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# DRAFT
# Environmental Impact Report No. 534
# San Gorgonio Crossing
# Riverside County, California

**State Clearinghouse Number: 2014011009**

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# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ADA | Americans with Disabilities Act |
| ARB | California Air Resources Board |
| AST | aboveground storage tank |
| ATCM | Airborne Toxic Control Measures |
| BMP | Best Management Practices |
| BVOC | biogenic volatile organic compound |
| C | Celsius |
| CAAQS | California Ambient Air Quality Standards |
| Cal OSHA | California Occupational Health and Safety Administration |
| Cal/EPA | California Environmental Protection Agency |
| CalFIRE | California Department of Forestry and Fire Protection |
| Caltrans | California Department of Transportation |
| CAP | Clean Air Plan |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CFC | chlorofluorocarbon |
| CFR | Code of Federal Regulations |
| $CH_4$ | methane |
| CHL | California Historical Landmarks |
| CMP | Congestion Management Plan |
| CNDDB | California Natural Diversity Database |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| $CO_2e$ | carbon dioxide equivalent |
| CPHI | California Points of Historical Interest |
| CPUC | California Public Utilities Code |
| CUPA | Certified Unified Program Agency |
| dB | decibel |
| DOT | United States Department of Transportation |
| DPM | diesel particulate matter |
| DTSC | California Department of Toxic Substances Control |
| EIR | Environmental Impact Report |

| | |
|---|---|
| EPA | United States Environmental Protection Agency |
| ESA | Endangered Species Act |
| F | Fahrenheit |
| FAR | floor area ratio |
| FCS | FirstCarbon Solutions |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| GWh/y | gigawatt-hours per year |
| GWP | global warming potential |
| HCM | Highway Capacity Manual |
| HFC | hydrofluorocarbon |
| HOV/HOT | High Occupancy Vehicle/High Occupancy Toll |
| HRA | Health Risk Assessment |
| HRI | California Historic Resources Inventory |
| HVAC | heating, ventilation, and air conditioning |
| I | Interstate |
| $L_{dn}$ | day/night average sound level |
| LED | light emitting diode |
| $L_{eq}$ | equivalent sound level |
| $L_{max}$ | maximum noise level |
| LOS | Level of Service |
| MBTA | Migratory Bird Treaty Act |
| mgd | million gallons per day |
| MMI | Modified Mercalli Intensity |
| mph | miles per hour |
| MTS | Metropolitan Transportation System |
| MXD | mixed-use development |
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NESHAP | National Emissions Standards for Hazardous Air Pollutants |
| NHPA | National Historic Preservation Act |
| $NO_2$ | nitrogen dioxide |
| NOC | Notice of Completion |
| NOP | Notice of Preparation |
| $NO_x$ | nitrogen oxides |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |

| | |
|---|---|
| NRHP | National Register of Historic Places |
| $O_3$ | ozone |
| OEHHA | California Office of Environmental Health Hazard Assessment |
| PCB | polychlorinated biphenyl |
| pCi/l | picocuries per liter |
| PFC | perfluorocarbon |
| Phase I ESA | Phase I Environmental Site Assessment |
| $PM_x$ | particulate matter |
| ppb | parts per billion |
| ppm | parts per million |
| PPV | peak particle velocity |
| PVC | polyvinyl chloride |
| RMP | Risk Management Plan |
| ROG | reactive organic gases |
| RWQCB | Regional Water Quality Control Board |
| $SF_6$ | sulfur hexafluoride |
| SFPUC | San Francisco Public Utilities Commission |
| $SO_2$ | sulfur dioxide |
| SR | State Route |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TAC | toxic air contaminants |
| TCM | transportation control measures |
| TDM | Transportation Demand Management |
| TDS | total dissolved solids |
| Tg | teragram |
| therms/y | therms per year |
| TMA | Transportation Management Association |
| TMDL | Total Maximum Daily Load |
| TOD | Transit Oriented Development |
| USACE | United States Army Corps of Engineers |
| USFWS | United States Fish and Wildlife Service |
| UST | underground storage tank |
| UWMP | Urban Water Management Plan |
| V/C | volume to capacity ratio |
| WDR | Waste Discharge Requirements |

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# EXECUTIVE SUMMARY

## Purpose

The County of Riverside has received a request to allow for the development of two buildings that will house a variety of industrial uses on a currently vacant property. The project site totals approximately 229 acres, of which approximately 16 acres are located within the City of Calimesa. Off-site property located within the City of Calimesa would be utilized for drainage and flooding improvements. A total of 140.23 acres of the site would be included within the developed portion of the project, 14 acres would remain undeveloped, and the remaining 70.18 acres would remain as natural open space.

This Draft Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (Pub. Res. Code Section 21000, et seq. [CEQA]) to evaluate the potential environmental impacts associated with the project. The Draft EIR is intended to serve as an informational document for public agency decision-makers and the public regarding the objectives and components of the project. This document will address the potentially significant adverse impacts related to construction and long-term operation of the project, as well as identify feasible mitigation measures and alternatives that may be adopted to reduce or eliminate these impacts.

## Proposed Project

The unincorporated community of Cherry Valley is located approximately 0.5 mile to the east of the project. The City of Beaumont is located south of the project site, the City of Calimesa is located directly west and northwest of the site, and the City of Yucaipa is located approximately 2 miles north of the site. Access to the site is provided from Cherry Valley Boulevard. The Assessor Parcel Numbers for the project site are 407-220-004, 407-220-007, 407-220-008, 407-220-009, 407-220-014, 407-220-016, 407-220-017, 413-270-012, and 413-270-01.

The southern and central portions of the project site consist of broad, sloping grasslands that transition to steeper ridges and canyons on the north portion of the project site. Much of the on-site vegetation consists of native grasses, sage scrub, and occasional scrub oak. The northern, steeper portion of the project site is traversed by two branches of the Cherry Valley Fault, although these branches of the fault appear to be inactive. The project would not locate any building over the fault line or within required structural setbacks related to the faults. Potential project impacts with respect to geological hazards are discussed in detail in Section 3.6, Geology and Soils, of this Draft EIR. Approximately 84.8 acres (36 percent) of the 229-acre site would remain as natural open space.

The project site is located within the community of Cherry Valley in unincorporated Riverside County. The project consists of two industrial buildings that will be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Certification. Building 1 would comprise approximately 811,000 square feet, and Building 2 would be approximately 1,012,760 square feet, for a total of

approximately 1,823,760 square feet of floor area. The two industrial buildings would include approximately 30,000 square feet of office space.

The project site is currently designated as Rural Mountainous (RM) and Very Low Density Residential (VLDR), and is located within the Cherry Valley Gateway Policy Area. The RM designation is located along the northerly portion of the project site, with the majority of the site designated as VLDR. A General Plan Amendment is proposed as part of the project entitlements to change the Land Use designation from RM and VLDR to RM, Open Space Recreation (OS-R), Public Facility (PF) and Light Industrial (LI). The land currently designated VLDR in the northern portion of the site (70.18 acres) will be re-designated to OS-R, and will remain undeveloped as part of this project. A small rectangular portion of the site along the eastern boundary (1.5 acres) currently designated VLDR will also be re-designated Public Facility (PF) for use by the Yucaipa Valley Water District. The land designated RM will remain RM. As depicted in the Pass Area Plan, the project site falls within both the Cherry Valley Gateway Policy Area and the Cherry Valley Policy Area.

The project also includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P) to be consistent with the General Plan Amendment. The Yucaipa Valley Water District tank area would remain zoned W-2.

The objectives of the project are to:

- **OBJ-1:** Provide an industrial park that supports regional warehouse distribution and logistics tenants which benefit from the strategic location located in close proximity to the I-10 Freeway.
- **OBJ-2:** Provide additional employment opportunities on the project site to local residents of Cherry Valley and neighboring cities to provide local economic opportunities and reduced commute times and air pollution, in accordance with Riverside County General Plan Policies LU 7.12, LU 10.1 and AQ 8.2.
- **OBJ-3:** Provide new development that would assist the County in obtaining fiscal balance in the years and decades ahead through increased tax revenues.
- **OBJ-4:** Provide convenient freeway access to trucks that would use the warehouse distribution facilities on the project site in a manner that limits truck traffic disruption to residential areas within Cherry Valley and neighboring cities.
- **OBJ-5:** Locate industrial uses near existing roadways and freeways to reduce traffic congestion and air pollutant emissions.
- **OBJ-6:** Facilitate goods movement for the benefit of local, regional, statewide and nationwide economic growth.
- **OBJ-7:** Provide for a reasonable return on investment needed to develop the project.
- **OBJ-8:** Create a high quality design industrial complex that maximizes the use of the site and promote the efficient use of land while still providing natural open space consistent with the rural identity of the community.

- **OBJ-9:** Develop and operate an industrial park supporting regional warehouse distribution and logistics tenants that meets industry standards for operational design criteria.

The County of Riverside has primary governmental authority for the approval and supervision of the project. Additional discretionary actions would also be required of other governmental entities. Consultation with San Bernardino County and Riverside County LAFCOs determined that Riverside County LAFCO is the appropriate authority for the consideration of any annexations related to this project, and is the responsible agency under CEQA for consideration of the project-related annexation to the Yucaipa Valley Water District, described below. This Draft EIR is intended to serve as the CEQA compliance document for any necessary approvals by the County of Riverside and other agencies.

The project would require the following actions:

- General Plan Amendment (No. 1079) proposing the following changes:
  - Change in land use designation from Rural Mountainous (RM) and Very Low Density Residential (VLDR) to RM, Open Space Recreation (OS-R), Public Facility (PF) and Light Industrial (LI); see Exhibit 2-8: Proposed Land Use Designation
- A Change of Zone (No. 7799) from Controlled Development (W-2) to Industrial Park (IP); see Exhibit 2-9: Proposed Zoning Designation
- Final EIR certification (No. 534)
- Approval of Tentative Parcel Map (No. 36564); see Exhibit 2-10: Parcel Map
- Plot Plan Approval (No. 25337); see Exhibit 2-11: Plot Plan and Conceptual Grading
- Annexation of the project site into the Yucaipa Valley Water District
- Approval from City of Calimesa for off-site drainage and flood improvements
- United States Army Corps of Engineers Permits related to potential impacts to waters of the U.S. (401 and 404)
- California Department of Fish and Wildlife for Streambed Alteration Agreement related to potential impacts to waters of the State U.S. (1602)
- Approval of a Storm Water Pollution Prevention Plan (SWPPP)
- Approval of a Water Quality Management Plan (WQMP)
- Approval of a Fugitive Dust Control Plan by the South Coast Air Quality Management District (SCAQMD)
- Acquisition of various ministerial permits, including grading and building permits and infrastructure improvement plans

## Areas of Controversy/Issues to Be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved through the environmental and entitlement processes for the project include decisions by the Lead Agency as to whether:

- The Draft EIR adequately describes the environmental impacts of the project.
- The recommended mitigation measures should be adopted or modified.
- Additional mitigation measures need to be applied to the project.

The primary issues of concern raised in response to scoping comments include:

- The project's contribution to air quality and greenhouse gas impacts
- Traffic congestion at the Cherry Valley Boulevard/I-10 traffic interchange
- Changes in land use designation and zoning
- Maintaining the rural character of the Cherry Valley area
- Aesthetics/light pollution
- Noise
- Property value
- Health impacts
- Water supply
- Cumulative impacts
- Water quality
- Agricultural resources
- Recreation

Table ES-1 summarizes the detailed discussion contained in Section 3 of this Draft EIR, Environmental Impact Analysis, of project impacts and mitigation measures.

## Alternatives to the Proposed Project

Section 6 of this Draft EIR reviews project alternatives. An evaluation of the No Project Alternative is required by CEQA Guidelines Section 15126.6(e), and is included in this section. The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Five alternatives are evaluated: (1) No Project—No Build Alternative, (2) No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative, (3) Residential Alternative, (4) Reduced Intensity Industrial Alternative, and (5) Mixed-Use/Business Park Alternative.

### 1. No Project—No Build Alternative

CEQA Guidelines Section 15126.6(e) requires the discussion and evaluation of a No Project Alternative. The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or

denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur.

## 2. No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative

Implementation of the No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative would involve development of the project site with 216 single-family homes on 110 acres, in the following configurations and under the following, existing General Plan land use designations:

- Rural Mountainous (RM): 1 custom lot/unit
- Very Low Density Residential (VLDR): 39 custom lots/units
- Low Density Residential (LDR): 176 units (7,000-square-foot [sf] lot minimum)

Internal street, sidewalk, and utility improvements would also be installed under the No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative (see Exhibit 6-1).

## 3. Residential Alternative

Implementation of the Residential Alternative would involve the construction of 792 dwelling units on 140 acres, in the following configurations:

- VLDR: 30 custom lots/units
- LDR: 110 lots/units (minimum 7,000 sf lots)
- Medium Density Residential (MDR): 191 (minimum 4,500 sf lots)
- High Density Residential (HDR): 221 townhomes
- Very High Density Residential (VHDR): 240 apartments

Internal street and sidewalk improvements would also be installed under the Residential Alternative. Two park/open space areas would be provided under the Residential Alternative, consisting of 3 acres toward the west of the site near the proposed townhomes, and 2.2 acres near the southeastern portion of the site. A private recreation area would also be provided for the proposed apartments. Refer to Exhibit 6-2 for a conceptual site plan.

## 4. Reduced Intensity Industrial Alternative

The Reduced Intensity Alternative would develop two equally sized buildings of approximately 651,266 square feet, for a total floor area of 1,302,532 square feet, or a 30 percent reduction in building floor area. In addition, on-site parking and truck loading areas would be proportionally reduced as part of the Reduced Intensity Industrial Alternative. This alternative assumes that access to the site would be identical to the project, with access points provided off Cherry Valley Boulevard.

Impacts upon development and operation of Reduced Intensity Industrial Alternative compared with the project are discussed below. Refer to Exhibit 6-3 for a conceptual site plan.

## 5. Mixed Use/Business Park Alternative

This alternative would replace Building 1 under the proposed project with 14 smaller business park buildings, totaling 91,000 square feet (for Building 1). These buildings would consist of flex-type or incubator one- or two-story buildings served by a common roadway system. The tenant spaces would be flexible and would be designed to lend themselves to a variety of uses. The spaces may include offices, retail and wholesale stores, restaurants, recreational areas and warehousing, manufacturing, light industrial, or scientific research functions. Based on the average mix of tenants in business park settings, it is estimated that 20 to 30 percent would consist of office/commercial uses, and the remaining 70 to 80 percent would consist of a mix of industrial warehousing, general office building, corporate headquarters, single-tenant office building, and research and development uses.

The 1,012,760-square-foot Building 2 proposed under the project would still be constructed, for a total of 1,594,230 square feet, or an approximately 22 percent reduction in building floor area compared with the proposed project. This alternative would occupy 152.76 gross acres, and approximately 76 percent of the project would remain as natural open space. This alternative assumes that access to the site would be similar to the proposed project, with access points provided from Cherry Valley Boulevard. Refer to Exhibit 6-4 for a conceptual site plan.

As required by CEQA Guidelines Section 15126.6, one of the alternatives must be identified as an Environmentally Superior Alternative. The Environmentally Superior Alternative is the one that would result in the greatest reduction or avoidance of any significant and unavoidable impacts of the proposed project (the fewest or least significant impacts). If the identified Environmentally Superior Alternative is the No Project Alternative, then an Environmentally Superior Alternative must also be selected from the remaining alternatives.

As detailed in Section 6, Alternatives to the Proposed Project, the No Project Alternative is identified as the Environmentally Superior Alternative. With the exception of the No Project—No Build Alternative, none of the other four alternatives completely eliminates the significant, adverse, and unavoidable impacts that would occur under the project regarding traffic and air quality.

The No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative is identified as the Environmentally Superior Alternative from among the remaining alternatives. Although the impacts of this alternative are greater than those for the No Project Alternative, when compared to the Mixed Use/Business Park Alternative, the Reduced Intensity Alternative, and the Residential Alternative, the No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative would result in fewer environmental impacts. Specifically, the No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative would result in the greatest reduction (in severity) of impacts for the project's significant and unavoidable impacts. Thus, it is the environmentally superior alternative. Section 6, Alternatives provides a summary of each alternative related to the environmental issues evaluated in Section 3, Environmental Impact Analysis of the Draft EIR, and includes the level of significance associated with the project to allow comparison of each alternative.

## Mitigation Monitoring and Reporting Program

CEQA requires public agencies to establish a monitoring report program for the purpose of ensuring compliance with those mitigation measures adopted as conditions of approval in order to mitigate or avoid significant environmental impacts identified in an EIR. A mitigation monitoring and reporting program, incorporating the mitigation measures set forth in this document, will be adopted at the time of certification of the Final EIR.

## Review of this Draft EIR

Upon completion of the Draft EIR, a Notice of Completion (NOC) will be filed with the State Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Draft EIR will be distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR, in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, the Draft EIR, including the technical appendices, is available for review at the Riverside County Planning Department, located at 4080 Lemon Street, Riverside, California. Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on the Draft EIR during the public review period on the Draft EIR.

Written comments on this Draft EIR should be addressed to:

Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
Attn: Mr. Brett Dawson, Project Planner

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review in the Final EIR at least 10 days prior to Riverside County Board of Supervisors action on the project and the EIR. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

## Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the detailed discussion contained in Section 3 of this Draft EIR, Environmental Impact Analysis, of project impacts and mitigation measures. In addition, the timing for mitigation is identified, based on the County of Riverside's tracking system.

## Table ES-1: Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.1—Aesthetics** | | | |
| **Impact AES-1:** The project would not have a substantial effect upon a scenic highway corridor within which it is located. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AES-2:** Scenic Resources: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AES-3:** The project would not interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AES-4:** The project could create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. | **MM AES-1:** Prior to issuance of building permits, the project applicant shall submit a photometric plan to the County of Riverside for review and approval. The photometric plan shall identify types of lighting fixtures and their locations on the project site. All light fixtures shall be shielded, recessed, or directed downward to prevent unwanted illumination of neighboring properties. Lighting fixtures should employ the most energy-efficient technology available unless technical feasibility or safety concerns take precedent. | Less than significant impact. | Prior to issuance of building permits. |
| **Impact AES-5:** The project could expose residential property to unacceptable light levels. | Implement Mitigation Measure AES-1. | Less than significant impact. | Prior to issuance of building permits. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.2—Agriculture and Forestry Resources** | | | |
| **Impact AG-1:** Agriculture: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AG-2:** Agriculture: The project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AG-3:** Agriculture: The project would cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 “Right-to-Farm”). | No mitigation measures are required. | Less than significant impact. | |
| **Impact AG-4:** Agriculture: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AG-5:** Forest: The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)). | No mitigation measures are required. | No impact. | |
| **Impact AG-6:** Forest: The project would not result in the loss of forest land or conversion of forest land to non-forest use. | No mitigation measures are required. | No impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact AG-7:** Forest: The project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of forest land to non-forest use. | No mitigation measures are required. | No impact. | |
| **Section 3.3—Air Quality** | | | |
| **Impact AQ-1:** The project would conflict with or obstruct implementation of the applicable air quality plan. | **Construction Mitigation Measures**<br>Implement Mitigation Measures AQ-1 through AQ-8 below:<br>**MM AQ-1:** During mass grading and building construction, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet or exceed United States Environmental Protection Agency (EPA) Tier 3 off-road emissions standards.<br><br>**MM AQ-2:** All Heavy-Heavy Duty Haul Trucks (HHD) accessing the project site shall use year 2007 or newer engines during all construction activities.<br><br>**MM AQ-3:** The following measures shall be applied to all projects during construction of the project:<br>a) Use paints with a volatile organic compound (VOC) content 100 grams per Liter or lower for both interior and exterior surfaces, if painted.<br>b) Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.<br>c) Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.<br>d) For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean up water and take it to the hazardous waste center (www.cleanup.org).<br>e) Use compliant low VOC cleaning solvents to clean paint application equipment.<br>f) Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions. | Significant and unavoidable impact. | Prior to building permit final inspection.<br><br>During construction (general).<br><br>Prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **MM AQ-4**: Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. The traffic control plan is intended to minimize traffic congestion and delays that increase idling and acceleration emissions. The applicant shall maintain one copy on-site in the construction trailer to the satisfaction of the County of Riverside. | | Prior to issuance of grading permits. |
| | **MM AQ-5:** During project construction, the following measures shall be implemented to the satisfaction of the County of Riverside. Construction equipment maintenance records and data sheets of equipment design specifications (including the emission control tier of the equipment) shall be kept on-site during construction and subject to inspection by the County of Riverside.<br>a) Construction equipment shall be properly maintained according to manufacturer specifications.<br>b) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling for no more than 5 minutes in any one hour.<br>c) Onsite electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators.<br>d) The project shall demonstrate compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 concerning fugitive dust and provide appropriate documentation to the County of Riverside.<br>e) Traffic speeds on all unpaved roads to be reduced to 15 mph or less.<br>f) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).<br>g) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1. | | During construction (general); prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **Operation Mitigation Measures**<br>**MM AQ-6:** Prior to operation of each warehouse building, the applicant shall demonstrate to the County of Riverside that vehicles can access the building using paved roads and parking lots. | | Prior to issuance of certificate of occupancy. |
| | **MM AQ-7:** The project shall implement the following measures to reduce emissions from on-site heavy duty trucks within six months after operations commence:<br>a) Post signs informing truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas.<br>b) Post signs in all dock and delivery areas containing the following: truck drivers shall turn off engines when not in use; trucks shall not idle for more than five minutes; telephone numbers of the building facilities manager and the California Air Resources Board to report violations.<br>c) Tenants shall maintain records on its fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles serving the warehouses within the project are in good condition, and in proper tune pursuant to manufacturer's specifications. Tenants shall maintain records on its fleet equipment and ensure that all Heavy-Heavy Duty Trucks (HHD) accessing the project site use year 2010 or newer engines. The records shall be maintained on-site and be made available for inspection by the County.<br>d) The facility operator will ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board approved courses (such as the free, one-day Course #512).<br>e) Require facility operator to become a SmartWay Partner.<br>f) Require facility operator to incorporate incentives and requirements such that the maximum feasible number of truck trips will be carried by SmartWay 1.0 or greater carriers. | | During operation (general); prior to issuance of certificate of occupancy. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | g) Prior to issuance of occupancy permits, signs shall be installed at each exit driveway, providing directional information to the County's truck route. Text on the sign shall read "To Truck Route" with a directional arrow. Truck routes shall be clearly marked pursuant to the Municipal code.<br><br>**MM AQ-8:** The following measures shall be incorporated into each building to reduce motor vehicle emissions:<br>a) All tenants shall participate in Riverside County's Rideshare Program. The purpose of the program would be to discourage single-occupancy vehicle trips and encourage alternate modes of transportation such as carpooling, transit, walking, and biking. The program shall provide employees with assistance in using alternate modes of travel, including carpooling encouragement, ride-matching assistance, and vanpool assistance.<br>b) A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building.<br>c) Each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided.<br>d) Each building shall provide a minimum of two shower and changing facilities within 200 yards of a building entrance.<br>e) Each building shall provide preferred parking for low-emitting and fuel-efficient vehicles equivalent to five percent of the required number of parking spaces. | | During operation (general). |
| **Impact AQ-2:** The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AQ-3:** The project would 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors). | Mitigation Measures AQ-1 through AQ-8 are required. | Significant and unavoidable impact. | See Impact AQ-1's Timing of Mitigation |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact AQ-4:** The project would not expose sensitive receptors, which are located within 1 mile of the project site to project substantial point source emissions. | No mitigation measures are required. | Less than significant impact. | |
| **Impact AQ-5:** The project would not involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter. | No mitigation measures are required. | Less than significant impact. | |
| **Section 3.4—Biological Resources** | | | |
| **Impact BIO-1:** The project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan. | **MM BIO-1:** To meet the criteria of a biologically equivalent or superior alternative, the applicant shall offset impacts to Riverine resources through on-site creation at a 2:1 ratio for the 1.11 acres of impacts to Riverine and limited Riparian resources. In total, the proposed mitigation shall result in 2.22 acres of Riparian and Riverine habitat creation/restoration.<br><br>The on-site creation of 2.22 acres of Riparian and Riverine habitat shall occur at 2 locations on-site along the southern boundary (see DBESP's Figure 8). The mitigation areas shall receive all upstream flows up to 100 cubic feet per second (CFS). Flows above 100 CFS shall bypass the mitigation area in a concrete-lined channel that will outlet at the eastern edge of the project. Flows up to 100 CFS will allow for creation of a braided streambed similar to the drainages that are being impacted. These areas shall be revegetated with primarily floodplain scrub vegetation. Scattered pockets of mule fat scrub shall also be planted to increase vegetative diversity. Combined, these areas shall offset losses of Riparian/Riverine functions and values by providing high quality Riparian/Riverine habitat, and provide for other functions and services such as water quality benefits, groundwater recharge, and nutrient cycling. A detailed restoration plan for the on-site mitigation sites shall be prepared and submitted to the County for review and approval prior to implementation of the restoration effort. | Less than significant impact. | Prior to issuance of grading permits.<br><br>Prior to issuance of grading permits. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact BIO-2:** The project could have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12). | Mitigation Measures BIO-1 and BIO-4 are required, as well as the following:<br>**MM BIO-2:** Pre-construction presence/absence surveys for burrowing owl shall be conducted on and off-site by a qualified biologist within 30 days prior to project disturbance activities, with the results summarized in a report submitted to the County Planning Department, Environmental Programs Division. Owls located as a result of survey efforts shall be relocated. A relocation plan shall be submitted to the Environmental Programs Division of the Planning Department for review and approval.<br>**MM BIO-3:** Clearing and grubbing shall occur outside of the bird breeding season (February 1 to August 31), unless a qualified biologist demonstrates to the satisfaction of the County that all nesting is complete through completion of a Nesting Bird Clearance Survey. A Nesting Bird Clearance Survey report shall be submitted to the Environmental Programs Division for review and approval prior to initiating clearing and grubbing during the breeding season. | Less than significant impact. | Prior to issuance of grading permits. |
| **Impact BIO-3:** The project could 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. Wildlife Service. | | | Prior to issuance of grading permits. |
| **Impact BIO-4:** The 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. | No mitigation measures are required. | No impact | |
| **Impact BIO-5:** The project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service. | Mitigation Measures BIO-1 will be required, as well as the following:<br>**MM BIO-4:** The project applicant shall pay MSHCP Local Development Mitigation Fees (LDMF) as determined by the County. The fee schedule is adjusted annually by the Western Riverside County Regional Conservation Authority (RCA), and was last adjusted on July 1, 2008. The current fee is $6,597 per acre for commercial or industrial uses. | Less than significant impact. | Prior to issuance of grading permits. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact BIO-6:** The project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. | **MM BIO-5:** Prior to the issuance of construction and building permits by the County, the project shall consult with the California Department of Fish and Wildlife regarding a Section 1602 Streambed Alteration Agreement Permit, the U.S. Army Corps of Engineers regarding a Clean Water Act Section 404 Permit, and the Regional Water Quality Control Board regarding a Clean Water Act Section 401 Certification. The project Applicant shall obtain these permits prior to the commencement of construction activities. | | Prior to issuance of construction and building permits. |
| **Impact BIO-7:** The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. | No mitigation measures are required. | No impact. | |
| **Section 3.5—Cultural Resources** | | | |
| **Impact CUL-1:** The project would not alter or destroy a historic site. | No mitigation measures are required. | No impact. | |
| **Impact CUL-2:** The project would not cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5. | No mitigation measures are required. | No impact. | |
| **Impact CUL-3:** The project could alter or destroy an archaeological site. | **MM CUL-3a:** In the event that buried cultural resources are discovered during construction, operations shall stop within a 100-foot radius of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The archeologist shall make recommendations to the Lead Agency on the measures to be implemented to protect the resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. | Less than significant impact. | During construction (general); prior to building permit final inspection. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **MM CUL-3b:** Any previously undiscovered resources found during construction within the project area shall be evaluated for significance in terms of CEQA criteria and recorded on appropriate Department of Parks and Recreation (DPR) forms. | | Prior to building permit final inspection. |
| | **MM CUL-3c:** If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by a qualified archaeologist and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery. | | During construction (general); prior to building permit final inspection. |
| | **MM CUL-3d:** No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered because of mitigation shall be curated at a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study. | | Prior to building permit final inspection. |
| **Impact CUL-4:** The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5. | Mitigation Measures CUL-3a through CUL-3d are required. | Less than significant impact. | Prior to building permit final inspection. |
| **Impact CUL-5:** The project would not disturb any human remains, including those interred outside of formal cemeteries. | **MM CUL-5:** In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines § 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:<br>1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is | Less than significant impact. | During construction (general); prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.<br>2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:<br>• The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.<br>• The descendant identified fails to make a recommendation.<br>• The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC by the NAHC fails to provide measures acceptable to the landowner. | | |
| **Impact CUL-6:** Archaeological Resources: The project would not restrict existing religious or sacred uses within the potential impact area. | No mitigation measures are required. | No impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact CUL-7:** Paleontological Resources: The project could directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature. | **MM CUL-7a:** During grading and excavation activities, full-time monitoring of excavation activities shall occur, except in the flatter areas where extensive plowing has churned deposits up to depths of 2 feet. Paleontologic monitors shall be equipped to salvage fossils, as they are unearthed, to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.<br><br>If the principal paleontologist determines that the sediments present within the subsurface have low potential to contain paleontologic resources and low paleontologic sensitivity, then the full-time monitoring program should cease and a program of periodic monitoring should occur.<br><br>**MM CUL-7b:** If specimens are found, the applicant shall ensure the preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils shall occur and are essential to fully mitigate adverse impacts to the resources.<br><br>**MM CUL-7c:** If specimens are found, the applicant shall ensure the identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance. The paleontologist shall have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented. | Less than significant impact. | During grading and excavation activities; prior to building permit final inspection.<br><br>Prior to building permit final inspection.<br><br>Prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **MM CUL-7d:** The paleontologist shall prepare a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontologic resources. | | Prior to building permit final inspection. |
| **Section 3.6—Geology and Soils** | | | |
| **Impact GEO-1:** The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-2:** The project could be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. | **MM GEO-2:** Upon the development of a grading plan, the County of Riverside shall verify that consistent with Section 8.0, Future Work, in the Neblett & Associates' 2008 Fault Investigation, the grading plans shall reflect the re-position of the structural setback zone based on the proposed grades for the proposed project.<br><br>It is recommended that a structural setback zone shall be located 50 feet south and 100 feet north of the trace of the South Branch of the CVFZ that transgresses the proposed development envelopes. Additionally, a Restricted Use Zone (RUZ) shall be located north and northeast of the South Branch to the north and northeast property boundary. The RUZ shall be utilized for non-habitable facilities, such as horse stables, soccer fields, and etc. that will have less than 1,000 hours of human occupancy per year. Future fault investigation in the RUZ area shall be required and approved by the controlling agencies to remove any portions of the RUZ for construction of potential habitable structures.<br><br>The footprint of the proposed project shall then be analyzed for conformance with the re-positioned structural setback and the restricted use zone. | Less than significant impact. | Prior to issuance of grading permits. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact GEO-3:** The project would not be subject to seismic-related ground failure, including liquefaction. | **MM GEO-3:** As depicted in Figure 1 of the November 24, 2015 Grading Plan Review by Ginter & Associates, Incorporated, settlement monuments shall be positioned at strategic locations in the deeper fill areas. These settlement monuments shall be monitored on a regular basis until the primary settlement has stabilized. | Less than significant impact. | Prior to grading permit final inspection. |
| **Impact GEO-4:** The project could be subject to strong seismic ground shaking. | **MM GEO-4:** Prior to the issuance of building permits for each structure, the project applicant shall submit a design-level Geotechnical Investigation to the County Engineering Geologist for review and approval. The investigation shall be prepared by a qualified engineer and identify necessary grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code geologic, soils, and seismic requirements. The measures identified in the approved report shall be incorporated into the project plans. | Less than significant impact. | Prior to issuance of building permits. |
| **Impact GEO-5:** The project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards. | **MM GEO 5a:** Recommendations listed below and contained within the November 24, 2014 Ginter and Associates Grading Plan (contained in EIR Appendix E) shall be implemented in the design of the project to the satisfaction of the County, prior to issuance of grading and/or building permits.<br><br>**MM GEO-5b:** To mitigate for hydroconsolidation, prior to issuance of a construction permit, the project applicant shall ensure the complete removal of the younger alluvium (Qya) approximately 20 feet in depth and replacement with compacted engineered fill to the design grades.<br><br>**MM GEO-5c:** To mitigate potential landside impacts from the proposed cut slope north of Building 2, the County of Riverside shall ensure that during project construction a stabilization fill prism shall be established for this cut slope as depicted in the January 7, 2013 Grading Plan Review by Ginter & Associates, Inc. Additionally, the County of Riverside shall ensure that during construction, conditions will be observed by a qualified individual and additional recommendations will be provided, as appropriate. | Less than significant impact. | Prior to issuance of grading permits.<br><br>Prior to issuance of grading permits.<br><br>Prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact GEO-6:** The project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence. | Mitigation Measure GEO-5a is required, as well as the following:<br>**MM GEO-6:** As recommended in the January 7, 2013 report by Ginter & Associates, Inc., after completion of project construction (or sooner regarding "A." below) and during project operation, the owner of the project shall do the following:<br>a) Plant landscape planting materials that consist of appropriate drought resistant vegetation as recommended by the Landscape Architect. Landscaping should be completed as soon as possible and properly maintained.<br>b) Conduct proper irrigation and maintenance and repair of installed irrigation systems to minimize ground saturation. Leaks should be repaired immediately. Sprinklers should be adjusted to provide maximum coverage with a minimum of water usage and overlap. Overwatering with consequent excessive runoff and ground saturation must be avoided.<br>c) If automatic sprinkler systems are installed, their use must be adjusted to account for natural rainfall conditions.<br>d) Maintain and clean all drainage devices that have been installed. | Less than significant impact. | Prior to issuance of grading permits and prior to building permit final inspection. |
| **Impact GEO-7:** The project would not be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-8:** The project could change topography or ground surface relief features. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-9:** The project could create cut or fill slopes greater than 2:1 or higher than 10 feet. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-10:** The project would not result in grading that affects or negates subsurface sewage disposal systems. | No mitigation measures are required. | No impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact GEO-11:** The project could result in substantial soil erosion or the loss of topsoil. | Mitigation Measure GEO-2 is required, as well as the following:<br>**MM GEO-11a.** As stated in the January 7, 2013 report by Ginter & Associates, after the completion of on-site grading, and prior to the issuance of a final certificate of occupancy for the project, the owner shall ensure that the manufactured slopes on-site shall be planted with drought-resistant plants to help mitigate surficial erosion.<br>**MM GEO-11b.** Prior to the issuance of grading permits, all grading procedures shall be in compliance with County Grading Standards, including requirements for erosion control during rainy months. This measure shall be implemented to the satisfaction of the County of Riverside Planning Department Director. | Less than significant impact. | Prior to issuance of grading permits.<br>Prior to building permit final inspection.<br>Prior to issuance of grading permits. |
| **Impact GEO-12:** The project could be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property. | Implement Geo-4. | Less than significant | Prior to grading permit final inspection. |
| **Impact GEO-13:** The project would not have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. | No mitigation measures are required. | No impact. | |
| **Impact GEO-14:** The project would not change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-15:** The project would not result in any increase in water erosion either on or off site. | No mitigation measures are required. | Less than significant impact. | |
| **Impact GEO-16:** The project would not be impacted by or result in an increase in wind erosion and blowsand, either on or off site. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.7—Greenhouse Gas Emissions** | | | |
| **Impact GHG-1:** The project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. | Mitigation Measures AQ-6 through AQ-8 are required, as well as the following:<br>**MM GHG-1.** The project shall implement at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables. | Less than significant impact | During project operation (general). |
| **Impact GHG-2:** The project would conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. | Mitigation Measures GHG-1, GHG-2 and AQ-6 through AQ-8 are required. | Less than significant impact | See Impact GHG-1's Timing of Mitigation |
| **Section 3.8—Hazards and Hazardous Materials** | | | |
| **Impact HAZ-1:** The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HAZ-2:** The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HAZ-3:** The project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HAZ-4:** The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. | No mitigation measures are required. | No impact. | |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact HAZ-5:** The project would not be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. | No mitigation measures are required. | No impact. | |
| **Impact HAZ-6:** Airports: The project would not result in an inconsistency with an Airport Master Plan. | No mitigation measures are required. | No impact. | |
| **Impact HAZ-7:** Airports: The project would not require review by the Airport Land Use Commission. | No mitigation measures are required. | No impact. | |
| **Impact HAZ-8:** Airports: The project is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and the project would not result in a safety hazard for people residing or working in the project area. | No mitigation measures are required. | No impact. | |
| **Impact HAZ-9:** Airports: For a project within the vicinity of a private airstrip, or heliport, the project would not result in a safety hazard for people residing or working in the project area. | No mitigation measures are required. | No impact. | |
| **Impact HAZ-10:** Hazardous Fire Area: The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.9—Hydrology and Water Quality** | | | |
| **Impact HYD-1:** The project would not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HYD-2:** The project could violate water quality standards or waste discharge requirements. | **MM HYD-2:** Prior to the issuance of grading permits for any portion or phase of the project, the developer shall prepare and submit a WQMP and a SWPPP to the County for review and approval. The WQMP and SWPPP shall contain specific Best Management Practices (BMPs) to prevent stormwater pollution from construction sources. These BMPs shall identify a practical sequence for site restoration, implementation, contingency measures, responsible parties, and agency contacts. The developer shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories:<br>Soil stabilization practices;<br>• Dewatering practices (if necessary);<br>• Sediment and runoff control practices;<br>• Monitoring protocols; and<br>• Waste management and disposal control practices.<br><br>Once approved by the County, contractors working on the site shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the WQMP and SWPPP.<br><br>The WQMP and SWPPP shall identify pollutant sources that could affect the quality of stormwater discharges from the construction site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project | Less than significant impact. | Prior to issuance of grading permits. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | construction sites. To protect receiving water quality, the WQMP and SWPPP shall include, but is not limited to, the following elements:<br>• Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas.<br>• No disturbed surfaces will be left without erosion control measures in place during the winter and spring months (September 30–March 30).<br>• Sediment shall be retained on-site by one or more basins, traps, or other appropriate improvements. Of critical importance is the protection of existing catch basins that eventually drain to the Santa Ana River.<br>• The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.<br>• BMPs performance and effectiveness shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.<br>• Native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance. | | |
| **Impact HYD-3:** The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). | No mitigation measures are required. | Less than significant impact. | |



CVAR_07512

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact HYD-4:** The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HYD-5:** The project would not place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HYD-6:** The project would not place within a 100-year flood hazard area structures, which would impede or redirect flood flows. | No mitigation measures are required. | Less than significant impact. | |
| **Impact HYD-7:** The project could otherwise substantially degrade water quality. | Mitigation Measures HYD-2 is required. | Less than significant impact. | Prior to issuance of grading permits. |
| **Impact HYD-8:** The project would not include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors). | Mitigation Measure HYD-2 is required. | Less than significant impact. | Prior to issuance of grading permits. |
| **Impact HYD-9:** Floodplains: The 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 substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. | Mitigation Measure HYD-2 is required. | Less than significant impact. | Prior to issuance of grading permits. |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact HYD-10:** Floodplains: The project would not change absorption rates or the rate and amount of surface runoff. | Mitigation Measure HYD-2 is required. | Less than significant impact. | Prior to issuance of grading permits. |
| **Impact HYD-11:** Floodplains: The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area). | No mitigation measures are required. | Less than significant impact. | |
| **Impact HYD-12:** The project would not result in changes in the amount of surface water in any water body. | No mitigation measures are required. | Less than significant impact. | |
| **Section 3.10—Land Use and Planning** | | | |
| **Impact LUP-1:** The project would not result in a substantial alteration of the present or planned land use of an area. | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-2:** The project would not affect land use within a city sphere of influence and/or within adjacent city or county boundaries. | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-3:** The project would be consistent with the site's existing or proposed zoning. | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-4:** The project would be compatible with existing surrounding zoning. | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-5:** The project would be compatible with existing and planned surrounding land uses. | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-6:** The project would be consistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan). | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact LUP-7:** The project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community). | No mitigation measures are required. | Less than significant impact. | |
| **Impact LUP-8.** Conflict with regional growth policies established by the Southern California Association of Governments (SCAG) as they relate to population, housing, and employment in the project area? | No mitigation measures are required. | Less than significant impact. | |
| **Section 3.11—Mineral Resources** | | | |
| **Impact MIN-1:** The project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State. | No mitigation measures are required. | Less than significant impact. | |
| **Impact MIN-2:** The project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. | No mitigation measures are required. | Less than significant impact. | |
| **Impact MIN-3:** Land Use: The project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine. | No mitigation measures are required. | No impact. | |
| **Impact MIN-4:** The project would not expose people or property to hazards from proposed, existing or abandoned quarries or mines. | No mitigation measures are required. | No impact. | |



CVAR_07515

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.12—Noise** | | | |
| **Impact NOI-1:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels. | No mitigation measures are required. | No impact. | |
| **Impact NOI-2:** For a project within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels. | No mitigation measures are required. | No impact. | |
| **Impact NOI-3:** For a project within the vicinity of a railroad, the project would not expose people residing or working in the project area to excessive noise levels railroad noise. | No mitigation measures are required. | No impact. | |
| **Impact NOI-4:** For a project within the vicinity of a highway, the project would not expose people residing or working in the project area to excessive noise levels. | No mitigation measures are required. | Less than significant impact. | |
| **Impact NOI-5:** The project would not expose people residing or working in the project area to excessive noise levels from other noise sources. | No mitigation measures are required. | Less than significant impact. | |
| **Impact NOI-6:** The project would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. | No mitigation measures are required. | Less than significant impact. | |
| **Impact NOI-7:** The project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. | **MM NOI-7a:** During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. | Less than significant impact. | Prior to grading permit final inspection. |



CVAR_07516

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **MM NOI-7b:** Whenever feasible, the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. | | Prior to grading permit final inspection. |
| | **MM NOI-7c:** The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction. | | Prior to grading permit final inspection. |
| | **MM NOI-7d:** The construction contractor shall limit haul truck deliveries to the same hours specified for use of construction equipment (7:00 AM to 6:00 PM). To the extent feasible, haul routes should not pass sensitive land uses or residential dwellings. | | Prior to grading permit final inspection. |
| | **MM NOI-7e:** For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the project site with the contact phone number. | | Prior to grading permit final inspection. |
| **Impact NOI-8:** The project could expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | **MM NOI-8a:** All project loading bays shall be equipped with sealed gasket bay doors. The project applicant shall ensure that these sealed gasket bay doors are used for all nighttime loading/unloading operations. Inclusion of loading bay doors equipped with sealed gaskets would be expected to reduce loading/unloading maximum operational noise levels by at least 15 dBA. This would effectively reduce loading/unloading operational noise levels to below a combined hourly average noise level of 37 dBA $L_{eq10}$, meeting the County of Riverside's nighttime operational noise standard of 45 dBA $L_{eq10}$. | Less than significant impact | Prior to grading permit final inspection. |
| **Impact NOI-9:** The project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.13—Population and Housing** | | | |
| **Impact POP-1:** The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. | No mitigation measures are required. | No impact. | |
| **Impact POP-2:** The project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income. | No mitigation measures are required. | Less than significant impact. | |
| **Impact POP-3:** The project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. | No mitigation measures are required. | No impact. | |
| **Impact POP-4:** The project would not affect a County Redevelopment Project Area. | No mitigation measures are required. | No impact. | |
| **Impact POP-5:** The project would not cumulatively exceed official regional or local population projections. | No mitigation measures are required. | No impact. | |
| **Impact POP-6:** The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). | No mitigation measures are required. | Less than significant impact. | |
| **Section 3.14—Public Services** | | | |
| **Impact PS-1:** The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire services. | | | |
| **Impact PS-2:** The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 sheriff services. | No mitigation measures are required. | Less than significant impact. | |
| **Impact PS-3:** The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 schools. | No mitigation measures are required. | Less than significant impact. | |
| **Impact PS-4:** The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 libraries. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact PS-5:** The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 health services. | No mitigation measures are required. | Less than significant impact. | |
| **Section 3.15—Recreation** | | | |
| **Impact REC-1:** The project would not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. | No mitigation measures are required. | Less than significant impact. | |
| **Impact REC-2:** The project would not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. | No mitigation measures are required. | Less than significant impact. | |
| **Impact REC-3:** The project is not located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees). | No mitigation measures are required. | Less than significant impact. | |
| **Impact REC-4:** The project would not impact recreational trails. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Section 3.16—Transportation and Traffic** | | | |
| **Impact TRAN-1:** The project would conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. | **MM TRAN-1a:** Prior to the issuance of occupancy permits, the project applicant shall participate in the County's DIF and TUMF Fee programs as applicable and address the project's fair share costs for Existing plus Ambient plus project (2017) impacts for the following improvements.<br>I-10 EB Ramps/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Add a westbound left turn lane.<br><br>I-10 WB Ramps/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Add an eastbound left turn lane.<br><br>The County shall ensure that the improvements specified will be constructed at that point in time necessary to avoid identified impacts. | Less than significant impact | Prior to issuance of occupancy permits. |
| | **MM TRAN-1b:** Prior to the issuance of occupancy permits, the project applicant shall participate in the County's DIF and TUMF Fee programs as applicable, and address the project's fair share costs for Existing plus Ambient plus project plus Cumulative (2017) impacts for the following improvements.<br>I-10 Eastbound Ramps/Cherry Valley Boulevard:<br>• Construct a southbound right turn lane.<br>• Construct a westbound left turn lane<br><br>Calimesa Boulevard/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Construct an eastbound left turn lane.<br><br>The County shall ensure that the improvements specified will be constructed at that point in time necessary to avoid identified impacts. | | Prior to issuance of occupancy permits |
| | **MM TRAN-1c:** Prior to the issuance of occupancy permits, the project applicant shall participate in the County's DIF and TUMF Fee programs as applicable, and address the project's fair share costs for Horizon Year | | Prior to issuance of occupancy permits |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | 2035 With project impacts for the following improvements.<br>I-10 Eastbound Ramps/Cherry Valley Boulevard:<br>• Convert the southbound right turn lane into free-right turn.<br>• Construct an additional eastbound through lane.<br>• Construct an eastbound right turn lane.<br>• Construct an additional westbound through lane.<br><br>I-10 Westbound Ramps/Cherry Valley Boulevard:<br>• Construct an additional eastbound through lane.<br>• Construct an additional eastbound left turn lane.<br>• Construct a northbound left turn lane.<br>• Construct an additional westbound through lane.<br>• Construct a westbound right turn lane.<br><br>Calimesa Boulevard/Cherry Valley Boulevard:<br>• Construct a southbound right turn lane.<br>• Construct an eastbound left turn lane<br>• Construct an additional eastbound through lane.<br>• Convert the westbound right turn into overlap phasing.<br>• Construct an additional westbound through lane.<br><br>Street 2/Cherry Valley Boulevard:<br>• Construct an additional eastbound shared through-right lane.<br>• Construct a westbound shared through lane.<br>• Construct a westbound left turn lane.<br>• Construct a northbound left turn lane on the future Patton Road.<br>• Construct a northbound shared through-right turn lane on the future Patton Road.<br><br>Union Street/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Construct a northbound left turn lane.<br>• Construct a southbound left turn lane.<br>• Construct an eastbound left turn lane. | | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | • Construct an eastbound shared through-right turn lane.<br>• Construct a westbound left turn lane.<br>• Construct a westbound shared through-right turn lane.<br><br>Nancy Street/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Construct an eastbound left turn lane.<br>• Construct an additional eastbound shared through-right turn lane.<br>• Construct a westbound left turn lane.<br><br>Beaumont Avenue/Cherry Valley Boulevard:<br>• Construct an additional eastbound through lane.<br>• Construct a westbound shared through-right turn lane.<br>• Modify traffic signal in order to provide overlap phasing for the EB right turn lane.<br>• Roberts Road/Cherry Valley Boulevard:<br>• Install a traffic signal.<br>• Construct a southbound left turn lane.<br>• Construct an eastbound left turn lane<br>• Construct a second eastbound through lane<br>• Construct a second westbound through lane<br>• Construct a westbound right turn lane<br><br>The County shall ensure that the improvements specified will be constructed at that point in time necessary to avoid identified impacts. | | |
| **Impact TRAN-2:** The project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact TRAN-3:** The project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. | No mitigation measures are required. | No impact. | |
| **Impact TRAN-4:** The project would not alter waterborne, rail or air traffic. | No mitigation measures are required. | Less than significant impact. | |
| **Impact TRAN-5:** The project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | **MM TRAN-5a:** Driveway 1 at Cherry Valley Boulevard—Install a stop control on the southbound approach and construct the intersection with right-in/right-out access only in conjunction with the following geometrics:<br>• Northbound Approach: not applicable.<br>• Southbound Approach: One right turn lane.<br>• Eastbound Approach: One through lane.<br>• Westbound Approach: One shared through-right turn lane.<br><br>**MM TRAN-5b:** Street 2 at Cherry Valley Boulevard—Install a traffic signal and construct the intersection with the following geometrics:<br>• Northbound Approach: not applicable.<br>• Southbound Approach: One left turn lane and one shared through-right turn lane.<br>• Eastbound Approach: One left turn lane with a minimum of 250-feet of storage and one though lane.<br>• Westbound Approach: One shared through-right turn lane.<br><br>**MM TRAN-5c:** Driveway 3 at Cherry Valley Boulevard—Install a stop control on the southbound approach and construct the intersection with right-in/right-out access only in conjunction with the following geometrics:<br>• Northbound Approach: not applicable<br>• Southbound Approach: One right turn lane.<br>• Eastbound Approach: One through lane.<br>• Westbound Approach: One shared through-right turn lane. | Less than significant impact. | Prior to certificate of occupancy.<br><br>Prior to building permit final inspection.<br><br>Prior to building permit final inspection. |



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## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| | **MM TRAN-5d:** Onsite traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.<br><br>**MM TRAN-5e:** Sight distance at each project access driveway shall be reviewed with respect to Caltrans and County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans. | | Prior to building permit final inspection.<br><br>Prior to a project approval. |
| **Impact TRAN-6:** The project would not cause an effect upon, or a need for new or altered maintenance of roads. | No mitigation measures are required. | Less than significant impact. | |
| **Impact TRAN-7:** The project would not cause an effect upon circulation during the project's construction. | **MM TRAN-7:** Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside for approval. The traffic control plan shall describe in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. The purpose of these measures is to safely guide motorists, cyclists, and pedestrians, minimize traffic impacts, and ensure the safe and even flow of traffic during construction, consistent with County standards and requirements. | Less than significant impact. | Prior to issuance of grading permits. |
| **Impact TRAN-8:** The project would not result in inadequate emergency access or access to nearby uses. | No mitigation measures are required. | Less than significant impact. | |
| **Impact TRAN-9:** The project would not conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact TRAN-10:** The project would not impact bike trails. | No mitigation measures are required. | No impact. | |
| **Section 3.17—Utilities and Service Systems** | | | |
| **Impact UTIL-1:** The project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-2:** The project would have sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements will be needed. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-3:** The project would not require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-4:** The project would not result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-5:** The project is served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact UTIL-6:** The project would comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan). | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-7:** The project could impact electricity facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-8:** The project could impact natural gas facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-9:** The project would not impact communications systems facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-10:** The project would not impact storm water drainage facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-11:** The project would not impact street lighting facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects | No mitigation measures are required. | Less than significant impact. | |

## Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

| Environmental Impact | Mitigation Measures | Level of Significance After Mitigation | Timing of Mitigation |
|---|---|---|---|
| **Impact UTIL-12:** The project would not impact the maintenance of public facilities, including roads, requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. | No mitigation measures are required. | Less than significant impact. | |
| **Impact UTIL-13:** The project would not impact other government service facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. | No mitigation measures are required. | No impact. | |
| **Impact UTIL-14:** The project would not conflict with any adopted energy conservation plans. | No mitigation measures are required. | Less than significant impact. | |



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## Significant and Unavoidable Impacts

Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Section 3 of this Draft EIR. Section 15126.2(b) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated, but not reduced to less than significant levels. This Draft EIR has determined that significant and unavoidable transportation/traffic and air quality impacts will occur as a result of project implementation, as discussed below.

**Air Quality**—The project could impede attainment of the AQMP because its emissions will exceed the SCAQMD regional significance thresholds for $NO_x$ and ROG during operations, even after implementation of all feasible mitigation. The predominance of operational emissions are generated by project traffic, and at present there are no additional feasible mitigation measures that would reduce these emissions to levels that are less-than-significant.

The project would also result in cumulatively considerable net increase in a criteria pollutant, Ozone, because regional significance thresholds for ROG and $NO_x$, both Ozone precursors, are exceeded.

**Traffic**—Cumulative impacts for I-10 Freeway—Eastbound and Westbound, and the on- and off-ramps at Cherry Valley Boulevard, as well as the intersection of Calimesa Boulevard and Cherry Valley Boulevard would be considered significant, adverse, and unavoidable. The project's cumulative contribution to the existing deficiencies of three freeway mainline facilities would be considered significant and unavoidable.

# SECTION 1: INTRODUCTION

## 1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the San Gorgonio Crossing Project (State Clearinghouse No. 2014011009). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.), and County of Riverside rules and regulations. This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the San Gorgonio Crossing Project (project).

The purpose of the Draft EIR is to disclose information to the public and to the decision-makers about the potential environmental effects of the project. An EIR does not recommend either approval or denial of a project; rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This Draft EIR describes the project, analyzes its environmental effects, and discusses reasonable alternatives that would avoid, reduce, or minimize environmental impacts.

### 1.1.1 - Overview

The San Gorgonio Crossing Project site totals approximately 229 acres, of which approximately 16 acres are located within the City of Calimesa and would be used for project infrastructure purposes. Approximately 140.23 acres would be included within the developed portion of the project, and the remaining 84.8 acres would remain as natural open space (approximately 36 percent of the project site). The project consists of two industrial buildings that will be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Certification. Building 1 will comprise approximately 811,000 square feet, and Building 2 approximately 1,012,760 square feet for a total of approximately 1,823,760 square feet of gross floor area. The two industrial buildings would include approximately 30,000 square feet of office space.

Both buildings will be designed to accommodate cross-dock usage, with 136 dock doors for Building 1 and 170 dock doors for Building 2. A public street—located between Building 1 and Building 2—would provide access to existing residences that are generally located to the north of the project site, which currently utilize access through the project site via a dirt road. The street proposed to replace the existing dirt road would be approximately 1,600 feet in length, designed to Riverside County standards, and would provide residents access through the project site. Additional development on the project site would include standard and trailer parking stalls, streets, and landscaping.

A water quality basin would be constructed to the west of Building 1. A rectangular concrete channel would be located north and south of Buildings 1 and 2. Additionally, a grouted riprap berm

and a water quality infiltration trench would be located north of Building 2[1]. Riprap berms would be located east of Building 2, and a water quality basin is planned west of Building 2. Additionally, a publicly maintained trapezoidal concrete channel would be located between the building sites and Cherry Valley Boulevard. As discussed, the project would utilize approximately 16 acres within the City of Calimesa for off-site drainage and flooding improvements. Improvements within the City of Calimesa are composed of drainage channels and appurtenances including a concrete trap channel, a concrete box culvert, two concrete outlet structures, and rip rap rock energy dissipaters. The Applicant has also agreed to construct a rock-lined berm to protect the adjacent property owners.

Three access points would be provided off Cherry Valley Boulevard. Section 2, Project Description, provides a complete description of the project.

### 1.1.2 - Purpose and Authority

This Draft EIR provides a project-level analysis of the environmental effects of the project. The environmental impacts of the project are analyzed in the Draft EIR to the degree of specificity required by Section 15146 of the CEQA Guidelines. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid potential impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Project Description
- Environmental Impact Analysis
- Cumulative Impacts
- Significant Unavoidable Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Environmental Issues Determined not to be Significant

### 1.1.3 - Lead Agency Determination

The County of Riverside is designated as the lead agency for the project. CEQA Guidelines Section 15367 defines the lead agency as ". . . the public agency, which has the principal responsibility for carrying out or approving a project." Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR, along with other information that may be presented during the CEQA process.

Lists of organizations and persons consulted are provided in Section 7, Persons and Organizations Consulted. Report preparation personnel are provided in Section 8, List of Preparers of this Draft EIR.

[1] Riprap is a foundation or sustaining wall of stones or chunks of concrete, which can be used to line channels.

### 1.1.4 - Project of Statewide, Regional, or Areawide Environmental Significance

The project meets the following criteria, as specified in Section 15206 of the CEQA Guidelines, of a project that is of statewide, regional, or areawide environmental significance:

- Potential environmental effects of the project could extend beyond the boundaries of unincorporated Riverside County.
- The project proposes a local general plan, element, or amendment thereof for which an EIR was prepared.
- The project proposes an industrial park occupying more than 40 acres of land, and encompassing more than 650,000 square feet of floor area.

Therefore, the project will comply with the notification requirements of Section 15206, which require that a copy of the Draft EIR be submitted to the State Clearinghouse for review.

## 1.2 - Scope of the EIR

The purpose of this EIR is to evaluate the potential environmental effects of the project and all related actions for the approval of the proposed general plan amendment.

### 1.2.1 - First Notice of Preparation

A Notice of Preparation (NOP) was issued on April 24, 2013, pursuant to CEQA Guidelines, Sections 15082 (a), 15103, and 15375 (State Clearinghouse No. 2014011009). The NOP was circulated among responsible and trustee state agencies, local organizations, and interested individuals, to identify issues to be addressed in the Draft EIR. The 45-day circulation and review period required by CEQA concluded on June 1, 2013. Furthermore, the County held a scoping meeting that was open to the public for comments and questions on April 22, 2013. Copies of comment letters related to the scoping meeting and received in response to the NOP are included in Appendix A, and listed in Table 1-1.

**Table 1-1: IS-NOP and Scoping Meeting Comments in 2013**

| Agency/Organization | Author | Date |
|---|---|---|
| **Public Agencies** | | |
| City of Beaumont | Chris Tracy, AICP Associate Planner | 04-11-2013 |
| Soboba Band of Luiseno Indians | Joseph Ontiveros, Director of Cultural Resources | 04-30-2013 |
| **Public Comments** | | |
| Cherry Valley Acres and Neighbors (CVAN) | Patsy Reeley, President | 04-18-2013 |
| | Susan Pratt | 04-22-2013 |
| | Jerry Guarracino | 04-22-2013 |
| | Philipp Goebels | 04-22-2013 |

**Table 1-1 (cont.): IS-NOP and Scoping Meeting Comments in 2013**

| Agency/Organization | Author | Date |
|---|---|---|
| Cherry Valley Acres and Neighbors (CVAN) (*cont.*) | Adam Sampson | 04-22-2013 |
| | Dusty and Melissa Hanvey | 04-22-2013 |
| | Jeff Elser | 04-22-2013 |
| | Seleste Dunn (Sabatino) | 04-22-2013 |
| | Shirleyjean Heyne, Keith Heyne, and Sara M. Williams | 04-22-2013 |
| | Steve Mehlman | 04-22-2013 |
| | Ross K. | 04-22-2013 |
| | Composerx (email name) | 04-22-2013 |

## 1.2.2 - Second Notice of Preparation

A second NOP was issued on January 6, 2014, pursuant to CEQA Guidelines, Sections 15082(a), 15103, and 15375. The NOP was circulated to responsible and trustee state agencies, local organizations, and interested individuals, to identify issues to be addressed in the Draft EIR. The 45-day circulation and review period required by CEQA concluded on February 12, 2014. Furthermore, the County held a scoping meeting that was open to the public for comments and questions on January 27, 2014. Thirteen speakers made comments during the scoping meeting; the speaker identification cards for these comments are in Appendix A. The comments made by the speakers during the scoping meeting addressed topics such as concerns regarding air quality emissions and related health impacts, noise impacts, truck traffic, desire to preserve rural setting, conflicts with residential and senior residential land use, and capacity of existing freeway interchanges. Copies of comment letters received in response to the January 6, 2014 NOP are included in Appendix A.5 and listed in Table 1-2. Letters received after the close of the scoping period for the January 2014 NOP are included in Appendix A.6 of this document.

**Table 1-2: EIR-NOP and Scoping Meeting Comments in 2014**

| Agency/Organization | Author | Date |
|---|---|---|
| **Public Agencies** | | |
| Native American Heritage Commission (NAHC) | Not provided | 01-10-2014 |
| Department of Transportation | Daniel Kopulsky, Office Chief | 01-09-2014 |
| Southern California Edison | Louis Davis, Local Public Affairs Region Manager | 02-05-2014 |
| California Department of Fish and Wildlife | Jeff Brandt, Senior Environmental Scientist | 02-04-2014 |
| Beaumont Unified School District | Alice Grundman, Substitute Director of Facilities and Planning | 02-04-2014 |

## Table 1-2 (cont.): EIR-NOP and Scoping Meeting Comments in 2014

| Agency/Organization | Author | Date |
|---|---|---|
| URS Corporation | Eric Carlson, Air Quality Scientist | 02-06-2014 |
| Soboba Band of Luiseno Indians | Joseph Ontiveros, Director of Cultural Resources | 01-08-2014 |
| Southern California Association of Governments (SCAG) | Jonathan Nadler, Manager Compliance and Performance Assessment | 01-30-2014 |
| Governor's Office of Planning and Research State Clearinghouse and Planning Unit | Scott Morgan, Director, State Clearinghouse | 01-06-2014 |
| **Public Comments** | | |
| Cherry Valley Acres and Neighbors (CVAN) | Patsy Reeley, President | No date |
| | Almira Lenn | No date |
| | Bill Souder | No date |
| | Bob and Marty Ellsworth | No date |
| | Charles Bledsoe | No date |
| | Debbie Avakian | No date |
| | Deborah Terrell | No date |
| | Ed Cooper | No date |
| | Elaine Hernandez | No date |
| | Gary Autrey | No date |
| | Hanna | No date |
| | Hope Amen | No date |
| | James Overturf | No date |
| | John and Shirley Russell | No date |
| | Joni Haynes | No date |
| | Joseph Kuhn | No date |
| | Julie Lewis | No date |
| | Katherine Talkington | No date |
| | Leigh Gileno | No date |
| | Leigh Stewart | No date |
| | Les & Rhonda Breeden | No date |
| | Marsha Wolfersberger | No date |
| | Quintanilla Household | No date |
| | Rhea Weber | No date |
| | Richard Hobson & Carol Mansell | No date |

## Table 1-2 (cont.): EIR-NOP and Scoping Meeting Comments in 2014

| Agency/Organization | Author | Date |
|---|---|---|
| | Rob Peterson | No date |
| | Sandra Leoni | No date |
| | Shirley Lithgow | No date |
| | Silvia Mendez | No date |
| | Teri Walder | No date |
| | Tom and Linda Brown | No date |
| | Veronica Cano-Campos | No date |
| | Wendy Walder | No date |
| | Zach Taylor | No date |
| | Janet Gudgell and Patricia Peters | 12-22-2013 |
| | Janet Gudgell and Patricia Peters | 01-8-2014 |
| | Composerx (email name) | 01-13-2014 |
| | Barbara and Henry Wener | 01-13-2014 |
| | Raymond W. Johnson (Johnson and Sedlack) | 01-13-2014 |
| | Judi Nightingale | 01-13-2014 |
| | Harvey and Anna Wimer | 01-14-2014 |
| | Diane Franklin | 01-20-2014 |
| | Mary A. Daniel | 01-22-2014 |
| | Dolores McCurry | 01-22-2014 |
| | Barbara W. Brown | 01-23-2014 |
| | Robert Bridges | 01-23-2014 |
| | Brenda Kreutzer | 01-24-2014 |
| | Michael and Carol Draney | 01-24-2014 |
| | Christy Sterling | 01-24-2014 |
| | Joan Paine | 01-24-2014 |
| | John and Kathleen Dyson | 01-24-2014 |
| | Kirk Brown | 01-24-2014 |
| | Lance Adams | 01-24-2014 |
| | Laura Cox | 01-24-2014 |
| | Lyndsey Oliver | 01-24-2014 |
| | Marc Sanders | 01-24-2014 |
| | Marina Lim | 01-24-2014 |

## Table 1-2 (cont.): EIR-NOP and Scoping Meeting Comments in 2014

| Agency/Organization | Author | Date |
|---|---|---|
| | Mitch Hino | 01-24-2014 |
| | Sandi Joel | 01-24-2014 |
| | Scott Giacolett | 01-24-2014 |
| | Zach Taylor | 01-25-2014 |
| | Michele Delph | 01-25-2014 |
| | Tammy Hull | 01-25-2014 |
| | Trina Brown | 01-25-2014 |
| | Zach Taylor | 01-25-2014 |
| | Dr. Blair Ball | 01-26-2014 |
| | Chris Brown | 01-26-2014 |
| | Dallin Ball | 01-26-2014 |
| | Danice Rose | 01-26-2014 |
| | Dennis Tankersley | 01-26-2014 |
| | Don Bohnsak | 01-26-2014 |
| | Fran Flanders | 01-26-2014 |
| | Jacqueline Smith | 01-26-2014 |
| | James and Jennifer Booth | 01-26-2014 |
| | Jeremy Ball | 01-26-2014 |
| | Jill Padilla | 01-26-2014 |
| | Donna Ingalls | 01-26-2014 |
| | John Burrows | 01-26-2014 |
| | Kim Knorr | 01-26-2014 |
| | Leta Porter | 01-26-2014 |
| | Dr. Linda Martinez | 01-26-2014 |
| | Lisa McCoy | 01-26-2014 |
| | Marshall Cammack | 01-26-2014 |
| | Michelle Mahdavi | 01-26-2014 |
| | Nancy Friedman | 01-26-2014 |
| | Larry and Pamela Bunker | 01-26-2014 |
| | Patrick Leahy | 01-26-2014 |
| | Robert and Renate Allen | 01-26-2014 |
| | Sara Sheeran | 01-26-2014 |

## Table 1-2 (cont.): EIR-NOP and Scoping Meeting Comments in 2014

| Agency/Organization | Author | Date |
|---|---|---|
| | Sean Gill | 01-26-2014 |
| | Sherrie and Robert Vines | 01-26-2014 |
| | Stephanie Schlott | 01-26-2014 |
| | Martha Saenz | 01-26-2014 |
| | Steve Price | 01-26-2014 |
| | Mr. and Mrs. Richardson | 01-27-2014 |
| | Andy Ramirez | 01-27-2014 |
| | Kathy Krause | 01-27-2014 |
| | Jar22 (email name) | 01-27-2014 |
| | Cathy Schaefer | 01-27-2014 |
| | David Hoffman (All Seasons Hay Co.) | 01-27-2014 |
| | Debbie Whipple | 01-27-2014 |
| | Erin Baldwin | 01-27-2014 |
| | Gene De Fouw | 01-27-2014 |
| | The Hanveys | 01-27-2014 |
| | Heidi Miccio | 01-27-2014 |
| | James Honeyfield | 01-27-2014 |
| | Janelle Poulter | 01-27-2014 |
| | Jeffrie Saenz | 01-27-2014 |
| | Jerry Beeman | 01-27-2014 |
| | John Burrows | 01-27-2014 |
| | John E. Clark | 01-27-2014 |
| | Judy Bingham | 01-27-2014 |
| | Karin Starr | 01-27-2014 |
| | Kimberley Wolf | 01-27-2014 |
| | Mrs. L. Montoya | 01-27-2014 |
| | Alan Shubeck | 01-27-2014 |
| | Linda Schreiber | 01-27-2014 |
| | Liza West | 01-27-2014 |
| | Martha Van Rooijen | 01-27-2014 |
| | Michelle Harrison | 01-27-2014 |
| | Patricia J. Gerdine | 01-27-2014 |

**Table 1-2 (cont.): EIR-NOP and Scoping Meeting Comments in 2014**

| Agency/Organization | Author | Date |
|---|---|---|
| | Starla Saiz | 01-27-2014 |
| | Steven Hallbert | 01-27-2014 |
| | Dr. Jamie Elam | 01-28-2014 |
| | Sharon K. | 01-28-2014 |
| | Tamra Johnson | 01-28-2014 |
| | Cindy Burke | 01-29-2014 |
| | Cynthia F. Clay | 01-29-2014 |
| | Don and Kamara Belding | 01-29-2014 |
| | Iqbal Pittalwala | 01-29-2014 |
| | Victoria Wolf | 01-29-2014 |
| | Ron Roy | 02-05-2014 |
| | Joe Kuhn | 02-12-2014 |

The primary issues of concern raised in scoping comments include:

- The project's contribution to air quality and greenhouse gas impacts
- Traffic congestion at the Cherry Valley Boulevard/Interstate 10 traffic interchange
- Changes in land use designation and zoning
- Maintaining the rural character of the Cherry Valley area
- Aesthetics/light pollution
- Noise
- Property value
- Health impacts
- Water supply
- Cumulative impacts
- Water quality
- Agricultural resources
- Recreation

## 1.2.3 - Community Committee Meetings

Following the scoping periods, the County received numerous inquiries and concerns regarding the project. In early 2014, the project proposed two buildings providing 2,560,000 square feet of light industrial use. To address public inquires, the County formed a committee of 11 representatives from the community to evaluate the project and work with the applicant to improve the proposed project. The committee was specifically charged with the following responsibilities and asked to report back to the County with its findings:

1. Review and evaluate the project and all related data and information.
2. Strive to make the project the best that it can be.
3. Determine if the project is good for the community.
4. Alternatively, determine and recommend the highest and best land use that is compatible with the area and is viable and sustainable.

The committee was scheduled to publicly meet monthly starting in April of 2014. Each meeting was intended to cover a specific topic (land use, air quality, transportation, etc.).

- The kick-off meeting was held on April 10, 2014 and covered a briefing on the project and its history.
- The second meeting was on May 8, 2014 and covered land use compatibility and amenities.

The committee voted and approved a motion to deny the project that was before them and recommend that the best use for the property is the existing land use/zoning. In doing so, the committee deviated from the identified responsibilities, did not take advantage of the opportunity to improve the project in conjunction with the project applicant.

While no further meetings were held, the meetings were an effective means for public involvement and comment. Having considered the input received during the meetings, as well as County Planning staff input, the project applicant decided to reduce the scope of the project. As a result, the project square footage was reduced from 2,560,000 square feet to 1,860,760 square feet of light industrial warehouse use, representing an overall reduction in project intensity of 28 percent. Thus, this EIR evaluates the impacts of this reduced intensity project.

### 1.2.4 - Environmental Issues Determined not to be Significant

CEQA Guidelines Section 15063 provide that if a lead agency determines that an EIR will clearly be required for a project, an Initial Study is not required; therefore, no Initial Study was prepared for this project. The Draft EIR is comprehensive in nature, evaluating all subject issues from the CEQA Appendix G Checklist. In particular, the following issues are addressed in the Draft EIR:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems.

The Draft EIR addresses the short and long-term effects of the project on the environment. It also evaluates the potential for the project to cause direct and indirect growth-inducing impacts, and includes a cumulative impact analysis. Alternatives to the project are also evaluated in the Draft EIR.

Mitigation has been proposed for any potentially significant impacts. After the public comment period and finalization of the Draft EIR, a mitigation monitoring and reporting program will be developed as required by Section 15097 of the CEQA Guidelines.

## Organization of the EIR

This Draft EIR document is organized into the following main sections:

- **Executive Summary.** This section includes a summary of the San Gorgonio Crossing Project and alternatives that are addressed in the Draft EIR. A brief description of the areas of controversy and a table summarizing the impacts, mitigation measures, and level of significance after mitigation are included in this section.
- **Section 1: Introduction.** This section provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Section 2: Project Description.** This section includes a detailed description of the project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the EIR, responsible agencies, and approvals needed for the project is also provided.
- **Section 3: Environmental Impact Analysis.** This section analyzes the environmental impacts of the project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Section 3 are as follows:
  - Section 3.1—Aesthetics: Addresses the potential visual impacts of development of the project.
  - Section 3.2—Agriculture and Forestry Resources: Addresses the project's potential impacts on local agriculture/farmland and forest land.
  - Section 3.3—Air Quality: Addresses the potential local and regional air quality impacts associated with the project implementation, as well as consistency with the South Coast Air Quality Management District policies.
  - Section 3.4—Biological Resources: Addresses the project's potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on the listed, proposed, and candidate threatened and endangered species.
  - Section 3.5—Cultural Resources: Addresses the potential impacts of project development on known historical resources and potential archeological and paleontological resources.
  - Section 3.6—Geology and Soils: Addresses the potential impacts the project may have on soils, and assesses the potential effects of project development in relation to geologic and seismic conditions.
  - Section 3.7—Greenhouse Gas Emissions: Addresses the potential impacts of the project regarding the generation of greenhouse gases.
  - Section 3.8—Hazards and Hazardous Materials: Addresses the likelihood of the presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.

- Section 3.9—Hydrology and Water Quality: Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- Section 3.10—Land Use and Planning: Addresses the potential related land use impacts associated with implementation of the project, including project compatibility with surrounding land uses and consistency with the Riverside County General Plan and other land use plans.
- Section 3.11—Mineral Resources: Addresses potential project impacts on known mineral resources and availability of locally important mineral resources.
- Section 3.12—Noise: Addresses the potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- Section 3.13—Population and Housing: Addresses the potential impact of development in terms of population growth, employment opportunities, housing affordability, and the jobs-to-housing balance.
- Section 3.14—Public Services: Addresses the potential impacts upon service providers including fire protection, police, and schools.
- Section 3.15—Recreation: Addresses the potential impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
- Section 3.16—Transportation and Traffic: Addresses the potential impacts on the local and regional roadway system, as well as potential impacts related to emergency access, parking, and alternative transportation.
- Section 3.17—Utilities and Service Systems: Addresses the potential impacts upon service providers including water treatment, wastewater treatment, stormwater, and solid waste.

- **Section 4: Cumulative Impacts Analysis.** This section discusses the cumulative impacts associated with the project, including the cumulative impact setting and cumulative impact analysis.
- **Section 5: Other CEQA Considerations.** This section provides a summary of significant environmental impacts, including growth-inducing impacts, and the project's significant and unavoidable impacts.
- **Section 6: Alternatives to the Proposed Project.** This section compares the impacts of the project with various project alternatives.
- **Section 7: Persons and Organizations Consulted.** This section contains a list of persons and organizations that were consulted during the preparation of this Draft EIR.
- **Section 8: List of Preparers.** This section contains a list of persons who prepared the Draft EIR.
- **Section 9: References.** This section contains a full list of references that were used in the preparation of this Draft EIR.
- **Appendices:** The material in the appendices includes all notices and other procedural documents pertinent to the Draft EIR, as well as all technical material prepared to support the analysis.

## 1.3 - Documents Incorporated by Reference

As permitted by Section 15150 of the CEQA Guidelines, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include, but are not limited to:

- County of Riverside General Plan (2014)
- County of Riverside General Plan Figures (2008);
- The Pass Area Plan (including the Cherry Valley Policy Area)

These documents are specifically identified in Section 9, References, of this Draft EIR. In accordance with Section 15150(b) of the CEQA Guidelines, these referenced documents and other sources used in the preparation of the Draft EIR are available for review at the County of Riverside address shown in Section 1.7, Review of the Draft EIR, below.

## 1.4 - Documents Prepared for the Project

The stand-alone technical studies prepared for the project are listed below:

- Water Supply Assessment. October 8, 2013. Yucaipa Valley Water District.
- Traffic Impact Analysis. November 5, 2014. Urban Crossroads.
- San Gorgonio Crossing Supplemental Traffic Analysis.[2] April 2, 2015. Urban Crossroads.
- San Gorgonio Crossing Alternatives Trip Generation Evaluation. May 1, 2015. Urban Crossroads.
- San Gorgonio Crossing Supplemental Traffic Analysis.[3] June 9, 2016. Urban Crossroads.
- Project Specific Water Quality Management Plan. October 2014, Albert A. Webb Associates.
- Preliminary Hydrology Study. October 2014. Albert A. Webb Associates.
- Off-site Hydrology and Hydraulics Report. October 2014. Albert A. Webb Associates.
- Biological Technical Report. January 2015, HELIX Environmental Planning, Inc.
- Determination of Biologically Equivalent or Superior Preservation Report. November 2014. HELIX Environmental Planning, Inc.
- Multiple Species Habitat Conservation Plan Consistency Analysis. November 2014. HELIX Environmental Planning, Inc.

[2] Refers to the April 2, 2015 Supplemental Traffic Analysis that evaluated potential traffic impacts under Horizon Year (2035) traffic conditions for the future Roberts Road/Cherry Valley Boulevard intersection.

[3] Refers to the April 6, 2016 Supplemental Traffic Analysis that provided additional analysis regarding the I-10 Freeway interchange, Cherry Valley Boulevard, and Calimesa Boulevard.

- San Gorgonio Crossing Gross Fiscal Impact and Economic Benefit Analysis. September 2015. Kosmont Companies.
- Economic Impact of Gateway Distribution Center. January 8, 2014. Economics & Politics, Inc.
- Fault Investigation. September 22, 2008. Neblett & Associates, Inc.
- Report of Findings, Updated Phase I Environmental Site Assessment. April 6, 2009. RM Environmental, Inc.
- Grading Plan Review. January 7, 2013. Ginter & Associates, Inc.
- Grading Plan Review for the Revised TPM #36564 San Gorgonio Crossings. November 2014. Ginter & Associates, Inc.
- Infiltration Rate Evaluation. October 23, 2012. Ginter & Associates, Inc.
- Air Quality and Greenhouse Gas Analysis. March 2015. FirstCarbon Solutions.
- Noise Impact Analysis. January 2015. FirstCarbon Solutions.
- Paleontological Resources Survey. April 9, 2013. FirstCarbon Solutions.
- Phase I Cultural Resources Survey. April 11, 2013. FirstCarbon Solutions.

## 1.5 - Lead Agency, Developer, and Consultant

The County of Riverside is the lead agency in the preparation of the Draft EIR. The applicant/owner is TSG Cherry Valley, LLC. The Shopoff Group, L.P. is the developer of the project. FirstCarbon Solutions (formerly Michael Brandman Associates) is the environmental consultant for the project.

## 1.6 - Review of the Draft EIR

Upon completion of the Draft EIR, a Notice of Completion (NOC) will be filed with the State Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Draft EIR will be distributed to responsible and trustee agencies, other affected agencies, surrounding Cities, and interested parties, as well as all parties requesting a copy of the Draft EIR, in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, the Draft EIR, including the technical appendices, is available for review at the Riverside County Planning Department, located at 4080 Lemon Street. Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on the Draft EIR during the public review period on the Draft EIR.

Written comments on this Draft EIR should be addressed to:

Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
Attn: Mr. Steve Weiss

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review in the Final EIR at least 10 days prior to Riverside County Board of Supervisors action on the project and the EIR. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.



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# SECTION 2: PROJECT DESCRIPTION

## 2.1 - Project Location

The proposed San Gorgonio Crossing Project (project) is located in Township 2 South, Range 1 West, Section 30, along the north side of Cherry Valley Boulevard and east of the Interstate 10 Freeway (I-10), between the cities of Calimesa and Beaumont, and is primarily located in an unincorporated area of the County of Riverside, California (Exhibit 2-1). Approximately 16 acres of the western portion of the project site are located within the City of Calimesa. The project site has regional access via Cherry Valley Boulevard to the I-10 Freeway, and local access via Cherry Valley Boulevard, Brookside Avenue, and Oak Valley Parkway (Exhibit 2-2).

The unincorporated community of Cherry Valley is located approximately 0.5 mile to the east of the project. The City of Beaumont is located south of the project site, the City of Calimesa is located directly west and northwest of the site, and the City of Yucaipa is located approximately two miles north of the site. Access to the site is off Cherry Valley Boulevard. The Assessor's Parcel Numbers for the project site are 407-220-004, 407-220-007, 407-220-008, 407-220-009, 407-220-014, 407-220-016, 407-220-017, 413-270-012, and 413-270-01.

The project site lies with The Pass Area Plan (PAP), which is a component of the County of Riverside General Plan that provides area-specific policies and requirements to address local conditions and issues. The PAP encompasses the cities of Banning, Beaumont and Calimesa as well as several county unincorporated communities, including Cherry Valley. Within the broader framework of the PAP, certain areas are identified as "policy areas." According to the PAP, a policy area is a portion of an Area Plan that contains special or unique characteristics that merit detailed attention and focused policies. The project site is within the Cherry Valley Policy Area (CVPA). In addition, the project site is within the Cherry Valley Gateway Policy Area, which is located on the western edge of the CVPA and, as the name implies, serves as a gateway to Cherry Valley. The specific policies that apply to these areas are discussed in more detail under Section 2.10, Land Use and Planning.

## 2.2 - Existing Conditions

### 2.2.1 - Project Site

The project site is currently vacant (Exhibit 2-3). Elevations on-site rise from southwest to northeast, ranging from approximately 2,690 to 4,400 feet above mean sea level. The southern and central portions of the project site consist of broad sloping grasslands that transition to steeper ridges and canyons on the north portion of the project site. Much of the on-site vegetation consists of native grasses, sage scrub, and occasional scrub oak. The northern, steeper portion of the project site is traversed by two branches of the Cherry Valley Fault, although these branches of the fault appear to be inactive. The project would not locate any building over the fault line or within required structural setbacks related to the faults. Potential project impacts with respect to geological hazards are discussed in detail in Section 3.6, Geology and Soils of this Draft EIR.

There are three ephemeral drainages that traverse the project site from east to west and northeast to southwest. Ephemeral drainages are drainages with water flows that generally occur for only a short period after a rain event. Although all on-site drainages are ephemeral and do not support wetland vegetation, there are some limited areas of the project site that contain Waters of the U.S. and Waters of the State. Several dirt roads and informal trails cross the project site, and physical access to a few homes to the north are provided through the site by dirt roads. Grazing and past agricultural activities have disturbed much of the site, which is grazed periodically by sheep and goats.

## 2.2.2 - Surrounding Land Use

The project site is bordered by the City of Calimesa to the west and northwest. The areas to the south, east, and the north of the project site are within unincorporated Riverside County. The area to the northeast, north, and northwest of the site primarily consists of rolling hills with a few scattered rural residences. Most of the surrounding area is currently in a predominantly undeveloped state. A mobile-home park (Rancho Calimesa) is located approximately 0.26 mile west of the site, off Calimesa Boulevard. The I-10 Freeway is located approximately 0.35 mile southwest of the project site. Land to the south consists of scattered vacant parcels, a truck services business, and the inactive Sunny Cal Egg Ranch. The Sunny Cal Egg Ranch site has been approved as a planned community development that would comprise approximately 560 residential units at buildout. East of the project site is a mix of properties used for agriculture purposes and large-lot, rural, single-family development.

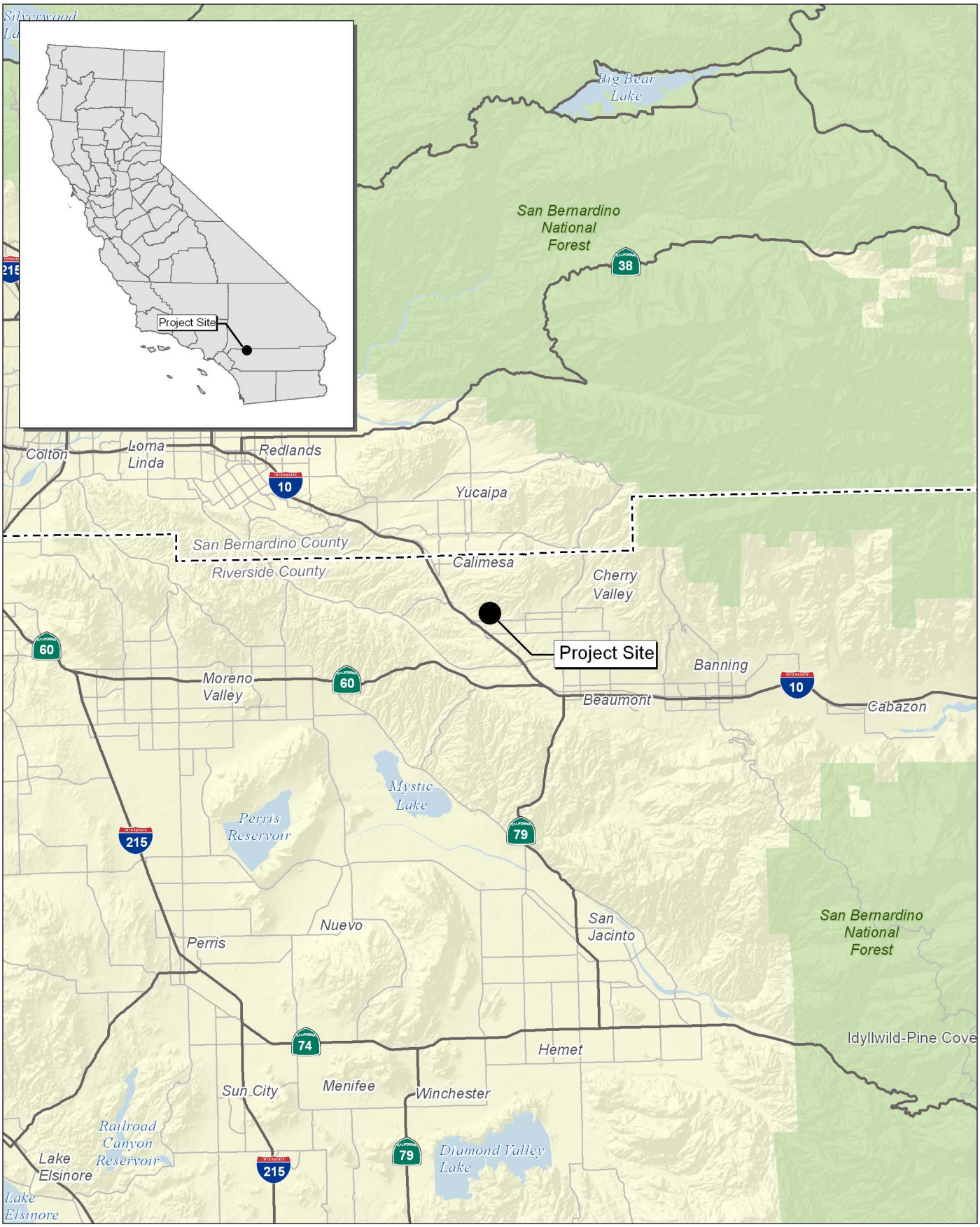
Additional uses in the vicinity of the project site include a residential neighborhood east of the I-10 Freeway, directly south of Brookside Avenue, and north of the Oak Valley Golf Club. In addition, the PGA Golf Course and several developing residential neighborhoods, as well as the approved Oak Valley Specific Plan (approximately 4,000 residential units), are located across the I-10 Freeway, to the west.

## 2.2.3 - Land Use Designations

### Project Site

The PAP identifies the project site within both the CVPA and the Cherry Valley Gateway Policy Area. The General Plan Land Use designations for the project site consist of Rural Mountainous (RM) within the northern portion of the project site and Very Low Density Residential (VLDR) within the southern portion of the project site. Land uses allowed under the VLDR land use designation include single-family detached residences on large parcels where intensive animal keeping is discouraged. Land uses allowed under the RM land use designation include single-family residential uses with a minimum lot size of 10 acres and limited animal keeping and agriculture.

The site is zoned Controlled Development Area (W-2), which typically allows for single-family residential, light agriculture, aviaries, apiaries, grazing of farm animals and animal husbandry. Guest ranches, educational institutions, country clubs, churches, meat cutting/packaging plants without slaughtering are permitted with approval of a Plot Plan. Airports, cemeteries, hunting clubs, lumber mills, trails, bike parks, rodeo arenas, commercial stables, menageries, and animal hospitals are permitted with approval of a Conditional Use Permit.



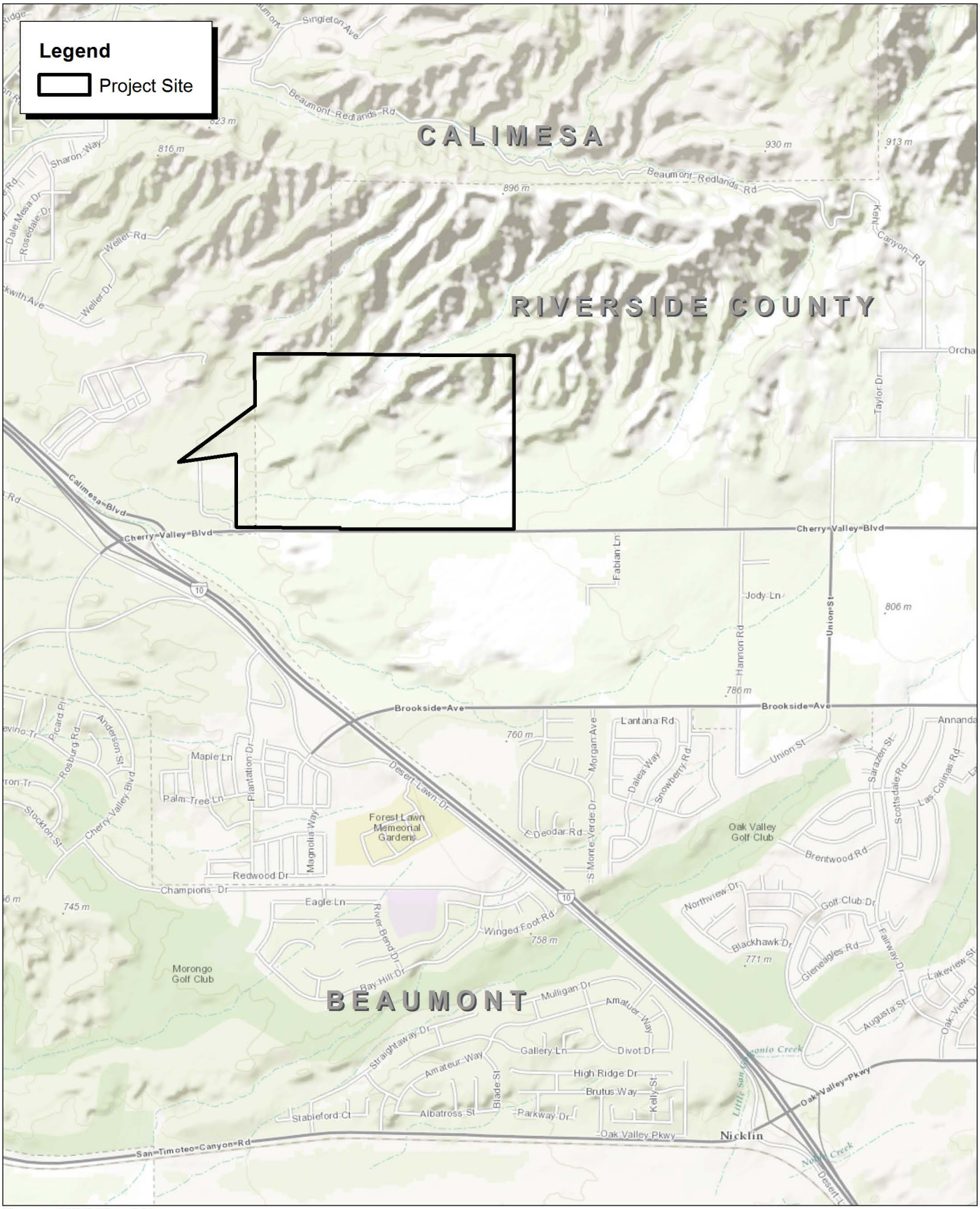

Source: Census 2000 Data, The CaSIL.

FirstCarbon® SOLUTIONS

5 2.5 0 5 Miles

# Exhibit 2-1
# Regional Location Map

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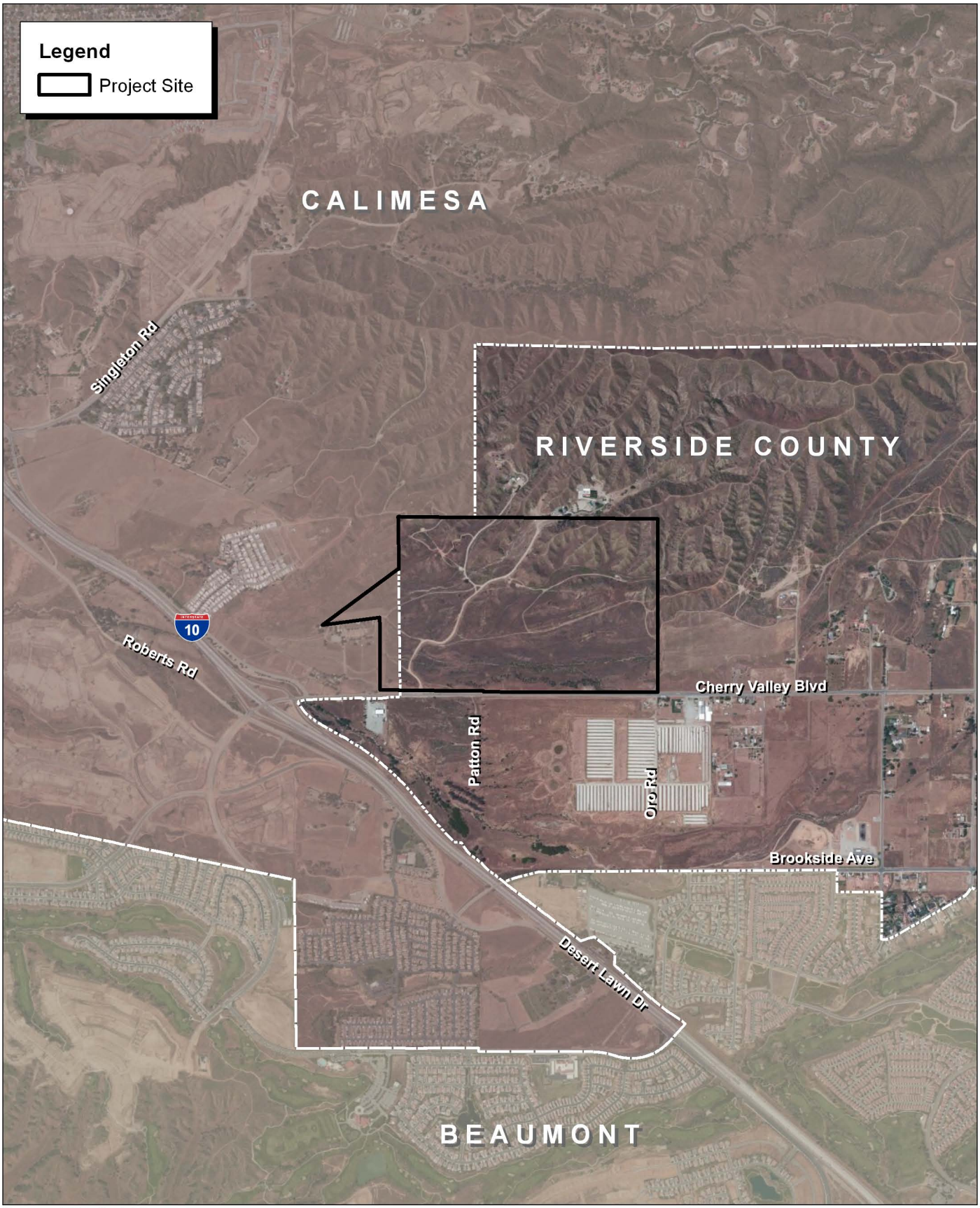

Source: ESRI Street Map.

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2,000 1,000 0 2,000 Feet

# Exhibit 2-2
# Local Vicinity Map

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Source: ESRI Aerial Imagery.

FirstCarbon® SOLUTIONS

2,000 1,000 0 2,000 Feet

# Exhibit 2-3
# Local Vicinity Map
# Aerial Base

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### Surrounding Areas

The unincorporated County property to the north of the project site is zoned Residential Agriculture, one acre minimum lot size (R-A-1). Areas to the east and south are also zoned R-A-1 and W-2. The General Plan Designation to the north of the project site is primarily RM. The area to the east and south of the project site is also designated VLDR. The area to the southeast of the project site, near the I-10 Freeway, is designated Commercial Retail (CR).

The areas directly west of the project site located within the City of Calimesa are zoned and designated by the General Plan as Commercial Regional, Residential Low (2 to 4 dwellings per acre), and Residential Low Medium (4 to 7 dwellings per acre). The area within the City of Calimesa that lies to the north and northwest of the project site is zoned/designated as Rural Residential (RR) (0 to 2 dwellings per acre). Two exhibits illustrate the designations of the surrounding areas: Exhibit 2-4 shows the land use designations of the project site and surrounding areas; and Exhibit 2-5 shows the zoning designations of the project site and surrounding areas.

## 2.2.4 - Project Applicant and Landowner

The applicant/owner, TSG Cherry Valley, LP, is represented by Shopoff Realty Investments and has submitted the proposed San Gorgonio Crossing Project to the County of Riverside for review and approval.

# 2.3 - Project Characteristics

## 2.3.1 - Description of the Project

Environmental Impact Report No. 534 (the County EIR reference number) provides an environmental analysis of the potential impacts of the project. The San Gorgonio Crossing Project site totals approximately 229 acres. The project includes an additional 16 acres located within the City of Calimesa that would be used for project infrastructure purposes. Approximately 140.23 acres would be included within the developed portion of the project, and 84.8 acres would remain as natural open space (approximately 36 percent of the project site). The project consists of two industrial buildings that would be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Silver Certification. Building 1 would cover approximately 811,000 square feet and Building 2 would cover approximately 1,012,760 square feet, for a total of approximately 1,823,760 square feet of floor area. The two industrial buildings would include approximately 30,000 square feet of office space. A site plan for the project is shown in Exhibit 2-6.

The proposed site plan consists of two buildings planned north of Cherry Valley Boulevard, to the east and west of re-aligned Roberts Road. The buildings would be designed for Class IIIB construction, and Occupancy Class S-1, B. These facilities are planned to house a variety of industrial and warehouse distribution/logistics uses. Both buildings would be approximately 47 feet in height. Building 1 would contain an office on the southwest and southeast corner of the proposed building. Building 2 would contain four office areas located at each corner of the proposed building. Both buildings would be of concrete tilt and glass construction. Additionally, the project includes the use of solar panels on its roofs, which would provide approximately 23 percent of the project's power needs.

The project would utilize neutral earth tones and architectural features to provide a rural design scheme that is in keeping with the existing character of the surrounding area. The elevations would generally include rural, western, and agricultural elements. For example, the project would utilize shades of brown with natural accent colors for the majority of the building elevations. The project buildings would also include decorative metal canopies, appropriate signage, and barn style façades.

In accordance with county landscaping standards, the project would provide extensive landscaping along the project frontage and within Cherry Valley Boulevard. Theme fencing would be located behind landscaped parkways between meandering sidewalk systems and the multi-purpose trail to prevent cross-over and degradation of landscape parkway plant material. Landscape medians would be designed with a decorative landscape maintenance strip along the edges of the curb and along median areas in width near turning lanes that match entry monumentation themes. All utilities would be located under street paving and not under landscape medians, to allow for street tree planting within landscape medians. Landscape parkways between the curb and the sidewalk will be a minimum width of 5 feet (including curb), and landscape parkways between the 5-foot meandering sidewalk and the 10-foot-wide, multi-purpose trail would be a minimum of 4 feet wide. Motorists and pedestrians traveling east along Cherry Valley Boulevard would see four separate layers of landscaping, and a berm separating the roadway from the project.

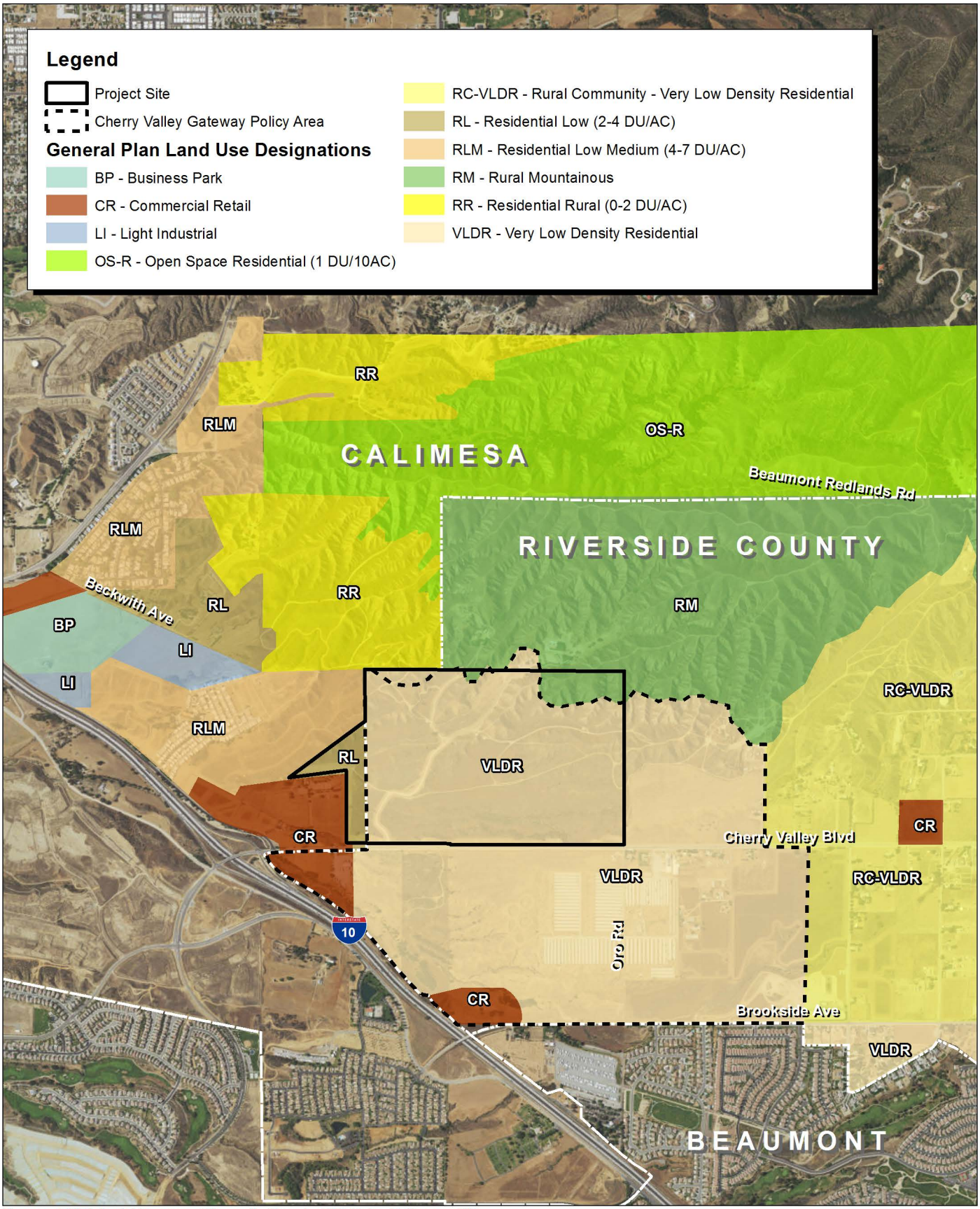
The project would provide 120 parking spaces for office use and would include warehouse parking and trailer parking to establish a total of 1,237 spaces, as well as additional bike spaces. A conceptual site plan for the project is shown in Exhibit 2-6.

Both buildings would be designed to accommodate cross-dock usage, with 136 dock doors for Building 1 and 170 dock doors for Building 2. Electric trailer movers would be used in place of traditional diesel-powered movers to move trailers throughout the project site, and would reduce the amount of emissions generated.

A public street—located between Building 1 and Building 2—would provide access to existing residences generally to the north of the project site that currently take access through the project site via a dirt road. The street would replace the existing dirt road, be approximately 1,600 feet in length, be designed to Riverside County standards, and provide residents access through the project site. Three access points would be provided off Cherry Valley Boulevard. A landscaped, raised median would be installed on Cherry Valley Boulevard to direct project traffic and improve the aesthetics of the streetscape. Refer to Exhibit 2-7 for an illustration of the proposed street section.

A water quality basin would be constructed to the west of Building 1. A rectangular concrete channel would be located north and south of Buildings 1 and 2. Additionally, a grouted riprap[1] berm and a water quality infiltration trench would be located north of Building 2. Riprap berms would also be located east of Building 2 and a water quality basin is planned west of Building 2. Additionally, a publicly maintained trapezoidal concrete channel would be located between the building sites and Cherry Valley Boulevard.

[1] Riprap is a foundation or sustaining wall of stones or chunks of concrete, which can be used to line channels.



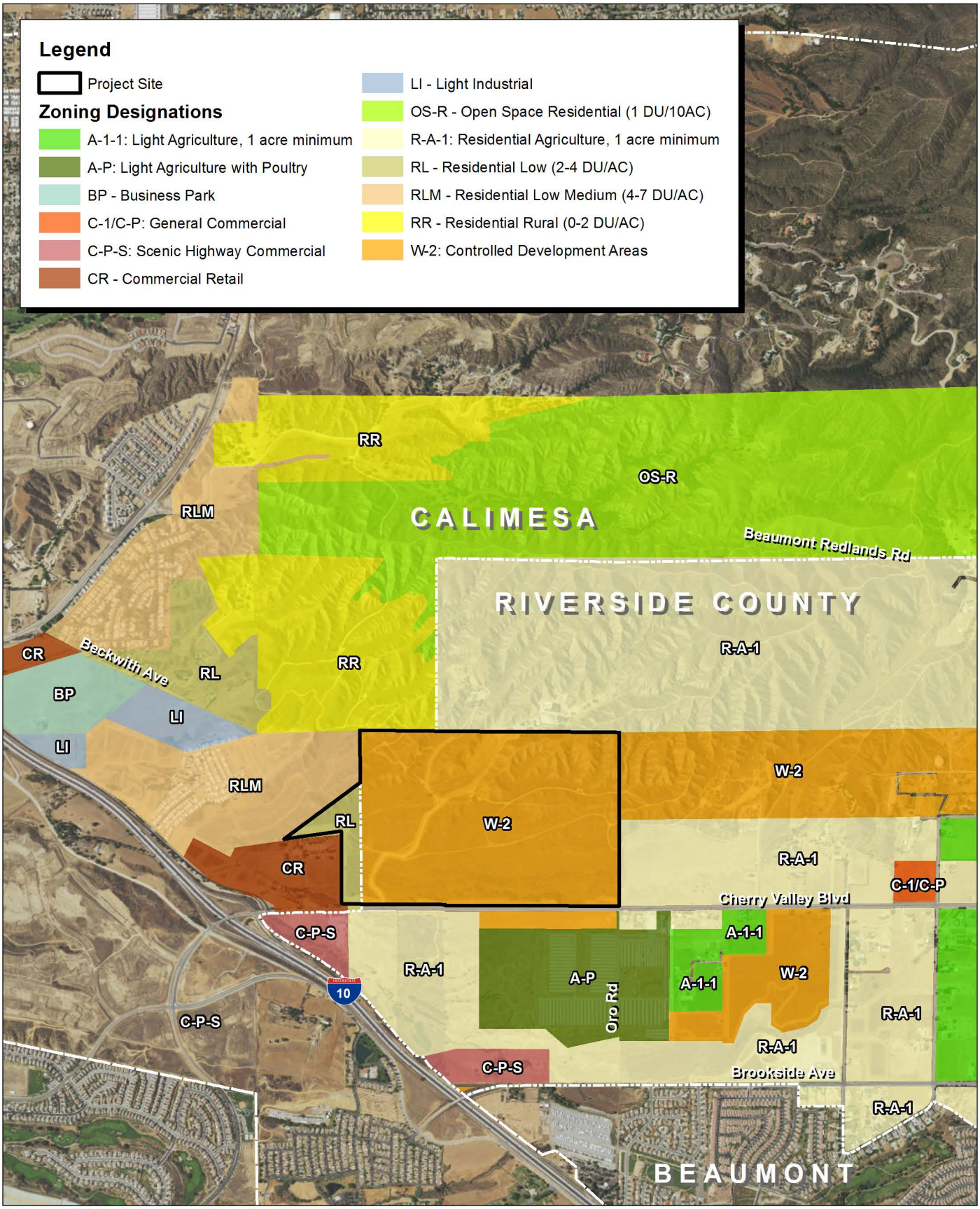

Source: ESRI Aerial Imagery. Riversdie County GIS Data. Calimesa GP.

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# Exhibit 2-4
# Existing
# Land Use Designations

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Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 2-5
# Existing Zoning Designations

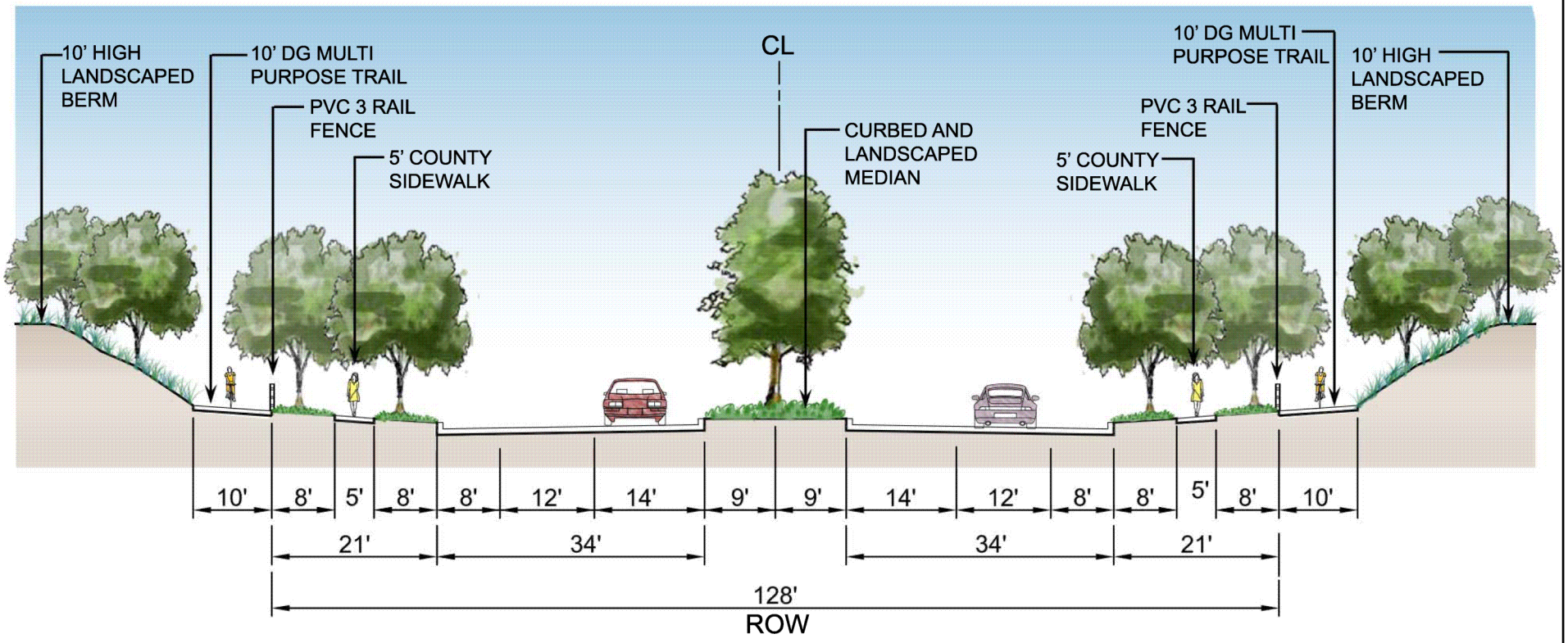
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Exhibit 2-6
Site Plan

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# Exhibit 2-7
# Cherry Valley Boulevard Street Section

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Existing drainage flows from off-site areas such as the hilly undeveloped portions of the site to the north, would be conveyed through the site and ultimately directed off-site to the west side of the project site. As included in the Hydrology analysis for Tentative Parcel Map 36564, there are two drainage areas that exist on-site: Drainage area "A" and "B." The project includes a number of drainage facilities designed to safely convey the off-site 100-year storm runoffs through the project site and to limit the storm flow resulting from project activities, including:

- Use of bio-treatment best management practices such as extended detention basins and trenches, sized to accommodate the first flush flows generated in the proposed development area;
- Storm drain facilities that would collect and route on-site runoff through a detention basin that is sized to limit 10-year storm discharge from the site to be equal or less than flows under the existing condition; and
- A detention basin that would incorporate hydro modification requirements by limiting the increase in the 2-year storm flow caused by the proposed development to less than 10 percent more than existing conditions (Exhibit 2-4).

The project also includes four acres of on-site riparian mitigation along the project frontage.

As discussed, the project includes two water quality basins that are included as part of the Site Specific Water Quality Management Plan. The primary function of these basins is to mitigate the stormwater impacts caused by developing the project site. The east side drainage improvements would include a rock protection berm. This berm would capture the off-site runoff and drain into a concrete wingwall structure. This inlet structure will be connected to a concrete culvert and will discharge into the trap channel on-site. The water will eventually drain out from the structure on the west side of the project. Additionally, the project would utilize approximately 16 acres within the City of Calimesa for off-site drainage and flooding improvements. Improvements within the City of Calimesa are composed of drainage channels and appurtenances such as a concrete trap channel, a concrete box culvert, two concrete outlet structures, and rip rap rock energy dissipaters. The Applicant has also agreed to construct a rock-lined berm to protect the adjacent property owners. Potential environmental impacts associated with these improvements are analyzed within this EIR, and separate approval is required by the City of Calimesa. See Section 3.9, Hydrology and Water Quality, for additional discussion of the water quality and drainage features of the project.

Two future water storage tanks, each with a capacity of 1 million gallons, are proposed on the northeastern portion of the project site. The project would provide the building pads and access for the tanks, and the Water District would be responsible for constructing the remaining features necessary for the two water storage tanks. See Section 2.3.3, Master Utilities System of this section and Section 3.17, Utilities and Service Systems for additional discussion on the future water tanks, as well as water service for the project site.

The project would feature on-site trails that connect with existing trails in the northern portion of the site to contribute to the development of the City of Calimesa's trail system. The trails would be developed as part of an easement, with the responsible entity to be determined prior to project

approval. A 12-foot-wide trail section would be constructed along the project frontage on the northern side of Cherry Valley Boulevard, in accordance with County Standard 405, consisting of decomposed granite to accommodate pedestrians and equestrians. A trailhead would also be constructed in the southwest corner of the site and feature a water tower and barn, which ties into the trails. These structures (tower and barn) would not be functional, but would screen views of the project site, and provide a focal point to viewers along local roadways, while maintaining and enhancing the rural character of the area. The water tower would be of similar scale to the industrial buildings, at 40 feet. The barn would be approximately 800 square feet, and approximately 19 feet in height at the ridge. The trail along the western margin of the project site would consist of decomposed granite to accommodate hikers and equestrians, and connect to the existing trails in the northern portion of the project site.

Additionally, a roadway and utility easement would be granted to Holbert Ranch (upon successful negotiation with this adjoining property owner) within the northwest corner of the site that would provide access to existing residents to the north.

Equipment and commodities to be stored on the property would include products and goods; vehicles; trucks; trailers; maintenance equipment, and machinery; office supplies and equipment; fuels for vehicles; and equipment associated with the distribution of goods. Vehicle and equipment maintenance to be performed on the property would be nominal, including routine vehicle maintenance, and maintenance and repair of equipment and machinery for operations. Primary repairs would be performed off-site.

## 2.3.2 - Phasing and Improvements

### Phasing

The project is planned to be completed in one construction phase, and the analysis provided in this Draft EIR is based on the entire project being developed in a single phase. Occupancy of the project is anticipated to be in 2017.

### Improvements

The project's mass grading activities would involve on-site cut of approximately 3 million cubic yards and fill of approximately 2.3 million cubic yards, with a balance of soils on-site. The design of the project would seek to balance the earthwork necessary for grading and avoid the import or export of soil.

Three access points are proposed off Cherry Valley Boulevard. The primary access point would be located in the mid-portion of the project site between Building 1 and Building 2, and is proposed as a signalized intersection. This primary access would serve as a public roadway (78-foot right-of-way). Two gated driveways would provide access to each building off the primary access. The primary access would also provide access to four, existing, single-family residences located approximately 290 to 700 feet north of the project site. Additional access is provided off Cherry Valley Boulevard via a driveway located on the west edge of the project site. The main access point and interior circulation pattern have been designed to accommodate the turning movements and stacking requirements of the truck-

trailer traffic, and to provide a distinctive design entrance to the project site. In addition, two secondary access points have been designed to accommodate automobile and emergency traffic only.

All grading and earthwork activities would be performed in accordance with the general earthwork and grading specifications of the County of Riverside. Based on the sloping terrain of the project site a number of manufactured slopes and possibly retaining walls may be needed to develop the site. More information on slopes and slope heights is presented and analyzed in Section 3.6, Geology and Soils.

In addition to the on-site improvements, off-site water and sewer maintenance, additional off-site grading, and drainage facilities would be located off-site as detailed in Section 2.3.4, below.

## 2.3.3 - Land Use Designation and Zoning

According to the County of Riverside General Plan, the project site is currently designated as RM and VLDR, and is located within the Cherry Valley Gateway Policy Area and the CVPA. The RM designation is located along the northerly portion of the project site with the majority of the site designated as VLDR (Exhibit 2-4). A General Plan Amendment is proposed as part of the project entitlements to change the Land Use designation from RM and VLDR to RM, Open Space Recreation (OS-R), Public Facility (PF) and Light Industrial (LI). The area of the project site designated as RM would remain designated as RM, and would not be developed as part of this project. Similarly, the new OS-R area would not be developed as part of this project. The area re-designated as PF would contain the two proposed water tanks for use by the Yucaipa Valley Water District (YVWD).

The PAP identifies the project area within the Cherry Valley Gateway Policy Area and the CVPA. The project includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P) to be consistent with the General Plan Amendment. No land use changes are proposed for the project site located within Calimesa. In addition, the project would be annexed into the Yucaipa Valley Water District. The Riverside County Local Agency Formation Commission (LAFCO) would be the responsible agency for considering the proposed annexations as determined through consultation with San Bernardino County LAFCO.

The Cherry Valley Gateway Policy Area was established to serve as a buffer between the communities of Beaumont and Cabazon, and to plan for the development of clustered dwelling units as compared to the neighboring CVPA. The location, configuration, and design of the project will allow the project to blend into the existing landscape despite the large size of the proposed buildings, helping to advance the vision and goals of the Policy Area. Project landscaping and berms further screen views of the project buildings and allow for continuity in the existing rural aesthetic of the area.

The project meets the goals and policies of the CVGPA in numerous respects. First, the project will preserve community uses and access to an informal equestrian and pedestrian trail network running throughout the undeveloped northern section of the Site. The project will also be set back from the street and landscaped in such a manner as to be visually unobtrusive, thereby espousing the rural character of the surrounding environment consistent with the goals of the CVGPA. In addition, the natural setting and unobstructed views allow the site to serve as a community separator between

the cities of Calimesa and Beaumont and as a scenic gateway or "approach" to the Cherry Valley community. The project would establish 84.8 acres of natural open space designated OS-R, thereby furthering the CVGPA goal to provide a community separator.

See Section 2.4.2 below regarding required approvals for the project, and Section 3.10, Land Use and Planning for additional discussion of proposed land use changes, and the project's consistency with the Cherry Valley Gateway Policy Area.

## 2.3.4 - Master Utilities System

### Water and Sewer

Water and sewer service for the project would be provided by the Yucaipa Valley Water District (YVWD). In order to provide service to the project site, off-site water and sewer lines in Cherry Valley Boulevard and Calimesa Boulevard would be constructed. A water reservoir would also be required on-site. Potable water would be provided via the extension of an existing YVWD pipeline that is located near the intersection of I-10 and Calimesa Boulevard. A 16-inch-diameter pipe would adequately serve the project's projected water demand and meet the County's fire flow requirements. No off-site non-potable water facilities are proposed at this time.

In addition, as previously mentioned, two future water storage tanks, each with a 1-million-gallon capacity are proposed on the northeastern portion of the project site to be owned and operated by YVWD. Both tanks are anticipated to be used for water storage. A booster station would be located adjacent to the water tanks on-site. The water tanks would not serve the project site but would serve existing and planned development in the YVWD service area.

The project would connect to existing off-site sewer mains to provide wastewater services to the site. The project would likely connect to the existing sewer main located approximately 2,250 feet south of the intersection of Calimesa Boulevard and Singleton Road. Alternatively, the project may utilize an existing sewer within Calimesa Boulevard that currently serves the Calimesa Country Club. Sewer main capacity in this location would need to be verified.

See Section 3.17, Utilities and Service Systems for additional discussion on the proposed water tanks, as well as water and wastewater service for the project.

### Natural Gas

The Southern California Gas Company (SCGC) currently provides natural gas service to the project area, and would serve the project site.

### Solid Waste

Solid waste from the project site would likely be disposed of at the Lamb Canyon Landfill, located at 16411 Lamb Canyon Road in the City of Beaumont, although the solid waste hauler may have the ability to take the project-generated solid waste to other landfills. The estimated solid waste generation of the project is discussed in Section 3.17, Utilities and Service Systems of this Draft EIR. This landfill has a remaining capacity of over 18 million cubic yards and is not scheduled to close until 2021, after which other solid waste disposal sites would be used (CalRecycle 2012).

### Electricity

The Southern California Edison Company, an Edison International Company, currently provides electricity for the project area, and would serve the project. Currently, Southern California Edison maintains local distribution lines in the project area, including along Cherry Valley Boulevard along the project frontage. The project would also establish roof top solar panels that would provide approximately 23 percent of the project's power needs on-site.

### Telephone and Cable TV

Verizon currently provides telephone service for the project area and would serve the project. Adelphia currently provides cable TV service for the project area.

### Project of Statewide, Regional, or Areawide Significance

Section 15206 of the California Environmental Quality Act (CEQA) Guidelines lists the types of projects that are of Statewide, Regional, or Areawide Significance. When a project is so classified, the CEQA environmental document is required to be distributed to applicable state agencies through the State Clearinghouse of the Governor's Office of Planning and Research, and should also be distributed to the applicable Council of Governments. The project meets the criteria of a project of Statewide, Regional, or Areawide Significance for the following reasons:

- Potential environmental effects of the project could extend beyond the boundaries of unincorporated Riverside County.
- The project proposes a local general plan, element, or amendment thereof for which an EIR is prepared.
- The project proposes an industrial park occupying more than 40 acres of land, and encompassing more than 650,000 square feet of floor area.

## 2.4 - Project Objectives and Approvals

### 2.4.1 - Project Objectives

A clear statement of project objectives would assist the County of Riverside in developing a reasonable range of alternatives, and would aid the decision-makers in their consideration of the project. The project objectives are listed below.

- **OBJ-1:** Provide an industrial park that supports regional warehouse distribution and logistics tenants which benefit from the strategic location located in close proximity to the I-10 Freeway.
- **OBJ-2:** Provide additional employment opportunities on the project site to local residents of Cherry Valley and neighboring cities to provide local economic opportunities and reduced commute times and air pollution, in accordance with Riverside County General Plan Policies LU 7.12, LU 10.1 and AQ 8.2.
- **OBJ-3:** Provide new development that would assist the County in obtaining fiscal balance in the years and decades ahead through increased tax revenues.

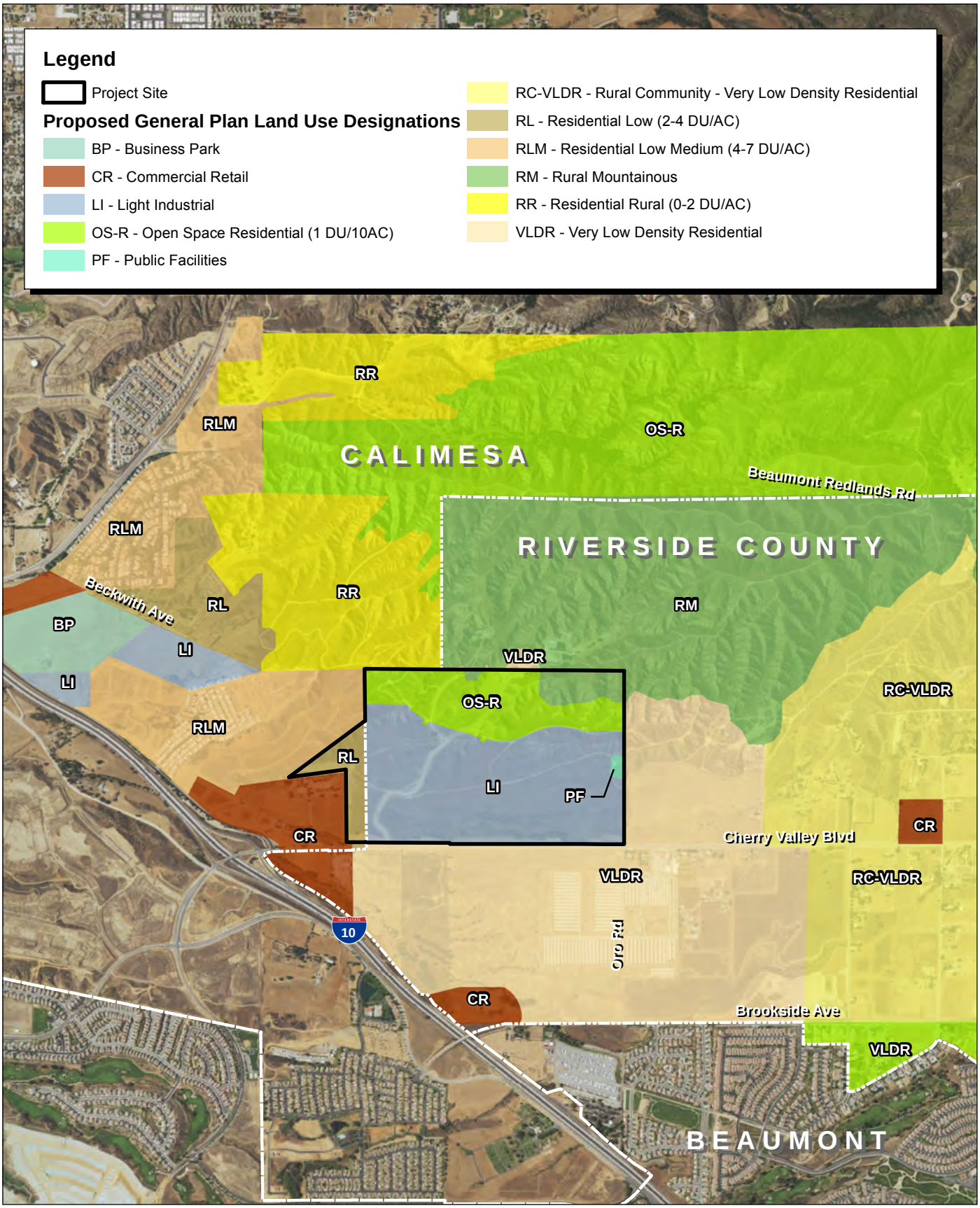
- **OBJ-4:** Provide convenient freeway access to trucks that would use the warehouse distribution facilities on the project site in a manner that limits truck traffic disruption to residential areas within Cherry Valley and neighboring cities.
- **OBJ-5:** Locate industrial uses near existing roadways and freeways to reduce traffic congestion and air pollutant emissions.
- **OBJ-6:** Facilitate goods movement for the benefit of local, regional, statewide and nationwide economic growth.
- **OBJ-7:** Provide for a reasonable return on investment needed to develop the project.
- **OBJ-8:** Create a high quality design industrial complex that maximizes the use of the site and promote the efficient use of land while still providing natural open space consistent with the rural identity of the community.

## 2.4.2 - Required Approvals

The County of Riverside has primary governmental authority for the approval and supervision of the project. Accordingly, the County is the Lead Agency for this project, as defined under CEQA and is responsible for completing this Draft EIR, and assessing and disclosing the environmental consequences associated with project implementation. Additional discretionary actions would also be required of other governmental entities. Consultation with San Bernardino County and Riverside County LAFCOs indicated determined that Riverside County LAFCO is the appropriate authority for the consideration of annexations related to this project, and is the responsible agency under CEQA for consideration of project-related annexations described below. This Draft EIR is intended to serve as the CEQA compliance document for any necessary approvals by the County of Riverside and other agencies.

The project would require the following actions:

- General Plan Amendment (No. 1079) proposing the following changes:
  - Change in land use designation from Rural Mountainous (RM) and Very Low Density Residential (VLDR) to RM, Open Space Recreation (OS-R), Public Facility (PF) and Light Industrial (LI); see Exhibit 2-8 Proposed Land Use Designations
- A Change of Zone (No. 7799) from Controlled Development (W-2) to Industrial Park (IP); see Exhibit 2-9 Proposed Zoning Designations
- Final EIR certification (No. 534)
- Approval of Tentative Parcel Map (No. 36564); see Exhibit 2-10 Parcel Map
- Plot Plan Approval (No. 25337); see Exhibit 2-11 Plot Plan and Conceptual Grading
- Annexation of the project site into the Yucaipa Valley Water District
- Approval from City of Calimesa for off-site drainage and flood improvements
- Army Corps of Engineers Permits related to potential impacts to waters of the U.S. (401 and 404)



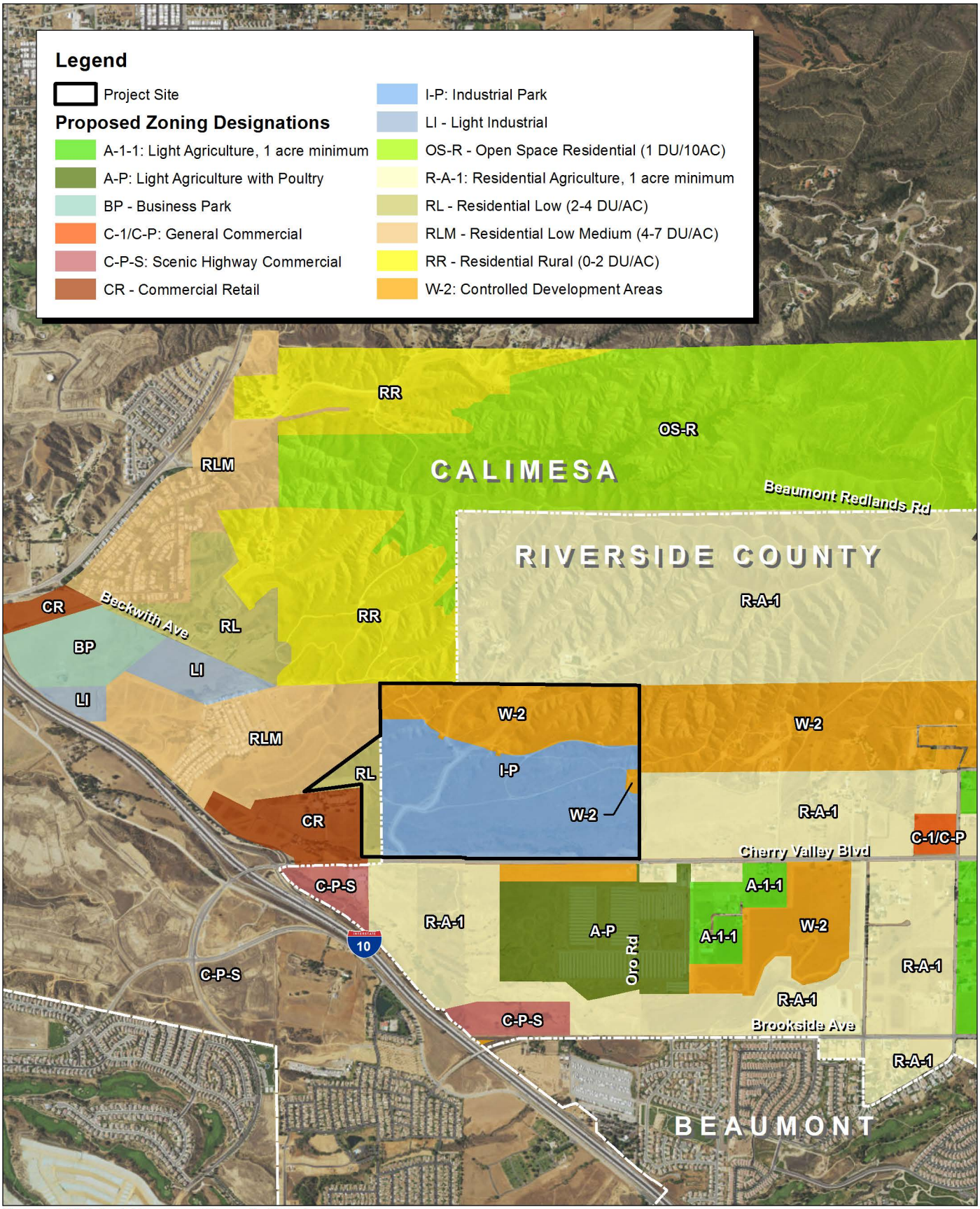

Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 2-8
# Proposed
# Land Use Designations

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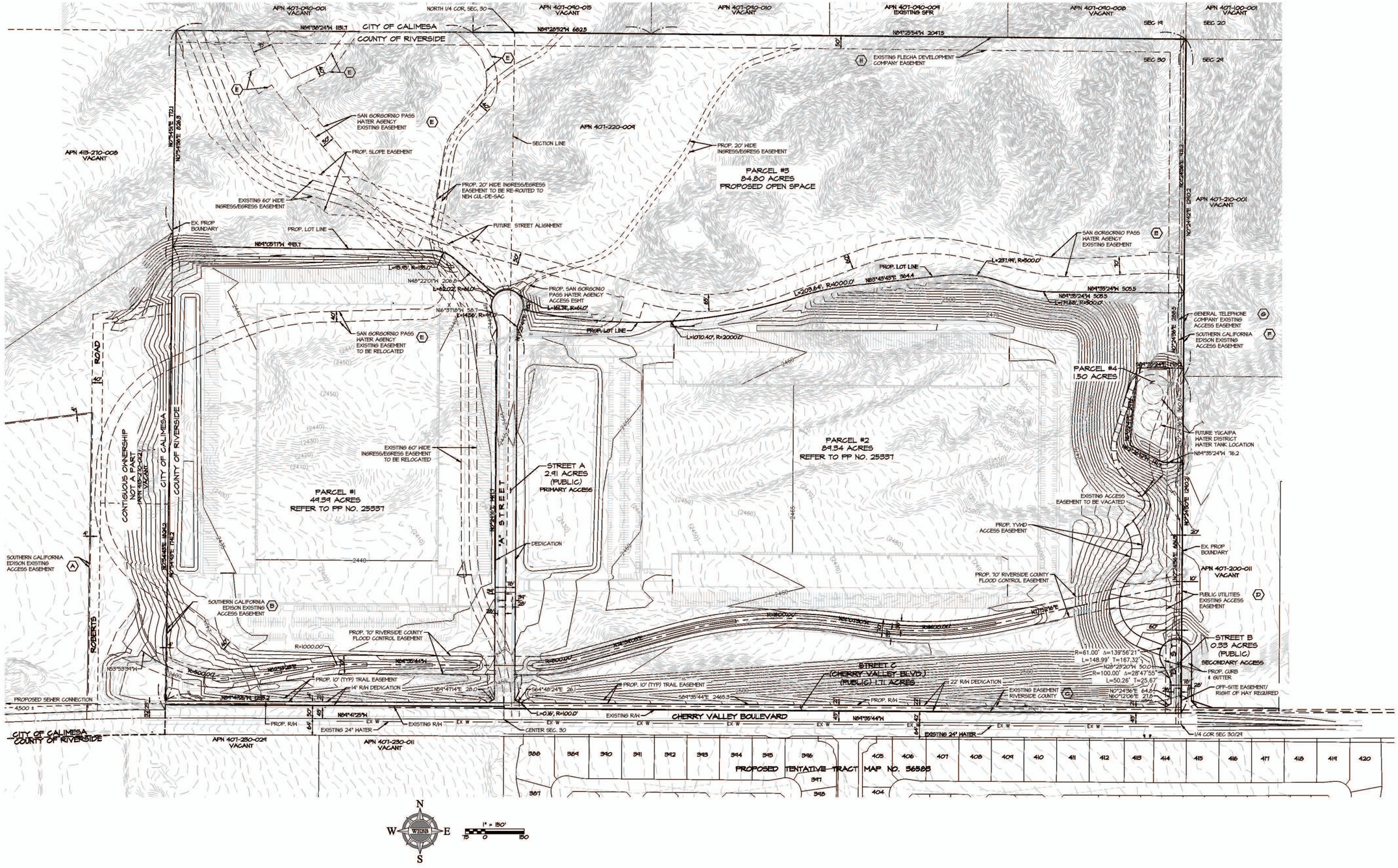

Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 2-9
## Proposed Zoning Designations

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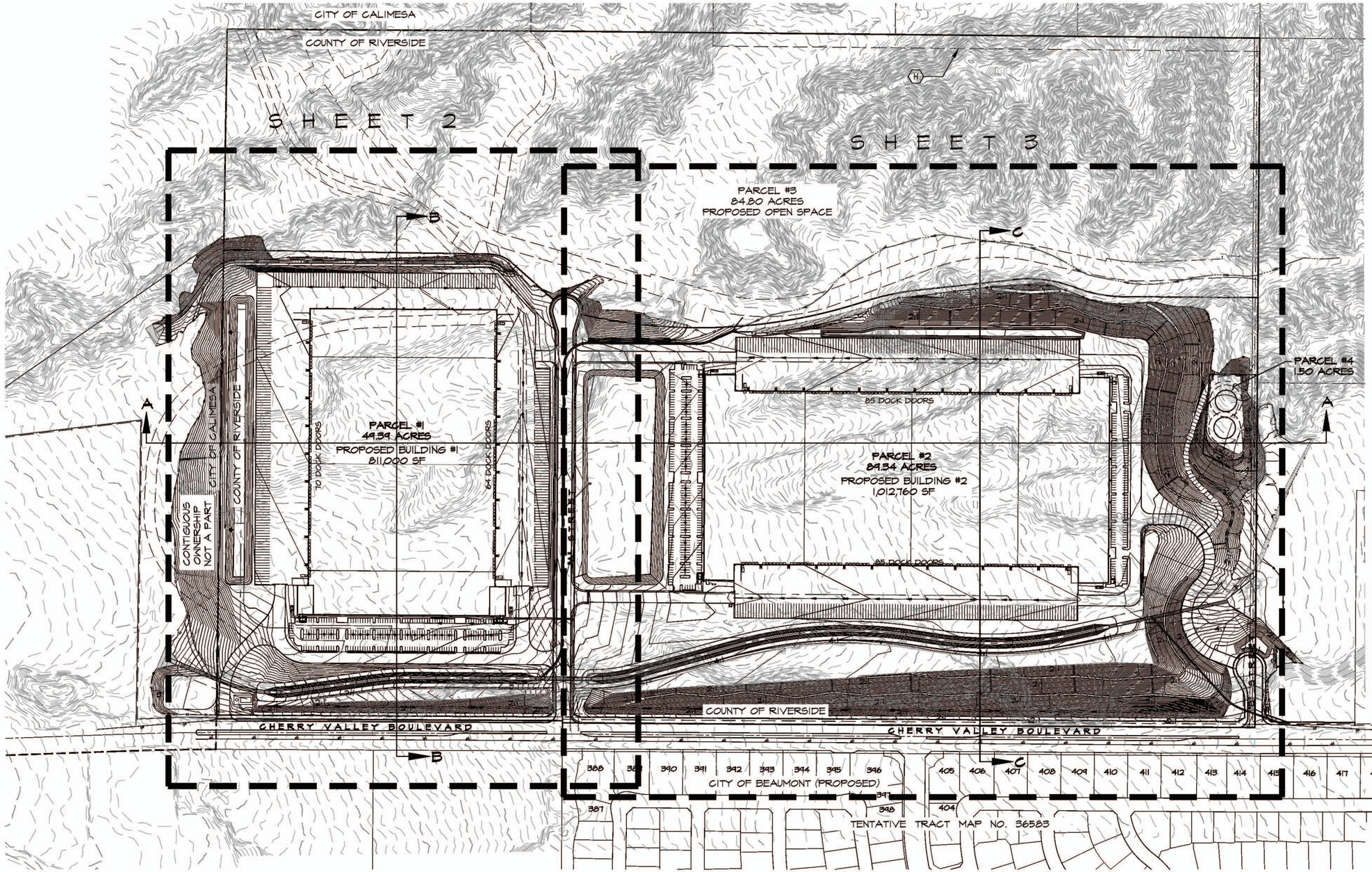



Source: Albert A. Webb Associates, June 2015.

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# Exhibit 2-10
# Parcel Map

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Source: Albert A. Webb Associates, June 2015.

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## Exhibit 2-11
## Plot Plan and Conceptual Grading

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- California Department of Fish and Wildlife for Streambed Alteration Agreement related to potential impacts to waters of the State U.S. (1602)
- Approval of a Storm Water Pollution Prevention Plan (SWPPP)
- Approval of a Water Quality Management Plan (WQMP)
- Approval of a Fugitive Dust Control Plan by the South Coast Air Quality Management District (SCAQMD)
- Acquisition of various ministerial permits, including grading and building permits and infrastructure improvement plans

## 2.5 - Intended Uses of this Draft EIR

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970, as amended (Public Resources Code section 21000, et seq.), and the California CEQA Guidelines. This report also complies with the rules, regulations, and procedures for implementation of CEQA as adopted by the County of Riverside.

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# SECTION 3: ENVIRONMENTAL IMPACT ANALYSIS

## Approach to Environmental Analysis

This Draft EIR provides analysis of impacts for 17 topics as set forth in CEQA Guidelines Appendix G. Sections 3.1 through 3.17 discuss the environmental impacts that may result with approval and implementation of the project.

## Environmental Topics

The following environmental issues are addressed in Section 3, Environmental Impact Analysis:

| | | | |
|---|---|---|---|
| 3.1 | Aesthetics | 3.10 | Land Use and Planning |
| 3.2 | Agriculture and Forestry Resources | 3.11 | Mineral Resources |
| 3.3 | Air Quality | 3.12 | Noise |
| 3.4 | Biological Resources | 3.13 | Population and Housing |
| 3.5 | Cultural Resources | 3.14 | Public Services |
| 3.6 | Geology and Soils | 3.15 | Recreation |
| 3.7 | Greenhouse Gas Emissions | 3.16 | Transportation and Traffic |
| 3.8 | Hazards and Hazardous Materials | 3.17 | Utilities and Service Systems |
| 3.9 | Hydrology and Water Quality | | |

## Organization of Issue Areas

Each environmental issue addressed in Sections 3.1 through 3.17 contains the following information:

1. The environmental setting as it relates to the specific issue.
2. The regulatory framework governing that issue.
3. The impact significance criteria.
4. An evaluation of the project-specific impacts and identification of mitigation measures.
5. A determination of the level of significance after mitigation measures are implemented.

## Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA. CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Final EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds are developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes;

local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

## Format Used for Impact Analysis and Mitigation Measures

The format adopted in this EIR to present the evaluation of impacts is described and illustrated below.

### Summary Heading of Impact

| | |
|---|---|
| **Impact AQ-1:** | **An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact abbreviation identifies the section of the report (AQ for Air Quality in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.** |

#### *Impact Analysis*

A narrative analysis follows the impact statement.

#### *Level of Significance Before Mitigation*

This section identifies the level of significance of the impact before any mitigation is proposed.

#### *Mitigation Measures*

In some cases, following the impact discussion, reference is made to state and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

**MM AQ-1a** Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact with which it is associated (**AQ-1** in this example); the letter identifies the sequential order of that mitigation for that impact (**a** in this example).

#### *Level of Significance After Mitigation*

This section identifies the resulting level of significance of the impact following mitigation.

## Table 3-1: Environmental Abbreviations in Impacts and Mitigation Measures

| Code | Environmental Issue |
|---|---|
| AES | Aesthetics |
| AG | Agriculture and Forestry Resources |
| AQ | Air Quality |
| BIO | Biological Resources |
| CUL | Cultural Resources |
| GEO | Geology and Soils |
| GHG | Greenhouse Gas Emissions |
| HAZ | Hazards and Hazardous Materials |
| HYD | Hydrology and Water Quality |
| LUP | Land Use and Planning |
| MIN | Mineral Resources |
| NOI | Noise |
| POP | Population and Housing |
| PS | Public Services |
| REC | Recreation |
| TRAN | Transportation and Traffic |
| USS | Utilities and Service Systems |

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# 3.1 - Aesthetics

This section describes the existing aesthetics and potential effects from project implementation on the site and its surroundings. Descriptions and analysis in this section are based upon existing site conditions, project site plans/exhibits, and the 2008 and 2014 County of Riverside General Plans. The purpose of this section is to describe the existing aesthetic environment and to analyze any potential impacts that the project may have on aesthetics and visual resources.

## 3.1.1 - Existing Conditions

### Visual Character

#### *Regional Setting*

The project site is located within The Pass Area Plan of the County of Riverside. As indicated in The Pass Area Plan, the Pass comprises valley and highland geographic features. The valley contains a majority of the existing and planned development. The San Gorgonio highlands, (i.e., mountains) create the backdrop for these communities. The San Gorgonio Pass is a narrow separation between the Peninsular Ranges, which extend southward into Baja California, and the Transverse Ranges, which extend northwest to include the San Bernardino and San Gabriel Mountains. These two ranges are accented by the San Gorgonio Mountain on the north, reaching to an elevation of 11,485 feet, and the southerly Mount San Jacinto, at a height of 10,831 feet. The western end of the Pass is framed by the Crafton Hills and the convoluted San Timoteo Badlands.

Views of the site include hillsides and slopes with vegetation and a limited number of trees but no man-made structures. The project site is predominantly covered by brush and low-lying vegetation, consisting mainly of native grasses with sage scrub and occasional scrub oak in the north. The southern and central portions of the property consist of a broad, sloping grassland with steep ridges and canyons occurring on the northern half of the site. Grazing and past active agriculture have disturbed much of the site. Several dirt roads and trails traverse the site and extend off-site to the north and east. The northern portion of the site is characterized by hilly topography with narrow ridgelines, steep flanks, and narrow valleys that trend from the northeast to the southwest. The southern portion of the project site is relatively flat with subdued ridgelines in the north that trend west-southwest and merge into a flat alluvial plain that trends east-west. The southern portion of the project site was cultivated for agriculture in the past. Elevations on-site range from approximately 2,400 to 2,690 feet above mean sea level. Overall, site drainage is to the west and southwest.

The project site is visible from isolated neighboring properties to the west, north, northeast and east, as well as residential housing proposed south/southeast of the site. The project site is visible from Interstate-10 (I-10 Freeway) to the west. The project site and surrounding area have prominent views of the hills and mountains to the north, northwest, and northeast. Photographs showing the project site and adjoining areas are provided in Exhibit 3.1-1 and Exhibits 3.1-1a through Exhibit 3.1-1e.

### Light and Glare

The introduction of light from interior and outdoor uses can be a nuisance to adjacent residential areas and can diminish the view of the clear night sky. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into a light source. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated.

The general area is relatively dark at present, although some lighting is visible from residential areas in the vicinity of the project site to the west, north, and east. The Pass Area Plan identifies the project site as within Zone B of the Mt. Palomar Nighttime Lighting Policy, which is intended to protect the Mt. Palomar Observatory from excessive light.

### Viewshed

A viewshed includes all the surface areas visible from an observer's viewpoint, as well as areas likely visible from the I-10 Freeway. Views of the project area from the I-10 Freeway include Cherry Valley Boulevard and surrounding lands such as the hills and steep slopes that are located north of the project site.

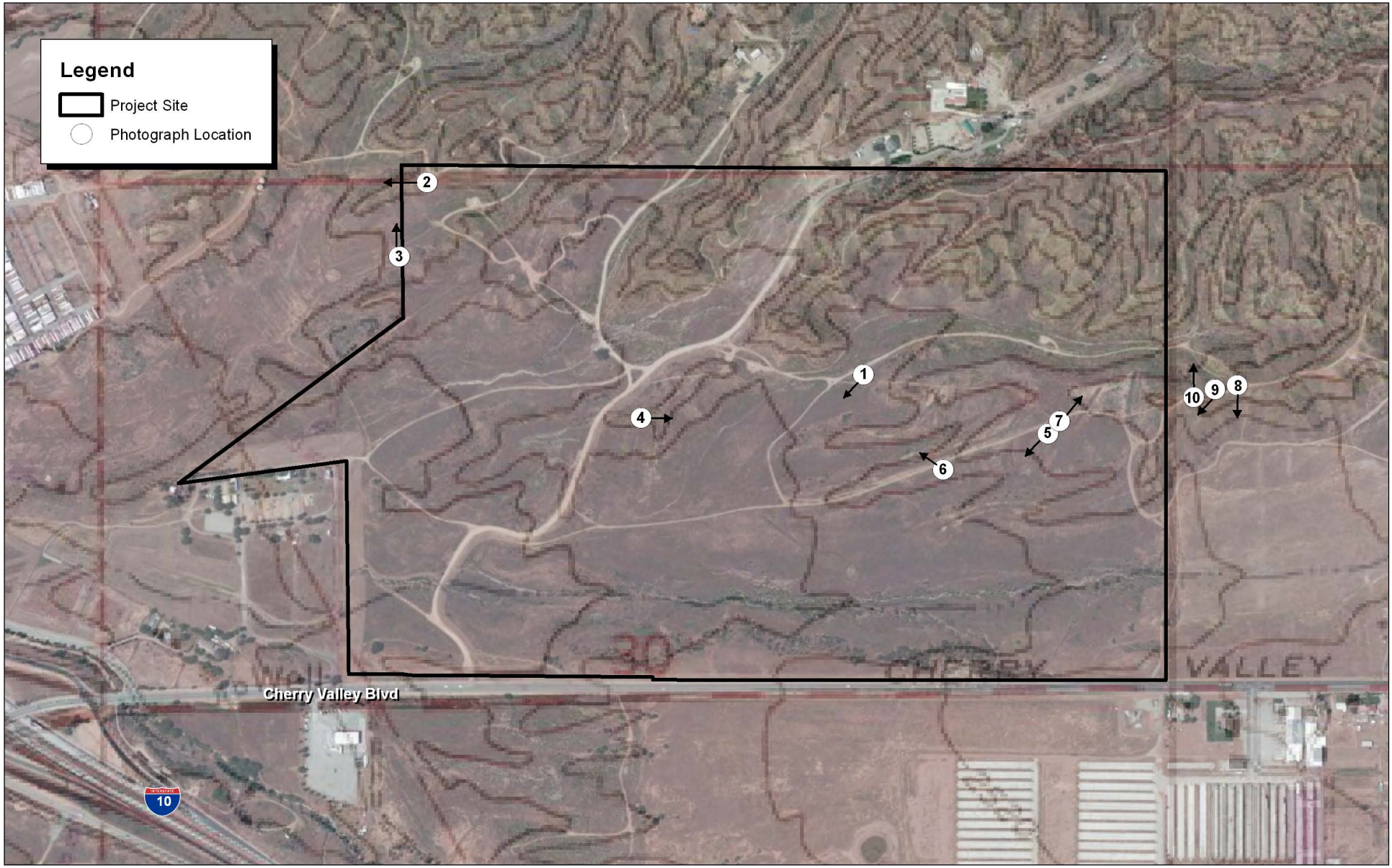
The majority of views to the project site are from vehicles driving along Cherry Valley Boulevard, which runs along the southern boundary of the project site, as well as from the rural residential land uses in the project vicinity. Views from the project site currently include the hills/mountains to the north, northwest, and northeast, as well as the land south of the project site, across Cherry Valley Boulevard. Elevations on site range from approximately 2,400 to 2,690 feet above mean sea level.

## 3.1.2 - Regulatory Setting

### State Regulations

In 1963, the Legislature created the California Scenic Highway Program, the purpose of which is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are in the California Streets and Highways Code (Sections 260–263). A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body applies to the California Department of Transportation (Caltrans) for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a Scenic Highway (California Department of Transportation 2013b). Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies (Caltrans[1]).

[1] Website http://www.dot.ca.gov/aboutcaltrans.htm. Accessed September 5, 2013.




Source: ESRI Aerial Imagery. FCS Field Survey and GIS Data, 2013.

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700 350 0 700 Feet

# Exhibit 3.1-1
# Project Site Photo Key Map

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Photograph 1: View toward the southwest of the Primary Valley and Cherry Valley Blvd on the mesa top beyond.



Photograph 2: View west from the NW corner of the property.

Source: FirstCarbon Solutions, 2013.

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# Exhibit 3.1-1a
# Project Site Photographs 1 and 2

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Photograph 3: View north from the western margin of the project property toward the NW corner of the property.



Photograph 4: View up canyon and toward the east at valley bottom last plowed in the 1970's.

Source: FirstCarbon Solutions, 2013.

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# Exhibits 3.1-1b
# Project Site Photographs 3 and 4

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Photograph 5: View toward the southwest from a point near the main access road leading to the NE quadrant of the property.



Photograph 6: View west northwest at the southwest tip of the foothills and low valleys near the center of the project site.

Source: FirstCarbon Solutions, 2013.

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# Exhibit 3.1-1c
# Project Site Photographs 5 and 6

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Photograph 7: View east toward the NE corner of the project area.



Photograph 8: View south at the eastern margin of the project site and Cherry Valley Blvd beyond.

Source: FirstCarbon Solutions, 2013.

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# Exhibit 3.1-1d
# Project Site Photographs 7 and 8

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Photograph 9: View southwest of cuts made along the property line at soil erosing out from the cuts. The property line is along the north-south power poles



Photograph 10: View due north at the foothills toward the NE corner of the property showing steepness of terrain and dryness of vegetation.

Source: FirstCarbon Solutions, 2013.

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# Exhibit 3.1-1e
# Project Site Photographs 9 and 10

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## Local Regulations

### *County of Riverside General Plan 2015 Land Use Element*

Policies within the Land Use Element of the General Plan determine how land is developed in the County. Policies within the Land Use Element pertaining to project design, scenic corridors, and land use compatibility are detailed below.

*Project Design*

Project design policies are intended to address the importance of detail at the parcel and project level in achieving the vision for Riverside County. The individual project is the immediate manifestation of the desires to incorporate quality and innovative design techniques that help enhance the character of the County and contribute to the distinctiveness of the community.

- **Policy LU 4.1:** Requires that new developments be located and designed to visually enhance, not degrade, the character of the surrounding area through consideration of concepts such as:
  a. Compliance with the design standards of the appropriate area plan land use category.
  b. Require that structures be constructed in accordance with the requirements of Riverside County's zoning, building, and other pertinent codes and regulations.
  c. Require that an appropriate landscape plan be submitted and implemented for development projects subject to discretionary review.
  d. Require that new development utilize drought tolerant landscaping and incorporate adequate drought-conscious irrigation systems. [ . . . ]
  f. Incorporate water conservation techniques, such as groundwater recharge basins, use of porous pavement, drought tolerant landscaping, and water recycling, as appropriate.
  g. Encourage innovative and creative design concepts.
  h. Encourage the provision of public art that enhances the community's identity, which may include elements of historical significance and creative use of children's art.
  i. Include consistent and well-designed signage that is integrated with the building's architectural character. [ . . . ]
  m. Provide and maintain landscaping in open spaces and parking lots.
  n. Include extensive landscaping.
  o. Preserve natural features, such as unique natural terrain, arroyos, canyons, and other drainage ways, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.
  p. Require that new development be designed to provide adequate space for pedestrian connectivity and access, recreational trails, vehicular access and parking, supporting functions, open space, and other pertinent elements.
  q. Design parking lots and structures to be functionally and visually integrated and connected.
- **Policy LU 4.2:** Requires property owners to maintain structures and landscaping to a high standard of design, health, and safety.

### *The Pass Area Plan and Applicable Policy Areas*

The project site is located within The Pass Area Plan (PAP), which is a component of the County of Riverside General Plan that provides area-specific policies and requirements to address local conditions and issues. The PAP encompasses the cities of Banning, Beaumont and Calimesa, as well as several unincorporated communities within Riverside County, including Cherry Valley. Within the PAP, individual, unincorporated communities are identified as "policy areas." According to the PAP, a policy area is a portion of an Area Plan that contains special or unique characteristics that merit detailed attention and focused policies.

The project site is located within the Cherry Valley Policy Area (CVPA). However, although the boundaries of the CVPA encompass the project site and the entire Cherry Valley area, it applies only to properties within the Rural Community Foundation Component, and is therefore inapplicable to the project site (Riverside County 2014b).

In addition, the project site is located within the Cherry Valley Gateway Policy Area (CVGPA), which is located on the western edge of the CVPA and, as the name implies, serves as a gateway to Cherry Valley. The intent of the CVGPA is to maintain the predominantly rural community nature of this area, while allowing existing uses that are of a higher density to remain legal conforming uses.

The project would be consistent with the goals of the CVGPA because the project would provide a new warehouse use that maintains the rural aesthetic of the area. Refer to Impact AES-2 for further discussion regarding project consistency with the CVGPA.

### *Third and Fifth Supervisorial District Design Guidelines*

The County has adopted a set of design guidelines applicable to new development within the Third and Fifth Supervisorial Districts. The project is located in Supervisorial District 5. The Development Design Standards and Guidelines for the Third and Fifth Supervisorial Districts are for use by property owners and design professionals submitting development applications to the County Planning Department. The guidelines have been adopted and incorporated into the PAP to advance several specific development goals of the Third and Fifth Districts (see Policy PAP 8.1 below). These goals include ensuring that the building of new homes is interesting and varied in appearance; using building materials that promote a look of quality development now and in the future; encouraging efficient land use while promoting high-quality communities; incorporating conveniently located parks, trails, and open space into designs; and encouraging commercial and industrial developers to use designs and materials that evoke a sense of quality and permanence.

*Policy*

- **PAP 8.1:** Require development to adhere to standards established in the Development Design Standards and Guidelines for the Third and Fifth Supervisorial Districts.

The project is located in Supervisorial District 5 and will adhere to applicable design guidelines. Therefore, the project would comply with the above policy.

### *Mt. Palomar Nighttime Lighting*

The Mount Palomar Observatory, located in San Diego County, requires darkness so that the night sky can be viewed clearly. The presence of the observatory necessitates unique nighttime lighting standards in the area. Policy PAP 9.1 is intended to limit light leakage and spillage that may obstruct or hinder the view.

*Policy*

- **PAP 9.1:** Adhere to the County's lighting requirements for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.

The project will adhere to the lighting requirements associated with the Palomar Observatory, and, therefore, the project would comply with the above policy.

### *County of Riverside Municipal Code and Zoning Ordinance*

The County of Riverside Municipal Code includes standards and regulations pertaining to the aesthetics of the County. The County recognizes the importance of trees to the character of the community as well as the role that trees have in advancing the public health, safety, and welfare of its residents. Chapter 12.24, Tree Removal, of the Municipal Code contains provisions for the removal of any native living tree, under specific conditions. Chapter 17.96, I-P Industrial Park Zone, contains standards regarding development of land zoned for Industrial Park land uses. Additionally, Chapter 8.80, Outdoor Lighting provide minimum requirements for outdoor lighting in order to reduce light Riverside County.

Article X, Section 10.1 (I-P Zone Industrial Park Zone), of the County's Zoning Ordinance provides regulations that shall apply to all I-P Zones. The project would be required to comply with all applicable development standards pertaining to the proposed industrial zoning designation contained within Section 10.1 of the County's Zoning Ordinance.

### *Ordinance Number 655*

The intent of Riverside County Ordinance Number 655 is to restrict the permitted use of certain light fixtures that emit undesirable light rays into the night sky, which have a detrimental effect on astronomical observation and research (County of Riverside[2]).

## 3.1.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Have a substantial effect upon a scenic highway corridor within which it is located?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?

[2] Website: http://www.clerkoftheboard.co.riverside.ca.us/ords/600/655.htm. Accessed March 5, 2013.

c) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

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

e) Expose residential property to unacceptable light levels?

## 3.1.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Scenic Highway

| | |
|---|---|
| **Impact AES-1:** | **The project would not have a substantial effect upon a scenic highway corridor within which it is located.** |

#### *Impact Analysis*

The I-10 Freeway, listed by the State as eligible for designation as a state Scenic Highway, is located approximately 0.35 mile southwest of the project site (California Scenic Highway Program 2013d). As described in The Pass Area Plan, three highway segments are designated as Potentially Eligible County Scenic Highways; State Route 79 (SR-79), Beaumont Avenue from Beaumont city limits 4 miles north to the San Bernardino County line, and the San Timoteo Canyon Scenic Corridor between SR-60 and San Timoteo Road, and then along San Timoteo Canyon Road between Redlands Boulevard and I-10 into San Bernardino County.

No roads within the project site or in the project vicinity are designated as a State or County Scenic Highway. The status of the I-10 Freeway as an eligible State Scenic Highway only means it is eligible to be designated when a local governing body applies to Caltrans for such an approval and adopts a Corridor Protection Plan. The "eligibility" itself provides no additional distinction or requirements that need to be analyzed under CEQA. The nearest Officially Designated State Scenic Highway is SR-243, between Idyllwild and the Banning city limits, located approximately 9 miles southeast of the project site. For these reasons, the project will not have a substantial effect upon a scenic highway corridor.

#### *Level of Significance Before Mitigation*

Less than significant impact.

#### *Mitigation Measures*

No mitigation measures are required.

#### *Level of Significance After Mitigation*

Less than significant impact.

## Scenic Resources Damage

| | |
|---|---|
| **Impact AES-2:** | **Scenic Resources: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.** |

### *Impact Analysis*

The project would not obstruct any scenic vistas, as the hills and mountains north of the project site would not be obstructed by the project. Furthermore, the project would conserve approximately 84.8 acres as open space, thereby preventing future development from encroaching on the scenic areas north of the project area. This open space area would also generally connect with other open space areas in the region, furthering the County's goals to provide continuity in open space areas as well as contribute to the desired "community separator." The open space area also prevents suburban sprawl within the County of Riverside.

The project would not obstruct any outcroppings or impact any landmark features, as none exist on the project site. The project will be constructed with high-quality building design and aesthetic features such as on-site landscaping. The project would utilize neutral earth tones and architectural features to provide a rural design scheme that is in keeping with the existing character of the surrounding area. The elevations would generally include rural, western, and agricultural elements. For example, the project would utilize shades of brown with natural accent colors for the majority of the building elevations. The project buildings would also include decorative metal canopies, appropriate signage, and barn-style façades. Ultimately, the design features utilized by the proposed project would complement the rural nature of the area. Thus, the project would not degrade the existing visual character of the site.

As discussed in other sections of this EIR, the area has a long history of agricultural and equestrian uses. Therefore, the project will include a rural water tower and a wooden barn structure in the project's southwest corner that are designed to evoke a rural theme and honor the history of Cherry Valley. In addition, the barn will functionally serve as a shade structure and trail head for an equestrian and recreation trail proposed as part of the project. Combined with the project's overall rural theme featuring western and agricultural architectural elements, these two monuments serve as a visible focal point and welcoming gateway to the Cherry Valley community. Additionally, these structures (tower and barn) would screen views of the project site and provide a focal point to viewers along local roadways, while maintaining and enhancing the rural character of the area. The water tower would be of similar scale to the industrial buildings, at 40 feet in height. The barn would be approximately 800 square feet and approximately 19 feet in height at the ridge. The proposed trailhead and associated parking area would enhance access to the foothills to the north of the project site. Furthermore, the proposed riparian areas along the project frontage would provide additional screening and natural views to the motorists and pedestrians along Cherry Valley Boulevard. The project would be set back from Cherry Valley Boulevard up to 575 feet, further removing the site from public view. Refer to Exhibit 3.1-2a through Exhibit 3.1-2d for architectural elevations of the proposed project. Therefore, given the aforementioned analysis, the project would be consistent with the existing rural aesthetic of the area and would also provide a welcoming gateway to the Cherry Valley Community. Thus, the project would be consistent with the CVGPA.

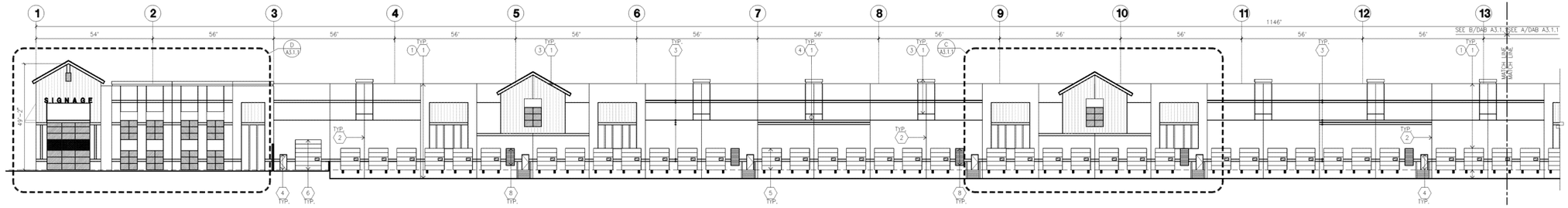
Construction of the project will create short-term aesthetic impacts during project construction, which includes construction equipment and machinery, and potential nighttime security lighting and fencing of the property during the construction phase. However, these aesthetic impacts are anticipated to be less than significant because they are limited to the short-term construction phase of the project.

Development of the project will convert vacant land into industrial land uses, and the visual character of the project site will change. Current views of the site consist of disturbed vacant land, with a limited number of trees and natural vegetation. Photographs showing the project site and adjoining areas are provided in Exhibit 3.1-1 and Exhibits 3.1-1a through Exhibit 3.1.1e. The project will remove existing vegetation and create an industrial development in an area that is predominantly developed with scattered rural residential lots.

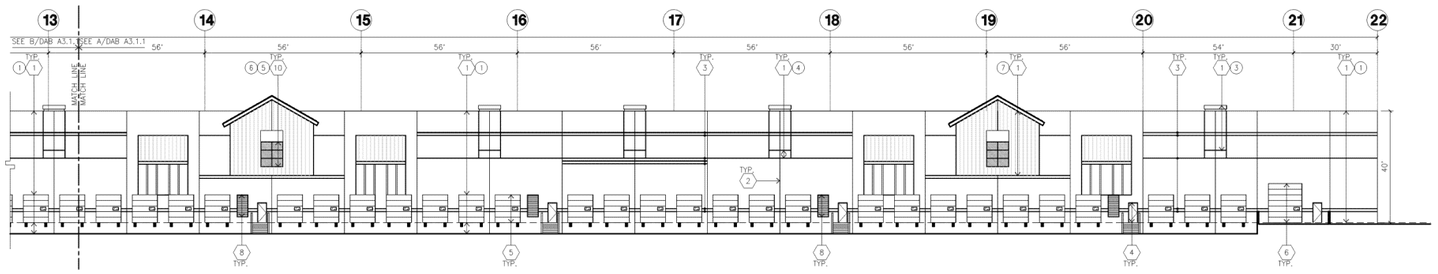
Visual simulations of the project are provided in Exhibit 3.1-3 and Exhibits 3.1-3a through 3.1-3f. As shown in these visual simulations, implementation of the project would substantially change the existing undeveloped visual character of the site but would not degrade it. The proposed logistic warehouse buildings will generally incorporate similar architectural elements, including a neutral, complementary color palette and a variety of building materials. The buildings have also been designed to include vertical and horizontal elements and features to break up the massing of the structures and provide visual interest. In addition, substantial landscaping along the site perimeter and building façades will soften views into the site and further enhance the visual character of the project. The project proposes to construct berms and landscaping extending up to 18 feet along the Cherry Valley Boulevard frontage, which would screen motorist and pedestrian views of the site. An additional berm would be located along east side of the site, further screening views. Ultimately, the buildings would not be visible to viewers along the adjacent roadway.

In addition to the features outlined in the preceding paragraph, the placement and design of the project allows the buildings to blend with the existing landscape, despite their relatively large size. As previously discussed, the two buildings would be set back approximately 375 to 575 feet from Cherry Valley Boulevard, approximately 300 feet from the east project boundary, and approximately 400 feet from the west project boundary, allowing for generous buffers with extensive landscaping, a berm, a meandering equestrian and pedestrian trail, and a three-railed fence. In addition, the project includes substantial grade separation between the developments. Specifically, Building 1 would be located approximately 29.8 feet above the centerline of Cherry Valley Boulevard, and Building 2 would be located approximately 48.3 feet below the centerline of Cherry Valley Boulevard. Neither of the project buildings would be visible from motorists or pedestrians traveling along Cherry Valley Boulevard. As demonstrated in the Visual Simulations (Exhibit 3.1-3Exhibits 3.1-3 and Exhibits 3.1--3a through 3.1-3f), project buildings would not be visible from any of the surrounding uses, with the exception of the I-10 Interchange area. However, as designed, the proposed buildings would blend in with the foothills behind the site. Thus, any potential impacts to scenic resources would be negligible.

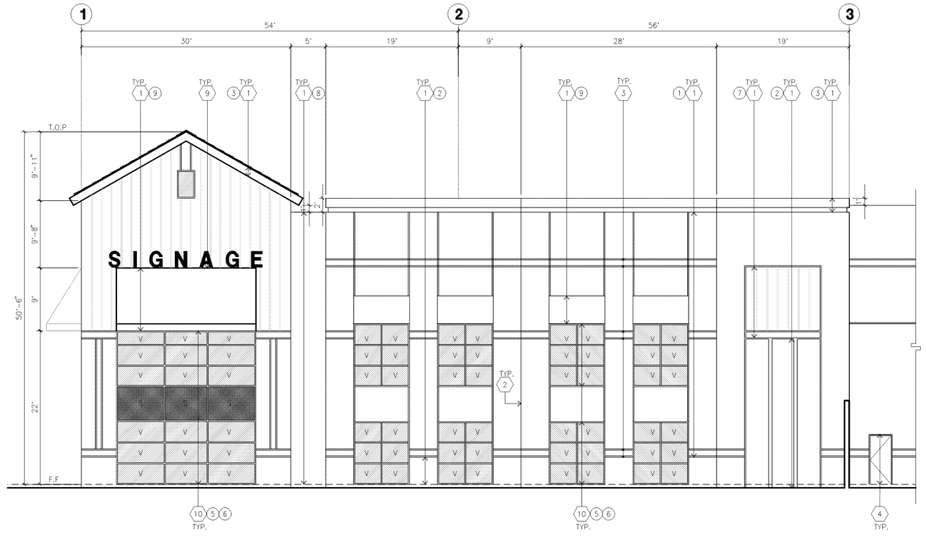
Although the project's buildings rise 41 feet in height, the project would not be visible to residents of adjacent developments or motorists traveling along Cherry Valley Boulevard, as their line of sight would be directed above the building. The aforementioned berm, water tower, barn, and landscaping would further screen views of the buildings.



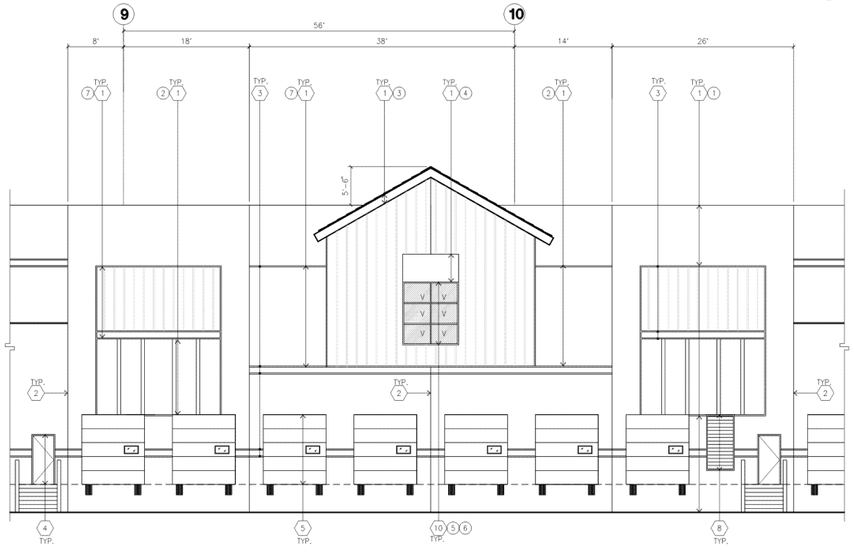

**EAST ELEVATION** A
scale: 1" = 20'-0"




**EAST ELEVATION - CONT.** B
scale: 1" = 20'-0"




**ENLARGED EAST ELEVATION** D
scale: 1/8" = 1'-0"



**ENLARGED EAST ELEVATION** C
scale: 1/8" = 1'-0"

**GLAZING LEGEND**

SPANDREL GLASS

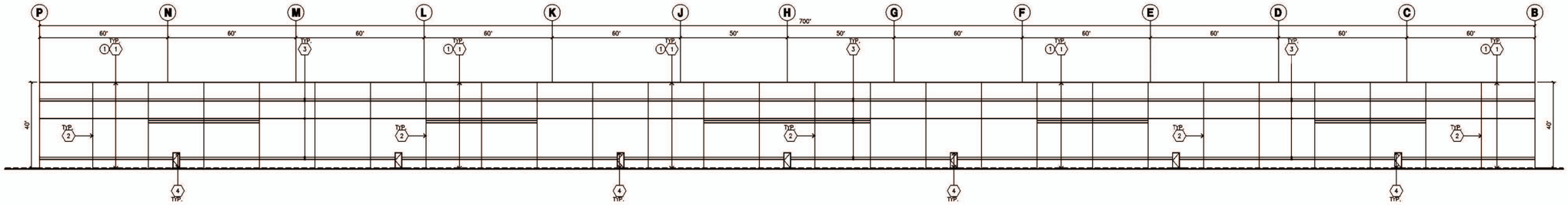
VISION GLASS

Source: HPA Architecture, October 2014.

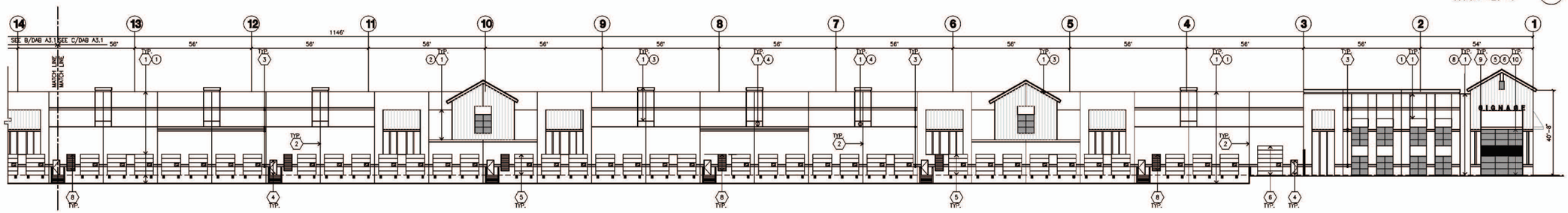
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# Exhibit 3.1-2a
# East Elevation

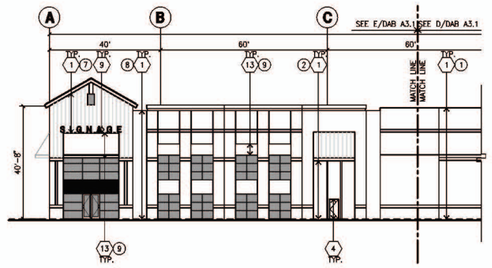
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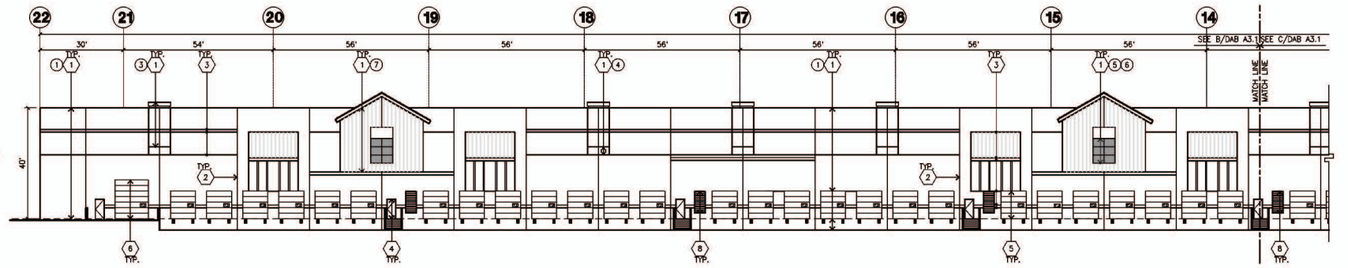

**NORTH ELEVATION** (A)
scale: 1" =20'-0"



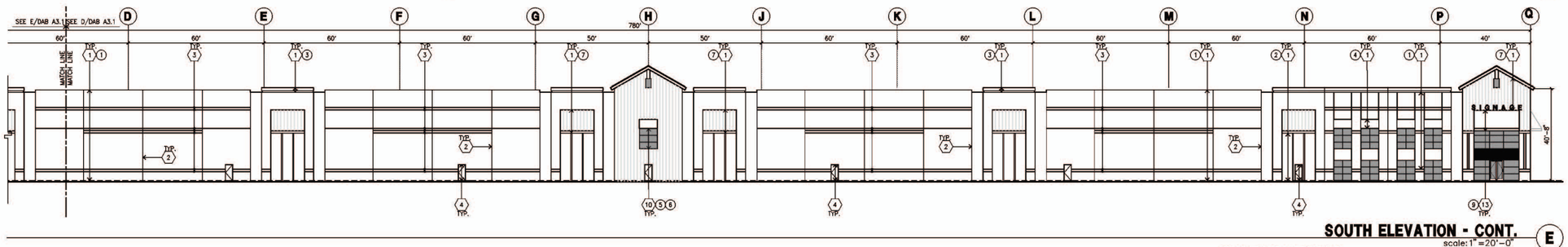

**WEST ELEVATION** (B)
scale: 1" =20'-0"




**SOUTH ELEVATION** (D)
scale: 1" =20'-0"




**WEST ELEVATION -CONT.** (C)
scale: 1" =20'-0"




**SOUTH ELEVATION - CONT.** (E)
scale: 1" =20'-0"

**GLAZING LEGEND**

SPANDREL GLASS

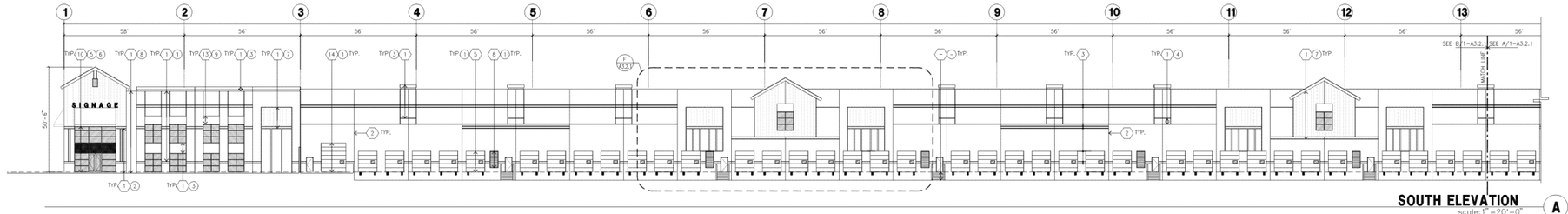
VISION GLASS

Source: HPA Architecture, October 2014.

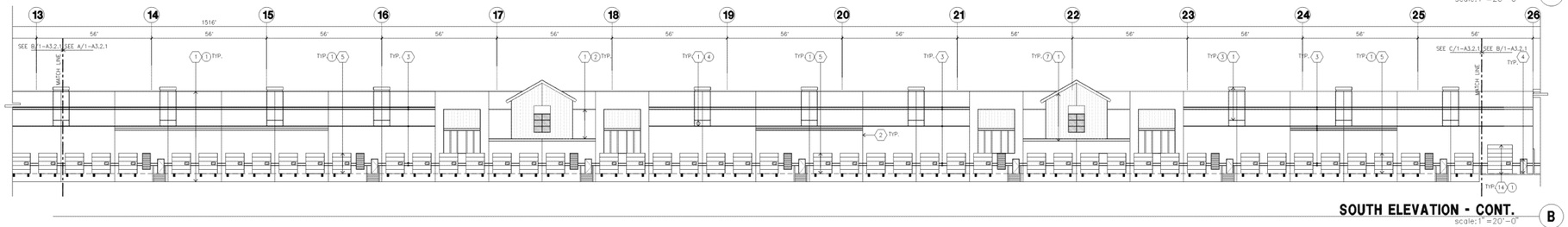
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## Exhibit 3.1-2b
## North, West, and South Elevations

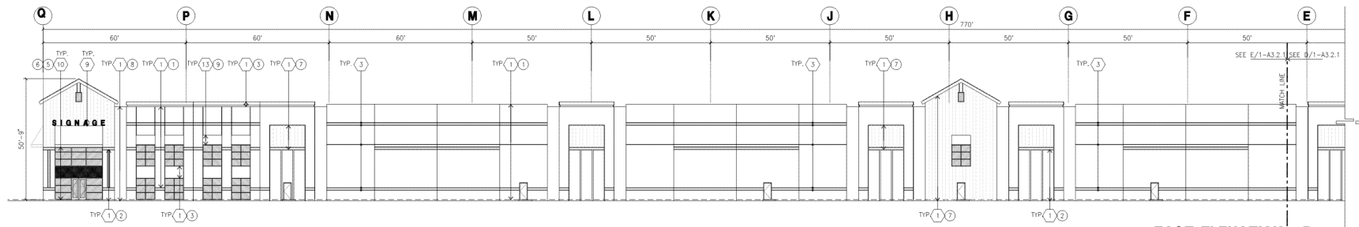
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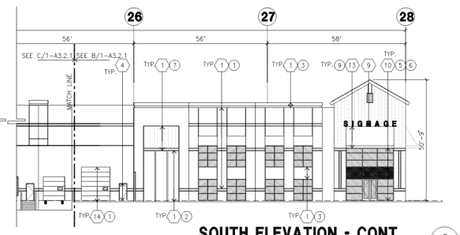

SOUTH ELEVATION
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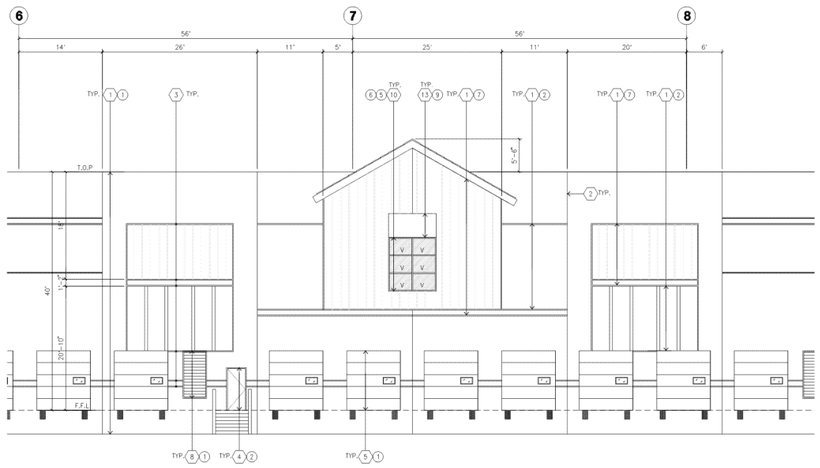

SOUTH ELEVATION - CONT.
scale: 1" = 20'-0" B



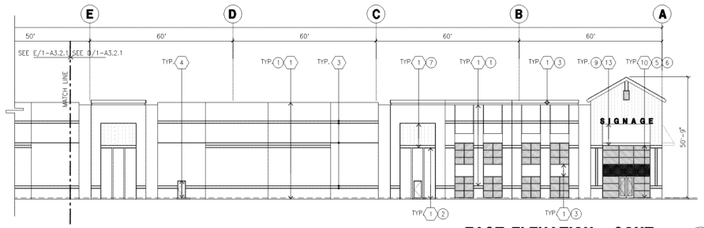

EAST ELEVATION
scale: 1" = 20'-0" D




SOUTH ELEVATION - CONT.
scale: 1" = 20'-0" C




ENLARGED SOUTH ELEVATION
scale: 1/8" = 1'-0" F




EAST ELEVATION - CONT.
scale: 1" = 20'-0" E

GLAZING LEGEND

SPANDREL GLASS

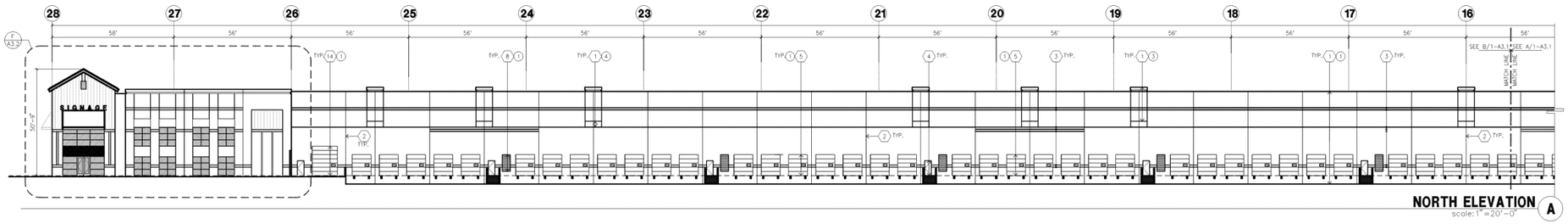
VISION GLASS

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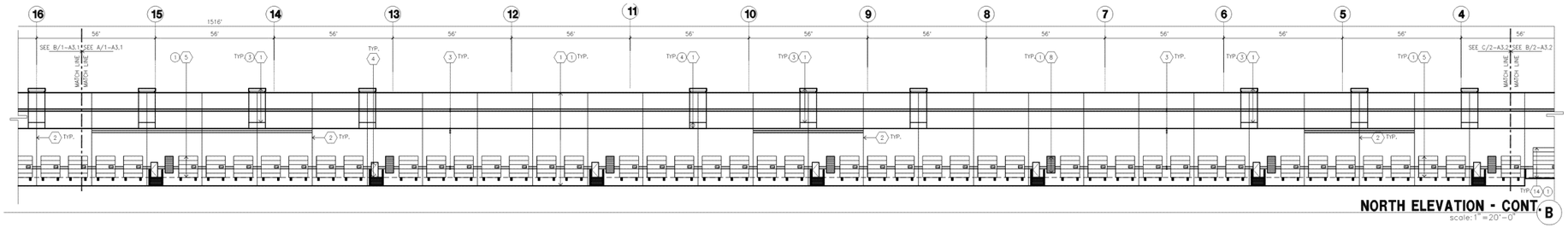
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# Exhibit 3.1-2c
# South and East Elevations

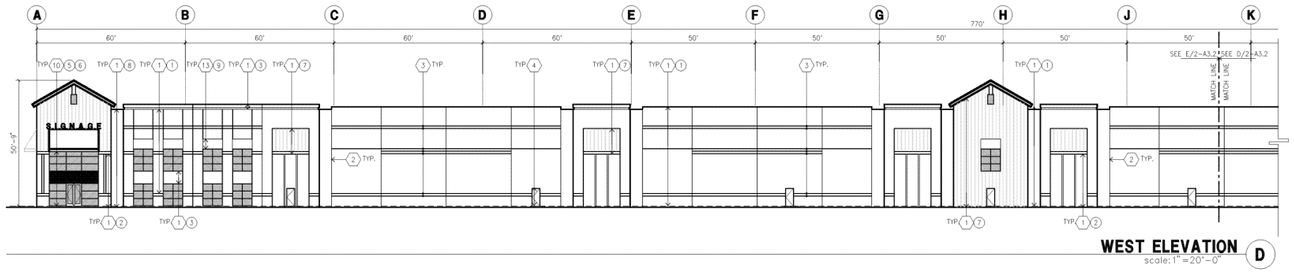
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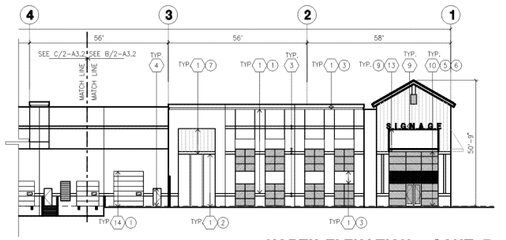

NORTH ELEVATION A
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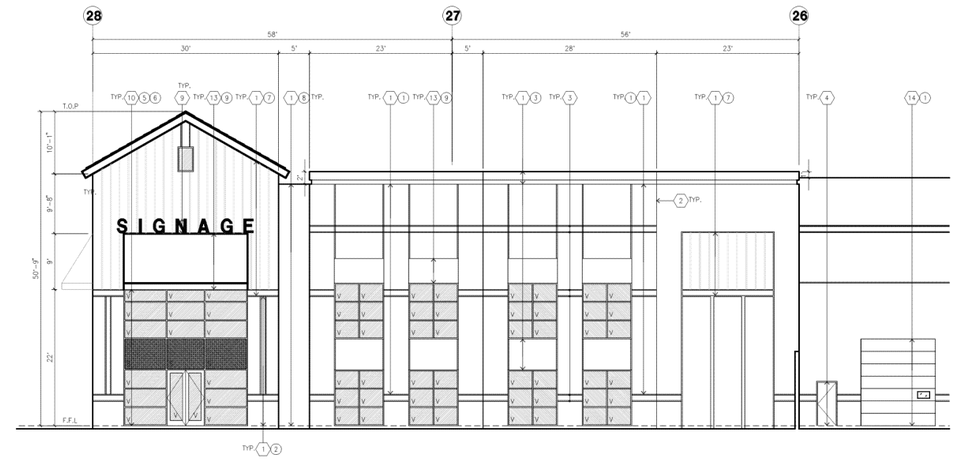

NORTH ELEVATION - CONT B
scale: 1" = 20'-0"



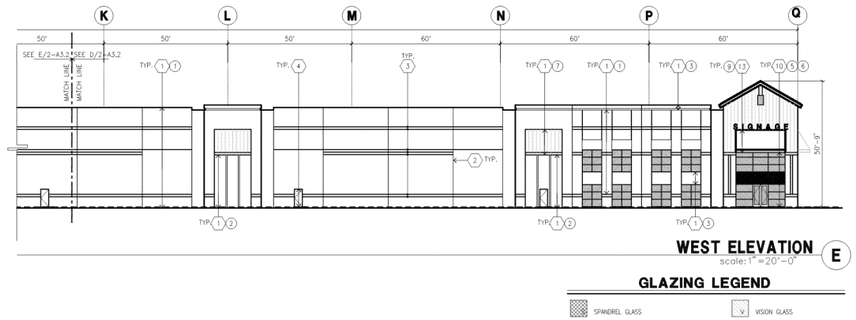

WEST ELEVATION D
scale: 1" = 20'-0"




NORTH ELEVATION - CONT C
scale: 1" = 20'-0"




ENLARGED NORTH ELEVATION F
scale: 1/8" = 1'-0"




WEST ELEVATION E
scale: 1" = 20'-0"

GLAZING LEGEND

SPANDREL GLASS

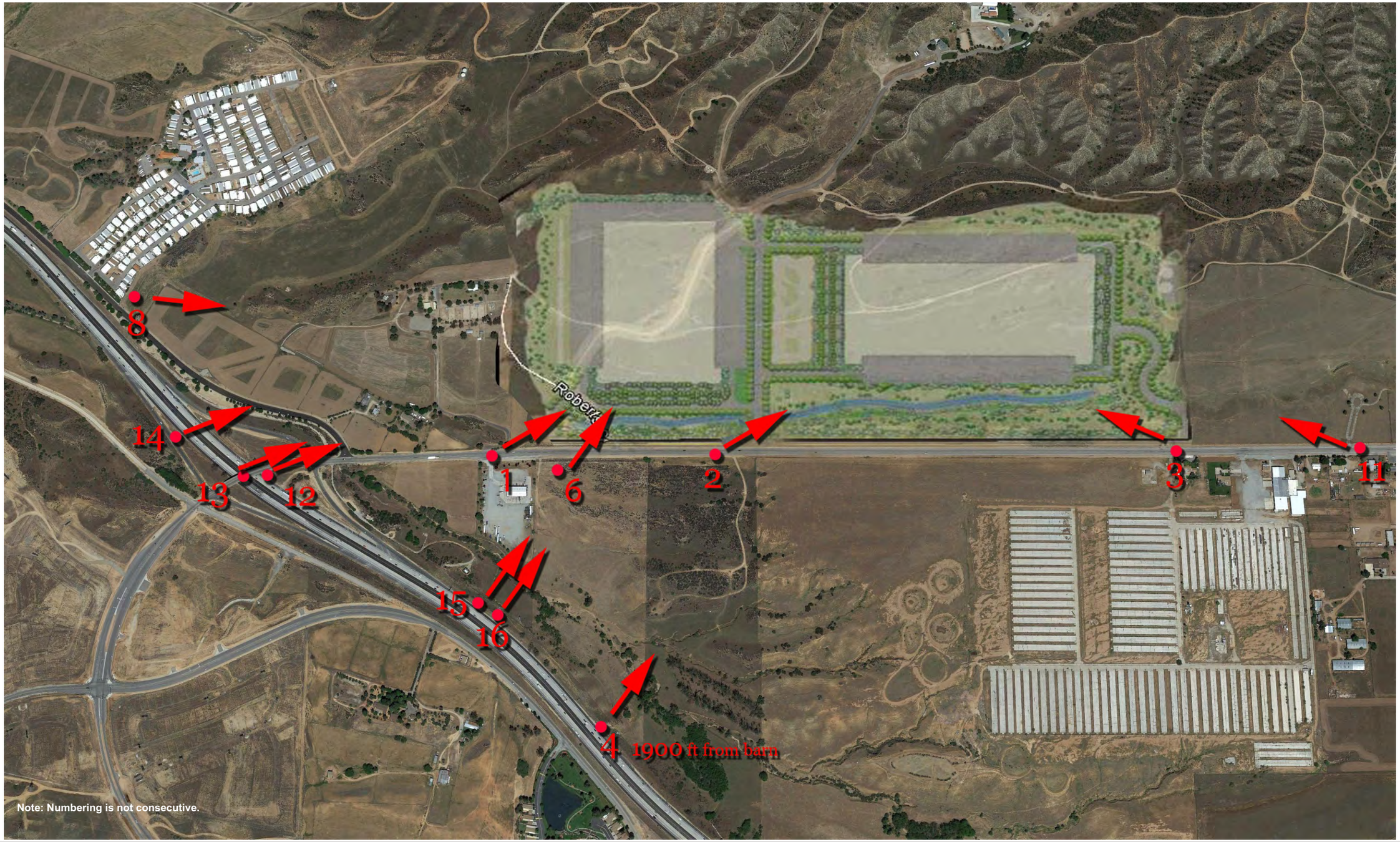
VISION GLASS

Source: HPA Architecture, October 2014.

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# Exhibit 3.1-2d
# North and West Elevations

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Source: Focus 360, 2015.

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Exhibit 3.1-3
Visual Simulation Key Map

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Source: Focus 360, 2016.

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# Exhibit 3.1-3a
# Visual Simulation 1

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Source: Focus 360, 2016.

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# Exhibit 3.1-3b
# Visual Simulation 2

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Source: Focus 360, 2016.

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# Exhibit 3.1-3c
# Visual Simulation 3

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Source: Focus 360, 2016.

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# Exhibit 3.1-3d
# Visual Simulation 4

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Source: Focus 360, 2016

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# Exhibit 3.1-3e
# Visual Simulation 6

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Source: Focus 360, 2015.

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# Exhibit 3.1-3f
# Visual Simulation 8

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Source: Focus 360, 2016

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# Exhibit 3.1-3g
# Visual Simulation 11

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Source: Focus 360, 2016.

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# Exhibit 3.1-3h
# Visual Simulation 12

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Source: Focus 360, 2016.

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# Exhibit 3.1-3i
# Visual Simulation 13

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Source: Focus 360, 2016.

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# Exhibit 3.1-3j
# Visual Simulation 14

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Source: Focus 360, 2016

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# Exhibit 3.1-3k
# Visual Simulation 15

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Source: Focus 360, 2016.

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# Exhibit 3.1-3l
# Visual Simulation 16

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Source: Focus 360, 2016

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# Exhibit 3.1-3m
# Entrance Perspective

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The project site would not be visible from the residents located north of the site. Refer to Exhibits 3.1-4a and 3.1-4b for line of sight simulations.

As discussed, both buildings are also set back at least 375 feet from Cherry Valley Boulevard, which is the main thoroughfare from which the public would view the buildings. The southwest corner of Building 1 would be set back 377 feet from the Cherry Valley Boulevard right-of-way. Further, the proposed landscaping would reduce the prominence of the buildings and provide a more subtle transition. The prominence of the buildings is further reduced by the hills immediately to the north because views of the buildings from Cherry Valley Boulevard do not break the silhouette of the ridgeline of these hills. These factors all combine to make the project visually unobtrusive and attractive.

The project would also include the construction of two concrete pads for water tanks for use by the Yucaipa Valley Water District (YVWD). The water tanks would not be visible from any applicable vantage points, including Cherry Valley Boulevard. However, the top portion of the tanks would likely be visible from the properties west of the site. Such impacts would be generally negligible. It should also be noted that although the water tanks are a reasonably foreseeable action associated with the project, the applicant would only be responsible for installing the concrete pads. The proposed water tanks are not required to serve the project site. Therefore, if warranted, the YVWD would be responsible for any potential mitigation relating to views of the tanks from properties to the west.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Mt. Palomar Observatory

| | |
|---|---|
| **Impact AES-3:** | **The project would not interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655.** |

### *Impact Analysis*

The project is approximately 43 miles northwest of the Mt. Palomar Observatory and is therefore within Zone B. The project site is currently regulated by Riverside County Lighting Ordinance No. 655 regarding the appropriate lighting methods and types to be used to reduce light and glare and "sky glow" within 45 miles of the Mt. Palomar Observatory as areas develop. The project will comply with the Lighting Ordinance, which includes regulations for the type of lighting, lamp source, and shielding of light emissions for outdoor light fixtures intended to minimize effects of lighting on the viability of the observatory, as demonstrated in the project-specific Photometric Plans (refer to Exhibits 3.1-5a and 3.1-5b). Thus, the project would have a less than significant impact on the nighttime use of the Mt. Palomar Observatory.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Light or Glare

**Impact AES-4: The project could create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

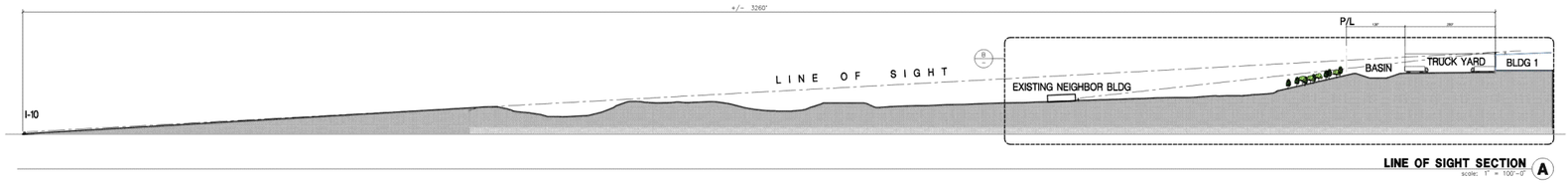
### *Impact Analysis*

The project area currently contains minimal lighting around its perimeter, and no lighting within its interior. Implementation of the project would result in a new light source for the area at night, and the windows of the structures may create a glare during the day. The lighting for Buildings 1 and 2, nearby streets, and outdoor parking lots would be a potential source of glare if not properly designed, creating a new source of light and glare to residences in the project vicinity. This overall increase in lighting is referred to as "sky glow," and would incrementally degrade existing "dark sky" conditions in the project area.

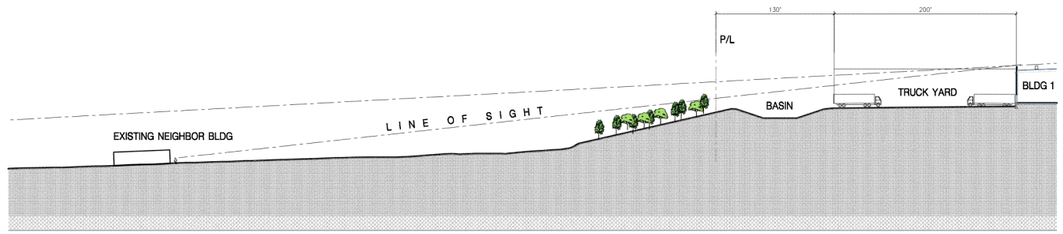
The project is approximately 43 miles northwest of the Mt. Palomar Observatory, within Zone B. The project site is currently regulated by Riverside County Lighting Ordinance No. 655 regarding the appropriate lighting methods to be used to reduce light and glare within 45 miles of the Mt. Palomar Observatory as areas develop.

County policy requires that lighting associated with new development projects be designed in a manner that prevents the direction or reflection of annoying light and glare onto nearby uses. Development of the project would require new lighting fixtures to be installed on-site, including on the building exterior, in parking areas, and in the loading areas. As demonstrated in the project-specific Photometric Plans (Exhibit 3.1-3a and 3.1-3b), the project would not cause light spillage onto adjacent properties, including the Cherry Valley Boulevard right-of-way.

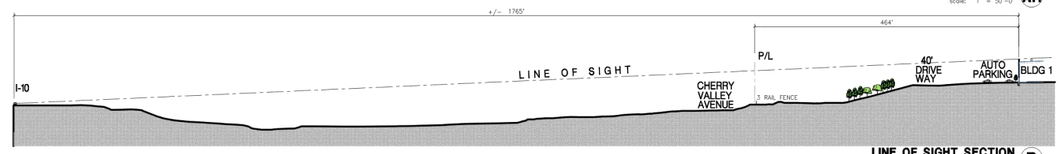
Nonetheless, mitigation is proposed that would require the project applicant to submit the photometric plan to the County for review and approval. With the implementation of this mitigation, the project would minimize the amount of light it would add to the ambient environment. The implementation of Mitigation Measure AES-1 will ensure that a photometric plan that details the type of lighting fixtures and their location will be provided to the County for their review prior to building permit approval. Furthermore, the mitigation measure will ensure that sources of lighting are designed in order to prevent light spillage onto adjoining properties. Therefore, with mitigation incorporated, impacts related to light sources would be less than significant.



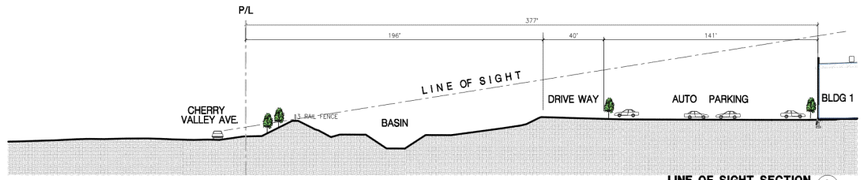

**LINE OF SIGHT SECTION A**
scale: 1" = 100'-0"



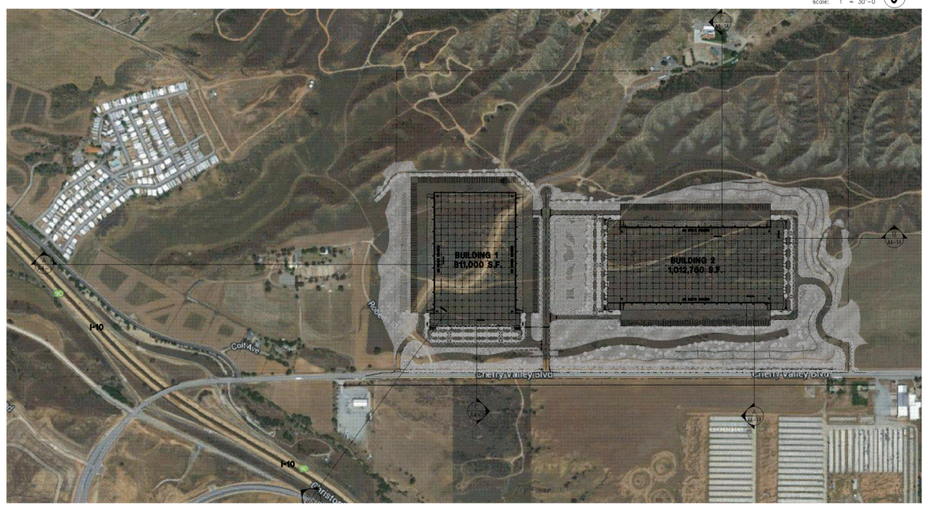

**LINE OF SIGHT SECTION A.1**
scale: 1" = 50'-0"




**LINE OF SIGHT SECTION B**
scale: 1" = 80'-0"




**LINE OF SIGHT SECTION C**
scale: 1" = 30'-0"

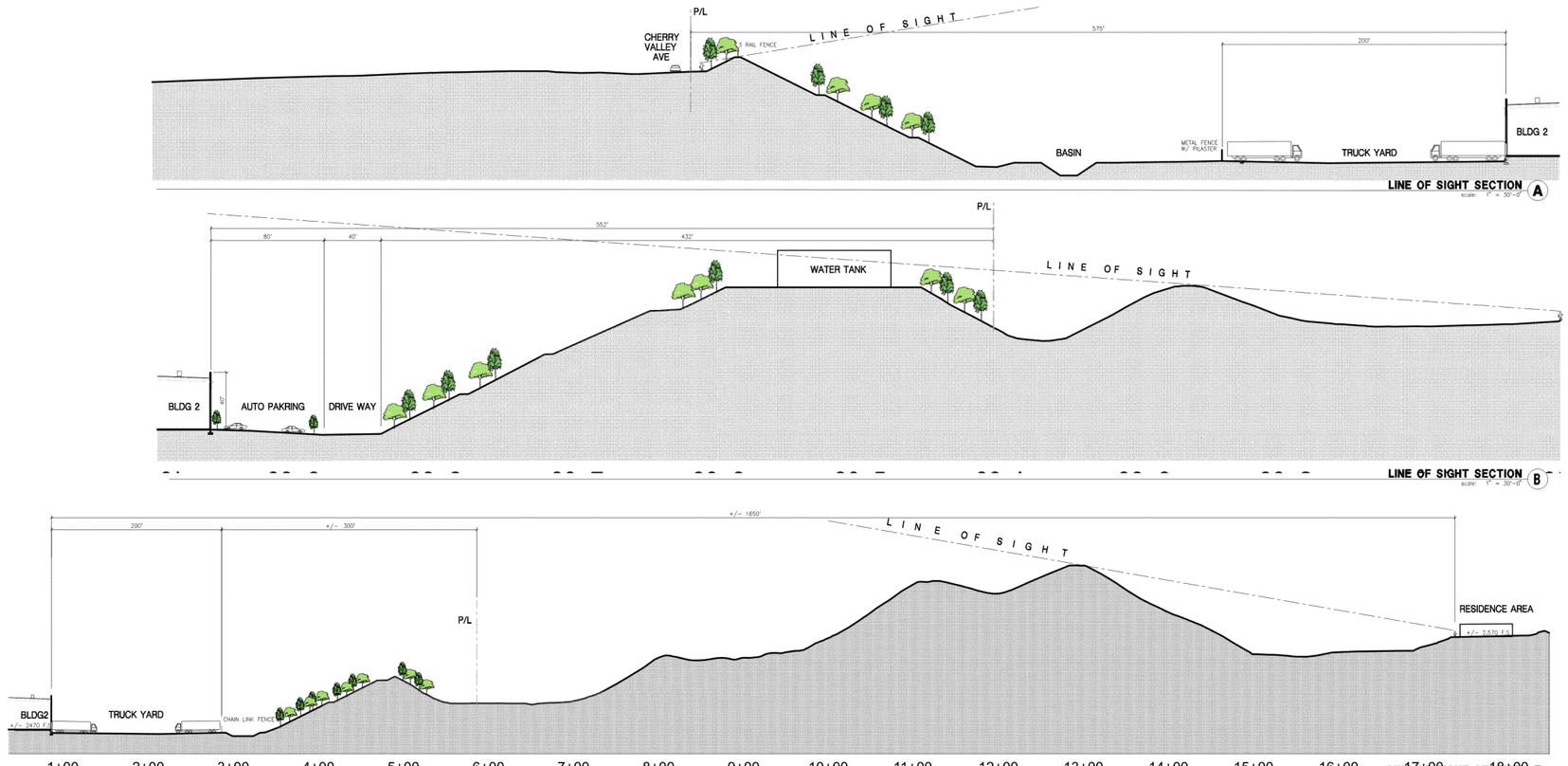


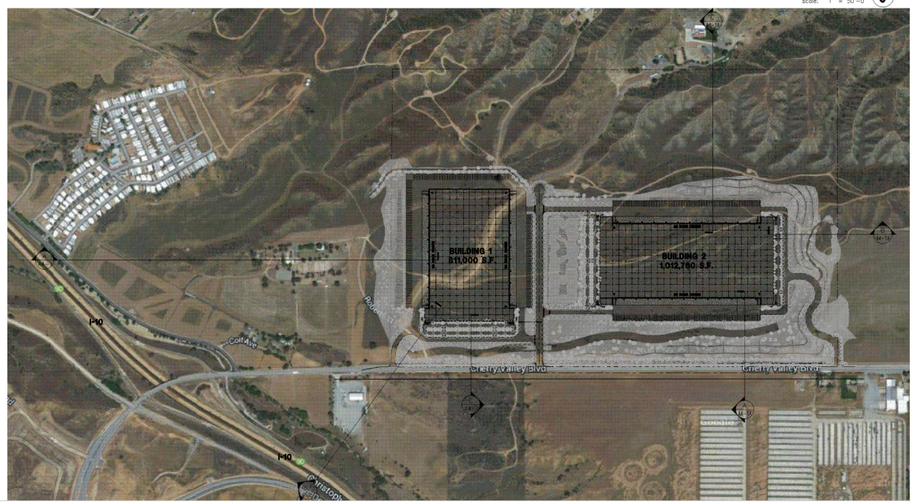

Source: HPA Architecture, October 2014.

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# Exhibit 3.1-4a
# Line of Sight Visualization

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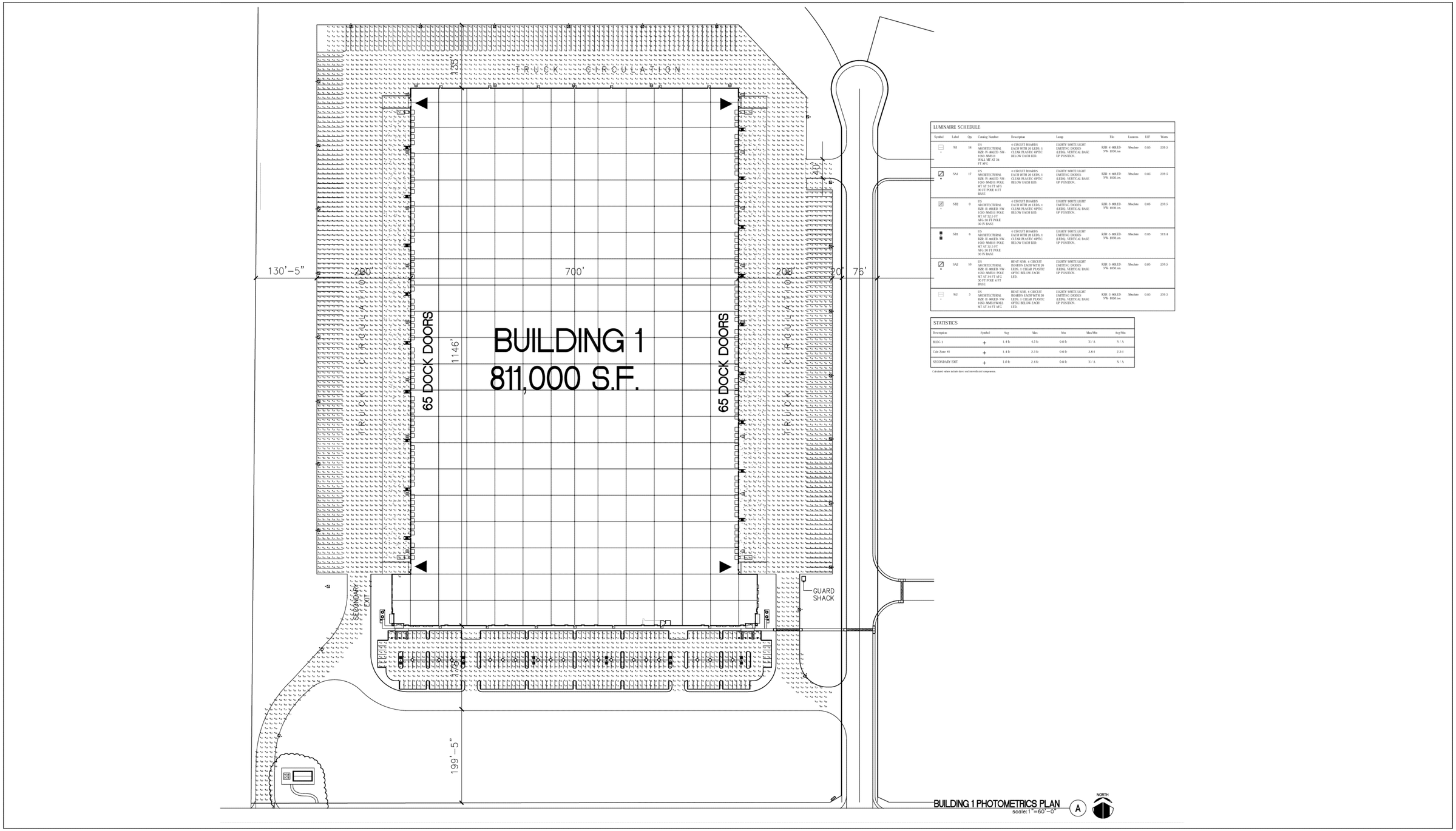




Source: HPA Architecture, October 2014.

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# Exhibit 3.1-4b
# Line of Sight Visualization

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LUMINAIRE SCHEDULE

| Symbol | Label | Qty | Catalog Number | Description | Lamp | File | Lumens | LLF | Watts |
|---|---|---|---|---|---|---|---|---|---|
| | W1 | 18 | US ARCHITECTURAL RZR-IV-80LED-NW-1050-MSD11-WALL MT AT 34 FT AFG | 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-4-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SA1 | 17 | US ARCHITECTURAL RZR-IV-80LED-NW-1050-MSD11-POLE MT AT 34 FT AFG 30 FT POLE 4 FT BASE | 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-4-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SB2 | 0 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11-POLE MT AT 32.5 FT AFG 30 FT POLE 30 IN BASE | 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-3-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SB1 | 6 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11-POLE MT AT 32.5 FT AFG 26 FT POLE 30 IN BASE | 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-5-80LED-NW-1050.ies | Absolute | 0.85 | 519.4 |
| | SA2 | 10 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11-POLE MT AT 34 FT AFG 30 FT POLE 4 FT BASE | HEAT SINK. 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-3-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | B2 | 3 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11WALL MT AT 34 FT AFG | HEAT SINK. 4 CIRCUIT BOARDS EACH WITH 20 LEDS. 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-3-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |

STATISTICS

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| BLDG 1 | + | 1.4 fc | 4.5 fc | 0.0 fc | N / A | N / A |
| *Calc Zone #5* | + | 1.4 fc | 2.3 fc | 0.6 fc | 3.8:1 | 2.3:1 |
| SECONDARY EXIT | + | 1.0 fc | 2.4 fc | 0.0 fc | N / A | N / A |

Calculated values include direct and interreflected components.

BUILDING 1 PHOTOMETRICS PLAN
scale: 1" = 60'-0"

Source: HPA Architecture, January 2013.

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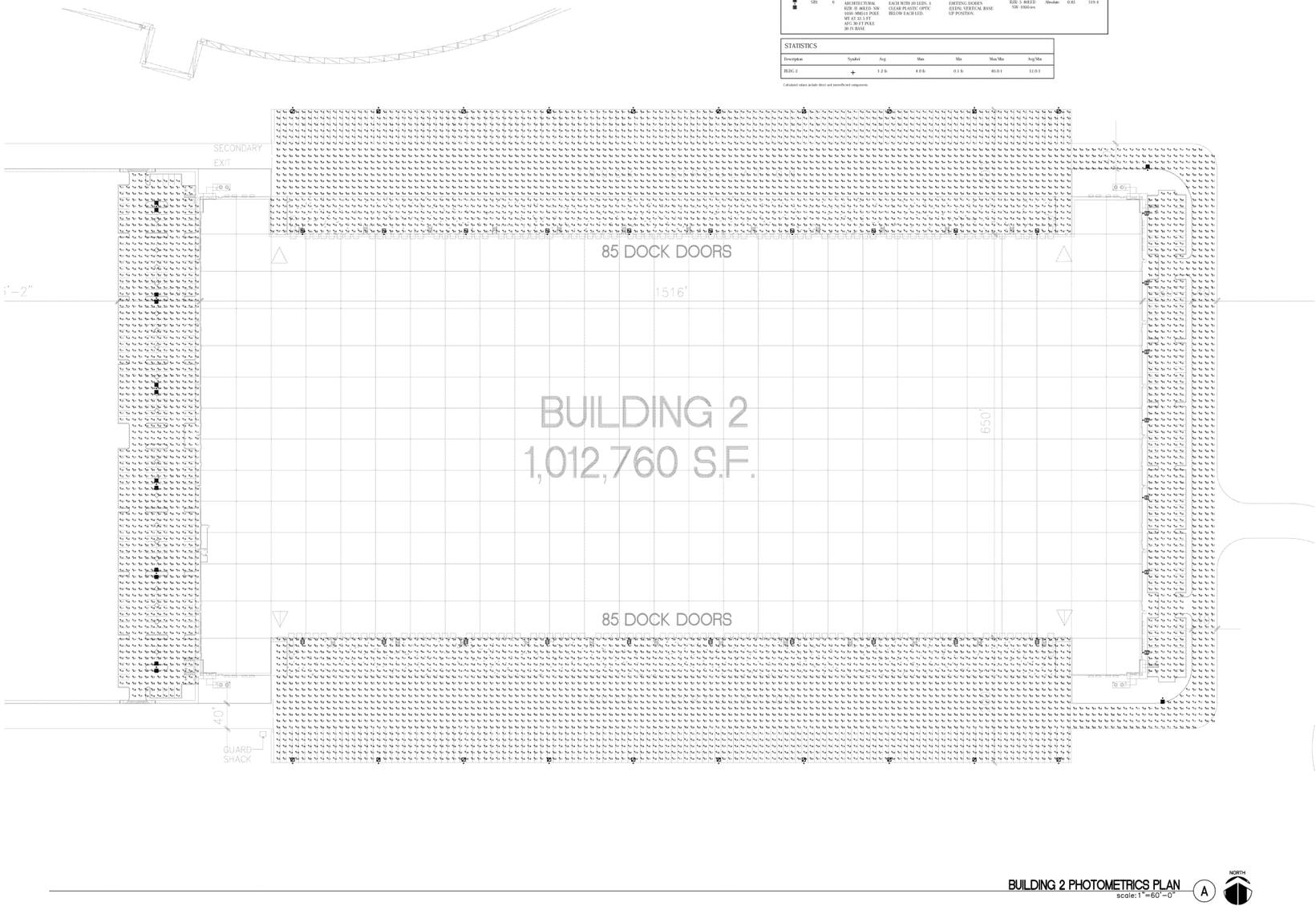
# Exhibit 3.1-5a
# Photometric Plan Building 1

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| LUMINAIRE SCHEDULE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Symbol | Label | Qty | Catalog Number | Description | Lamp | File | Lumens | LLF | Watts |
| | B1 | 27 | US ARCHITECTURAL RZR-W-40LED-NW-1050-MSD11 WALL MT AT 34 FT AFG | 4 CIRCUIT BOARDS. EACH WITH 20 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-4-40LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SA1 | 20 | US ARCHITECTURAL RZR-IV-40LED-NW-1050-MSD11 POLE MT AT 32.5 FT 30 FT POLE 4 FT BASE | 4 CIRCUIT BOARDS. EACH WITH 20 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-4-40LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SA2 | 2 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11 POLE MT AT 32.5 FT AFG 30 FT POLE 36 IN BASE | 4 CIRCUIT BOARDS. EACH WITH 20 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-3-80LED-NW-1050.ies | Absolute | 0.85 | 259.5 |
| | SB1 | 6 | US ARCHITECTURAL RZR-II-80LED-NW-1050-MSD11 POLE MT AT 32.5 FT AFG 30 FT POLE 36 IN BASE | 4 CIRCUIT BOARDS. EACH WITH 20 LEDS, 1 CLEAR PLASTIC OPTIC BELOW EACH LED. | EIGHTY WHITE LIGHT EMITTING DIODES (LEDS). VERTICAL BASE UP POSITION. | RZR-3-80LED-NW-1050.ies | Absolute | 0.85 | 519.4 |

| STATISTICS | | | | | | |
|---|---|---|---|---|---|---|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| BLDG 2 | + | 1.2 fc | 4.0 fc | 0.1 fc | 40.0:1 | 12.0:1 |

Calculated values include direct and interreflected components




Source: HPA Architecture, January 2013.

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# Exhibit 3.1-5b
# Photometric Plan Building 2

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Potential sources of glare from the project include windows, exterior light fixtures, and solar panels, if installed by future tenants. All building windows will be glazed in order to reduce heat and energy use from cooling, which would also reduce the incidence of glare. In relation to the overall size of the buildings, there are very few windows; therefore, the project would create only minimal amounts of glare producing features. In addition, the proposed fencing and landscaping, including trees, would act as a visual barrier for much of the building features, including that of windows and light fixtures. These additional design features would help soften the visual impact of the buildings and reduce the incidence of glare within the surrounding area. If solar panels were to be installed, they would be predominately oriented south, creating a low visibility from both Cherry Valley Road and adjacent properties. Further, the roof of the buildings would be flat, providing an added decrease in the visibility of the solar panels and any potential glare they may emit.

Glare from solar panels for airplane and airport operation is typically a consideration on or adjacent to airports, or near the landing approach for airplanes. Since the closest airport is the Banning Municipal Airport, which is over 10 miles southeast of the project site, glare from solar panels would not be a consideration for airport or airplane operation. In addition, Chapter 17.296, Solar Energy Systems of the County Municipal Code requires that applications to install these types of systems must be approved by the Director of the Department of Building and Safety, or if found to have a specific adverse effect, be subject to a plot plan approval (Riverside 2013a). Therefore, the proposed solar panels would be subject to further review. Based on the above considerations, impacts related to glare would be less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM AES-4** Prior to issuance of building permits, the project applicant shall submit a photometric plan to the County of Riverside for review and approval. The photometric plan shall identify types of lighting fixtures and their locations on the project site. All light fixtures shall be shielded, recessed, or directed downward to prevent unwanted illumination of neighboring properties. Lighting fixtures should employ the most energy-efficient technology available unless technical feasibility or safety concerns take precedent.

### *Level of Significance After Mitigation*

Less than significant impact.

## Light or Glare

**Impact AES-5: The project could expose residential property to unacceptable light levels.**

### *Impact Analysis*

Development of the project will introduce new sources of nighttime light and glare into the area from street lighting, as well as outdoor lighting, including security lighting and parking lot lighting. Exhibits 3.1-3a and 3.1-3b illustrate the project's proposed lighting plan. Because of the location of the project in proximity to existing residential land uses directly to the north and west, mitigation is required to

reduce impacts to a less than significant level. The implementation of Mitigation Measure AES-1 will ensure that a photometric plan that details the type of lighting fixtures and their location will be provided to the County for review prior to building permit approval. Furthermore, the mitigation measure will ensure that sources of lighting are designed to prevent light spillage onto adjoining properties. Therefore, with mitigation incorporated, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure AES-1.

### *Level of Significance After Mitigation*

Less than significant impact.

# 3.2 - Agriculture and Forestry Resources

This section of the Draft EIR describes agricultural and forestry resources in relation to the project site, and discusses the potential impacts to these resources that would occur with implementation of the proposed project. The following documents were used in the analysis:

- County of Riverside, County of Riverside General Plan 2008
- County of Riverside, County of Riverside General Plan (Update) 2014

## 3.2.1 - Existing Conditions

According to the Land Use Element of the County of Riverside General Plan, in terms of historic character and economic strength, one of Riverside County's most important land uses is its widespread and diverse agricultural lands. Within the County of Riverside, one of the largest industries (in terms of dollar value) is agriculture production. According to Table LU-1 in the Land Use Element of the 2014 General Plan, Unincorporated Western Riverside County—where the project is located—contains approximately 23,106 acres of agricultural land.

The unincorporated county area to the north of the project site is zoned Residential Agriculture, one acre minimum lot size (R-A-1) and Controlled Development Area (W-2), which typically allows for single-family residential, light agriculture, aviaries, apiaries, grazing of farm animals and animal husbandry. Areas to the east and south are also zoned R-A-1 and W-2. The areas directly adjacent to the west of the project site are located within the City of Calimesa; these areas are zoned and designated by the General Plan as Residential Low (2 to 4 dwellings per acre) and Residential Low Medium (4 to 7 dwellings per acre). However, the area further to the west, near Cherry Valley Boulevard is designated Commercial Regional. The area within the City of Calimesa that lies to the north and northwest of the project site is zoned/designated as Rural Residential (RR) (0 to 2 dwellings per acre).

Based on a site visit conducted in late 2014, none of the area surrounding the project site is currently used for agriculture (i.e., crop farming). Land to the east of the project site is currently used for grazing and land to the west, and to the southwest is a small horse ranch. Existing land uses surrounding the project site include rural residential land uses located north, east, and west of the project site. The land located south of the project site contains an abandoned egg farm and is an approved residential development site.

Grazing and past active agriculture have disturbed much of the site, which is currently grazed by sheep and goats. Although none of the area within the project site is currently used for traditional agriculture practices (such as crop farming), as shown in Exhibit 3.2-1, the project is categorized as Farmland of Local Importance (approximately 147.64 acres) and Other Land (approximately 97.67 acres) under the Farmland Mapping and Monitoring Program (FMMP), discussed below in Section 3.2.2, Regulatory Setting. The project site is bounded by undeveloped but moderately disturbed vacant land, except for residential uses to the north, west, and east. In addition, Exhibit 3.2-2 shows Williamson Act-designated land located approximately 1.0 mile east of the project site and 2.0 miles southwest of the project site; however, the project site is not under a Williamson Act contract.

Exhibit 3.2-3 depicts a soils map showing the six different types of soils on the project site. The majority of the project site, approximately 117 acres, contains Hanford coarse sandy loam. As detailed in the Updated Phase I Environmental Site Assessment for the project, the aerial photographs of the project site indicate the site was used for agricultural purposes from 1938 (if not earlier, as this is the earliest aerial photograph that was taken) to approximately 1967, when fallow agricultural land was observed on-site.

## 3.2.2 - Regulatory Setting

### State Regulations

### Farmland Mapping and Monitoring Program

The California Department of Conservation established the FMMP in 1982. The FMMP is a non-regulatory program that provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. The maps are updated every 2 years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The program rates agricultural lands according to physical characteristics and other factors such as irrigation status. The best-quality farmland is land that contains a combination of physical and chemical features able to sustain long-term agricultural production, and is classified as Prime Farmland. Additional classifications include Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (Table 3.2-1).

The FMMP also inventories and maps a variety of other land use categories. For purposes of determining a project's significance under CEQA, only Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are used to determine impacts. Conversion to non-agricultural uses of lands falling under any of these classifications is considered a significant impact under CEQA.

Table 3.2-1 provides a description of the various farmland classifications, from the United States Department of Agriculture.

**Table 3.2-1: Description of Farmland Classifications**

| Farmland Category | Description |
|---|---|
| Prime (P) | Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. |
| Statewide Importance (S) | Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. |
| Unique (U) | Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. |

**Table 3.2-1 (cont.): Description of Farmland Classifications**

| Farmland Category | Description |
|---|---|
| Local (L) | Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. In some counties, Confined Animal Agriculture facilities are part of Farmland of Local Importance, but they are shown separately. |
| Grazing (G) | Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. |
| Urban & Built Up Land (U) | Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. |
| Other (X) | Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. |
| Water (W) | Perennial water bodies with an extent of at least 40 acres. |
| Source: California Department of Conservation, 2007b. | |

## California Land Conservation Act

The California Land Conservation Act, better known as the Williamson Act, was enacted by the State Legislature in 1965 to encourage the preservation of agricultural lands. Under the provisions of the act, landowners agreeing to keep their lands under agricultural production for a minimum of 10 years receive property tax adjustments. Williamson Act contracts limit the use of the properties to agricultural, open space, and other compatible uses. Williamson Act lands are assessed based on their agricultural value, rather than their potential market value under nonagricultural uses.

## Local Regulations

**County of Riverside Ordinance No. 509.** This ordinance establishes uniform rules that apply to agricultural preserves.[1]

**County of Riverside Ordinance No. 625.** This ordinance (cited as the Riverside County Right-To-Farm Ordinance) intends to reduce the County's loss of its agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance.[2]

[1] Website: http://www.rivcocob.org/ords/500/509.2.pdf. Accessed May 2015.
[2] Website: http://www.rivcocob.org/ords/600/625.1.pdf. Accessed May 2015.

### The Pass Area Plan

Agriculture is an important component of land use in The Pass Area. The Pass Area Plan is an extension of the County of Riverside General Plan and Vision and it provides customized direction specifically for this planning area. In addition to the economic importance of providing food and fiber, agricultural lands provide visual variety and community separators. The following policy is from The Pass Area Plan:

- **PAP 7.1:** Protect farmland and agricultural resources within the Pass planning area through adherence to the Agricultural Resources section of the General Plan Multipurpose Open Space Element and the Agriculture Land Use Designation Policies section of the General Plan Land Use Element.

This policy would not apply to the project because the site is not designated for agricultural use (i.e., crop farming) by the General Plan, and agricultural use of the project site ceased in 1967.

## 3.2.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to agriculture and forestry resources are significant environmental effects, the following questions are analyzed and evaluated.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?

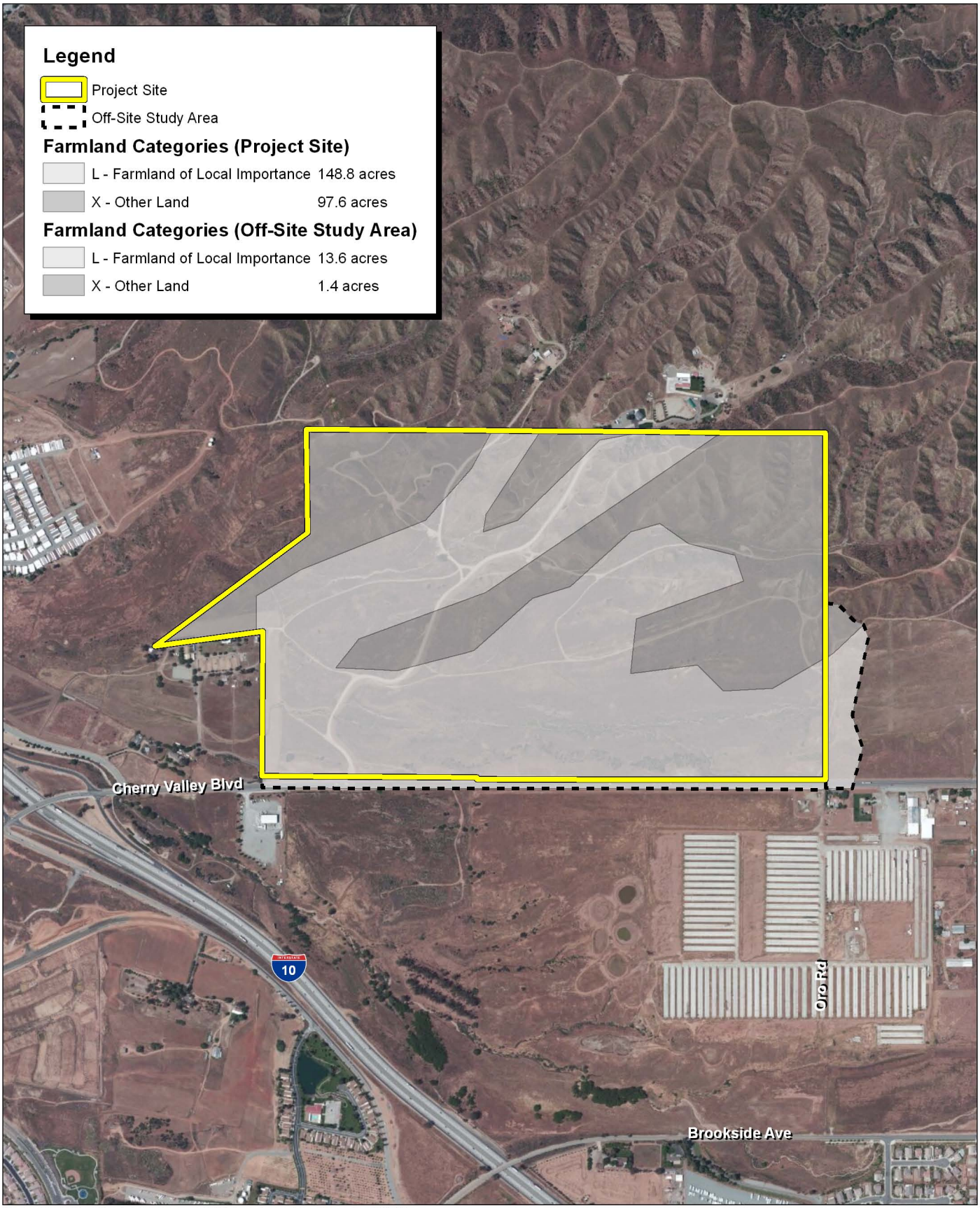
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 “Right-to-Farm”)?

d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

e) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?

f) Result in the loss of forest land or conversion of forest land to non-forest use?

g) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?




Source: ESRI Aerial Imagery. FMMP Riverside County, 2010.

FirstCarbon® SOLUTIONS

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# Exhibit 3.2-1
# Important Farmland Map

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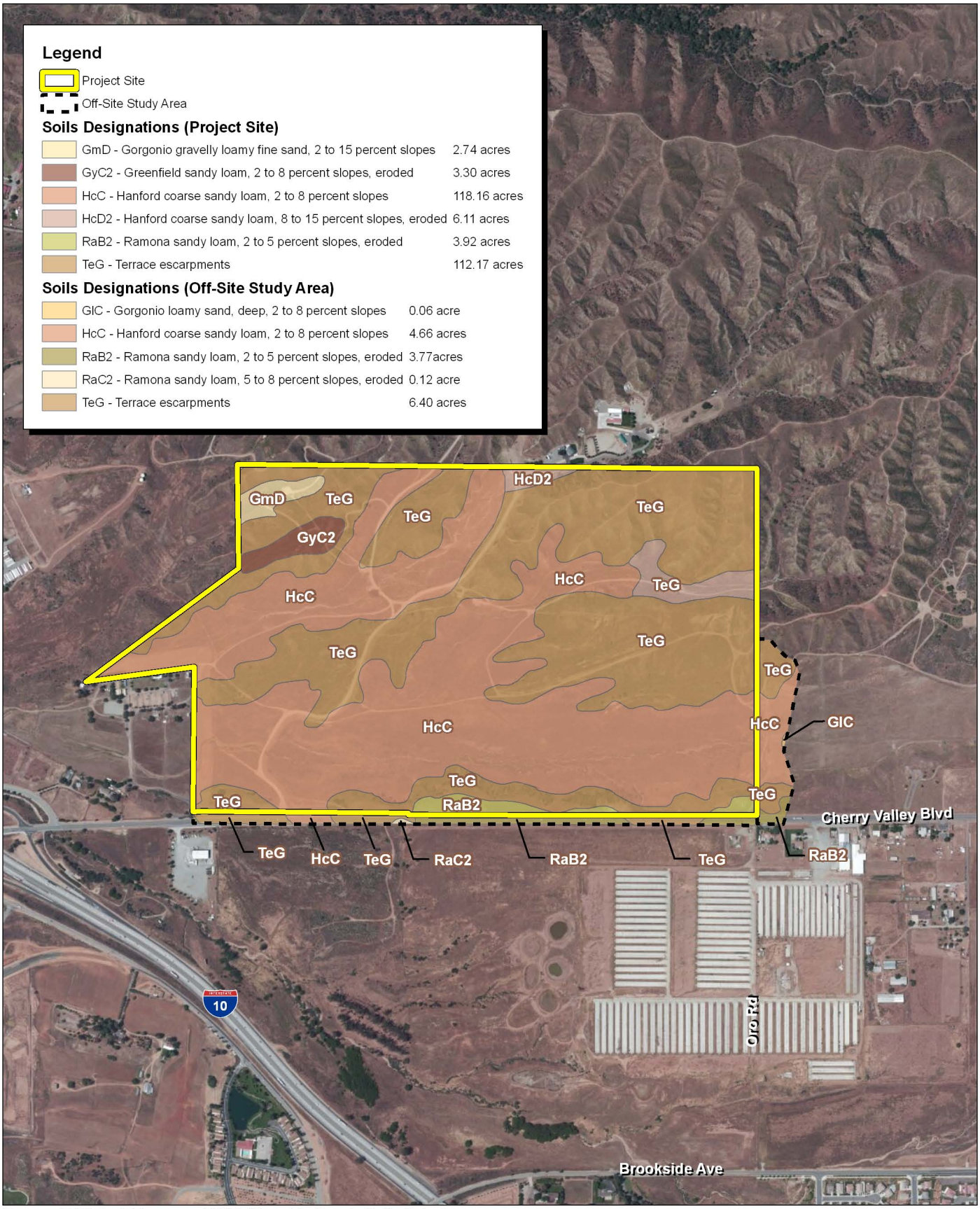

Source: ESRI Aerial Imagery. Williamson Act Contract Data for Riverside County, 2008.

FirstCarbon® SOLUTIONS

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# Exhibit 3.2-2
# Williamson Act Map

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Source: ESRI Aerial Imagery. USDA Riverside County Soils Data.

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# Exhibit 3.2-3
# Soils Map

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## 3.2.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Convert Farmland to Non-Agricultural Use

| | |
|---|---|
| **Impact AG-1:** | **Agriculture: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.** |

#### *Impact Analysis*

The Farmland Mapping and Monitoring Program (FMMP) agricultural land designations on-site are as follows: The project site contains lands classified as Farmland of Local Importance (approximately 137 acres), even though it is not currently used for agriculture, and other land (approximately 92 acres). Therefore, the project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. According to the California Department of Conservation, the farmland map category Farmland of Local Importance is considered land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. The County of Riverside defines Farmland of Local Importance as:

> Soils that would be classified as Prime and Statewide but lack available irrigation water. Lands planted to dryland crops of barley, oats, and wheat.
>
> Lands producing major crops for Riverside County but that are not listed as Unique crops. These crops are identified as returning one million or more dollars on the 1980 Riverside County Agriculture Crop Report. Crops identified are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelons.
>
> Dairylands, including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more.
>
> Lands identified by city or county ordinance as Agricultural Zones or Contracts, which includes Riverside City "Proposition R" lands. Lands planted to jojoba which are under cultivation and are of producing age.

The project site was previously used for farming. Based on the Phase I Cultural Resources Assessment prepared for the project site, the flatter parts of the project site were plowed and cleared of native vegetation in the 1920s or 1930s for the purposes of dryland farming. Dryland farming is defined as the agricultural techniques for non-irrigated cultivation of crops. According to the Phase I ESA prepared for the project, the site was used for agricultural purposes dating back to the early 1930s. From 1980 to present, however, the site has consisted of cleared/developed land. Thus, the site has not been used for farming (including dry farming) since the 1980s, and does not contain lands planted to dryland crops of barley, oats, or wheat. Additionally, the project site has not produced 1 million or more dollars in agricultural income for at least 36 years. Furthermore, the site does not contain dairy lands or associated uses. Lastly, the project site does not contain lands

identified by the County as agricultural zones or contracts, such as Proposition R Lands or lands planted to jojoba. Therefore, the project does not meet the County of Riverside's definition of Farmland of Local Importance.

The loss of potential farmland of local importance on-site is not significant because the site has not been used for farming for more than 30 years, and there is not a sufficient supply of irrigation water to serve such an intensive type of agricultural use on-site.

Furthermore, although the site is considered Farmland of Local Importance, the project site is currently zoned W2 (Controlled Development Area). Allowed uses for this zoning designation include: One-family dwellings, light agriculture, aviaries, apiaries, grazing of farm animals, and animal husbandry. Significant agriculture uses are not permitted within the W2 zone. The fact that the County has not designated the project site under any of the zoning designations that would allow for larger-scale agricultural use—such as C/V (Citrus Vineyard) A-P (Light Agriculture with Poultry), A-D (Agriculture-Dairy), A-2 (Heavy Agriculture) or A-1 (Light Agriculture)—is indicative of the County's policy decision that the site would not be suitable for the types of use that would meet the County's definition of Farmland of Local Importance.

Additionally, the project site is designated as Very Low Density Residential (VLDR), Rural Mountainous (RL), and Residential Low (RL) by the County of Riverside General Plan, rather than the Agriculture (AG) designation. According to the Land Use Element of the County of Riverside General Plan, the Very Low Density Residential land use designation provides for the development of detached single-family residential dwelling units and ancillary structures. The Rural Mountainous land use designation allows single-family residential uses and limited animal-keeping and agricultural uses, with a maximum residential density of one dwelling unit per 10 acres.

Although the current zoning and land use designation allow for small-scale agricultural activities such as grazing, the site has not been used for agricultural purposes in more than 30 years. Potential future use of the site for small-scale agriculture would not provide any of the benefits currently proposed by the project, and would likely not be a financially viable endeavor given the size of the project site. Lastly, the site is not considered suitable for agricultural uses from a water-usage standpoint given the significant irrigation demand associated with such uses, and a zone change and General Plan Amendment would be required to allow for larger-scale agricultural uses on the site.

Additionally, the greater project area is anticipated to undergo development in the future. For example, the Sunny Cal Egg Ranch Specific Plan that includes the construction of 497 single-family homes was approved by the nearby City of Beaumont. The Holbert Ranch (TTM 3054) project would also establish 131 single-family homes adjacent to the project site. Additionally, the City of Calimesa General Plan designates land adjacent to the project site to the west as Commercial Retail. As shown in Exhibit 3.2-1, there are 43 projects in the vicinity of the project, including three high-cube warehouse projects: Rolling Hills Ranch Industrial Prologis, World Logistics Center, and the Dowling Orchard Business Park. Thus, project impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Conflict with Existing Zoning or Williamson Act Contract

| | |
|---|---|
| **Impact AG-2:** | **Agriculture: The project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.** |

### *Impact Analysis*

The site is designated as having farmland of local importance and other land, as referenced in the County's Geographic Information Systems (GIS) database and project materials (such as a GIS map prepared with data from the FMMP); however, the project site is vacant and is not currently being used for agricultural land uses. In addition, neither the project site or project vicinity is under a Williamson Act contract; the nearest property under Williamson Act contract is located approximately 3,000 feet to the east of the project site. The County of Riverside GIS database shows that the project site is not located within a Riverside County Agricultural Preserve. The project site is currently zoned W2 (Controlled Development Area). Allowed uses for this zoning designation include one-family dwellings, light agriculture, aviaries, apiaries, grazing of farm animals, and animal husbandry. Therefore, impacts to existing agricultural use or a Williamson Act contract are anticipated to be less than significant because the project will not conflict with existing agricultural zoning, agricultural use, or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Non-Agricultural Uses

| | |
|---|---|
| **Impact AG-3:** | **Agriculture: The project would cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm").** |

### *Impact Analysis*

The land adjacent to the eastern edge of the project site is zoned as R-A-1 (Residential Agriculture, 1-acre minimum) by the County of Riverside. The County's zoning description identifies typical uses as:

- Mobile home on permanent foundations on lots less than 2.5 acres.
- Noncommercial keeping of horses, cattle, sheep, and goats on lots over 20,000 square feet (sq ft) and 100 ft. wide.
- Two such animals on each 20,000 sq ft up to 1 acre.
- Two such animals on each additional acre.
- Some agricultural uses.
- Limited noncommercial animal husbandry.
- 4-H projects.
- Agricultural mobile homes permitted for owner/farm worker for each 10 acres being farmed.
- Mobile home parks with approved conditional use permit.
- Churches with approved public use permit.

Although the project would develop non-agricultural land uses within 300 feet of agriculturally zoned property, the project is anticipated to have a less than significant impact because the land surrounding the project site consists of rural residential land uses and is not used for agricultural purposes (such as crop farming). Land to the east of the project site is currently used for grazing, and land to the west, adjacent to the project site is currently a horse ranch.

Additionally, while the project site will be used for industrial purposes, ongoing operations at the site would not impact surrounding agricultural uses, including any future agricultural uses that may occur within 300 feet of the project site. Right to Farm bills are typically created in order to control nuisance claims, often created when higher-end commercial enterprises, retail, or more dense residential developments are placed in proximity to ongoing agricultural operations. This is typically not an issue for industrial and warehouse developments, which are able to coexist with nearby agricultural operations. Thus, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Conversion of Farmland

| | |
|---|---|
| **Impact AG-4:** | **Agriculture: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.** |

### *Impact Analysis*

The land surrounding the project site consists of rural residential land uses and is not being used for agricultural purposes. The project area is anticipated to undergo development in the future. For example, the Sunny Cal Egg Ranch Specific Plan was approved by the City of Beaumont. Additionally, the City of Calimesa General Plan designates land adjacent to the project site to the west as Commercial Retail. In addition, the location and configuration of the project will not cause other changes to existing agricultural operations. It will not impede the current use of such operations in terms of access, or limit the continued use of such properties for agriculture in any other way. Thus, development of the project's industrial buildings is not anticipated to have a significant impact involving other changes in the existing environment that could result in conversion of Farmland to non-agricultural use.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Existing Zoning—Forest Land

| | |
|---|---|
| **Impact AG-5:** | **Forest: The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)).** |

### *Impact Analysis*

The project site and surrounding area is not zoned for forestland. Therefore, the project would not conflict with existing zoning for forest land uses or timberland zoned Timberland Production. The project would not conflict with any existing zoning for forest land or timberland, and no impacts are anticipated to occur.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Loss or Conversion of Forest Land

| | |
|---|---|
| **Impact AG-6:** | **Forest: The project would not result in the loss of forest land or conversion of forest land to non-forest use.** |

### *Impact Analysis*

The project will not involve the conversion of forest land because the project site does not contain any forest land. Additionally, the use of the project site for warehouse and industrial uses will not cause any conversion of forest land to a non-forest use in another location. The project site will be used for warehouse and shipping activities, neither of which will have any direct or indirect impacts on forest lands. The project site is not used for forest use and is not zoned for forest uses. Therefore, the project will have no impact on forestry resources.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Other Changes to Forest Land

| | |
|---|---|
| **Impact AG-7:** | **Forest: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.** |

### *Impact Analysis*

The project would have no impact regarding the conversion of forest land to non-forest use (see Impact AG-6). Thus, the project will have no impact, and no mitigation measures are required.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

# 3.3 - Air Quality

This section describes the existing air quality conditions and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Air Quality, Health Risk, and Greenhouse Gas Analysis Report prepared in March 2016 by FirstCarbon Solutions, included in this Draft EIR as Appendix B. The purpose of the Air Quality, Health risk, and Greenhouse Gas Analysis Report is to evaluate whether the estimated air pollutant and greenhouse gas emissions generated from the project would cause significant impacts to air resources in the project area.

## 3.3.1 - Regulatory Setting

### Federal Regulations

The United States Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for ozone ($O_3$), carbon monoxide (CO), nitrogen oxides ($NO_x$), sulfur dioxide ($SO_2$), particulate matter between 2.5 and 10 microns ($PM_{10}$), and lead. The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the California Air Resources Board (ARB).

The Federal Clean Air Act (CAA) was first enacted in 1955, and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants $O_3$, nitrogen dioxide ($NO_2$), $SO_2$, $PM_{10}$, CO, particulate matter less than 2.5 microns ($PM_{2.5}$), and lead. The NAAQS were amended in July 1997 to include an additional standard for $O_3$ and to adopt a NAAQS for $PM_{2.5}$.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and $NO_x$. $NO_x$ is a collective term that includes all forms of nitrogen oxides (NO, $NO_2$, $NO_3$) which are emitted as byproducts of the combustion process.

## State Regulations

The California Air Resources Board (ARB), which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (Assembly Bill [AB] 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The ARB established the California Ambient Air Quality Standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the South Coast Air Basin (SoCAB) because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the South Coast Air Quality Management District (SCAQMD), regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources.
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development).
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions.
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled.
- Significant use of low emissions vehicles by fleet operators.
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, $NO_x$, CO and $PM_{10}$. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

## Regional Regulations

### *South Coast Air Quality Management District*

*Air Quality Management Plans*

An Air Quality Management Plan (AQMP) is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient

air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

**2003 AQMP**

One of the purposes of the 2003 AQMP is to lead the air basin and portions of the Salton Sea Air Basin under SCAQMD jurisdiction into compliance with the 1-hour ozone and $PM_{10}$ federal standards. One of the purposes of the 2007 AQMP is to lead the air basin into compliance of the federal 8-hour ozone and $PM_{2.5}$ standards.

The 2003 AQMP also replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future, and updated the maintenance plan for the federal $NO_2$ standard that the SoCAB has met since 1992.

The 2003 AQMP also incorporated new scientific data in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2003 AQMP utilized complex modeling to show that with the control measures, the air basin would be in compliance with the federal and state standards for all pollutants by 2010, except for the state ozone and $PM_{10}$ standards and the state ozone and $PM_{10}$ standard after 2010 or by the earliest practicable date, as mandated by the California Health and Safety Code Section 40462. The ARB approved the 2003 AQMP on August 1, 2003. The EPA's adequacy finding on the emissions budgets for conformity determination in the air basin was published in the Federal Register (69 FR 15325-15326).

**2007 AQMP**

The 2007 AQMP, which was adopted by the SCAQMD on June 1, 2007. On July 13, 2007, the SCAQMD Board adopted the 2007 Final AQMP Transportation Conformity Budgets and directed the Executive Officer to forward them to ARB for its approval and subsequent submittal to the EPA. On September 27, 2007, ARB adopted the State Strategy for the 2007 State Implementation Plan and the 2007 AQMP as part of the SIP. On January 15, 2009, the EPA's regional administrator signed a final rule to approve in part and disapprove in part the SCAQMD 2003 1-hour ozone plan and the nitrogen dioxide maintenance plan. The parts of the plan that were approved strengthen the SIP. The Clean Air Act does not require the disapproved portions of the plan, and the disapprovals do not start sanctions clocks.

The 2007 AQMP outlines a detailed strategy for meeting the federal health-based standards for $PM_{2.5}$ by 2015 and 8-hour ozone by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporates significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions will be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate forming emissions. The 2007 AQMP includes 37 control measures proposed for adoption by the SCAQMD, including measures to reduce emissions from new commercial and residential developments, more reductions from industrial facilities, and reductions from wood burning fireplaces and restaurant charbroilers.

**2012 AQMP**

The 2012 AQMP was adopted December 7, 2012 (SCAQMD 2012a) and approved by the ARB on January 25, 2013. The purpose of the 2012 AQMP for the SoCAB is to set forth a comprehensive and integrated program that will lead the SoCAB into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update of the SoCAB's projections in meeting the federal 8-hour ozone standards. On February 13, 2013, the AQMP was submitted to the EPA as the SIP for the federal 24-hour $PM_{2.5}$ standard and ozone standard. In addition, the AQMP will update specific elements of the previously approved 8-hour ozone SIP: 1) an updated emissions inventory and, 2) new control measures and commitments for emissions reductions to help fulfill the Section 182(e)(5) portion of the 8-hour ozone SIP. The 2012 AQMP states, "The remarkable historical improvement in air quality since the 1970s is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs" (SCAQMD 2012a, page ES-1).

The 2012 AQMP proposes air basin-wide $PM_{2.5}$ measures that will be implemented by the 2014 attainment date, episodic control measures to achieve air quality improvements (would only apply during high $PM_{2.5}$ days), Section 182(e)(5) implementation measures (to maintain progress towards meeting the 2023 8-hour ozone national standard), and transportation control measures. Most of the control measures focus on incentives, outreach, and education.

Proposed $PM_{2.5}$ reduction measures in the 2012 AQMP include the following:

- Further $NO_x$ reductions from RECLAIM
- Further reductions from residential wood burning devices
- Further reductions from open burning
- Emission reductions from under-fired charbroilers
- Further ammonia reductions from livestock waste
- Backstop measures for indirect sources of emissions from ports and port-related sources
- Further criteria pollutant reductions from education, outreach and incentives

There are multiple VOC and $NO_x$ reductions in the 2012 AQMP to attempt to reduce ozone formation, including further VOC reductions from architectural coatings, miscellaneous coatings, adhesives, solvents, lubricants, mold release products, consumer products.

The 2012 also contains proposed mobile source implementation measures for the deployment of zero- and near-zero emission on-road heavy-duty vehicles, locomotives, and cargo handling equipment. There are measures for the deployment of cleaner commercial harbor craft, cleaner ocean-going marine vessels, cleaner off-road equipment, and cleaner aircraft engines.

The 2012 AQMP proposes the following mobile source implementation measures:

On-road mobile sources:

- Accelerated penetration of partial zero-emission and zero-emission vehicles and light-heavy and medium-heavy duty vehicles through funding assistance for purchasing the vehicles.

- Accelerated retirement of older light-, medium-, and heavy-duty vehicles through funding incentives.
- Further emission reductions from heavy-duty vehicles serving near-dock rail yards through a proposed control measure that calls for a requirement that any cargo container moved between the Ports of Los Angeles and Long Beach to the nearby rail yards with zero-emission technologies.

Off-road mobile sources:

- Extension of the SOON provision for construction/industrial equipment, which provides funding to repower or replace older Tier 0 and Tier 1 equipment.
- Further emission reductions from freight and passenger locomotives calls for an accelerated use of Tier 4 locomotives in the air basin.
- Further emission reductions from ocean-going marine vessels while at berth.
- Emission reductions from ocean-going marine vessels.

The 2012 AQMP also relies upon the Southern California Association of Governments regional transportation strategy, which is in its adopted 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2011 Federal Transportation Improvement Program, which contains the following sections:

- Linking regional transportation planning to air quality planning: making sure that the regional transportation plan supports the goals and objectives of the AQMP/SIP.
- Regional transportation strategy and transportation control measures: the RTP/SCS contains improvements to the regional multimodal transportation system including the following: active transportation (non-motorized transportation—biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance.
- Reasonably available control measure analysis.

*South Coast Air Quality Management District Rules*

The AQMP for the air basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and national air quality standards. The rules and regulations that apply to this project include, but are not limited to, the following rules.

**SCAQMD Rule 402**

Prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

**SCAQMD Rule 403**

Governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

**SCAQMD Rule 481**

Applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior of the building walls. The rule states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

(1) The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.

(2) Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.

(3) An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

**SCAQMD Rule 1108**

Governs the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

**SCAQMD Rule 1113**

Governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

**SCAQMD Rule 1143**

Governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

**SCAQMD Rule 1186**

Limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

**SCAQMD Rule 1303**

Governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for $PM_{10}$ among other pollutants.

**SCAQMD Rule 220**

Sets forth "On-Road Motor Vehicle Mitigation Options"; provides employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period, calculated as a monthly average.

## Local Regulations

### *County of Riverside General Plan*

The County of Riverside General Plan contains the following policies that address air quality and are applicable to the proposed project:

- **Q 2.1:** The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible (AI 114).
- **AQ 2.2:** Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible (AI 114).
- **AQ 2.3:** Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution (AI 114).
- **AQ 2.4:** Consider creating a program to plant urban trees on an Area Plan basis that removes pollutants from the air, provides shade and decreases the negative impacts of heat on the air (AI 114).
- **AQ 3.1:** Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.
- **AQ 3.2:** Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.
- **AQ 3.3:** Encourage large employers and commercial/industrial complexes to create Transportation Management Associations (AI 115).
- **AQ 3.4:** Encourage employee rideshare and transit incentives for employers with more than 25 employees at a single location.
- **AQ 4.1:** Encourage the use of building materials/methods which reduce emissions.
- **AQ 4.2:** Encourage the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- **AQ 4.3:** Encourage centrally heated facilities to utilize automated time clocks or occupant sensors to control heating.

- **AQ 4.7:** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SOCAB, the Environmental Protection Agency and the California Air Resources Board.
- **AQ 4.9:** Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- **AQ 4.10:** Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended (AI 111).
- **AQ 5.1:** Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- **AQ 5.2:** Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments (AI 62).
- **AQ 5.4:** Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.
- **AQ 7.1:** Provide incentives to encourage new firms to locate within the County and existing firms to expand operations (AI 18).
- **AQ 7.2:** Work with SCAQMD and MDAQMD to develop a means to encourage the location of new commercial and industrial development in those localities where jobs are most needed (AI 18).
- **AQ 8.2:** Emphasize job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods (AI 18).
- **AQ 8.6:** Encourage employment centers in close proximity to residential uses (AI 14).
- **AQ 8.8:** Promote land use patterns which reduce the number and length of motor vehicle trips (AI 26).
- **AQ 10.1:** Encourage trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking (AI 47).

### *Western Riverside Council of Governments (WRCOG)*

In 2005, the Western Riverside Council of Governments published a guidance document referred to as the "Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" (WRCOG 2005). This document recommends guidelines that provide local governments and developers with a menu of options or strategies that can reduce exposure to diesel particulate from new and/or modified warehouse or distribution centers. The Guidelines include seven goals, and a variety of strategies for each goal that can be implemented in whole or part. There are a variety of benefits associated with adopting the guidelines, such as reducing the exposure of residents and sensitive receptors to diesel emissions.

## 3.3.2 - Existing Environmental Conditions

The project is located in the County of Riverside and within the SoCAB. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the west, north, and east. The southern limit of the SoCAB is the San Diego County line. The SoCAB consists of Orange County, Los

Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

There are a number of existing residences in close proximity to the project. The closest existing residences are located near the southeast corner of the project along Cherry Valley Boulevard. In addition, several areas adjacent to the project site are zoned for residential development. The shortest distances to any existing or proposed sensitive receptor is 25 meters, as future residences located within the proposed Sunny Cal Specific Plan are directly across Cherry Valley Boulevard (south from the project site).

## Regional Climate

The regional climate has a substantial influence on air quality in the SoCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SoCAB vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the SoCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SoCAB, with average minimum temperatures of 47 degrees Fahrenheit (°F) in downtown Los Angeles and 36°F in San Bernardino. All portions of the SoCAB have recorded maximum temperatures above 100°F.

Although the climate of the SoCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SoCAB climate. Humidity restricts visibility in the SoCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SoCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the SoCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SoCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SoCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14-1⁄2 hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SoCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong,

dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SoCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island, which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SoCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SoCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

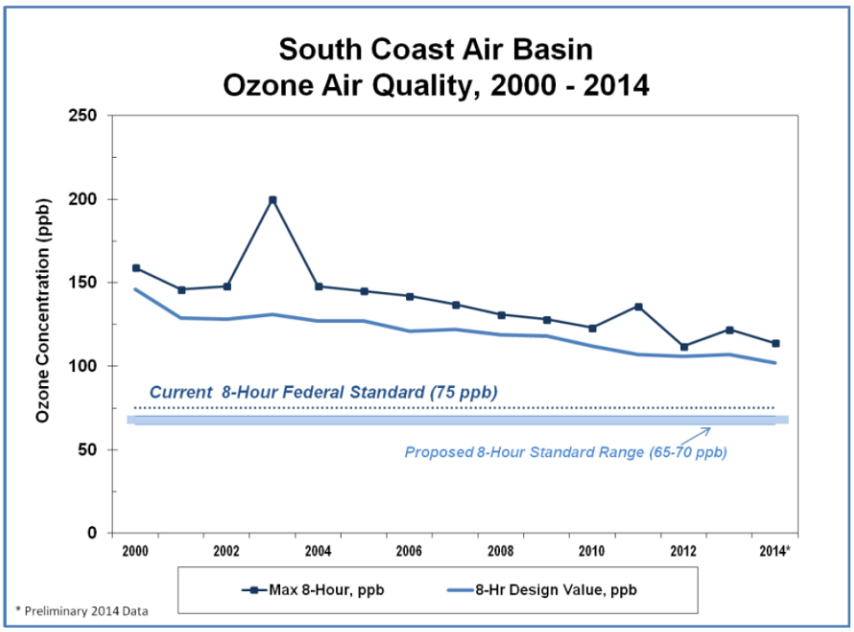
A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as $NO_x$ and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

## Existing Local Air Quality

Existing ambient air quality, historical trends, and future projections of air quality in the project area are best documented from measurements made near the project site. The SCAQMD maintains an extensive air-monitoring network that measures levels of several air pollutants throughout the SoCAB. Air quality in the South Coast region continues to improve over the long term, although the maximum concentration and number of days each year in which the federal ozone standard is exceeded fluctuates from year to year due to weather conditions.

In 2014, the South Coast region exceeded the federal ozone standard on 94 days, the second-lowest number ever recorded in the South Coast Air Basin. The maximum 1-hour ozone concentration of 0.142 parts per million (ppm) in 2014 was the lowest on record and the maximum 8-hour ozone concentration of 0.114 was the second-lowest recorded (see Figure 1). Similar improvements in basin air quality can be noted from Figure 2 through Figure 6 for other criteria pollutants.

**Figure 1: Trends in South Coast Air Basin Ozone Levels**




Air pollution controls have significantly reduced levels of $PM_{2.5}$ across the region and data since 2011 show that the Southland is meeting the former 1997 annual $PM_{2.5}$ federal standard of 15 micrograms per cubic meter. EPA revised the annual average $PM_{2.5}$ standard from 15 micrograms per cubic meter down to 12 micrograms per cubic meter in March 2013 and the South Coast region is continuing to make progress toward attainment of this annual standard. The region came close but did not meet the 24-hour federal $PM_{2.5}$ standard in 2014 (see Figure 2 and Figure 3).

**Figure 2: Trends in South Coast Air Basin 24-hour Average $PM_{2.5}$ Levels**

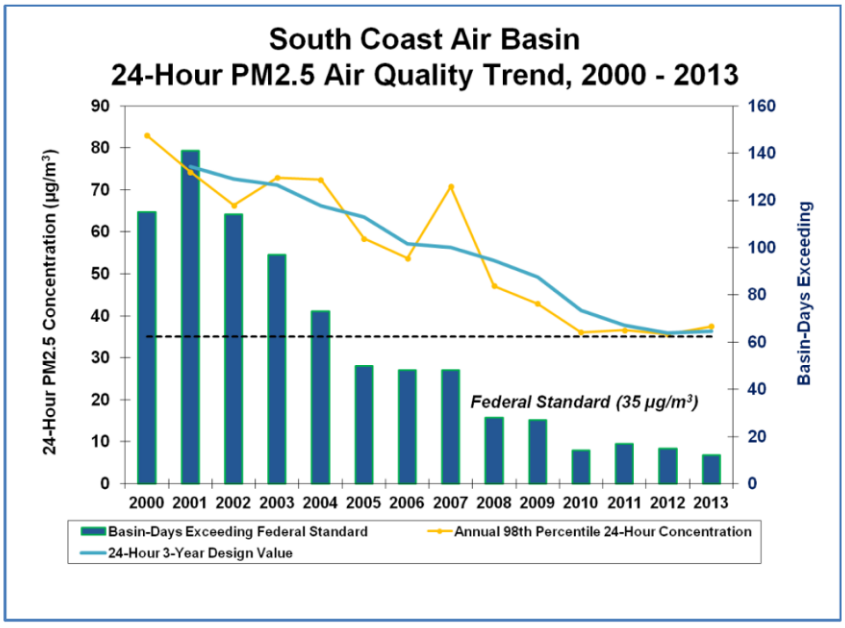


**Figure 3: Trend in South Coast Air Basin Annual $PM_{2.5}$ Levels**

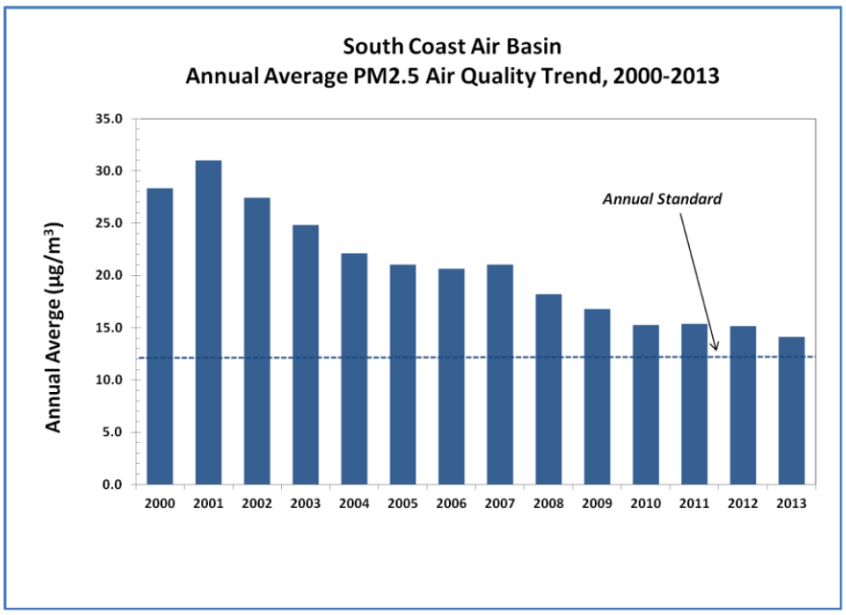



**Figure 4: Trend in South Coast Air Basin $PM_{10}$ Levels**

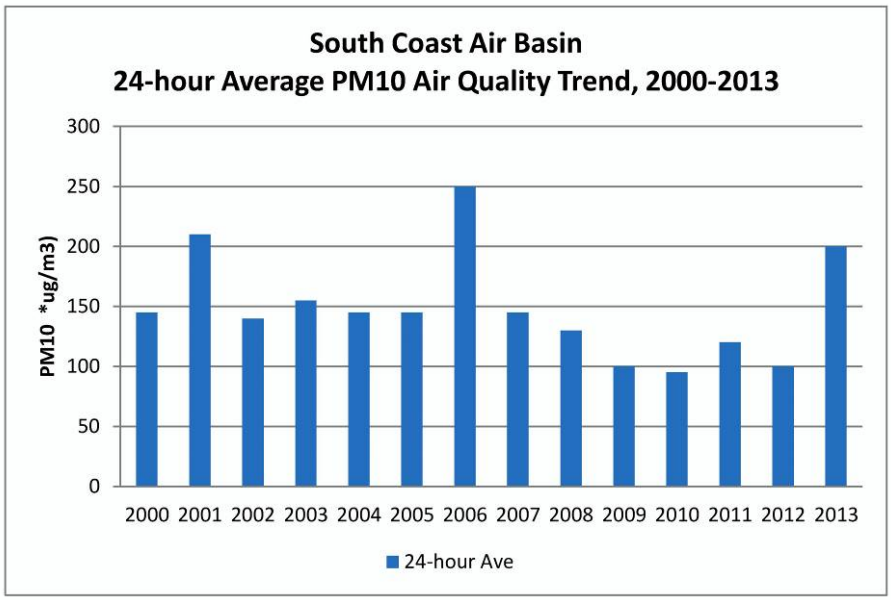


**Figure 5: Trend in South Coast Air Basin Carbon Monoxide Levels**

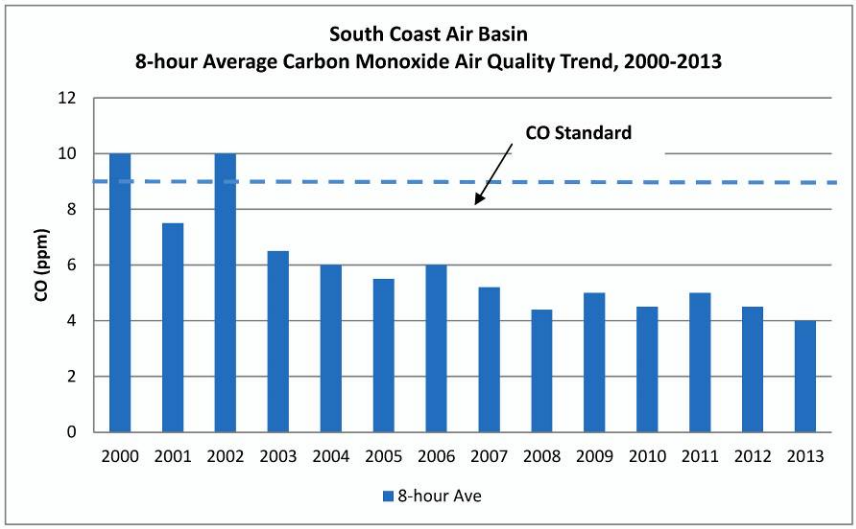
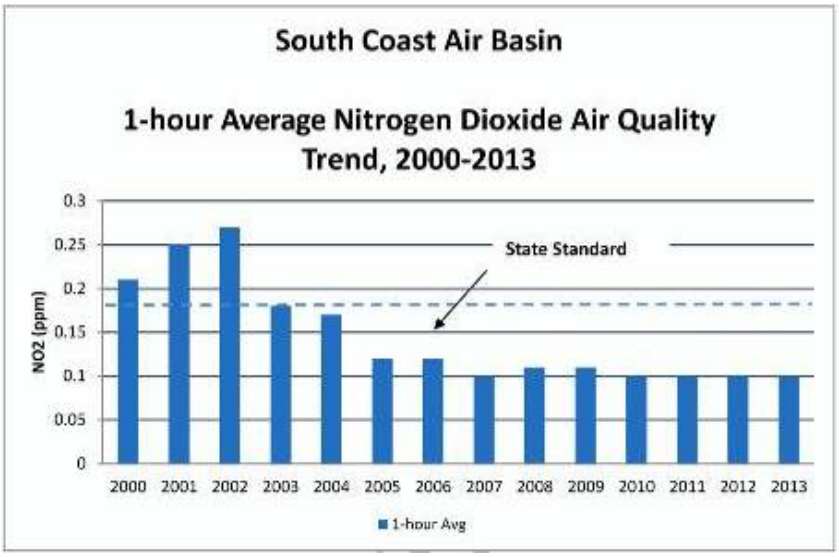



**Figure 6: Trend in South Coast Air Basin Nitrogen Dioxide Levels**




The SCAQMD has subdivided the SoCAB into 36 Source-Receptor Areas (SRAs), many containing one or more monitoring stations. These SRAs are designated to provide a general representation of the local meteorology, terrain, and air quality conditions within the particular geographical area. The project is located within SRA 29, "Banning Airport." During the latest 3-year period (2012-2014), various air pollutants were measured within SRA 29 at the SCAQMD's Banning Airport air monitoring station. The pollutant levels from SRA 29 were used to comprise a "background" for the project location.

Table 3.3-1 summarizes the air monitoring data for SRA 29 covering the period 2012-2014, the most current published 3-year monitoring period. Where data for a pollutant was not measured at the

Banning Airport air monitoring station, the data from the nearest air monitoring station within the SoCAB measuring that pollutant was used.

**Table 3.3-1: Air Quality Monitoring Summary**

| Air Pollutant | Averaging Time | Air Standard | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|
| Ozone[a] | 1 Hour | Max 1 Hour (ppm) | 0.117 | 0.115 | 0.114 |
| | | Days > State Standard (0.09 ppm) | 40 | 24 | 22 |
| | 8 Hour | Max 8 Hour (ppm) | 0.098 | 0.103 | 0.097 |
| | | Days > State Standard (0.07 ppm) | 71 | 66 | 56 |
| | | Days > National Standard (0.075 ppm) | 53 | 41 | 38 |
| Carbon monoxide[b] | 8 Hour | Max 8 Hour (ppm) | 1.46 | 1.60 | 1.40 |
| | | Days > State Standard (9.0 ppm) | 0 | 0 | 0 |
| | | Days > National Standard (9 ppm) | 0 | 0 | 0 |
| Nitrogen dioxide[a] | Annual | Annual Average (ppm) | ID | ID | 0.008 |
| | 1 Hour | Max 1 Hour (ppm) | 0.072 | 0.052 | 0.052 |
| | | Days > State Standard (0.18 ppm) | 0 | 0 | 0 |
| | | 98$^{th}$ Percentile | 0.050 | 0.045 | 0.046 |
| Inhalable coarse particles ($PM_{10}$)[a] | Annual | Annual Average (µg/m$^3$) | 17.7 | 18.9 | ID |
| | 24 hour | 24 Hour (µg/m$^3$) | 45.0 | 64.0 | 45.0 |
| | | Days > State Standard (50 µg/m$^3$) | 0 | 1 | 0 |
| | | Days > National Standard (150 µg/m$^3$) | 0 | 0 | 0 |
| Fine particulate matter ($PM_{2.5}$)[a] | Annual | Annual Average (µg/m$^3$) | ID | 16.4 | 16.5 |
| | 24 Hour | 24 Hour (µg/m$^3$) | 30.2 | 53.7 | 30.9 |
| | | Days > National Standard (35 µg/m$^3$) | 0 | 1 | 0 |

Notes and Abbreviations:
> = exceed
ppm = parts per million
µg/m$^3$ = micrograms per cubic meter
ID = insufficient data
ND = no data
max = maximum
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
[a] Ozone, nitrogen dioxide, and $PM_{10}$ data from Banning Airport station
[b] Carbon monoxide and $PM_{2.5}$ data from Riverside-Magnolia station, 21 miles west of the project site
Source: ARB 2014 and SCAQMD 2014

Criteria pollutants are pollutants that are regulated through the development of human health-based and/or environmentally based criteria for setting permissible levels. Examples of sources and effects of the criteria pollutants are identified below:

- **CO** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter

morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- **$SO_2$** is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When $SO_2$ oxidizes in the atmosphere, it forms sulfates ($SO_4$). Collectively, these pollutants are referred to as sulfur oxides ($SO_x$).
- **Nitrogen oxides (oxides of nitrogen or $NO_x$)** consist of nitric oxide (NO), nitrogen dioxide ($NO_2$) and nitrous oxide ($N_2O$) and are formed when nitrogen combines with oxygen. Their lifespan in the atmosphere ranges from 1 to 7 days for NO and $NO_2$, to 170 years for $N_2O$. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. $NO_2$ is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, $NO_2$ is the most abundant in the atmosphere. As ambient concentrations of $NO_2$ are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of $NO_2$ than those indicated by regional monitors.
- **$O_3$** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides ($NO_x$), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.
- **$PM_{10}$:** A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. $PM_{10}$ also causes visibility reduction and is a criteria air pollutant.
- **$PM_{2.5}$:** A similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from $SO_2$ release from power plants and industrial facilities and nitrates that are formed from $NO_x$ release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.
- **Volatile Organic Compounds (VOC)** are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some

examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, $CO_2$, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to $O_3$, which is a criteria pollutant.

- **Reactive organic gases (ROG):** Similar to VOC, ROG are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to $O_3$, which is a criteria pollutant.
- **Lead (Pb)** is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. It should be noted that the project is not anticipated to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant.

## Toxic Air Contaminants

A toxic air contaminant, or TAC, is defined as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. For those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined, and for which the state and federal governments have set ambient air quality standards. The majority of the estimated health risk from TACs can be attributed to a relatively few compounds, the most important being particulate matter (PM) from diesel-fueled engines, known as diesel particulate matter (DPM). In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

The health risks can be defined in terms of the probability of developing cancer as a result of exposure to carcinogens at a given concentration. The Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA Guidance) recommends the incorporation of several factors to quantify the carcinogenic compound dose via the inhalation pathway. The cancer risk values for diesel exhaust particulate matter, which is the primary TAC of concern, consider exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for diesel exhaust are not known for these pathways. All of the carcinogenic compounds in this assessment result in exposures to the public via the inhalation pathway.

Both SCAQMD and ARB have monitoring networks within the SoCAB that measure ambient concentrations of certain TACs that are associated with important health-related effects, and are

present in appreciable concentrations in the SoCAB. The SCAQMD uses this information to determine health risks for a particular area. The ARB publishes annual Statewide, air basin, and location-specific summaries of the concentration levels of several TACs and their resulting cancer risks.[1] The most recent summary is the ARB Air Quality Almanac for 2009. The Almanac presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. Diesel particulate matter is not directly measured, but is indirectly estimated based on fine particulate matter measurements and special studies on the chemical speciation of ambient fine particulate data, along with receptor modeling techniques. ARB estimates that 78 percent of the known statewide cancer risks are from the top 10 outdoor air toxics, in addition to DPM.

Estimates of total cancer risk Statewide have shown a steady decline from the early 1990s, when the cancer risk from diesel PM was estimated to be 1,696 in one million. By the year 2000, the cancer risk was estimated to be 1,005 in one million, or a reduction of 41 percent. Reductions in cancer risk are expected to continue into the future as new emission controls are implemented that further reduce DPM emissions, which are the major component of the total airborne cancer risk.

Table 3.3-2 provides a summary of TACs and health risk information from the ARB Annual Toxic Summary for the most recent three-year period, 2012–2014 for the Riverside-Rubidoux air monitoring station, which is located approximately 23 miles west of the project site. The cancer risk attributable to the non-DPM chemicals (i.e., the 10 TACs measured by the ARB described above) has dropped significantly at the Rubidoux location, declining from an estimated cancer risk of 429 in one million in 1990 to 104 in one million in 2011, a reduction of 76 percent.

**Table 3.3-2: TAC Concentration Levels and Associated Health Risks—Riverside**

| TAC | Conc.[1]/Risk[2] | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Acetaldehyde | Annual Average<br>Health Risk | 1.39<br>7 | 1.27<br>6 | 1.17<br>6 |
| Benzene | Annual Average<br>Health Risk | 0.32<br>30 | 0.31<br>28 | 0.29<br>27 |
| 1,3-Butadiene | Annual Average<br>Health Risk | 0.050<br>19 | 0.065<br>24 | 0.056<br>21 |
| Carbon tetrachloride | Annual Average<br>Health Risk | 0.084<br>22 | 0.082<br>22 | 0.097<br>26 |
| Chromium, Hex | Annual Average<br>Health Risk | 0.030<br>5 | 0.58<br>9 | 0.070<br>6 |
| Para-dichlorobenzene | Annual Average<br>Health Risk | ID<br>ID | ID<br>ID | ID<br>ID |

[1] Cancer risk is expressed as a probability of an individual out of a population of one million contracting cancer via a continuous exposure to TACs over a 70-year lifetime.

**Table 3.3-2 (cont.): TAC Concentration Levels and Associated Health Risks—Riverside**

| TAC | Conc.[1]/Risk[2] | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Formaldehyde | Annual Average<br>Health Risk | 3.70<br>27 | 3.57<br>26 | 3.56<br>26 |
| Methylene chloride | Annual Average<br>Health Risk | 2.41<br>8 | 1.33<br>5 | 1.49<br>5 |
| Perchloroethylene | Annual Average<br>Health Risk | 0.020<br>0.8 | 0.022<br>0.9 | 0.026<br>1 |
| Diesel PM | No monitoring data available | | | |
| Total Health Risk (without DPM) | | 119 | 121 | 118 |

Notes:
[1] Concentrations for Hexavalent Chromium are expressed as ng/m$^3$, and concentrations for Diesel PM are expressed as µg/m$^3$. Concentrations for all other TACs are expressed as ppb.
[2] Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information is not available.
ID = insufficient data
Source: ARB 2014a for the Riverside Rubidoux air monitoring station.

In addition to the measurements presented in the ARB almanac and the Annual Air Toxics Summary, the SCAQMD has conducted a detailed TAC emission inventory, air sampling, and dispersion modeling study called the "Multiple Air Toxics Exposure Study in the South Coast Air SoCAB" (MATES-II, SCAQMD 2000), MATES-III (SCAQMD 2008a), and MATES-IV (SCAQMD 2014) (collectively, "MATES Studies").

The MATES Studies provided information on the importance of various TACs in terms of their relative health risks, as well as their spatial distribution across the SoCAB. The MATES-IV information can be used to characterize the "background" health risks from both regional and local TAC emission sources based on the available toxics emission inventory for the year 2012. The MATES-IV program results indicate that the existing cancer risk attributable to TACs in the area where the project site is located is estimated to be 158 in one million, of which DPM contributes approximately 68 percent of the total cancer risk. This cancer risk level is approximately 54 percent lower than the background cancer risks based on the MATES-III study that used the toxics emission inventory for the year 2005, which further illustrates the trend of declining health risk from TACs.

This sharp decline is attributable largely to emission reduction programs implemented by the SCAQMD, ARB, and EPA, particularly with regard to DPM.

### *Odors*

Odors can cause a variety of responses. The impact of an odor results from interacting factors, such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception.

Odor is typically a warning system that prevents animals and humans from consuming spoiled food or toxic materials. Odor-related symptoms reported in a number of studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomach ache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation (SCAQMD 2007.

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations (SCAQMD 2007). The SCAQMD's resolution activity for odor compliance is mandated under California Health & Safety Code Section 41700, and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

The SCAQMD indicates that the number of overall complaints has declined over the last five years. Over the last four years, odor complaints make up 50 to 55 percent of the total nuisance complaints. Over the past decade, odors from paint and coating operations have decreased from 27 to 7 percent, and odors from refuse collection stations have increased from 9 to 34 percent (SCAQMD 2007).

### Local Sources of Air Pollutants

The project site is currently vacant except for the private use of some unpaved roads. The only emissions expected from the current site are the occasional fugitive dust from exposed soil areas.

Within a radius of about 3 miles from the project, there are numerous residential areas. Emissions from the surrounding residences include the following: space and water heating, landscape maintenance, consumer products, and motor vehicles. Two main freeways, Interstate 10 (I-10) and State Route 60, with their associated traffic and emissions, are within this 3-mile radius.

## 3.3.3 - Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The current attainment designations for the Basin are shown in Table 3.3-3.

**Table 3.3-3: South Coast Air Basin Attainment Status**

| Pollutant | State Status | National Status |
|---|---|---|
| Ozone | Nonattainment | Nonattainment—Extreme |
| Carbon monoxide | Attainment | Unclassified/Attainment |
| Nitrogen dioxide | Attainment | Unclassified/Attainment |
| Sulfur dioxide | Attainment | Attainment |
| $PM_{10}$ | Nonattainment | Attainment |
| $PM_{2.5}$ | Nonattainment | Nonattainment |
| Lead | Attainment | Nonattainment (Los Angeles County Only) |
| Sulfates | Attainment | No national standard |
| Visibility Reducing Particles | Unclassified | No national standard |
| Hydrogen Sulfide | Unclassified | No national standard |
| Source of state status: California Air Resources Board 2014b. | | |

## 3.3.4 - Thresholds of Significance

According to the County of Riverside CEQA Thresholds, to determine whether impacts to air quality are significant, the following questions are analyzed and evaluated. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

d) Expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions?

e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?

f) Create objectionable odors affecting a substantial number of people?

To assist in the establishment of a quantitative determination of what is considered "significant," the SCAQMD has published a number of significance thresholds that apply to new projects constructed or operated within the SCAQMD. The SCAQMD recommends that lead agencies apply these thresholds in determining whether a proposed project would result in a significant air quality impact. If the lead agency finds that a proposed project has the potential to exceed these air pollution thresholds, the project would be considered significant. These thresholds have been defined by

SCAQMD for the SoCAB, based on scientific data the SCAQMD has obtained and factual data within the federal and State Clean Air Acts. Since the project is located within the SoCAB, these thresholds are applicable to this project. The SCAQMD has defined thresholds for $NO_2$, VOC, Oxides of Sulfur ($SO_x$), CO, $PM_{10}$, and $PM_{2.5}$, hereinafter referred to as "criteria" pollutants, and for health risk in terms of cancer and non-cancer risk.

From the perspective of this analysis, four types of significance thresholds were evaluated in terms of impacts on air quality from the construction and operation of the project. These thresholds are the Regional Significance Thresholds, Local Significance Thresholds (LSTs), Health Risk Significance Thresholds, and CO "Hot Spot" Thresholds, which are discussed below.

## 3.3.5 - Regional Air Quality Significance Thresholds

The SCAQMD has regional significance thresholds for VOC, $NO_x$, $SO_x$, CO, $PM_{10}$, and $PM_{2.5}$. Projects located within the SoCAB with construction- or operational-related emissions in excess of any of the thresholds presented in Table 3.3-4 would be considered significant.

**Table 3.3-4: SCAQMD Regional Thresholds**

| Pollutant | Construction (pounds per day) | Operation (pounds per day) |
|---|---|---|
| Oxides of nitrogen ($NO_x$) | 100 | 55 |
| Reactive organic gases (ROG) | 75 | 55 |
| Particulate matter ($PM_{10}$) | 150 | 150 |
| Particulate matter ($PM_{2.5}$) | 55 | 55 |
| Oxides of sulfur ($SO_x$) | 150 | 150 |
| Carbon monoxide (CO) | 550 | 550 |
| Source: SCAQMD 2012b. | | |

## 3.3.6 - Local Air Quality Significance Thresholds (LSTs)

LSTs were developed in response to the SCAQMD Governing Board's environmental justice (EJ) initiatives (EJ initiative I-4) in recognition of the fact that criteria pollutants such as CO, $NO_x$, and $PM_{10}$ and $PM_{2.5}$ in particular, can have local impacts as well as regional impacts. The goal of significance thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any project. The evaluation of localized air quality impacts determines the potential of the project to violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. LSTs represent the maximum emissions or air concentrations from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, at any nearby sensitive or worker receptor. LSTs are defined separately for construction and operational activities.

The project is located in SRA 29 (Banning Airport). Therefore, the LSTs for this SRA were selected for the LST assessment. The project size is generally represented as the maximum area disturbed during a day from which emissions are calculated.

## Health Risk Significance Thresholds

In addition to the thresholds established above for pollutants, the SCAQMD has also defined health risk thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of 70 years for sensitive receptors. Thus, an individual located in an area with a cancer risk of one would experience one chance out of a population of one million of contracting cancer over a 70-year time period, assuming that individual lives in that area continuously for the entire 70-year time period.

TACs can also cause chronic (long-term) related non-cancer illnesses such as reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system effects, birth defects, or other adverse environmental effects. Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). The SCAQMD has established the following health risk thresholds.

### *Project-Specific Health Risk Significance Thresholds*

The SCAQMD has established the following project-specific health risk significance thresholds (SCAQMD 2015b):

Maximum Incremental Cancer Risk: >=10 in 1 million.
Hazard Index (project increment) >=1.0.

A significant impact would occur if a project's impacts exceeded any of these thresholds.

### *Cumulative Health Risk Significance Thresholds*

The SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (SCAQMD 2003c). In this report the SCAQMD clearly states (page D-3):

> . . . the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI >1.0 while the cumulative (facility-wide) is HI >3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same

significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

### Carbon Monoxide "Hot Spot" Thresholds

The largest contributor of CO emissions during project operations is typically from motor vehicles. A CO hot spot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. The CO hot spot thresholds are represented by the most restricted state or federal CO ambient air quality standards:

- 1-hour CO standard: 20 ppm; and
- 8-hour CO standard: 9 ppm.

If the CO contributed by the project in combination with CO produced by non-project traffic exceeds the above standards, then the project would have a significant impact.

## 3.3.7 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### Air Quality Plan

| | |
|---|---|
| **Impact AQ-1:** | **The project would conflict with or obstruct implementation of the applicable air quality plan.** |

#### *Impact Analysis*

The project site is located within the SoCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 12,000-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies, to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions,

accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including SCAG's 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and updated emission inventory methodologies for various source categories.

Similar to the 2007 AQMP, the 2012 AQMP was based on assumptions provided by both ARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012 RTP.

The 2012 AQMP also has assumed that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development. The project's consistency with the 2012 AQMP is discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993). These indicators are discussed as follows:

- Consistency Criterion No. 1: Whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

Violations of the CAAQS and NAAQS could occur if LSTs, regional significance thresholds, or the CO hot spot significance thresholds were exceeded.

*Construction Impacts*

As evaluated as part of the project LST analysis (see Impact AQ-2), the project's localized construction-source emissions would not exceed applicable LSTs. In addition, the project would not exceed the applicable SCAQMD regional construction thresholds after application of mitigation (see Impact AQ-3). Therefore, the project would not conflict with the AQMP according to this criterion during construction.

*Operational Impacts*

The project LST analysis demonstrates that project operational-source emissions would not exceed applicable LSTs, and are therefore less than significant (see Impact AQ-2). However, the project would exceed the applicable SCAQMD regional numeric thresholds for ROG and $NO_x$ emissions under project operations even after mitigation (see Impact AQ-3). Therefore, during project operations, the project would conflict with the AQMP according to this criterion.

- Consistency Criterion No. 2: A project would conflict with the AQMP if it will exceed the assumptions in the AQMP in 2010 or increments based on the year of project build-out and phase. The Handbook indicates that key assumptions to use in this analysis are population number and location and a regional housing needs assessment.

### *Consistency with Current General Plans*

The development of emission burdens used in AQMPs to demonstrate compliance with ambient air quality standards is based, in part, on land use patterns contained within local general plans. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and if the general plan was adopted prior to the applicable AQMP, then the growth of vehicle miles traveled (VMT) and/or population generated by said project would be consistent with the growth in VMT and population assumed within the AQMP. The current General Plan land use for the project site is Very Low Density Residential (VLDR) within the County, and Residential Low (RL) with the City of Calimesa. The project would result in the construction and operation of warehouses uses and would generate a higher growth in VMT than anticipated under the General Plan. Therefore, growth supported by development of the project would not be accounted for in the AQMP. The project is potentially significant under this criterion.

In addition to Criteria 1 and 2 above, consistency with the AQMP will also be determined by whether the project complies with applicable control measures, rules, and regulations, as discussed below.

### *Control Measures*

This step involves assessing the project's compliance with the control measures in the AQMPs.

*2003 AQMP*. The 2003 AQMP contains a number of land use and transportation control measures including the following: the District's Stationary and Mobile Source Control Measures; State Control Measures proposed by ARB; and Transportation Control Measures provided by SCAG. ARB's strategy for reducing mobile source emissions include the following approaches: new engine standards; reduce emissions from in-use fleet, require clean fuels, support alternative fuels and reduce petroleum dependency, work with EPA to reduce emissions from national and state sources, and pursue long-term advanced technology measures (SCAQMD 2003, page 4-25). Transportation control measures provided by SCAG include those contained in the Regional Transportation Plans, the most current version of which is the 2012 Regional Transportation Plan. The Regional Transportation Plan has control measures to reduce emissions from on-road sources by incorporating strategies such as high occupancy vehicle interventions, transit, and information-based technology interventions (SCAQMD 2003, page 4-19). The project indirectly would comply with the control measures set by ARB and SCAG.

*2007 AQMP*. The focus of the 2007 AQMP is to demonstrate attainment of the federal $PM_{2.5}$ ambient air quality standard by 2015 and the federal 8-hour ozone standard by 2024, while making expeditious progress toward attainment of state standards. This is to be accomplished by building upon improvements from the previous plans and incorporating all feasible control measures while balancing costs and socioeconomic impacts. The 2007 AQMP indicates that $PM_{2.5}$ is formed mainly

by secondary reactions or sources. Therefore, instead of reducing fugitive dust, the strategy for reducing $PM_{2.5}$ focuses on reducing precursor emissions of $SO_x$, directly emitted $PM_{2.5}$, $NO_x$, and ROG.

The Final 2007 AQMP control measures consist of four components. The first component is SCAQMD's Stationary and Mobile Source Control Measures. The Final 2007 AQMP includes 30 short-term and mid-term stationary and seven mobile source control measures for SCAQMD implementation. A complete listing of the measures is provided in the 2007 AQMP and includes measures such as VOC reductions from gasoline transfer and dispensing facilities, further $NO_x$ reductions from space heaters, localized control program for PM emission hot spots, urban heat island, energy efficiency and conservation, etc. Some of the measures will become new rules and some will be amendments to existing rules. When the rules pass, the owner-operator will follow the applicable rules.

The second component is ARB's Proposed State Strategy, which includes short- and mid-term control measures aimed at reducing emissions from sources that are primarily under state jurisdiction, including on-road and off-road mobile sources, and consumer products. These measures are required in order to achieve the remaining emission reductions necessary for $PM_{2.5}$ attainment. ARB's strategy includes measures such as improvements to California's Smog Check Program, expanded passenger vehicle retirement, cleaner in-use heavy-duty trucks, reductions from port related sources, cleaner off-road equipment, evaporative and exhaust strategies, pesticide strategies, etc. When these measures are implemented by the ARB, the project would be required to follow them.

The third component is SCAQMD Staff's Proposed Policy Options to Supplement ARB's Control Strategy. SCAQMD staff believes that a combination of regulatory actions and public funding is the most effective means of achieving emission reductions. As such, the 2007 Final AQMP proposes three policy options for the decision makers to consider in achieving additional reductions. The first option is to incorporate the SCAQMD proposed additional control measures as a menu of selections further reducing emissions from sources primarily under state and national jurisdiction. The second option is to have the State fulfill its $NO_x$ emission reduction obligations under the 2003 AQMP by 2010, for its short-term defined control measures plus additional reductions needed to meet the $NO_x$ emission target between 2010 and 2014. The third option is based on the same rate of progress under Policy Option 1, but it relies heavily on public funding assistance to achieve the needed $NO_x$ reductions via accelerated fleet turnover, to post-2010 on-road emission standards or the cleanest off-road engine standards in effect today or after 2010. This strategy is adopted as part of the mitigation measures recommended for this project.

The fourth component consists of Regional Transportation Strategy and Control Measures provided by SCAG. Transportation plans within the SoCAB are statutorily required to conform to air quality plans in the region, as established by the 1990 Federal Clean Air Act and reinforced by other Acts. The region must demonstrate that its transportation plans and programs conform to the mandate to meet the federal ambient air quality standards in a timely manner. The Regional Transportation Plan, prepared by the SCAG, is developed every 4 years with a 20-year planning horizon to meet the long-term transportation planning requirements for emission reductions from on-road mobile sources within the SoCAB. The biennial Regional Transportation Improvement Program requires that the short-term implementation requirements of the Transportation Conformity Rule be met by

SCAG. The first 2 years of the program are fiscally constrained and demonstrate timely implementation of a special category of transportation projects called Transportation Control Measures. In general, Transportation Control Measures are those projects that provide emission reductions from on-road mobile sources, based on changes in the patterns and modes by which the regional transportation system is used. Strategies are grouped into three categories: high occupancy vehicle strategy, transit and systems management, and information-based technology (traveling during a less congested time of day). SCAG approved the transportation measures in the Regional Transportation Plan, which have been included in the region's air quality plans. The Transportation Control Measures will be implemented and will subsequently reduce emissions in the SoCAB.

*2012 AQMP.* The 2012 AQMP was adopted December 7, 2012. The purpose of the 2012 AQMP for the SoCAB is to set forth a comprehensive and integrated program that will lead the SoCAB into compliance with the federal 24-hour $PM_{2.5}$ air quality standards, and to provide an update of the SoCAB's projections in meeting the federal 8-hour ozone standards. Similarly to the prior AQMPs, the project would comply with all applicable rules and regulations enacted as part of the AQMP. In addition, as discussed in the Regulatory section, the AQMP relies upon the SCAG regional transportation strategy, which is in its adopted 2012-2035 RTP/SCS and 2011 Federal Transportation Improvement Program. Included in the RTP/SCS are regional transportation strategy and transportation control measures including the following: active transportation (non-motorized transportation—biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance.

*SIPs*. Geographical areas in the state that exceed the federal air quality standards are called nonattainment areas. The project area is in nonattainment for ozone, $PM_{10}$, $PM_{2.5}$, and $NO_2$. SIPs show how each area will attain the federal standards. To do this, the SIPs identify the amount of pollutant emissions that must be reduced in each area to meet the standard and the emission controls needed to reduce the necessary emissions. On September 27, 2007, ARB adopted its State Strategy for the 2007 SIP. In 2009, the SIP was revised to account for emissions reductions from regulations adopted in 2007 and 2008 and clarifies ARB's legal commitment. There are currently proposed revisions and a 2011 Progress Report. The SoCAB is currently 94 percent of the way towards achieving the 2014 emissions levels identified in its $PM_{2.5}$ SIP. The SIP takes into account ARB rules and regulations. The project will comply with applicable rules and regulations.

*Summary*

In summary, the project would comply with all applicable rules and regulations. However, the project could impede attainment because the project is inconsistent with the current General Plan land use designation and the project's emissions exceed the SCAQMD regional significance thresholds.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measures AQ-1 through AQ-8 below.

## Construction Mitigation Measures

**MM AQ-1** During mass grading and building construction, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet or exceed United States Environmental Protection Agency (EPA) Tier 3 off-road emissions standards.

**MM AQ-2** All Heavy-Heavy Duty Haul Trucks (HHD) accessing the project site shall use year 2007 or newer engines during all construction activities.

**MM AQ-3** The following measures shall be applied to all projects during construction of the project:

a) Use paints with a volatile organic compound (VOC) content 100 grams per Liter or lower for both interior and exterior surfaces, if painted.
b) Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
c) Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
d) For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of cleanup water and take it to the hazardous waste center (www.cleanup.org).
e) Use compliant low-VOC cleaning solvents to clean paint application equipment.
f) Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.

**MM AQ-4** Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flagperson) during construction-related truck hauling activities. The traffic control plan is intended to minimize traffic congestion and delays that increase idling and acceleration emissions. The applicant shall maintain one copy on-site in the construction trailer to the satisfaction of the County of Riverside.

**MM AQ-5** During project construction, the following measures shall be implemented to the satisfaction of the County of Riverside. Construction equipment maintenance records and data sheets of equipment design specifications (including the emission control tier of the equipment) shall be kept on-site during construction and subject to inspection by the County of Riverside.

a) Construction equipment shall be properly maintained according to manufacturer specifications.
b) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour.

c) On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel-powered electric generators.
d) The project shall demonstrate compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 concerning fugitive dust and provide appropriate documentation to the County of Riverside.
e) Traffic speeds on all unpaved roads to be reduced to 15 miles per hour or less.
f) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).
g) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.

## Operational Mitigation Measures

**MM AQ-6** Prior to operation of each warehouse building, the applicant shall demonstrate to the County of Riverside that vehicles can access the building using paved roads and parking lots.

**MM AQ-7** The project shall implement the following measures to reduce emissions from on-site heavy duty trucks within six months after operations commence:

a) Post signs informing truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas.
b) Post signs in all dock and delivery areas containing the following: truck drivers shall turn off engines when not in use; trucks shall not idle for more than five minutes; telephone numbers of the building facilities manager and the California Air Resources Board to report violations.
c) Tenants shall maintain records on its fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles serving the warehouses within the project are in good condition, and in proper tune pursuant to manufacturer's specifications. Tenants shall maintain records on its fleet equipment and ensure that all Heavy-Heavy Duty Trucks (HHD) accessing the project site use year 2010 or newer engines. The records shall be maintained on-site and be made available for inspection by the County.
d) The facility operator will ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board-approved courses (such as the free, one-day Course #512).
e) Require facility operator to become a SmartWay Partner.
f) Require facility operator to incorporate incentives and requirements such that the maximum feasible number of truck trips will be carried by SmartWay 1.0 or greater carriers.
g) Prior to issuance of occupancy permits, signs shall be installed at each exit driveway, providing directional information to the County's truck route. Text on

the sign shall read "To Truck Route" with a directional arrow. Truck routes shall be clearly marked pursuant to the Municipal code.

**MM AQ-8** The following measures shall be incorporated into each building to reduce motor vehicle emissions:

a) All tenants shall participate in Riverside County's Rideshare Program. The purpose of the program would be to discourage single-occupancy vehicle trips and encourage alternate modes of transportation such as carpooling, transit, walking, and biking. The program shall provide employees with assistance in using alternate modes of travel, including carpooling encouragement, ride-matching assistance, and vanpool assistance.
b) A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building.
c) Each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided.
d) Each building shall provide a minimum of two shower and changing facilities within 200 yards of a building entrance.
e) Each building shall provide preferred parking for low-emitting and fuel-efficient vehicles equivalent to 5 percent of the required number of parking spaces.
f) All on-site forklifts and yard trucks shall be electric with the necessary electrical charging stations provided.

### *Level of Significance After Mitigation*

**Significant and unavoidable impact.** The project would comply with all applicable rules and regulations. However, the project could impede attainment of the AQMP because its emissions will exceed the SCAQMD regional significance thresholds for $NO_x$ and ROG during operations, even after implementation of all feasible mitigation. The predominance of operational emissions are generated by project traffic, and, at present, there are no additional feasible mitigation measures that would reduce these emissions to levels that are less than significant.

## Air Quality Standards/Violations

| | |
|---|---|
| **Impact AQ-2:** | **The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.** |

### *Impact Analysis*

Two criteria are used to assess the significance of this impact: (1) the localized construction and operational significance analysis; and (2) the CO hot spot analysis.

*Localized Construction Analysis*

The SCAQMD Governing Board adopted a methodology for calculating localized air quality impacts through localized significance thresholds (also referred to as an LST analysis). LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standards. LSTs were developed in

recognition of the fact that criteria pollutants such as CO and $NO_x$—and $PM_{10}$ and $PM_{2.5}$ in particular—can have local impacts at nearby sensitive receptors as well as regional impacts.

The localized assessment methodology limits the emissions in the analysis to those generated from on-site activities. The on-site emissions during construction are compared with the localized significance thresholds and are summarized in Table 3.3-5. As shown in Table 3.3-5, unmitigated emissions during construction would not exceed the SCAQMD localized construction significance thresholds.

**Table 3.3-5: Localized Significance Analysis (Construction)**

| Activity | On-site Emissions (pounds per day) | | | |
|---|---|---|---|---|
| | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Site Preparation | 54.6 | 41.1 | 10.0 | 6.6 |
| Mass Grading | 89.3 | 56.4 | 6.6 | 4.1 |
| Building Construction | 28.6 | 17.9 | 2.0. | 1.8 |
| Tenant Improvements | 14.6 | 12.5 | 1.2 | 1.2 |
| Paving | 20.3 | 14.7 | 1.1 | 1.0 |
| **Maximum Daily Emissions[(1)]** | **89.3** | **56.4** | **10.0** | **6.6** |
| Localized Significance Threshold | 236 | 2,817 | 21 | 11 |
| Exceed Threshold? | No | No | No | No |

Notes:
(1) The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the site preparation and grading activities do not occur at the same time as the other construction activities; therefore, their emissions are not summed; the maximum daily emissions would occur during grading activities for $NO_x$ and CO and during the site preparation activity for particulate matter.
Source of emissions: Appendix B
Source of thresholds: South Coast Air Quality Management District 2009, for Source Receptor Area 29, at a distance of 25 meters and an area disturbed of 5 acres per day.

*Localized Operational Analysis*

The localized impacts during project operations are summarized in Table 3.3-6. As shown in this table, the operation of the project would not exceed any SCAQMD operational localized significance threshold. Additionally, the project would utilize electric trailer movers in place of traditional diesel-powered movers to move trailers throughout the project site, which would reduce the amount of emissions generated during operation.

**Table 3.3-6: Localized Significance Analysis (Operations)**

| Air Pollutant | Averaging Time, Units | Local Project Impact | Background Air Quality | Total | Standard/ Threshold | Significant Impact? |
|---|---|---|---|---|---|---|
| Carbon monoxide (CO) | 1-hour, ppm | 0.03 | 2.29 | 2.32 | 20 | No |
| | 8-hour, ppm | 0.02 | 1.60 | 1.62 | 9.0 | No |
| Nitrogen dioxide ($NO_2$) | 1-hour, ppm | 0.016 | 0.072 | 0.088 | 0.18 | No |
| | 1-hour 98$^{th}$ percentile, ppm | 0.012 | 0.050 | 0.062 | 0.100 | No |
| | Annual | 0.001 | 0.010 | 0.011 | 0.03 | No |
| Particulate matter ($PM_{10}$) | 24-hour, $\mu g/m^3$ | 1.4 | NA | 1.4 | 2.5 | No |
| | Annual, $\mu g/m^3$ | 0.6 | NA | 0.6 | 1.0 | No |
| Particulate matter ($PM_{2.5}$) | 24-hour, $\mu g/m^3$ | 0.4 | NA | 0.4 | 2.5 | No |

Notes:
Concentration units for each air pollutant are shown in the second column; the AERMOD model estimates pollutant concentrations in units of micrograms per cubic meter; to estimate pollutant concentrations for $NO_2$ and CO which are in units of parts per million by volume, the $NO_2$ pollutant concentrations in micrograms per cubic meter are divided by 1,880 and the CO pollutant concentrations are divided by 1,100; these multiplication factors are based on a standard temperature of 25 degrees centigrade and a standard atmospheric pressure of 760 millibars.

NA=Not Applicable; as noted above, since the SCAQMD exceeds the federal or State $PM_{10}$ and $PM_{2.5}$ standards, determining background levels of $PM_{10}$ and $PM_{2.5}$ are unnecessary (SCAQMD 2008); the $PM_{10}$ and $PM_{2.5}$ significance thresholds are based on the requirements of SCAQMD Rule 403—Fugitive Dust from construction and SCAQMD Rule 1303 Requirements:
ppm = parts per million (a unit of concentration); $\mu g/m^3$ = micrograms per cubic meter (a unit of concentration)
Sources:
Local project impacts are from project specific dispersion modeling; model output is in Appendix B, Localized Criteria Pollutant Assessment.
Background air quality for CO and $NO_2$ are from Table 3.3-1 of this AQ-GHG report.
Total = local project impact + background air quality
Source: Appendix B.

*Carbon Monoxide Hot Spot Analysis*

A CO hot spot is a localized concentration of CO that is above the state or federal 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. To provide a worst-case scenario, CO concentrations are estimated at project-impacted intersections, where the concentrations would be the greatest.

CO hot spot thresholds ensure that emissions of CO associated with traffic impacts from a project, in combination with CO emissions from existing and forecasted regional traffic, do not exceed state or federal standards for CO at any traffic intersection impacted by the project. Project concentrations may be considered significant if a CO hot spot intersection analysis determines that project

generated CO concentrations cause a localized violation of the state CO 1-hour standard of 20 ppm, state CO 8-hour standard of 9 ppm, federal CO 1-hour standard of 35 ppm, or federal CO 8-hour standard of 9 ppm.

This analysis follows guidelines recommended by the CO Protocol and the SCAQMD. According to the CO Protocol, intersections with Level of Service (LOS) E or F require detailed analysis. In addition, intersections that operate under LOS D conditions in areas that experience meteorological conditions favorable to CO accumulation require a detailed analysis. The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria: (1) the intersection is at LOS D or worse and where the project increases the volume to capacity ratio by 2 percent, or (2) the project decreases LOS at an intersection from C to D.

The Traffic Study prepared for this project by Urban Crossroads analyzed four project scenarios: Existing plus Project (2014), Existing plus Ambient Growth plus Project (2017), Existing plus Ambient Growth plus Project plus Cumulative (2017), and Horizon Year plus Project (2035). The Existing plus Project and Existing plus Ambient Growth plus Project scenarios resulted in two intersections operating at LOS below D, while the Existing plus Ambient Growth plus Project plus Cumulative scenario resulted in three intersections operating at LOS below D. The Horizon Year plus Project scenario resulted in six intersections operating at LOS below D.

Using the CALINE4 model, potential CO hot spots were analyzed at the intersections listed in Table 3.3-7. Two intersections from each analysis year (2014, 2017, and 2035) were chosen to investigate potential near-term and long-term impacts. These intersections were chosen because they operate at LOS D or worse and had the highest traffic volumes for the given scenario year. There are several inputs to the CALINE4 model. One input is the traffic volumes, which are from the project-specific traffic report. Emission factors were generated using the EMFAC2011 model for the applicable scenario year.

As shown in Table 3.3-7, the estimated 1-hour and 8-hour average CO concentrations at build-out in combination with background concentrations are below the state and federal standards. No CO hot spots are anticipated because of traffic-generated emissions by the project in combination with other anticipated development in the area. Therefore, the mobile emissions of CO from the project are not anticipated to contribute substantially to an existing or projected air quality violation of CO. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact related to CO hot spots.

**Table 3.3-7: Localized Carbon Monoxide Concentrations**

| Scenario | Intersection | Peak Hour | Estimated CO Concentration (ppm) | | | | Significant Impact? |
|---|---|---|---|---|---|---|---|
| | | | 1 Hour Impact[(1)] | Significance Threshold | 8 Hour Impact[(2)] | Significance Threshold | |
| Existing Plus Project (2014) | I-10 EB Ramps and Cherry Valley Blvd. | PM | 3.0 | 20.0 | 1.9 | 9.0 | No |
| Existing Plus Project (2014) | I-10 WB Ramps and Cherry Valley Blvd. | AM | 3.0 | 20.0 | 1.9 | 9.0 | No |

**Table 3.3-7 (cont.): Localized Carbon Monoxide Concentrations**

| Scenario | Intersection | Peak Hour | Estimated CO Concentration (ppm) | | | | Significant Impact? |
|---|---|---|---|---|---|---|---|
| | | | 1 Hour Impact[(1)] | Significance Threshold | 8 Hour Impact[(2)] | Significance Threshold | |
| Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) | I-10 EB Ramps and Cherry Valley Blvd. | PM | 3.0 | 20.0 | 1.9 | 9.0 | No |
| Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) | I-10 WB Ramps and Cherry Valley Blvd. | AM | 3.0 | 20.0 | 1.9 | 9.0 | No |
| Horizon Year Plus Project (2035) | I-10 EB Ramps and Cherry Valley Blvd. | PM | 2.6 | 20.0 | 1.8 | 9.0 | No |
| Horizon Year Plus Project (2035) | I-10 WB Ramps and Cherry Valley Blvd. | PM | 2.6 | 20.0 | 1.8 | 9.0 | No |

Notes:
(1) The 1-hour concentration is the CALINE4 project increment (see Appendix D for model output) plus the 1-hour background concentration of 2.5 ppm (from Table 3.3-1). 1-hour background calculated by dividing 8-hour background CO by 0.7 (persistence factor).
(2) The 8-hour concentration is the CALINE4 project increment (see Appendix D) multiplied by 0.7 (persistence factor to convert the 1-hour average CALINE4 model output to an 8-hour average), then adding the 8 hour background concentration of 1.6 ppm (from Table 3.3-1).
Source: see Appendix B.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Criteria Pollutant

**Impact AQ-3:** **The project would 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

### *Impact Analysis*

To result in a less than significant impact, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the regional significance thresholds. This is an approach recommended by the SCAQMD in its comment letters on similar projects.
2. Summary of projections: the project must be consistent with current air quality attainment plans including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4$^{th}$ 1184, 1219-20.

*Step 1: Regional Analysis*

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The SoCAB is in nonattainment for $PM_{10}$, $PM_{2.5}$, $NO_2$, and ozone. Therefore, if the project exceeds the regional thresholds for $PM_{10}$, or $PM_{2.5}$, then it would contribute to a cumulatively considerable impact for those pollutants. Likewise, if the project exceeds the regional threshold for $NO_x$ or VOC, then it follows that the project would contribute to a cumulatively considerable impact for ozone. If the project exceeds the $NO_x$ threshold, it could contribute cumulatively to $NO_2$ concentrations.

Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the SCAQMD because emissions from projects in the Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards.

**Construction Regional Emissions**

Table 3.3-8 summarizes construction-related emissions (without mitigation). For the assumptions used in generating the emissions, please refer to Section 4 of the Air Quality and Greenhouse Gas Analysis Report (Appendix B). The information shown in Table 3.3-8 indicates that the SCAQMD regional emission thresholds would be exceeded for ROG emissions during project construction. Therefore, without mitigation, the short-term construction emissions are considered to have a potentially significant regional impact.

**Table 3.3-8: Unmitigated Regional Construction Air Pollutant Emissions**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Site Preparation | 5.2 | 54.7 | 42.3 | 0.0 | 10.1 | 6.7 |
| Mass Grading | 7.6 | 89.5 | 58.3 | 0.1 | 6.9 | 4.2 |
| Building Construction | 9.9 | 63.1 | 109.4 | 0.2 | 14.6 | 5.5 |

## Table 3.3-8 (cont.): Unmitigated Regional Construction Air Pollutant Emissions

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Tennant Improvements | 146.4 | 15.4 | 22.7 | 0.2 | 3.2 | 1.7 |
| Paving | 3.5 | 20.4 | 15.6 | 0.0 | 1.3 | 1.0 |
| **Maximum Daily Emissions[(1)]** | **159.8** | **98.9** | **147.7** | **0.2** | **19.1** | **8.3** |
| Significance Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| Significant Impact? | **Yes** | No | No | No | No | No |

Notes:
(1) The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the site preparation and grading activities do not occur at the same time as the other construction activities; therefore, their emissions are not summed; the maximum daily emissions would occur during grading activities for $NO_x$ and during the overlapping of the building construction, tenant improvements, and paving construction activities for all other pollutants
ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide
$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter
Source of emissions: Appendix B: CalEEMod Output.
Source of thresholds: South Coast Air Quality Management District 2011a.

#### Operational Regional Emissions

Maximum daily operational emissions from emission sources generated both on-site and off-site as derived from CalEEMod are shown in Table 3.3-9 and Table 3.3-10. As shown in Table 3.3-9 and Table 3.3-10, the project's operational emissions would exceed the SCAQMD's regional thresholds for ROG and $NO_x$. The project would utilize electric trailer movers in place of traditional diesel-powered movers to move trailers throughout the project site, which would reduce the amount of emissions generated during operation.

## Table 3.3-9: Unmitigated Regional Operational Emissions—Summer

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile—Passenger Vehicles | 5.8 | 7. 1 | 84.1 | 0.2 | 2.4 | 1.0 |
| Mobile—Heavy Duty Trucks | 24.0 | 404.6 | 236.8 | 1.3 | 15.7 | 9.6 |
| Area | 47.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Energy | 0.1 | 1.1 | 0.9 | 0.0 | 0.1 | 0.1 |
| **Total** | **77.6** | **412.8** | **322.1** | **1.5** | **18.2** | **10.7** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant Impact? | **Yes** | **Yes** | No | No | No | No |

**Table 3.3-9 (cont.): Unmitigated Regional Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Notes:<br>ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide<br>$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter Area = painting and consumer products<br>Source of emissions: Appendix B: CalEEMod Output.<br>Source of thresholds: South Coast Air Quality Management District 2011a. | | | | | | |

**Table 3.3-10: Unmitigated Regional Operational Emissions—Winter**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile—Passenger Vehicles | 6.0 | 7.8 | 77.8 | 0.2 | 2.4 | 1.1 |
| Mobile—Heavy Duty Trucks | 24.7 | 420.4 | 258.8 | 1.3 | 15.7 | 9.6 |
| Area | 47.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Energy | 0.1 | 1.1 | 0.9 | 0.0 | 0.1 | 0.1 |
| **Total** | **78.5** | **429.3** | **337.8** | **1.5** | **18.2** | **10.7** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant Impact? | **Yes** | **Yes** | No | No | No | No |
| Notes:<br>ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide<br>$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter Area = painting and consumer products<br>Source of emissions: Appendix B: CalEEMod Output.<br>Source of thresholds: South Coast Air Quality Management District 2011a. | | | | | | |

In summary, without mitigation, the project contributes to a cumulatively significant regional air quality impact with respect to ROG and $NO_x$.

*Step 2: Plan Approach*

Section 15130(b) of the CEQA Guidelines states the following:

> The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. This analysis considers the current CEQA Guidelines, which includes the recent amendments approved by the Natural Resources Agency and effective on March 18, 2010. This analysis is based on the 2003 and 2007 AQMPs. The SoCAB is in nonattainment for ozone, particulate matter ($PM_{10}$ and $PM_{2.5}$), and $NO_2$, which means that concentrations of those pollutants currently exceed the ambient air quality standards for those pollutants.

Under the amended CEQA Guidelines, cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The AQMPs describe and evaluate the future projected emissions sources in the SoCAB and set forth strategies to meet both state and federal Clean Air Act planning requirements and federal ambient air quality standards. Therefore, the AQMPs are relevant plans for a CEQA cumulative impacts analysis. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and $PM_{10}$; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal $NO_2$ standard that the SoCAB has met since 1992. The 2007 AQMP focuses on ozone and $PM_{2.5}$ while the 2012 AQMP's primary focus is to further address the SoCAB's attainment with the federal $PM_{2.5}$ standard. The AQMP also incorporates significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling.

The geographic scope for cumulative criteria pollution from air quality impacts is the SoCAB, because that is the area in which the air pollutants generated by the sources within the Basin circulate and are often trapped. The SCAQMD is required to prepare and maintain an AQMP and SIP to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SCAQMD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning are necessary to maintain clean air. The SCAQMD evaluated the entire SoCAB when it developed the AQMP.

In accordance with CEQA Guidelines Section 15064, subdivision (h)(3), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously approved plan or mitigation program. As identified in Impact AQ-1, the project complies with the control measures in the 2003 and the 2007 AQMP and all of the SCAQMD's applicable rules and regulations. However, because the project exceeds the SCAQMD's CEQA significance thresholds, the analysis contained in Impact AQ-1 demonstrates that the project is not consistent with the most recent AQMP and SIP without mitigation. Therefore, the project would result in a significant impact according to this criterion.

*Step 3: Cumulative Health Impacts*

The SoCAB is in nonattainment for ozone, $NO_2$, $PM_{10}$, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as the elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects that were described in Draft EIR Appendix B, Air Quality, Health Risk, and Greenhouse Gas Analysis Report. Based on that information, health effects from ozone, $NO_2$, $PM_{10}$, and $PM_{2.5}$ are summarized

briefly below. Issues from ozone include irritation of the respiratory system and lung problems; issues from $NO_2$ include the potential to aggravate chronic respiratory disease; issues from $PM_{10}$ and $PM_{2.5}$ include short-term irritation and long-term reduction in lung function. However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not mean that 100 percent of the population would experience health effects.

The regional analysis indicates that without mitigation, the project would exceed the SCAQMD regional significance thresholds for ROG and $NO_x$ (ozone precursors). Because ozone is a secondary pollutant (it is not emitted directly but formed by chemical reactions in the air), it can be formed miles downwind of the project site. Project emissions of ROG and $NO_x$ may contribute to the background concentration of ozone and cumulatively cause health effects. Impacts may include the following: irrigation to respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage. Children who live in high ozone communities and who participate in multiple sports have been observed to have a higher asthma risk. This is a significant cumulative health impact associated with ground-level ozone concentrations.

Additionally, the project could result in a significant cumulative contribution to $PM_{10}$. Sensitive individuals may experience health impacts when concentrations of this pollutant exceed the ambient air quality standards. Health impacts from particulate matter may include the following:

- Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias.

The project could result in a significant cumulative contribution to $NO_2$ emissions. The potential effects from $NO_2$ may include the following:

- Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups;
- Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and/or
- Contribution to atmospheric discoloration.

As shown by the CO hot spot analysis in Impact AQ-2, the project, in combination with CO emissions from other regional emission sources, would not result in an exceedance of the CO ambient air quality standard at project-impacted intersections. The standards are set to protect the health of sensitive individuals. Therefore, the project would not result in cumulative health effects from CO exposure.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Mitigation Measures AQ-1 through AQ-8 are required. The mitigated construction emissions are shown in Table 3.3-11. After mitigation, the construction activities would not exceed any daily threshold, and construction emissions would be less than significant.

**Table 3.3-11: Mitigated Regional Construction Air Pollutant Emissions**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Site Preparation | 1.1 | 19.6 | 24.6 | 0.0 | 8.2 | 4.9 |
| Mass Grading | 2.1 | 40.6 | 49.3 | 0.1 | 4.6 | 2.1 |
| Building Construction | 7.6 | 48.3 | 109.2 | 0.2 | 13.5 | 4.6 |
| Tennant Improvements | 60.5 | 9.8 | 22.5 | 0.0 | 2.6 | 1.1 |
| Paving | 2.1 | 11.2 | 17.8 | 0.0 | 0.8 | 0.6 |
| **Maximum Daily Emissions[(1)]** | **70.2** | **69.3** | **148.4** | **0.2** | **16.9** | **6.3** |
| Significance Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| Significant Impact? | No | No | No | No | No | No |

Notes:
(1) The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the site preparation and grading are independent activities that do not occur at the same time as the other construction activities; therefore, their emissions are not summed; the maximum daily emissions would occur during the overlapping of the building construction, tenant improvements, and paving construction activities for all pollutants.
ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide
$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter
Source of emissions: Appendix B: CalEEMod Output.
Source of thresholds: South Coast Air Quality Management District 2011a.

Mitigated maximum daily operational emissions are shown in Table 3.3-12 for the summer and Table 3.3-13 for the winter. As shown, the project's mitigated operational emissions would continue to exceed the SCAQMD's regional thresholds for ROG and $NO_x$ in both season scenarios; therefore, these impacts are significant and unavoidable.

**Table 3.3-12: Mitigated Regional Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile—Passenger Vehicles | 5.8 | 7.1 | 84.1 | 0.2 | 2.4 | 1.0 |
| Mobile—Heavy Duty Trucks | 26.6 | 313.5 | 222.1 | 1.4 | 16.8 | 20.3 |

## Table 3.3-12 (cont.): Mitigated Regional Operational Emissions—Summer

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Area | 47.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Energy | 0.1 | 1.1 | 0.9 | 0.0 | 0.1 | 0.1 |
| **Total** | **80.2** | **321.7** | **307.4** | **1.6** | **18.3** | **10.4** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant Impact? | **Yes** | **Yes** | No | No | No | No |

Notes:
Mitigation Measure AQ-2 requires all Heavy Heavy-Duty Trucks to use model year 2010 or newer engines, and emissions reflect EMFAC2011 running exhaust factors for the model year 2010.
ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide
$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter
Source of emissions: Appendix B: CalEEMod Output.
Source of thresholds: see Table 3.3-8

## Table 3.3-13: Mitigated Regional Operational Emissions—Winter

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile—Passenger Vehicles | 5.8 | 7.6 | 76.3 | 0.2 | 2.3 | 1.0 |
| Mobile—Heavy Duty Trucks | 27.4 | 325.4 | 245.2 | 1.4 | 16.8 | 10,2 |
| Area | 47.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Energy | 0.1 | 1.1 | 0.9 | 0.0 | 0.1 | 0.1 |
| **Total** | **81.0** | **334.1** | **322.6** | **1.6** | **19.2** | **11.3** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Significant Impact? | **Yes** | **Yes** | No | No | No | No |

Notes:
Mitigation Measure AQ-2 requires all Heavy Heavy-Duty Trucks to use model year 2010 or newer engines, and emissions reflect EMFAC2011 running exhaust factors for the model year 2010.
ROG = reactive organic gases $NO_x$ = nitrogen oxides CO = carbon monoxide
$SO_x$ = sulfur oxides $PM_{10}$ and $PM_{2.5}$ = particulate matter
Source of emissions: Appendix B: CalEEMod Output.

### *Level of Significance After Mitigation*

Significant and unavoidable impact.

## Sensitive Receptors

**Impact AQ-4: The project would not expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions.**

### *Impact Analysis*

The Air Quality and Greenhouse Gas Analysis Report (Appendix B) prepared for the proposed project includes a Health Risk Assessment to evaluate the potential impacts of project emissions on adjoining residential areas, as well as other sensitive receptors.

Those individuals who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as $NO_2$ and CO), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

The closest sensitive receptors are existing residences located to the east of the project along Cherry Valley Boulevard and proposed residential developments (e.g., Sunny Cal Specific Plan) located across Cherry Valley Boulevard, approximately 50 meters south of the project.

*LST Analysis*

The localized construction analysis uses thresholds that represent the maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The thresholds are developed based on the ambient concentrations of that pollutant for each source receptor area, and the location of the sensitive receptors. If the project results in emissions under those thresholds, it follows that the project would not cause or contribute to an exceedance of the standard. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded at the sensitive receptor locations, it follows that the receptors would not be exposed to substantial pollutant concentrations.

As identified in Impact AQ-2, the localized construction analysis demonstrated that the project would not exceed the localized thresholds for CO, $NO_2$, $PM_{10}$, or $PM_{2.5}$. Therefore, during construction, the project would not expose sensitive receptors to substantial pollutant concentrations of CO, $NO_2$, $PM_{10}$, or $PM_{2.5}$. Further, as identified in Impact AQ-2, the operation of the project would not exceed either of the SCAQMD's operational localized significance thresholds for CO, $NO_2$, $PM_{10}$, or $PM_{2.5}$ or create a localized CO hot spot. If the relevant localized significance thresholds are not exceeded, then the sensitive individuals would not be significantly impacted. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact.

*Toxic Air Pollutants—Project Construction*

The greatest potential for toxic air contaminant (TAC) emissions during construction are diesel particulate emissions associated with heavy equipment operations during construction activities. The SCAQMD does not consider diesel-related cancer risks from construction equipment to be an

issue because of the short-term nature of construction activities. Construction activities associated with the proposed project would be short term (approximately 2 years). The assessment of cancer risk is typically based on a 70-year exposure period. Because exposure to diesel exhaust would be well below the 70-year exposure period, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons due to the short-term nature of construction. Furthermore, the operational health risk analysis captures applicable emissions from construction and amortizes it over the exposure period. As demonstrated in the following paragraphs, impacts would be less than significant.

*Toxic Air Pollutants—Project Operation*

The ARB Air Quality and Land Use Handbook contains recommendations that will "help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution" (ARB 2005), including recommendations for distances between sensitive receptors and certain land uses. The Handbook states that its recommendations are advisory and should not be interpreted as "buffer zones." The ARB recognizes the opportunity for more detailed site-specific analyses and there is no "one size fits all" solution to land use planning. The Handbook recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center. The nearest existing sensitive receptor is approximately 25 to 50 meters south of the project site, while the nearest planned sensitive receptors are approximately 25 to 50 meters south, west, and east from the project site. Therefore, since the project involves the construction of a warehouse approximately 25 to 50 meters from the nearest sensitive receptor, a more detailed site-specific Health Risk Assessment has been prepared. The Health Risk Assessment quantifies the cancer risk from project operational toxic air pollutant emissions, primarily from delivery truck exhaust from traffic and truck idling emissions at loading docks.

The results of the Health Risk Assessment for cancer risks are provided in Table 3.3-14. These results reflect emissions from on-site vehicle travel and idling, as well as traveling along Cherry Valley Boulevard to and from the project. The methodology used to estimate the cancer risks are based on the current CEQA guidance from the SCAQMD that assumes an exposure over a 70-year lifetime. As noted from this table, the operation of the project would not exceed the SCAQMD's cancer risk significance threshold of 10 in one million at any of the locations identified in the analysis. The maximum cancer risk is 1.3 in one million and is near the project's future driveway #1 at Cherry Valley Boulevard. The maximum chronic and acute non-cancer hazard indices from the operation of the project are estimate to be less than 0.002 and 0.02, respectively, values less than the SCAQMD's significance threshold of 1.0. Therefore, project's health risks and hazards are less than significant.

**Table 3.3-14: Estimates of Lifetime Cancer Risk from Project Operations—Current SCAQMD Guidance**

| Location | Cancer Risk (per million) | | Exceeds Significance Threshold? |
|---|---|---|---|
| | Maximum Lifetime Project Risk | Significance Threshold | |
| 36240 Cherry Valley Boulevard | 0.2 | 10 | No |
| 37101 Cherry Valley Boulevard | 0.2 | 10 | No |

**Table 3.3-14 (cont.): Estimates of Lifetime Cancer Risk from Project Operations—Current SCAQMD Guidance**

| Location | Cancer Risk (per million) | | Exceeds Significance Threshold? |
|---|---|---|---|
| | Maximum Lifetime Project Risk | Significance Threshold | |
| 37251 Cherry Valley Boulevard | 0.2 | 10 | No |
| 37255 Cherry Valley Boulevard | 0.1 | 10 | No |
| 37275 Cherry Valley Boulevard | 0.1 | 10 | No |
| 37303 Cherry Valley Boulevard | 0.1 | 10 | No |
| 37321 Cherry Valley Boulevard | 0.1 | 10 | No |
| 9865 Roberts Street | 0.1 | 10 | No |
| 9975 Roberts Street | 0.1 | 10 | No |
| Sunny Cal Specific Plan (Cherry Valley Boulevard) | 1.3 | 10 | No |
| Holbert Ranch | 0.1 | 10 | No |
| Tournament Hills Elementary School | 0.0 | 10 | No |
| Brookside Elementary School | 0.0 | 10 | No |
| Beaumont High School | 0.0 | 10 | No |
| Bornstein Property | 0.3 | 10 | No |
| Sunset Ranch | 0.3 | 10 | No |

Note:
The maximum cancer risk at any receptor location regardless of whether the location is an existing residence, or zoned for residential, or zoned for non-residential is 1.6 in one million; the location of this maximum risk is near future project driveway 1 and Cherry Valley Boulevard.
Cancer risks are based on the current SCAQMD CEQA guidance that assumes an exposure duration of 70 years.
Source: See Appendix B.

### *Toxic Air Pollutants—Cumulative*

The SCAQMD has not defined a cumulative significance threshold for TACs; however, it assumes that a project that does not exceed the project-level significance threshold would also not result in a cumulatively significant impact. Considering that, this assessment of the project's cumulative impacts uses the following two-step methodology to determine significance:

- Step One: quantify the sum of the existing risk in the project area, probable new projects within a ¼ mile radius from the project, and the project's impacts. The sum is compared with the 10 in a million threshold. If the cumulative total impacts are below this threshold, a finding of non-significance can be made. If the total impacts exceed the threshold, then they are potentially significant and step two comes into play.
- Step Two: If the project's cancer risk is less than the 10 in a million threshold, then impacts are less than significant.

*Step One*

**Existing Contribution to Cumulative Health Impacts**

The SCAQMD has conducted an analysis of the cumulative effects of TACs within the Basin as part of its "Multiple Air Toxics Exposure Study in the South Coast Air Basin" (MATES-IV, the latest version of this MATES study series). The MATES studies express cumulative TAC impacts in terms of potential increased cancer risks. The MATES-IV study estimates that the Basin-wide average excess cancer risk level resulting from exposure to cumulative TACs is approximately 367 incidents per one million population. The MATES-IV Study estimates the cumulative TAC-source cancer risk for the localized area encompassing the project site at 157 in one million. DPM-source cancer risks are reflected in the area's ambient cumulative cancer risk along with all other TAC source risks, and account for the predominance (68 percent) of the total risk shown in MATES-IV. The cancer risk of 157 in a million constitutes the existing impact from TAC emission sources in the region without the impacts from the project.

**Related Projects Contribution to Cumulative Health Impacts**

In addition to the MATES-IV cumulative TAC-source cancer risk noted above, other new or proposed potential TAC-generating projects (related projects) in the project area not included in the MATES IV study could contribute to cumulative TAC impacts. These related projects, because of their recent and/or tentative nature, are not reflected in the cumulative TAC impacts identified in the MATES-IV study.

Based on a review of the cumulative development project listing contained in the project traffic study (Urban Crossroads 2014), four projects were identified within the 0.25-mile radius from the project. These development projects are all single-family residential projects and include the following:

- Holbert Ranch—131 dwelling units
- Bornstein Property—209 dwelling units
- Sunny Cal Specific Plan—497 dwelling units
- Sunset Ranch (Osborne/Dunham)—231 dwelling units

Since these projects are residential, they are not expected to generate TAC emissions that could impact nearby health risk levels.

**Project Contribution to Cumulative Health Impacts**

Project-level TACs would incrementally increase the background cancer risk by a maximum of 1.3 incidents per million population.

**Summary of the Total Cumulative Cancer Risk for Step One**

The total cumulative cancer risk under Step One of the cumulative assessment is 158 in a million (157 in a million from existing, ambient sources, plus 1.3 in a million attributable to the project). Because the existing, ambient health risk already exceeds the 10 in a million cumulative significance threshold by a large margin, a cumulatively significant TAC impact exists even without the project. Therefore, a second step is required to determine whether the project makes a cumulatively considerable contribution to this existing impact.

*Step Two*

Identification of a specific amount of risk that constitutes a cumulatively considerable contribution to an existing cumulative impact is necessary in order to avoid a potential conflict with CEQA provisions, which state that any increase within an already-impacted area is not necessarily significant (i.e., "one additional molecule" is not the appropriate standard). According to current SCAQMD recommendations, an individual project's contribution of 10 in one million or more would be considered a cumulatively considerable contribution to an existing significant cumulative impact. Since the project's maximum cancer risk (1.3 in a million) does not exceed the 10 in one million threshold, the project's health risk impacts are determined to be less than significant on a project-level, and would not result in a considerable contribution to the existing cumulatively significant TAC impact.

In March 2015, the OEHHA published new guidance for estimating cancer risks. The OEHHA guidance uses more recent scientific findings to include a child's greater sensitivity and susceptibility to exposures to TACs. In general, residential cancer risks from pollutants like diesel particulate matter are found to be higher with the application of the new OEHHA guidance than the cancer risks estimated using the methodology currently recommended by the SCAQMD, which does not take into account child sensitivity and susceptibility. To this end, a supplemental assessment of cancer risk was prepared that applies the new OEHHA guidance in updating the cancer risk estimates from the project.

Currently, the SCAQMD has not officially adopted the new OEHHA cancer risk guidance for evaluating cancer risks for purposes of CEQA assessments. However, while this supplemental assessment is not required under CEQA by the SCAQMD, it is presented below in anticipation of the guidance being adopted by the SCAQMD for CEQA evaluations in the near future. A complete discussion of the OEHHA cancer risk guidance is provided in Appendix B of this report.

The results of this supplemental assessment are summarized in Table 3.3-15. As noted from the table, the maximum cancer risk is 5.0 in one million, less than the 10 in one million health risk significance threshold. Therefore, under the OEHHA guidance, the project's construction and operational emissions would have a less than significant health risk impact.

**Table 3.3-15: Estimates of Lifetime Cancer Risks Using the OEHHA Cancer Risk Guidance**

| Location | Cancer Risk (OEHHA Cancer Risk Guidance) WITH MITGATION (per million) | | Exceeds Significance Threshold? |
|---|---|---|---|
| | Maximum Lifetime Project Risk | Significance Threshold | |
| 36240 Cherry Valley Boulevard | 2.0 | 10 | No |
| 37101 Cherry Valley Boulevard | 1.6 | 10 | No |
| 37251 Cherry Valley Boulevard | 1.2 | 10 | No |
| 37255 Cherry Valley Boulevard | 0.9 | 10 | No |

**Table 3.3-15 (cont.): Estimates of Lifetime Cancer Risks Using the OEHHA Cancer Risk Guidance**

| Location | Cancer Risk (OEHHA Cancer Risk Guidance) WITH MITGATION (per million) | | Exceeds Significance Threshold? |
|---|---|---|---|
| | Maximum Lifetime Project Risk | Significance Threshold | |
| 37275 Cherry Valley Boulevard | 0.9 | 10 | No |
| 37303 Cherry Valley Boulevard | 0.9 | 10 | No |
| 37321 Cherry Valley Boulevard | 0.8 | 10 | No |
| 9865 Roberts Street | 0.2 | 10 | No |
| 9975 Roberts Street | 1.3 | 10 | No |
| Sunny Cal Specific Plan (Cherry Valley Boulevard) | 5.0 | 10 | No |
| Holbert Ranch | 0.4 | 10 | No |
| Tournament Hills Elementary School | 0.1 | 10 | No |
| Brookside Elementary School | 0.1 | 10 | No |
| Beaumont High School | 0.1 | 10 | No |
| Bornstein Property | 4.6 | 10 | No |
| Sunset Ranch | 1.8 | 10 | No |

Note:
Mitigated emissions include Tier III construction equipment and MY2010 for heavy-heavy duty diesel Trucks
Source: See Appendix B

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Objectionable Odors

**Impact AQ-5:** **The project would not create objectionable odors affecting a substantial number of people.**

### *Impact Analysis*

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the

California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus constitute a public nuisance related to air quality.

Land uses typically associated with odors include wastewater treatment facilities, waste disposal facilities, or agricultural operations. The project does not contain land uses typically associated with emitting objectionable odors. The project would involve the use of diesel construction equipment and diesel trucks during construction, as well as asphalt paving and application of architectural coatings, which would be temporary and short-term in nature. Emissions from these sources would rapidly disperse in the atmosphere and not be noticeable to the nearby public. Likewise, during operations, the project would not be anticipated to emit any objectionable odors. Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with County solid waste regulations. The project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the project construction and operations would be less than significant and no mitigation is required.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## 3.4 - Biological Resources

This section describes the existing biological resources and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based on information contained in the 2015 Biological Technical Report, the November 2014 Determination of Biologically Equivalent or Superior Preservation (DBESP) Report, and the November 2014 Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, all of which were prepared by HELIX Environmental Planning, Inc. These reports are included in this EIR as Appendix C.

In addition to conducting biological field surveys, HELIX Environmental Planning performed a review of existing literature, and searches of the California Department of Fish and Wildlife's (CDFW [formerly the California Department of Fish and Game]) California Natural Diversity Data Base (CNDDB), and California Native Plant Society's online database for information regarding sensitive species known to occur in the project vicinity. The MSHCP was reviewed to determine the location of the project site in relation to MSHCP Criteria Cells and survey criteria as well as to determine listed or sensitive species that have potential to occur within the site.

The focused surveys listed in Table 3.4-1 were conducted by HELIX on the San Gorgonio Crossing parcel in 2005, 2007, 2008, 2012, and 2013: sensitive plants, burrowing owl (*Athene cunicularia*), Riparian/Riverine and vernal pool assessment, and jurisdictional delineation.

**Table 3.4-1: HELIX Environmental Planning Survey Information**

| Date | Personnel | Survey Type |
|---|---|---|
| 01/27/05 | Larry Sward, Stacy Nigro | Vegetation mapping, jurisdictional delineation |
| 01/28/05 | Rob Hogenauer, Zack West | Winter burrowing owl survey |
| 01/31/05 | Rob Hogenauer, Scott Taylor | Winter burrowing owl survey |
| 02/8/05 | Larry Sward, Stacy Nigro | Vegetation mapping, jurisdictional delineation |
| 5/27/05 | Larry Sward | Rare plant survey |
| 6/15/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 6/16/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/9/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/11/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/18/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 4/18/07 | Rob Hogenauer, Zsolt Kahancza | Breeding season burrowing owl survey |
| 4/20/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 01/27/05 | Larry Sward, Stacy Nigro | Vegetation mapping, jurisdictional delineation |

## Table 3.4-1 (cont.): HELIX Environmental Planning Survey Information

| Date | Personnel | Survey Type |
|---|---|---|
| 01/28/05 | Rob Hogenauer, Zack West | Winter burrowing owl survey |
| 01/31/05 | Rob Hogenauer, Scott Taylor | Winter burrowing owl survey |
| 02/08/05 | Larry Sward, Stacy Nigro | Vegetation mapping, jurisdictional delineation |
| 05/27/05 | Larry Sward | Rare plant survey |
| 06/15/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 6/16/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/9/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/11/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 8/18/05 | Rob Hogenauer, Zack West | Breeding season burrowing owl survey |
| 4/18/07 | Rob Hogenauer, Zsolt Kahancza | Breeding season burrowing owl survey |
| 4/20/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 4/23/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 4/30/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/2/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/4/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/7/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/15/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/21/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/23/07 | Rob Hogenauer | Breeding season burrowing owl survey |
| 8/27/08 | Rob Hogenauer, Zsolt Kahancza | Breeding season burrowing owl survey |
| 8/28/08 | Rob Hogenauer, Zsolt Kahancza | Breeding season burrowing owl survey |
| 8/29/08 | Rob Hogenauer, Zsolt Kahancza | Breeding season burrowing owl survey |
| 8/30/08 | Rob Hogenauer, Brian Parker | Breeding season burrowing owl survey |
| 9/17/12 | Larry Sward | Jurisdictional delineation |
| 4/29/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 4/29/13 | Rob Hogenauer, Sally Trnka, Ben Rosenbaum | Rare Plant Survey |
| 5/1/13 | Rob Hogenauer | Rare Plant Survey |
| 5/10/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/13/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/16/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/21/13 | Rob Hogenauer | Breeding season burrowing owl survey |

**Table 3.4-1 (cont.): HELIX Environmental Planning Survey Information**

| Date | Personnel | Survey Type |
|---|---|---|
| 5/23/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 5/29/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 6/3/13 | Rob Hogenauer | Breeding season burrowing owl survey |
| 10/22/13 | Larry Sward | Jurisdictional delineation |
| Source: HELIX Environmental Planning, Inc., 2013, 2014, and 2015. | | |

## 3.4.1 - Existing Conditions

The southern and central portions of the project site consist of broad, sloping grassland, with steep ridges and canyons on the northern half of the site. Grazing and past active agriculture has disturbed much of the site, which is currently grazed by sheep and goats. Several dirt roads and trails traverse the site and extend off-site to the north and east. A small horse ranch and the I-10 Freeway are located to the southwest of the project site, while the remains of a chicken ranch are located to the southeast. The remainder of the project site is bordered by undeveloped land, with the exception of a few rural residences to the north. The northern and western portions of the property were affected by fire between 2007 and 2008. The larger scrub trees were affected by the fire, although most remain and are recovering. Elevations on-site range from approximately 2,400 to 2,690 feet above mean sea level. Overall, site drainage is to the west and southwest. Soils on-site are primarily Hanford coarse sandy loam and terrace escarpments with Gorgonio gravelly loamy fine sand, Greenfield sandy loam, Hanford cobbly coarse sandy loam, and Ramona sandy loam.

### Vegetation Communities

According to the Biological Technical Report, dated November 11, 2014, the project site supports eight vegetation communities/habitats: mule fat scrub, Riversidean sage scrub, Riversidean-Diegan coastal sage scrub (including disturbed), coastal sage-chaparral scrub (including disturbed), scrub oak chaparral (including disturbed), exotic habitat (eucalyptus woodland), non-native grassland, and disturbed habitat. The project is within the Western Riverside County MSHCP's Narrow Endemic Plant Species Survey Area (NEPSSA) for two plant species: Yucaipa (Marvin's) onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*). Rare plant surveys were performed for these species, and the Yucaipa onion was observed in the northeast corner of the property. However, the Yucaipa onion population will be completely avoided by project activities. Exhibit 3.4-1 and Table 3.4-2 describe the vegetation communities that currently exist on-site.

**Table 3.4-2: Existing Vegetation Communities**

| Vegetation Communities | Acre(s)* | |
|---|---|---|
| | On-site | Off-site |
| Mule fat scrub | 0.06 | 0.0 |
| Riversidean sage scrub | 7.7 | 0.1 |

**Table 3.4-2 (cont.): Existing Vegetation Communities**

| Vegetation Communities | Acre(s)* | |
|---|---|---|
| | On-site | Off-site+ |
| Riversidean-Diegan coastal sage scrub (including disturbed) | 27.9 | 0.2 |
| Coastal sage-chaparral scrub (including disturbed) | 0.5 | 0.0 |
| Scrub oak chaparral (including disturbed) | 12.7 | 0.0 |
| Non-native grassland | 174.1 | 9.6 |
| Pasture | 0.0 | 1.3 |
| Eucalyptus woodland | 0.6 | 0.0 |
| Disturbed habitat | 6.3 | 1.4 |
| Developed | 0.0 | 0.9 |
| **Total** | **229.87** | **13.6** |

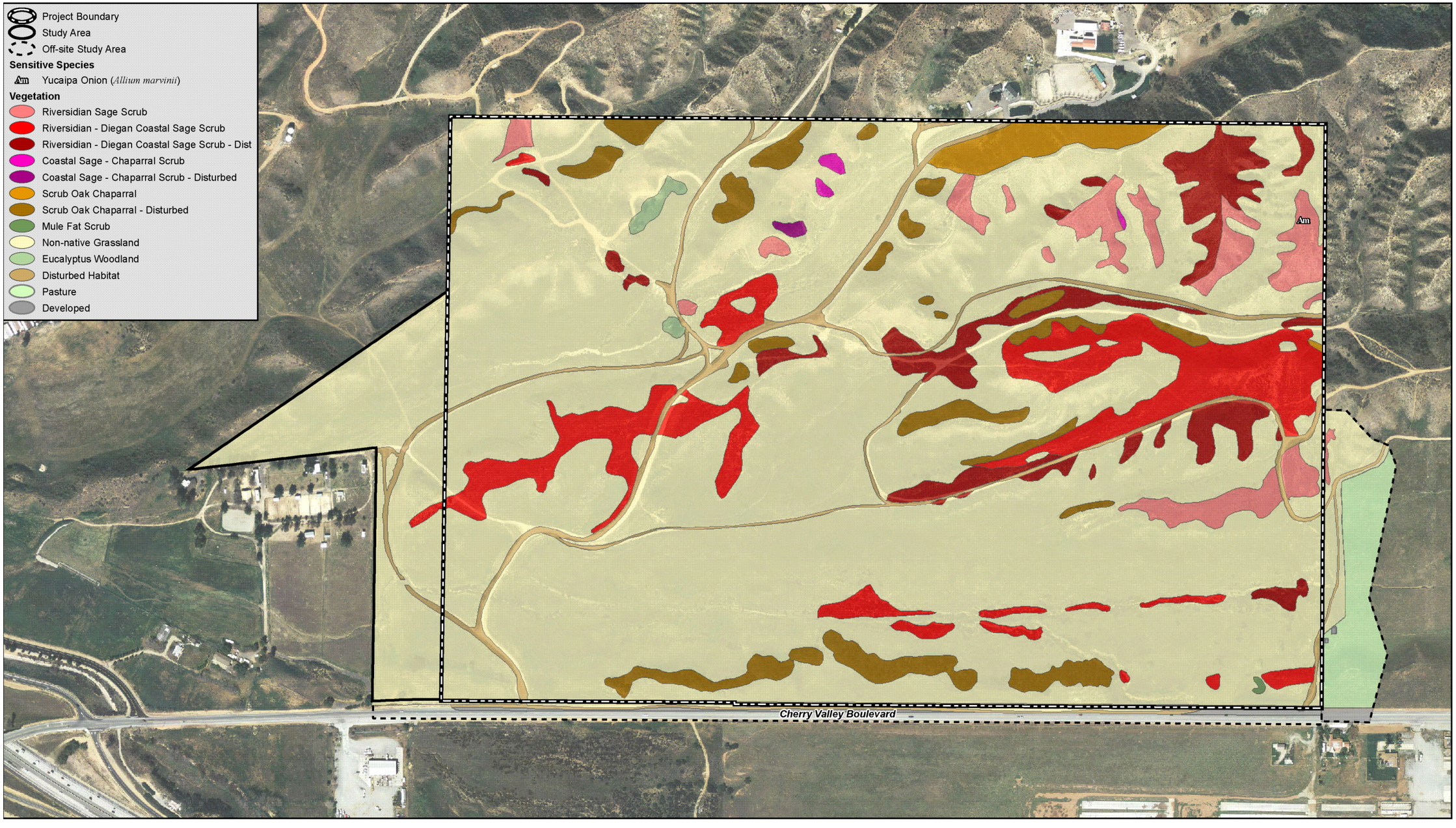
Notes:
* Acres are rounded to the nearest 0.1, except for acre(s) under 0.1, which are rounded to the nearest 0.01; thus, totals reflect rounding. Acreages include off-site improvement areas.
+ Includes impact acreages only.
Source: HELIX Environmental Planning, Inc., 2014, 2015.

### *Mule Fat Scrub*

Mule fat scrub is a depauperate, shrubby riparian scrub community dominated by mule fat (*Baccharis salicifolia*) and interspersed with shrubby willows (*Salix* spp.). This habitat generally occurs along intermittent stream channels with a fairly coarse substrate and moderate depth to the water table. It consists of a small (0.06 acre), isolated stand in the southeastern corner of the site.

### *Riversidean Sage Scrub*

Riversidean sage scrub occupies xeric sites such as steep slopes, severely drained soils, or clays that slowly release stored soil moisture. It is dominated by sub-shrubs with leaves that are deciduous during drought, an adaptation that allows the habitat to withstand the prolonged drought period in the summer and fall. Sage scrub species have relatively shallow root systems and open canopies that allow for the occurrence of a substantial herbaceous (annual plant) component. Typical stands are fairly open and dominated by species such as coastal sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), and flat-topped buckwheat (*Eriogonum fasciculatum*). This habitat type occurs mainly in the eastern portions of the site and is dominated by brittlebush, rosemary flat-topped buckwheat (*Eriogonum fasciculatum* ssp. *polifolium*), and coastal sagebrush. Other species present include deerweed (*Lotus scoparius*), filarees (*Erodium* spp.), black and white sage (*Salvia mellifera* and *S. apiana*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), and non-native grasses. A total of 7.7 acres of this habitat occurs on the site, and an additional 0.1 acre occurs in the off-site impact area.




Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-1
# Vegetation Map

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### *Riversidean-Diegan Coastal Sage Scrub (including disturbed)*

This habitat type is a mix of both Riversidean and Diegan coastal sage scrubs, both of which occupy low-moisture sites and are dominated by drought-resistant deciduous sub-shrubs. This habitat type is found mainly in the central portions of the site and totals approximately 27.9 acres. It is generally taller and comprises greater percentages of coastal sagebrush and flat-topped buckwheat than the pure Riversidean sage scrub habitat. Other species present include California encelia (*Encelia californica*), black sage, deerweed, and non-native grasses. Disturbed portions totaling approximately 10.2 acres consist of sparse shrub cover and a high percentage of non-native grasses and forbs. An additional 0.2 acre of Riversidean-Diegan coastal sage scrub occurs within the off-site impact area.

### *Coastal Sage-Chaparral Scrub (Including Disturbed)*

Areas of shrub habitat occur on-site that contain a mix of sage scrub and chaparral species. Three small pockets of this habitat type totaling 0.3 acre occur in the northern portion of the site and consist of chamise (*Adenostoma fasciculatum*), coastal sagebrush, black sage, and various grasses. A 0.2-acre patch of disturbed coastal sage-chaparral scrub occurs in the north-central portion of the property.

### *Scrub Oak Chaparral (Including Disturbed)*

Scrub oak chaparral is a dense evergreen chaparral that can grow up to 20 feet tall. It is dominated by scrub oak (*Quercus berberidifolia*) at this location. Most of the scrub oak chaparral on-site is fairly open, and numerous trees exhibit stress, possibly from past drought conditions; these areas of sparse shrubs were identified as disturbed. This habitat is found on the slope adjacent to Cherry Valley Boulevard and other slopes throughout the site. Approximately 2.9 acres of scrub oak chaparral and 9.8 acres of disturbed scrub oak chaparral occur on the site. Species occurring include scrub oak, spiny redberry (*Rhamnus crocea*), sugar bush (*Rhus ovata*), miner's lettuce (*Claytonia perfoliata*), fiesta flower (*Pholistoma racemosum*), black sage, American bowlesia (*Bowlesia incana*), and wild cucumber (*Marah macrocarpa*).

### *Non-native Grassland*

Non-native grassland contains annual grasses of varying cover and is often associated with showy-flowered, native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. This is the dominant habitat type on-site and in the off-site grading areas, totaling 174.1 acres. Species present include ripgut grass (*Bromus diandrus*), foxtail chess (*B. madritensis* ssp. *rubens*), Mediterranean grass (*Schismus barbatus*), rancher's fiddleneck (*Amsinckia intermedia*), horehound (*Marrubium vulgare*), and filaree. An additional 9.6 acres of non-native grassland occurs within the off-site impact area.

### *Pasture*

Pasture is similar to non-native grassland but is subject to regular grazing by animals. The grazing typically results in the habitat having a higher composition of lower growing annuals such as Mediterranean grass and filaree (*Erodium* spp.). Pasture occurs off-site to the east, and totals 1.3 acres within the off-site impact area.

### *Exotic Habitat (Eucalyptus Woodland)*

Eucalyptus woodlands were first established in California in the late 1800s and have since been planted extensively for wind blocks, ornamentals, and hardwood production. Most groves are

monotypic, with the most common species being either blue gum (*Eucalyptus globulus*) or red gum (*E. globulus*) eucalyptus. The understory within well-established groves is usually very sparse, due to the closed canopy and allelopathic nature of the leaf litter. As a wildlife habitat, these woodlands provide excellent nesting sites for a variety of raptors, including golden eagles. During winter migrations, a large variety of warblers may be found feeding on the insects attracted to eucalyptus flowers. The sparse understory offers only limited wildlife habitats. This habitat occurs on-site as two stands in the northwestern portion of the property and totals approximately 0.6 acre.

### *Disturbed Habitat*

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by either vehicles (roads) or prior development, or where agricultural lands have been abandoned. Disturbed habitat is generally dominated by non-native weedy species that adapt to frequent disturbance or consists of dirt trails and roads, as is the case on-site. Disturbed habitat on-site totals approximately 6.3 acres. An additional 1.4 acre of disturbed habitat occurs within the off-site impact area.

### *Developed Land*

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Approximately 0.9 acre of developed land, consisting of existing Cherry Valley Boulevard, occurs within the off-site impact area.

## Jurisdictional Areas

### *United States Army Corps of Engineers Jurisdictional Areas*

Areas under United States Army Corps of Engineers (USACE) jurisdiction occur as several segments of non-wetland Waters of the United States, including two major drainages that traverse the site from east to west (Drainages A and B) as shown in Exhibit 3.4-2. The other drainages on-site are tributaries to these main drainages. All USACE drainages are ephemeral. A total of 0.46 acre of USACE jurisdictional Waters of the U.S. occurs on-site.

### *CDFW Jurisdictional Areas*

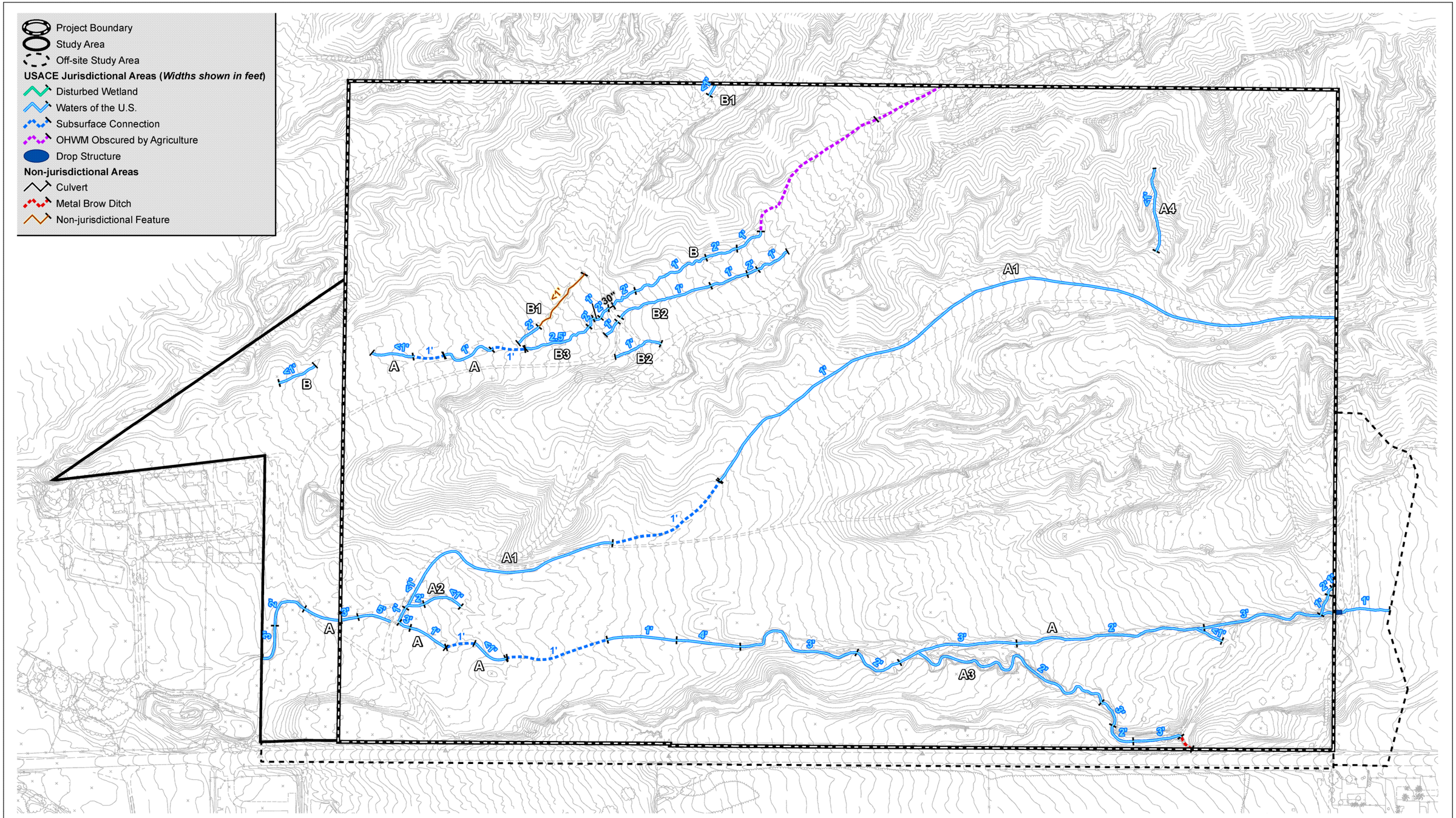
Areas under CDFW jurisdiction exist in the same areas as those that are USACE jurisdictional (Exhibit 3.4-3), but are slightly wider. Approximately 1.37 acres of the CDFW drainages are ephemeral, along with 0.04 acre of disturbed wetland.

### *Riparian/Riverine Areas*

All of the CDFW jurisdictional streambeds are also considered Riverine under the MSHCP. Two small areas of disturbed wetland are considered Riparian under Section 6.1.2 of the MSHCP.

## Plant Species

A total of 60 plant species were observed during the surveys conducted by HELIX. A list of plant species observed is included in Appendix C.1.

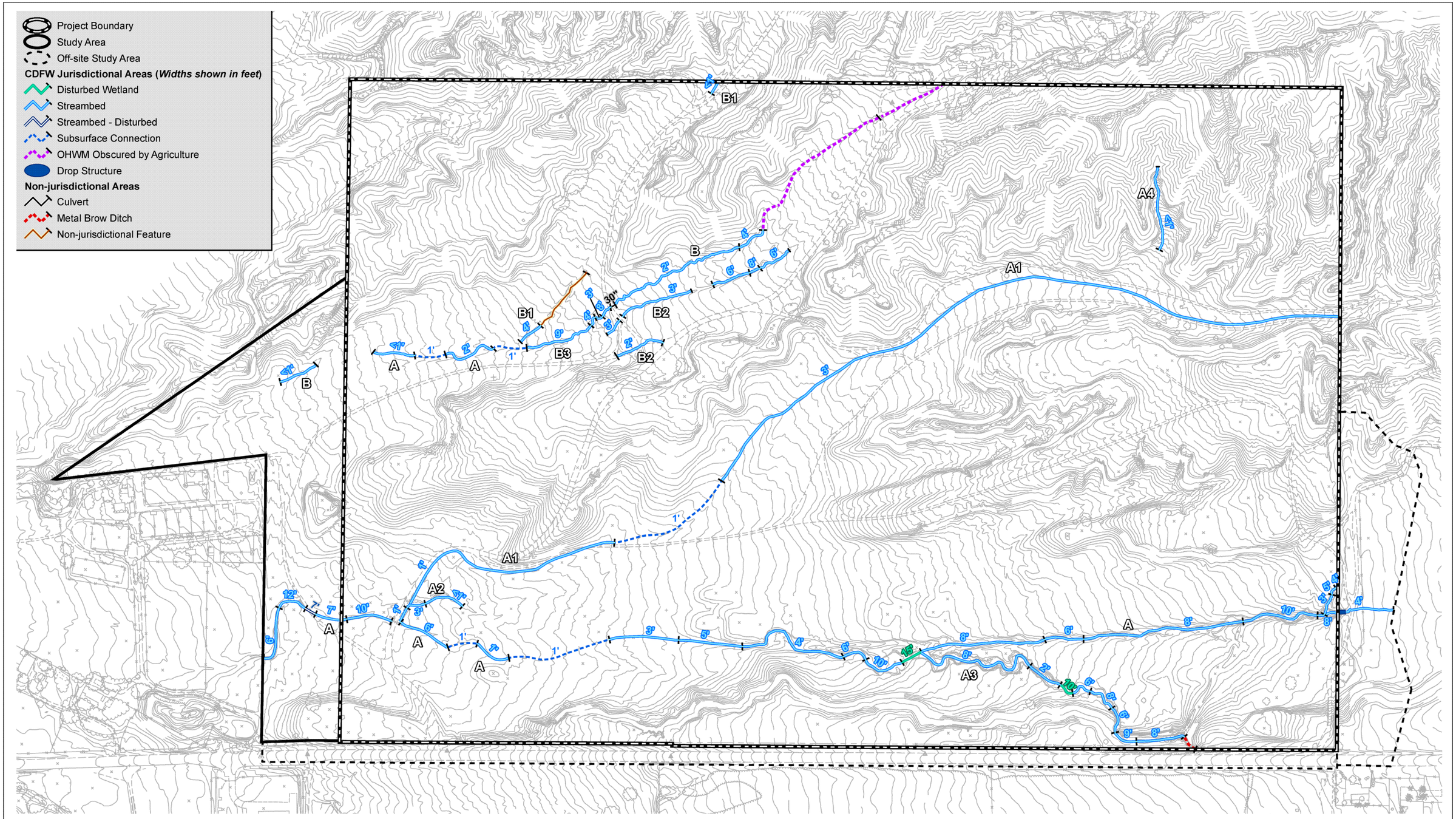



Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-2
# USACE Jurisdictional Areas

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Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-3
# CDFW Jurisdictional Areas

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## Animal Species

A total of 74 animal species were observed during the surveys conducted by HELIX. A list of animals observed or detected is included in Appendix C.1. All of the animal species were identified by direct observation or vocalizations, the presence of scat and/or tracks, or other signs.

## Sensitive Resources

Sensitive resources are those defined as (1) habitat areas or vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife; and (2) species that have been given special recognition by federal, state, or local government agencies and organizations as a result of limited, declining, or threatened populations.

### *Sensitive Vegetation Communities*

Sensitive vegetation communities on the San Gorgonio Crossing project site include mule fat scrub, Riversidean sage scrub, Riversidean-Diegan coastal sage scrub (including disturbed), coastal sage-chaparral scrub (including disturbed), scrub oak chaparral (including disturbed), and non-native grassland.

### *Sensitive Plant Species*

One sensitive plant species, the Yucaipa onion was observed on-site.

**Yucaipa onion (*Allium marvinii*)**
**Status:** —/— CNPS List 1B, MSHCP covered.
**Distribution:** Previously only known to occur within two other locations in California. Additional populations have recently been discovered within the MSHCP conservation area.
**Habitat:** Clay soils in chaparral or sage scrub habitat.
**Status on-site:** A total of 20 bulb clusters with 91 flowering heads were observed on-site. The entire population of Yucaipa onion observed on the property is within an approximately 200-square-foot area in the northeast corner of the property, outside the proposed impact area.

*Sensitive Plant Species with Potential to Occur*

Listed or sensitive plant species not observed during project-related site visits but that are known to occur in the vicinity or may have potential to occur on-site are described in Table 3.4-3. The list also includes the MSHCP NEPSSA Area 8 plant species. Many of these species have specific habitat requirements that do not occur on the property. Species are listed by status and alphabetized (by scientific name) where status is the same. A key of the status codes is located in Appendix C.1.

**Table 3.4-3: Listed or Sensitive Plant Species with Potential to Occur**

| Species Name | Status* | Potential To Occur |
|---|---|---|
| Slender-horned spineflower (*Dodecahema leptoceras*) | FE/SE<br>CNPS List 1B.1<br>MSHCP Covered | **Not expected to low.** Habitat of chaparral, woodland, and sage scrub with sandy soil does occur on-site. Not observed on-site during sensitive plant or other surveys conducted on-site. This is an MSHCP covered species. Property not in MSHCP plant survey area for this species. |

**Table 3.4-3 (cont.): Listed or Sensitive Plant Species with Potential to Occur**

| Species Name | Status* | Potential To Occur |
|---|---|---|
| San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) | FE/— CNPS List 1B.1 MSHCP Covered | **Not expected.** Occurs in association with vernal pools, alkali scrub, and playas that are not present on-site. Not observed during rare plant survey. |
| Yucaipa onion (*Allium marvinii*) | —/— CNPS List 1B.1 MSHCP Covered | **Present.** A small population was observed in the northeast corner of the property, outside the impact area. |
| many-stemmed dudleya (*Dudleya multicaulis*) | —/— CNPS List 1B MSHCP Covered | **Not expected.** Clay soils in barren, rocky areas with limited vegetation. Not observed during focused rare plant survey. Property does contain suitable habitat. |
| Smooth tarplant (*Centromadia pungens* ssp. *laevis*) | —/— CNPS List 1B.1 MSHCP Covered | **Not expected.** Occurs in alkali soil habitats that are not present on the property. Not observed during rare plant or other survey of property; species is conspicuous and would have been seen if present. |
| Parry's spineflower (*Chorizanthe parryi* var. *parryi*) | —/— CNPS List 1B.1 MSHCP Covered | **Low.** Prefers alluvial habitats of sage scrub and chaparral that are limited on-site. Was not observed during the rare plant survey. |
| San Bernardino aster (*Symphyotrichum defoliatum*) | —/— CNPS List 1B.2 | **Not expected.** Primary habitat is vernal pools and ditches in areas that once supported vernal pools that are not present on-site. Not observed during rare plant survey. |
| Plummer's mariposa-lily (*Calochortus plummerae*) | —/— CNPS List 4.2 MSHCP Covered | **Low.** Chaparral, sage scrub, and grassland habitat present, along with rocky and granitic soils. Species not observed during rare plant survey. |
| Source: HELIX Environmental Planning, Inc., 2015. | | |

### *Sensitive Animal Species*

No threatened or endangered animal species were observed on the San Gorgonio Crossing property.

Three MSHCP covered species were observed/detected on the San Gorgonio Crossing property: orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*), northern harrier (*Circus cyaneus*), and Bell's sage sparrow (*Amphispiza belli belli*). Belding's orange-throated whiptail and Northern harrier are state species of concern and Bell's sage sparrow is a USFWS bird of conservation concern and a CDFW watch list species. None of the three species is state or federally listed.

**Belding's orange-throated whiptail** (*Cnemidophorus hyperythrus beldingi*)

**Status:** —/SSC, MSHCP Covered

**Distribution:** Southern Orange County and southern San Bernardino County, south through Baja California

**Habitat:** Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements

include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites (*Reticulitermes* sp.).

**Status on-site:** Observed along disturbed sage scrub in northeastern portion of property.

**Northern harrier** (*Circus cyaneus*)

**Listing:** Nesting; —/SSC; Fully Protected; MSHCP Covered

**Distribution:** Widespread throughout temperate regions of North America and Eurasia. Winters and migrates throughout California from below sea level in Death Valley to an elevation of 9,800 feet.

**Habitat:** Coastal, salt, and freshwater marshlands; grasslands and prairies

**Status on-site:** Observed flying over field on western portion of property.

**Bell's sage sparrow** (*Amphispiza belli belli*)

**Status:** USFWS BCC, CDFW WL: MSHCP Covered

**Distribution:** Patchy distribution throughout Southern California, which often shifts to include partially recovered burned areas. Populations are often clumped, but species no longer observed in most coastal areas.

**Habitat(s):** Chaparral and sage scrub with modest leaf-litter on the ground (e.g., after a fire or in gabbro-based soil areas)

**Status on-site:** Observed in sage scrub on north and eastern portions of property.

*Sensitive Animals with Potential to Occur*

A list of sensitive animal species not observed within the San Gorgonio Crossing project impact area, but that are known to occur in the vicinity, is provided in Table 3.4-4. Species requiring habitat assessments and/or surveys under the MSHCP are also included in Table 3.4-4. Species are grouped into invertebrates and vertebrates (amphibians, reptiles, birds, and mammals), listed by status, and alphabetized (by scientific name) where status is the same.

**Table 3.4-4: Listed or Sensitive Animal Species with Potential to Occur**

| Species Name | Status* | Potential To Occur |
|---|---|---|
| **Invertebrates** | | |
| Vernal pool fairy shrimp (*Branchinecta lynchi*) | FT/— MSHCP Covered | **Not expected.** No vernal pool or seasonal pond habitat present on-site. |
| Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*) | —/— MSHCP Covered | **Not expected.** No vernal pool or seasonal pond habitat present on-site. |
| Riverside fairy shrimp (*Streptocephalus woottoni*) | FE/— MSHCP Covered | **Not expected.** No vernal pool or seasonal pond habitat present on-site. |
| **Vertebrates** | | |
| **Amphibian** | | |
| Western spadefoot (*Spea hammondii*) | —/SSC MSHCP Covered | **Low.** Habitat of sandy and gravelly soils is present, but breeding pool habitat is not present on-site. |

## Table 3.4-4 (cont.): Listed or Sensitive Animal Species with Potential to Occur

| Species Name | Status* | Potential To Occur |
|---|---|---|
| coast horned lizard (*Phrynosoma blainvillii*) | —/SSC MSHCP Covered | **Moderate.** Preferred prey species (harvester ants) and preferred habitat (open sage scrub) both occur on-site. Potential impacts to species are covered under the MSHCP. |
| **Birds** | | |
| least Bell's vireo (*Vireo bellii pusillus*) | FE/SE MSHCP Covered | **Not expected.** Suitable riparian habitat with developed canopy and understory not present on-site. |
| Southwestern willow flycatcher (*Empidonax traillii extimus*) | FE/SE MSHCP Covered | **Not expected.** Occurs in mature riparian woodland habitat, which is not present on-site. |
| Coastal California gnatcatcher (*Polioptila californica californica*) | FT/SSC MSHCP Covered | **Low.** Habitat (coastal sage scrub) occurs on-site but species not heard or observed during the multiple surveys that occurred during the species' breeding season. |
| Burrowing owl (*Athene cunicularia*) | —/SSC MSHCP Covered | **Low.** Grassland and sparse sage scrub habitat present. Surveys over multiple years, all negative. |
| Cooper's hawk (*Accipiter cooperii*) | —/SSC MSHCP Covered | **Low.** Woodland habitat required for breeding not present on-site. Foraging habitat is present. |
| Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) | —/SSC MSHCP Covered | **Moderate.** Coastal sage scrub habitat is present. Much of habitat disturbed and/or affected by recent fires. |
| California horned lark (*Eremophila alpestris actia*) | —/— MSHCP Covered | **Not expected.** Prefers open plains with sparse vegetation and plowed fields of bare dirt, which are limited on-site. |
| Tri-colored blackbird (*Agelaius tricolor*) | —/SSC MSHCP Covered | **Not expected.** Preferred habitat of reeds for breeding does not occur on-site. |
| White-faced ibis (*Plegadis chihi*) | —/SSC MSHCP Covered | **Not expected.** Species prefers wetlands and ponds that are not present on-site. |
| **Mammals** | | |
| Stephens' kangaroo rat (*Dipodomys stephensi*) | FE/ST MSHCP Covered | **Low.** Habitat (open Riversidean sage scrub) occurs on-site although at limits of this species' range. |
| Northwestern San Diego pocket mouse (*Chaetopdipus fallax fallax*) | —/SSC MSHCP Covered | **Moderate.** Habitat (coastal sage scrub and grassland) occurs on-site. Potential impacts to species covered under MSHCP. |
| Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) | —/SSC MSHCP Covered | **Not expected.** Habitat of open ground with loose sandy soils on-site. Potential impacts to species covered under MSHCP. |
| San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) | —/— MSHCP Covered | **Low.** Prefers brushy habitat in mountains and canyons that is present on the northeastern portion of the property. Species not observed during the multiple surveys conducted on-site. |

**Table 3.4-4 (cont.): Listed or Sensitive Animal Species with Potential to Occur**

| Species Name | Status* | Potential To Occur |
|---|---|---|
| Southern grasshopper mouse (*Onychomys torridus ramona*) | —/SSC | **Low.** Prefers low-lying arid sage scrub habitat that is limited on-site, site is not within current known range. |

Note:
* Refer to Appendix C.1 for a listing and explanation of status and sensitivity codes.
Source: HELIX Environmental Planning, Inc., 2014, 2015

## Multiple Species Habitat Conservation Plan Consistency Analysis

The purpose of the MSHCP Consistency Analysis report is to summarize the biological data on the project site for consistency with the Western Riverside County MSHCP. The MSHCP is a comprehensive, multi-jurisdictional effort that includes Riverside County and 14 cities in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system. The MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the U.S. Fish and Wildlife Service (USFWS) and/or CDFW. The MSHCP was adopted on June 17, 2003 by the Riverside County Board of Supervisors. The Incidental Take Permit was issued by both the USFWS and CDFW on June 22, 2004 for the entire MSHCP area.

## Determination of Biologically Equivalent or Superior Preservation Report (DBESP)

The purpose of the DBESP analysis is to summarize the project's compliance with the County's MSHCP. The project site is located within the Pass Area Plan of the MSHCP; however, it is not located within any Criteria Cell. This project has not yet received its USACE Section 404 Permit, CDFW Streambed Alteration Agreement, or Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification. The DBESP discusses the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, stating:

> The purpose of the procedures described in this section is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that Habitat values for species inside the MSHCP Conservation Area are maintained.

The emphasis is on conservation of habitats capable of supporting MSHCP Covered Species, particularly within the identified Conservation Area. For projects that propose impacts to Riparian/Riverine or vernal pool resources or other resources such as sensitive plants or wildlife species outlined as requiring a separate assessment, a DBESP assessment must be completed to ensure that the proposed alternative provides for "replacement of any lost functions and values of Habitat as it relates to Covered Species." This DBESP analysis provides information necessary for the County of Riverside to find that the project meets these objectives.

## 3.4.2 - Regulatory Setting

### Federal Regulations

#### *Endangered Species Act*

The Federal Endangered Species Act (FESA) of 1973 establishes a framework for protecting and facilitating the recovery of threatened and endangered populations of animal and plant species. Under the FESA, the Secretary of the Interior is required to list species of animals and plants that are both threatened and endangered, a task that is delegated to the USFWS and the National Marine Fisheries Service (NMFS). A species can become threatened or endangered as a result of the following factors:

- Present or threatened destruction
- Modification or curtailment of its habitat range
- Over-utilization for commercial recreation, scientific, or educational purposes
- Disease or predation
- Inadequacy of existing statutory mechanisms
- Other natural or man-made factors affecting its continued existence

Section 3 of the FESA defines an endangered species as any species or subspecies of fish, wildlife, or plants "in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as any species or subspecies "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Designated endangered and threatened species, as listed through publication of a final rule in the Federal Register, are fully protected from a "take" without an incidental take permit administered by the USFWS under Section 10 of the FESA. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap capture, or collect, or to attempt to engage in any such conduct (50 Code of Federal Regulations [CFR] 17.3). The term "harm" in the definition of take means an action that actually kills or injures wildlife. Such action may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR 17.3).

#### *Clean Water Act and Porter-Cologne Water Quality Control Act*

Under the Clean Water Act of 1972, the United States Environmental Protection Agency (EPA) is authorized to regulate the discharge of pollutants in the waters of the United States and to regulate water quality standards for surface waters. The EPA has delegated authority for implementing water quality regulations to the California State Water Resources Control Board (State Water Board), which has nine Regional Water Quality Control Boards. The State Water Board and Regional Water Quality Control Boards were established by the Porter-Cologne Water Quality Control Act.

#### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MTBA) of 1918 makes it unlawful to take (kill, harm, harass, etc.) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. The MTBA protects more than 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species, and it was originally drafted to put an end to the commercial trade in birds and

their feathers that, by the early years of the 20th century, had wreaked havoc on the populations of many native bird species. The MTBA implements the United States' commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protects selected species of birds that are common to all countries (i.e., they occur in all countries at some point during their annual life cycle). The act requires that the removal of any trees, shrubs, or any other potential nesting habitat be conducted outside the avian nesting season, which is generally between early February and late August.

## State Regulations

### *California Endangered Species Act of 1984 (CESA)*

The California Endangered Species Act (CESA) and implementing regulations in the Fish and Game Code, Section 2050 through Section 2089, includes provisions for the protection and management of plant and animals species listed as endangered or threatened, or designated as candidates for such listing. Incidental take of an endangered species is permitted by CDFW only under certain conditions and provided that the proper federal permits have been obtained and notifications made to the CDFW as described in Fish and Game Code Section 2080.1. Plants of California declared to be endangered, threatened, or rare are listed at 14 CCR Section 670.2. Animals of California declared to be endangered or threatened are listed at 14 CCR Section 670.5.14. CCR Section 15000, et seq. describe the types and extent of information required to evaluate the effects of a project on biological resources of a project site.

### *Fish and Game Code of California*

The Fish and Game Code provides specific protection and listing for several types of biological resources. Section 1602 of the Fish and Game Code requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. All native birds of prey are protected under Section 3503.5 and Section 3511 provides protection for non-game birds. Except as provided in Section 2081.7., Section 3511 provides for the protection of fully protected birds. Additionally, Section 3513 provides that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA).

Section 2081(b) and (c) of the CESA allows CDFW to issue an incidental take permit for a State-listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of "fully protected" species and "specified birds." If a project is planned in an area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFW cannot provide take authorization under CESA.

### *Native Plant Protection Act of 1977*

The Native Plant Protection Act of 1977 and implementing regulations in Section 1900, et seq. of the Fish and Game Code designates rare and endangered plants, and provides specific protection measures for identified populations. It is administered by the CDFW.

### *Wetlands Conservation Policy of 1993*

This policy provides for the protection, preservation, restoration, enhancement, and expansion of wetland habitats in California. Primarily, it acts to ensure no overall net loss of wetlands within the state and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property. The administering agencies for this authority are the CDFW, the California Environmental Protection Agency (Cal-EPA), and the RWQCB—South Coast Region.

## Local Regulations

### *County of Riverside General Plan*

Riverside County is known for its extraordinary environmental setting, which provides recreational, ecological, and scenic value. This open space, found in remote regions of the County as well as within Community Development areas, is one of the primary defining aspects of the County's livability and character. In some instances, it is this open space that provides the separations between communities, helping to enhance the distinctiveness of communities in the County. The RCIP Vision states:

> We value the unusually rich and diverse natural environment with which we are blessed and are committed to maintaining sufficient areas of natural open space to afford the human experience of natural environments as well as sustaining the permanent viability of the unique landforms and ecosystems that define this environment.

Poorly planned growth and development would threaten to eliminate or degrade this essential feature of the County. The Multipurpose Open Space Element addresses this issue in great detail. The policies below relate directly to preserving and enhancing open space through land use-related methods. They include restrictions on development of open space, focusing urban growth, providing recreational and open space opportunities within the built environment, and achieving a balance between urban uses and open space/habitat (County of Riverside 2014).

The Land Use Element of the 2014 County of Riverside General Plan includes the following policies, which relate directly to preserving and enhancing open space through land use related methods.

- **LU 8.2:** Require that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and Federal and State regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act.

As addressed below and throughout this Draft EIR, the project, with incorporation of mitigation, will comply with all federal, state, regional, and local policies and regulations, including those provisions related to the County of Riverside General Plan, CEQA, the CAA, and CWA.

- **LU 8.4:** Allow development clustering and/or density transfers in order to preserve open space, natural resources, and/or biologically sensitive resources.

Wetlands in Riverside County might typically occur in low-lying areas that receive fresh water at the edges of lakes, ponds, streams, and rivers. Wetlands provide habitat for a wide variety of plants, invertebrates, fish, and larger animals, including many rare, threatened, or endangered species. The plants and animals found in wetlands include both those that are able to live on dry land or in the water and those that can live only in a wet environment. Wetlands in Riverside County may include vernal pools, palm oases, or desert washes (County of Riverside 2014).

The Multipurpose Open Space Element of the General Plan includes the following city policy regarding wetlands:

- **OS 6.1:** During the development review process, ensure compliance with the Clean Water Act's Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.

As addressed below, the project will incorporate mitigation that will offset any project impacts to riparian/riverine and/or jurisdictional waters.

*Western Riverside County MSHCP Program*

The County of Riverside General Plan (2014) states:

> The Western Riverside County MSHCP encompasses approximately 1.26 million acres (approximately 1,997 square miles) and includes unincorporated and incorporated County land (excluding Indian land) west of the crest of the San Jacinto Mountains to the Orange County line. The plan is the largest HCP ever attempted and covers multiple species and multiple habitats within multiple jurisdictions. The proposed MSHCP covers a diverse landscape from urban cities to undeveloped foothills and montane forests. In addition to the presence of multiple habitats, the plan stretches across the Santa Ana Mountains, Riverside Lowlands, San Jacinto Foothills, San Jacinto Mountains, Aqua Tibia Mountains, Desert Transition and San Bernardino Mountain bio-regions.
>
> This serves as a Habitat Conservation Plan pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan under the NCCP Act of 1991. It is used to allow incidental "take" of plant and animal species identified within the proposed MSHCP. The purpose of the MSHCP is for the Wildlife Agencies to grant "take authorization" for otherwise lawful actions that may incidentally take or harm individuals of a species outside of preserve areas, in exchange for supporting assembly of a coordinated reserve

system. Conservation and management duties, as well as implementation assurances, will be provided by the County and other signatory agencies or jurisdictions identified as permittees through a corresponding Implementation Agreement.

**Habitat Evaluation and Acquisition Negotiation Process**

To complement the conservation and management responsibilities assigned to the County, a property owner-initiated habitat evaluation and acquisition negotiation process has also been developed for the Western Riverside MSHCP. The Habitat Evaluation and Acquisition Negotiation Process applies to property that may be needed for inclusion in the MSHCP Reserve or subjected to other MSHCP criteria. Under the incentive-based program, the County may obtain interests in property needed to implement the MSHCP over time. If it is determined that all or a portion of a property is needed for the MSHCP Reserve, various incentives or monetary compensation may be available to the property owner in exchange for the conveyance of property. Incentives are intended to provide a form of compensation to property owners who convey their property. Once a property interest is obtained, it will become part of the MSHCP Reserve.

Each area plan that is affected by the Western Riverside MSCHP contains maps that identify the areas potentially affected by the MSHCP, and identification of plant and animal species to be covered by the plan.

Below are MSHCP-related policies from the County of Riverside General Plan.

- **OS 17.1:** Enforce the provisions of applicable MSHCP's, and implement related Riverside County policies when conducting review of development applications.
- **OS 17.3:** Enforce the provisions of applicable MSHCP's, and implement related Riverside County policies when conducting review of possible general plan amendments and/or zoning changes, including policies regarding the handling of private and public stand alone applications for general plan amendments, lot line adjustments and zoning ordinance amendments that are not accompanied by, or associated with, an application to subdivide or other land use development application. Every stand -alone application shall require an initial Habitat Evaluation and Acquisition Negotiation Process (HANS) assessment and such assessment shall be made by the Planning Department's Environmental Programs Division. Habitat assessment and species specific focused surveys shall not be required as part of the initial HANS assessment for stand-alone applications but will be required when a development proposal or land use application to subsequently subdivide, grade or build on the property is submitted to the County.

As addressed below, the project, with incorporation of mitigation, will be consistent with the MSHCP.

The County's multipurpose open space system will be created and maintained using several different techniques, all related to preservation of significant environmental resources. By preserving multi-species habitat; by creating and maintaining active and passive parks, recreation areas, and trail systems; by conserving natural and scenic resources; and avoiding natural hazard areas, a complete system of open space will be achieved that ensures the County's "remarkable environmental setting"

remains intact for future generations of citizens to enjoy. This section identifies policies for the preservation of environmentally sensitive land within the County of Riverside, including but not limited to the land to be preserved through the MSHCPs (County of Riverside 2014).

The Multipurpose Open Space Element of the County's General Plan contains policies for the preservation of environmentally sensitive land within the County of Riverside, including but not limited to the land to be preserved through the MSHCPs:

- **OS 18.1:** Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, and through implementing related Riverside County policies.
- **OS 18.2:** Provide incentives to landowners that will encourage the protection of significant resources in the County beyond the preservation and/or conservation required to mitigate project impacts.

The project, with the incorporation of mitigation, will be consistent with the MSHCP, as addressed in the November 2015 Biological Technical Report, the November 2014 Determination of DBESP Report, and the November 2014 MSHCP Consistency Analysis.

**The Pass Area Plan**

The Pass Area Plan includes areas located in each of three watersheds: Santa Ana River, San Jacinto River, and Salton Sea. Rivers and creeks flowing from the mountains such as the San Gorgonio River, San Timoteo Creek, and Smith Creek provide habitat corridors through developed land, and link a wide variety of open space. This allows for wildlife to move from one open space area to another without crossing developed land. The following policy preserves and protects these important watersheds.

- **PAP 14.1**: Protect the Santa Ana, San Jacinto, and Salton Sea watersheds and surrounding habitats, and provide flood protection through adherence to the Watershed Management section of the General Plan Multipurpose Open Space Element.
- **PAP 15.1:** Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines and Best Management Practices adopted by Riverside County.

The Endangered Species Act prohibits the "taking" of endangered species. Taking is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" listed species. The Wildlife Agencies have authority to regulate this "take" of threatened and endangered species. The intent of the proposed MSHCP is for the Wildlife Agencies to grant a "take authorization" for otherwise lawful actions that may incidentally "take" or "harm" species outside reserve areas, in exchange for supporting assembly of a coordinated reserve system. Therefore, the proposed Western Riverside County MSHCP will allow the County to "take" plant and animal species within identified areas through the local land use planning process. In addition to the conservation and management duties assigned to the County, a property owner-initiated habitat evaluation and acquisition negotiation process has also been developed. This process is intended to apply to property that may be needed for inclusion in the MSHCP Reserve or subjected to other MSHCP criteria.

The policies below are from The Pass Area Plan and pertain to biological resources.

- **PAP 16.4:** Conserve rock and granite outcroppings for reptile populations known within this area.

Potential impacts to plants, including oak woodlands are addressed below. Under the existing condition, the portions of the project site proposed for development do not contain substantial rock or granite outcropping. Rock and granite outcropping may be located north of the project site in the foothill areas; however, the project would not impact these areas.

- **PAP 16.5:** Conserve coastal sage scrub patches which support known populations of granite night lizard and granite spiny lizard.

Of the existing Coastal sage-chaparral scrub (including disturbed) vegetation community found on the project site, less than 0.2 acre will be impacted by the project.

## 3.4.3 - Thresholds of Significance

According to the County of Riverside CEQA Thresholds, to determine whether impacts to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

c) 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. Wildlife Service?

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

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

f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

## 3.4.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Conservation Plans

| | |
|---|---|
| **Impact BIO-1:** | **The project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.** |

#### *Impact Analysis*

*MSHCP Consistency*

The San Gorgonio Crossing property lies outside any Criteria Cells; therefore, the project is not required to conserve habitat on-site with respect to Criteria Cells.

MSHCP Section 6.1.2 focuses on protection of Riparian/Riverine and vernal pool habitat types. The project will comply with the policies of Section 6.1.2 that protect species associated with vernal pools and Riparian/Riverine habitats. Vernal pools do not exist on the San Gorgonio Crossing project; therefore, vernal pool species do not occur.

The definition of Riparian/Riverine habitats is based on the potential for the habitat to support Riparian/Riverine covered species (least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo). The ephemeral drainages/streambed on-site are not suitable for any of these species; however, the drainages have potential to support downstream Riparian/Riverine habitats, and are therefore considered Riparian/Riverine habitats under the MSHCP.

Twenty-four plant species are identified in the MSHCP as potentially occurring in Riparian/Riverine and vernal pool habitats. Shrub and tree species such as California black walnut (*Juglans californica* var. *californica*), Engelmann oak (*Quercus engelmannii*), Coulter's matilija poppy (*Romneya coulteri*), and San Miguel savory (*Satureja chandleri*) would have been readily identifiable during project surveys but were not found on-site. Several species, including spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), prostrate navarretia (*Navarrettia prostrate*), San Diego button-celery (*Eryngium aristulatum* var. *parishii*), thread-leaved brodiaea (*Brodiaea filifolia*), fish's milkwort (*Polygala cornuta* var. *fishiae*), lemon lily (*Lilium parryi*), ocellated Humboldt lily (*L. humboldtii* ssp. *ocellatum*), Mojave tarplant (*Deinandra mohavensis*), Parish's meadowfoam (*Limnathes gracilis* var. *parishii*), and slender-horned spineflower (*Dodecahema leptoceras*) have distributions well outside the study area. The remaining species have a distribution that includes the project area or occur in habitats found on-site and are discussed in greater detail below. None of the 24 MSHCP Riparian/Riverine species were observed on the property.

The Santa Ana River woolly-star (*Eriastrum densifolium* spp. *sanctorum*) is found along the Santa Ana River in two locations and is restricted to open washes and early successional alluvial fan scrub on open slopes above main watercourses, such as the Santa Ana River on fluvial deposits, where flooding and scouring occur at a frequency that allows the persistence of open shrublands. No appropriate habitat occurs on-site for the Santa Ana River woolly-star.

Suitable habitat for Brand's phacelia (*Phacelia stellaris*) includes coastal dunes and/or coastal scrub in sandy openings, sandy benches, dunes, sandy washes, or floodplains of rivers at elevations between 0 and 1,200 feet. Brand's phacelia is known from two locations on sandy terraces along the Santa Ana River (at Fairmont Park and along a horse trail in the Santa Ana Wilderness Area along the Santa Ana River). Given the highly disturbed nature of the site, this species is not expected to occur.

Graceful tarplant (*Holocarpha virgata* ssp. *elongata*) occurs in chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grasslands below 1,900 feet. This species would not be expected to occur on-site because the site's elevation is higher than the known range for this species.

Mud nama (*Nama stenocarpum*) is restricted to muddy embankments of marshes and swamps and within lake margins and riverbanks. Three populations are known from Riverside County, with two occurring along the San Jacinto River. No appropriate habitat occurs on-site.

Orcutt's brodiaea (*Brodiaea orcuttii*) occurs in clay soils in mesic native and non-native grasslands that often include vernal pools as well as moist meadows and along stream courses at higher elevations. The core population in Riverside County is the Santa Rosa Plateau. No clay soils are present on-site.

San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) is restricted to grassland, playas, and vernal pools with alkali soils. This species typically occurs on the margins of areas subject to short-term inundation and does not develop in areas that support regular long-term ponding or flooding. No alkali soils or appropriate habitat occur on-site.

Smooth tarplant (*Centromadia pungens*) is found in southwestern California and northwestern Baja California, Mexico (Baja) and occurs in San Bernardino, Riverside, and San Diego counties. This species occurs in a variety of habitats, including alkali scrub and playas, riparian woodland, watercourses, and grasslands with alkaline affinities. No alkali soils are present on-site.

Vernal barley (*Hordeum intercedens*) occurs in grassland, vernal pools, and vernal playas and is restricted to clay and alkaline, silty-clay soils in Riverside County. Twelve populations are known from Riverside County along the San Jacinto River and Salt Creek. No appropriate soils occur on-site.

Consistency with Section 6.1.2 of the MSHCP as well as mitigation measures to replace the function and values of the Riverine area on-site are detailed in the DBESP analysis.

The project is within an area designated as a NEPSSA area for two plant species: Yucaipa onion and many-stemmed dudleya. A total of 20 bulb clusters of Yucaipa onion with 91 flowering heads were observed on-site. The entire population of Yucaipa onion observed on the property is within an approximately 200-square-foot area in the northeast corner of the site, outside the proposed impact area. Other sensitive plant surveys were conducted and were negative; therefore, the project is consistent with MSHCP Section 6.1.3.

Section 6.1.4 addresses potential indirect impacts to MSHCP preserve lands such as the Criteria Cells located 0.5 mile north of the project site. The proposed development is designed to leave open space between the development and the northern property border; as a result, the development

will occur more than 0.5 mile from MSHCP Conservation Areas and is therefore not subject to Section 6.1.4. Since the project does border open space, the following shall be implemented by the project to minimize potential indirect impacts:

- Best Management Practices (BMPs) would be implemented to maintain water quality. All runoff would be treated prior to exiting the site or draining into potential preserve areas to reduce pollutants of concern. There would be no change in water flow from the project site.
- The project is the construction of a warehouse, and it is not expected to produce any toxics or bioproducts that would significantly affect any MSHCP Conservation Area. Any potential pollutants (e.g., increased levels of phosphorus or nitrogen) would be treated through implementation of BMPs.
- The project is not expected to generate levels of noise greater than that of any standard commercial development and is not expected to adversely affect any MSHCP Conservation Area;
- No plants included on the California Invasive Plant Council's (Cal-IPC's) list of invasive species (2006) or in MSHCP Table 6-2 would be used anywhere on-site.
- Manufactured slopes associated with the proposed site development would not extend into any proposed MSHCP conservation area.
- The project is not within any CASSA area for amphibians or mammals. The project occurs within the burrowing owl survey area. Because no burrowing owls or owl signs were observed during the protocol survey, no conservation is required on-site. The project is consistent with MSHCP Section 6.3.2.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM BIO-1** To meet the criteria of a biologically equivalent or superior alternative, the applicant shall offset impacts to Riverine resources through on-site creation at a 2:1 ratio for the 1.11 acres of impacts to Riverine and limited Riparian resources. In total, the proposed mitigation shall result in 2.22 acres of Riparian and Riverine habitat creation/restoration.

The on-site creation of 2.22 acres of Riparian and Riverine habitat shall occur at two locations on-site along the southern boundary (see DBESP's Figure 8). The mitigation areas shall receive all upstream flows up to 100 cubic feet per second (cfs). Flows above 100 cfs shall bypass the mitigation area in a concrete-lined channel that will outlet at the eastern edge of the project. Flows up to 100 cfs will allow for creation of a braided streambed similar to the drainages that are being impacted. These areas shall be revegetated with primarily floodplain scrub vegetation. Scattered pockets of mule fat scrub shall also be planted to increase vegetative diversity. Combined, these areas shall offset losses of Riparian/Riverine functions and values by providing high quality Riparian/Riverine habitat, and provide for other functions and services such as water quality benefits, groundwater recharge, and nutrient cycling. A detailed

restoration plan for the on-site mitigation sites shall be prepared and submitted to the County for review and approval prior to implementation of the restoration effort.

Habitat creation or restoration at a 2:1 ratio is the standard level of mitigation acceptable to CDFW for the type of habitat that would be potentially impacted by the project.

### *Level of Significance After Mitigation*

Less than significant impact. Impacts to MSHCP Riverine areas shall be mitigated to below a level of significance by on-site creation or restoration at a 2:1 ratio. The project will be conditioned to provide a more detailed mitigation plan for review and approval by the County prior to ground disturbance. The information provided in the DBESP is adequate to determine that the mitigation proposed will provide equivalent or superior preservation as required by the DBESP process.

## Endangered or Threatened Species and Sensitive or Special Status Species

| | |
|---|---|
| **Impact BIO-2:** | **The project could have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12).** |
| **Impact BIO-3:** | **The project could 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. Wildlife Service.** |

### *Impact Analysis*

*Vegetation Communities/Habitats*

The project would impact 145.6 acres on the San Gorgonio Crossing property on-site, and an additional 13.5 acres off-site (Exhibit 3.4-4). Impacts to mule fat scrub, Riversidean sage scrub, Riversidean-Diegan coastal sage scrub (including disturbed), coastal sage-chaparral scrub (including disturbed), scrub oak chaparral (including disturbed), and non-native grassland are considered potentially significant. Refer to Table 3.4-5 for a summary of vegetation community impacts.

**Table 3.4-5: Vegetation Community Impacts**

| Vegetation Community | Acre(s)*+ | Impacts+ | Open Space/Not Impacted |
|---|---|---|---|
| Mule fat scrub | 0.06 | 0.06 | 0.0 |
| Riversidean sage scrub | 7.8 | 2.4 | 5.4 |
| Riversidean-Diegan coastal sage scrub (including disturbed) | 28.1 | 19.5 | 8.6 |
| Coastal sage-chaparral scrub (including disturbed) | 0.5 | 0.0 | 0.5 |
| Scrub oak chaparral (including disturbed) | 12.7 | 5.6 | 7.1 |
| Non-native grassland | 183.7 | 123.8 | 59.9 |
| Eucalyptus woodland | 0.6 | 0.2 | 0.4 |
| Disturbed habitat | 7.7 | 5.3 | 2.4 |

**Table 3.4-5 (cont.): Vegetation Community Impacts**

| Vegetation Community | Acre(s)*+ | Impacts+ | Open Space/Not Impacted |
|---|---|---|---|
| Pasture | 1.3 | 1.3 | 0.0 |
| Developed | 0.9 | 1.3 | 0.0 |
| Total | 243.4 | 159.1 | 84.3 |

Notes:
* Acres are rounded to the nearest 0.1, except for acre(s) under 0.1, which are rounded to the nearest 0.01; thus, totals reflect rounding.
\+ Includes off-site impact areas
\# Off-site acreages not impacted not included in this number
Source: HELIX Biological Technical Report, 2015.

*Sensitive Plant Species*

The San Gorgonio Crossing project would not result in impacts to NEPSSA, listed, or sensitive plant species.

*Sensitive Animal Species*

No impacts to federal or state listed animal species will result from project implementation. Three MSHCP covered sensitive animal species (orange-throated whiptail, northern harrier, and Bell's sage sparrow) were observed or detected on-site and would be directly impacted by the project because their habitats would be adversely affected. Impacts to these species are not considered significant, as they are covered under the MSHCP.

Implementation of the project would directly impact raptor foraging habitat. In addition, the eucalyptus trees on-site have potential to support nesting raptor species such as the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*B. lineatus*), or great-horned owl (*Bubo virginicus*), and there is potential to directly or indirectly impact raptor nests during construction. These impacts are considered potentially adverse, but will be reduced to less than significant with mitigation. Direct impacts to an active raptor nest are not allowed under the federal MBTA, and direct take of active raptor nests would be considered significant. Therefore, surveys shall be required prior to any disturbance of the project site by construction activities.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Mitigation Measures BIO-1 and BIO-4 are required, as well as the following:

**MM BIO-2** Pre-construction presence/absence surveys for burrowing owl shall be conducted on and off-site by a qualified biologist within 30 days prior to project disturbance activities, with the results summarized in a report submitted to the County Planning Department, Environmental Programs Division. Owls located as a result of survey

efforts shall be relocated. A relocation plan shall be submitted to the Environmental Programs Division of the Planning Department for review and approval. All surveys and relocation plans shall be conducted and prepared by a qualified biologist currently holding a Memorandum of Understanding with the County. The Relocation Plan must follow the most current CDFW-approved protocols/mitigation and must be in accordance with the "Burrowing Owl Species Objectives and Mitigation Measures" outlined in the MSHCP. The EPD shall be consulted to determine appropriate type of relocation (active or passive) and translocation sites. Occupation of this species on the project site may result in the need to revise grading plans so that take of "active" nests is avoided, or, alternately, a grading permit may be issued once the species has been relocated.

**MM BIO-3** Clearing and grubbing shall occur outside the bird breeding season (February 1 to August 31), unless a qualified biologist demonstrates to the satisfaction of the County that all nesting is complete through completion of a Nesting Bird Clearance Survey. A Nesting Bird Clearance Survey report shall be submitted to the Environmental Programs Division for review and approval prior to initiating clearing and grubbing during the breeding season.

### *Level of Significance After Mitigation*

Less than significant impact. Impacts to breeding birds shall be avoided through clearing of habitat outside the breeding season and conducting surveys prior to any disturbance of the project site by construction activities.

## Wildlife Corridors and Nursery Sites

| | |
|---|---|
| **Impact BIO-4:** | **The 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.** |

### *Impact Analysis*

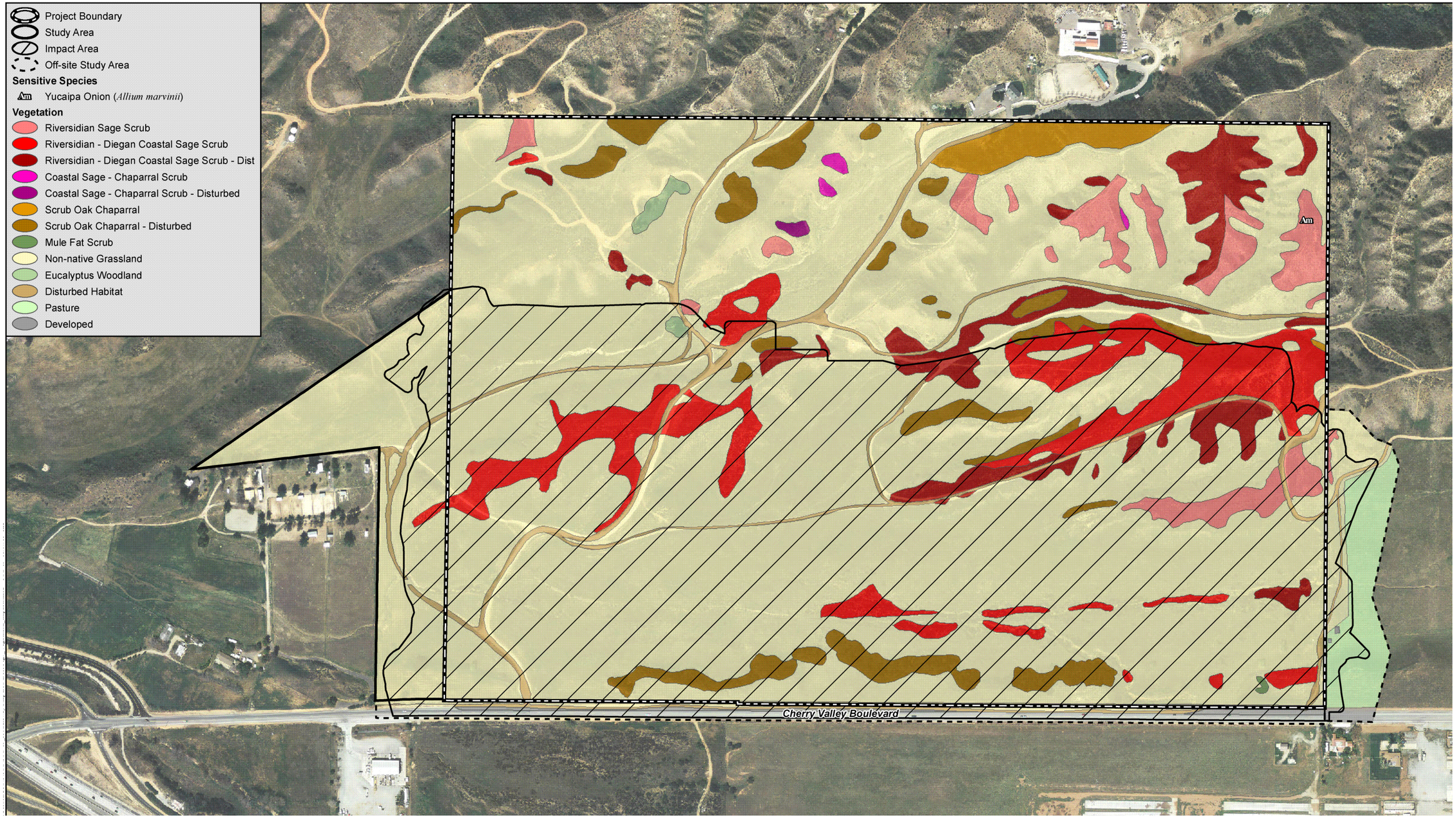
According to the MSHCP Consistency Analysis' Appendix A , the project will have no impact regarding interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. The project site is not located in any Criteria Cells under the MSHCP. Additionally, because the project site was previously used for agricultural purposes, the presence of Cherry Valley Boulevard along the southern boundary of the project site and residences located to the west, north, and east, the project site would not likely function as an established native resident or migratory wildlife corridor. Thus, the project is anticipated to have no related impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.




Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-4
# Vegetation/Impacts

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### *Level of Significance After Mitigation*

No impact.

## Riparian Habitat and Federally Protected Wetlands

| | |
|---|---|
| **Impact BIO-5:** | **The project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service.** |
| **Impact BIO-6:** | **The project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.** |

### *Impact Analysis*

*Riparian/Riverine, USACE, and CDFW Jurisdictional Areas*

Section 6.1.2 of the MSHCP focuses on protection of Riparian/Riverine areas and vernal pool habitats capable of supporting MSHCP covered species, particularly within the identified Conservation Area.

The purpose of the procedures described in this section is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that Habitat value for species inside the MSHCP Conservation Area are maintained.

The project site encompasses 1.25 acres of unvegetated, ephemeral drainage courses that are considered Riverine under Section 6.1.2. An additional 0.04 acre of disturbed wetland occurs on-site and is considered Riparian under Section 6.1.2. An additional 0.12 acre of ephemeral drainage occurs in the off-site study area. The functions of the unvegetated Riverine streams and disturbed wetland on the property are primarily water conveyance, sediment transport, and energy dissipation (hydrologic regime and flood attenuation).

The proposed project would impact approximately 1.07 acres of streambed habitat considered Riverine, and 0.04 acre of disturbed wetland that is considered Riparian. The current project does avoid impacts to the Riverine resources in the northwestern portion of the site. Impacts to 0.30 acre of the Riverine resources have been avoided to the maximum extent practicable.

Impacts to USACE jurisdictional areas total 0.40 acre, all of which are ephemeral drainage (Table 3.4-6). No impacts to USACE jurisdictional wetlands would occur. The impacts to the non-wetland ephemeral drainages are considered potentially significant. In order to reduce impacts to the non-wetland ephemeral drainages to less than significant, mitigation is proposed that would result in preservation of the functions and values of riparian/riverine sources impacted by the project. The project has been designed to avoid impacts to 0.30 acre of riparian/riverine resources in the northwestern portion of the site. In addition, the project will replace riparian/riverine habitat at a 2:1 ratio for the 1.11 acres of impacts to riparian/riverine sources, resulting in 2.22 acres of riparian/riverine habitat creation/restoration.

**Table 3.4-6: USACE and CDFW Jurisdictional Area Impacts (acre)**

| Jurisdictional Area | USACE | CDFW |
|---|---|---|
| Ephemeral drainage/streambed | 0.40 | 1.11 |
| Total | 0.40 | 1.11 |

A DBESP was prepared for the project. The goal of the DBESP process is to determine if an alternative project configuration would result in biologically equivalent or superior preservation. The first priority for sensitive habitats under CEQA and the MSHCP is avoidance of direct impacts. The proposed land use requires large pads that cannot be effectively reshaped to avoid Riparian/Riverine resources. Complete avoidance of Riparian/Riverine resources would eliminate the viability of development on the site because of the distribution of the drainages across the site. Total avoidance can be achieved only by minimal or no development, which would render the project infeasible.

As discussed, the current project does avoid impacts to 0.30 acre of Riparian/Riverine resources in the northwestern portion of the site. Impacts to 0.30 acre (23 percent) of the Riverine resources have been avoided to the maximum extent practicable.

Section 6.2.1 of the MSHCP states:

> If an avoidance alternative is not Feasible, a practicable alternative that minimizes direct and indirect effects to Riparian/Riverine areas and vernal pools and associated functions and values to the greatest extent possible shall be selected.

Mitigation measures that would result in equivalent or superior preservation of the functions and values of riparian/riverine resources impacted by the project are shown here. Minimization measures for the project will include the use of standard BMPs to minimize the impacts during construction. Equipment will be stored in upland areas, outside drainages except as required by project design (restoration, trash removal, etc.). Removal of trash located throughout the property will decrease the potential of pollutants entering the riparian/riverine areas downstream. The removal of the pollutants will increase the functions and values of the Riparian/Riverine areas proposed to be restored, thus replacing a portion of functions and values that will be lost within the project footprint.

Source control and treatment control BMPs will be implemented to minimize the potential contaminants that generated during and post construction. Source control BMPs include landscape planning, roof runoff controls, trash storage areas, use of alternative building materials, and education of future tenants. Treatment control BMPs include detention basins, vegetated swales (bio-swales), drain inlets, and vegetated buffers. Water quality BMPs will be implemented throughout the project to capture and treat contaminants.

Mitigation for impacts to riparian/riverine resources will occur through on-site creation at a 2:1 ratio for the 1.11 acres of impacts to riparian/riverine resources. In total, the proposed mitigation will result in 2.22 acres of riparian/riverine habitat creation/restoration.

The on-site creation of 2.22 acres of Riparian and Riverine habitat will occur at two locations on-site along the southern boundary (Exhibit 3.4-5). The mitigation areas will receive all upstream flows up

to 100 cfs. Flows above 100 cfs will bypass the mitigation area in a concrete-lined channel that will outlet at the eastern edge of the project. Flows up to 100 cfs will allow for creation of a braided streambed similar to the drainages that are being impacted. These areas will be revegetated with primarily floodplain scrub vegetation. Scattered pockets of mule fat scrub will also be planted to increase vegetative diversity. Combined, these areas will offset losses of riparian/riverine functions and values by providing high quality Riparian/Riverine habitat, as well as other functions and services such as water quality benefits, groundwater recharge, and nutrient cycling. A detailed restoration plan for the on-site mitigation sites will be prepared and submitted to the County for review and approval prior to implementation of the restoration effort.

The amount of mitigation required by the regulatory agencies for impacts to 0.40 acre of USACE jurisdictional areas (Exhibit 3.4-6) and 1.11 acres of CDFW jurisdictional area (Exhibit 3.4-7) will be determined during the permitting process (refer to MM BIO-5 below). The Applicant shall comply with all requirements set forth by the USACE and CDFW during the permitting process.

### *Level of Significance Before Mitigation*

Potentially significant impact.

## Local Policies or Ordinances Protecting Biological Resources

### *Mitigation Measures*

Mitigation Measures BIO-1 will be required, as well as the following:

**MM BIO-4** The project applicant shall pay MSHCP Local Development Mitigation Fees (LDMF) as determined by the County. The fee schedule is adjusted annually by the Western Riverside County Regional Conservation Authority (RCA), and was last adjusted on July 1, 2008. The current fee is $6,597 per acre for commercial or industrial uses.

**MM BIO-5** Prior to the issuance of construction and building permits by the County, the project Applicant shall consult with the California Department of Fish and Wildlife regarding a Section 1602 Streambed Alteration Agreement Permit, the United States Army Corps of Engineers (USACE) regarding a Clean Water Act Section 404 Permit, and the Regional Water Quality Control Board regarding a Clean Water Act Section 401 Certification. The project Applicant shall be required to obtain these permits prior to the commencement of construction activities. The project shall mitigate impacts to waters of the United States, wetlands, and riparian habitats (pursuant to the Federal Clean Water Act and the California Fish and Game Code, Section 1600, et seq.) by replacement on an in-kind basis. Compensatory habitat-based mitigation will consist of preserving on-site habitat, restoring similar habitat, or purchasing off-site credits from an approved mitigation bank. Replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or USACE in order to account for the potentially diminished habitat values of replacement habitat and reduce impacts to less than significant. Agreed-upon mitigation ratios will depend on the quality of the habitat and presence/absence of a special-status species. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be affected, subject to state and federal

regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the County), protected in perpetuity by provision for an appropriate conservation easement or dedication.

### *Level of Significance After Mitigation*

Less than significant impact. Impacts to sensitive habitats will be mitigated through payment of the MSHCP LDMF of $6,597. Impacts to USACE and CDFW jurisdictional habitats along with impacts to MSHCP Riverine areas shall be mitigated to below a level of significance by on-site creation or restoration at a 2:1 ratio (2.22 acres). Impacts to riparian habitat and federally protected wetlands will be mitigated through the Section 1602 Streambed Alteration Agreement Permit and Clean Water Act Sections 401 and 404 permitting processes, which will require mitigation and habitat replacement at levels deemed acceptable by the permitting agencies.

**Impact BIO-7: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

### *Impact Analysis*

The project site contains scrub oak chaparral. Scrub oak chaparral is a dense, evergreen chaparral that can grow to 20 feet tall. It is dominated by scrub oak (*Quercus berberidifolia*) at this location. Most of the scrub oak chaparral on-site is fairly open, and numerous trees exhibit stress, possibly from past drought conditions; these areas of sparse shrubs were identified as disturbed. This habitat is found on the slope adjacent to Cherry Valley Boulevard and other slopes throughout the site. Approximately 2.9 acres of scrub oak chaparral and 9.8 acres of disturbed scrub oak chaparral occur on the site. No scrub oak chaparral is located within the off-site study area. Species occurring include scrub oak, spiny redberry (*Rhamnus crocea*), sugar bush (*Rhus ovata*), miner's lettuce (*Claytonia perfoliata*), fiesta flower (*Pholistoma racemosum*), black sage, American bowlesia (*Bowlesia incana*), and wild cucumber (*Marah macrocarpa*).

As previously discussed, the Pass Area Plan contains the following policy regarding Oak tree preservation:

**PAP 15.1** Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines and Best Management Practices adopted by Riverside County.

Because of the lack of oak woodlands on the project site (as the site contains scrub oak chaparral), the project will not conflict with The Pass Area Plan policy regarding oak tree and viable oak woodland preservation.

### *Level of Significance Before Mitigation*

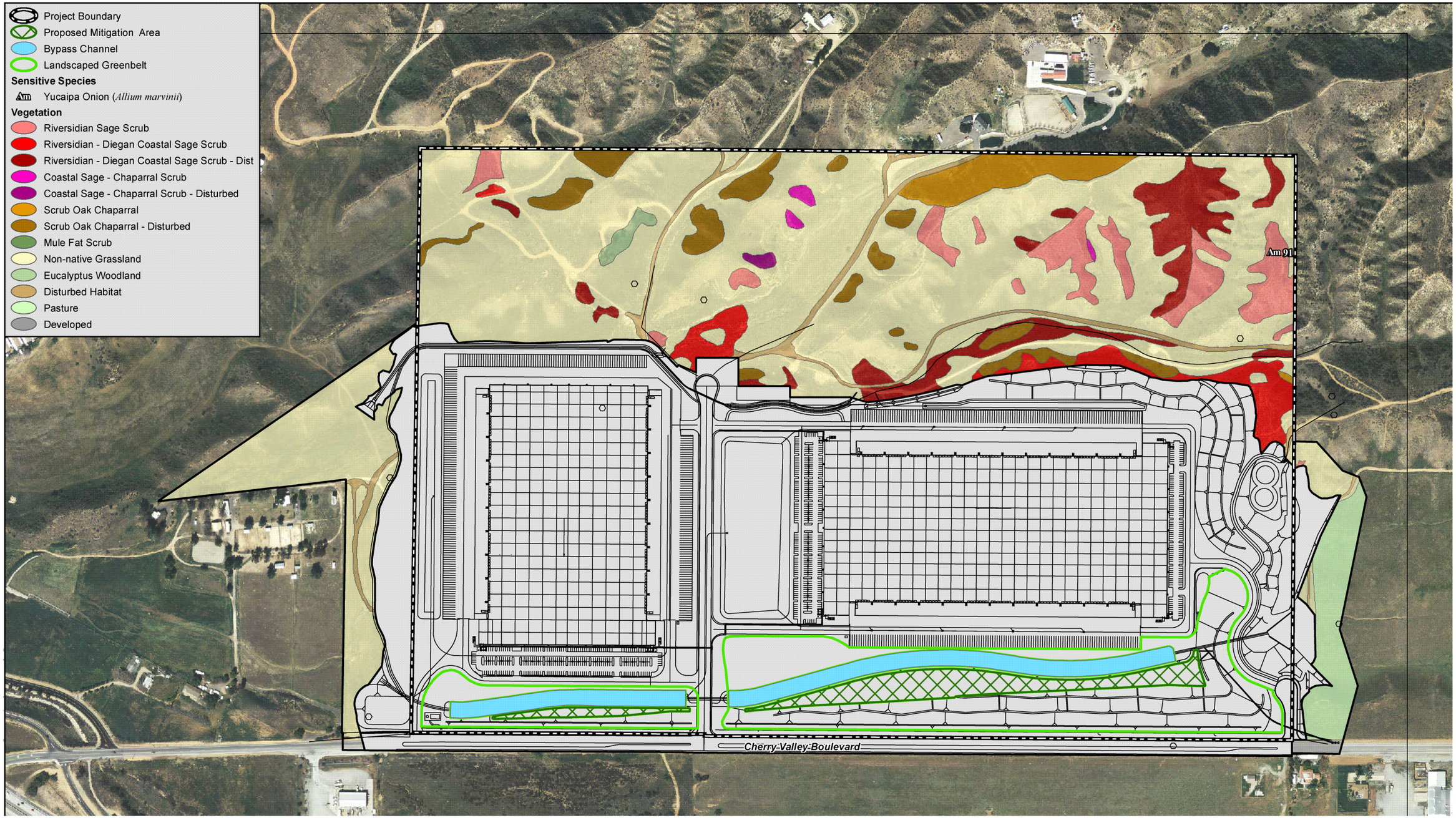
No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

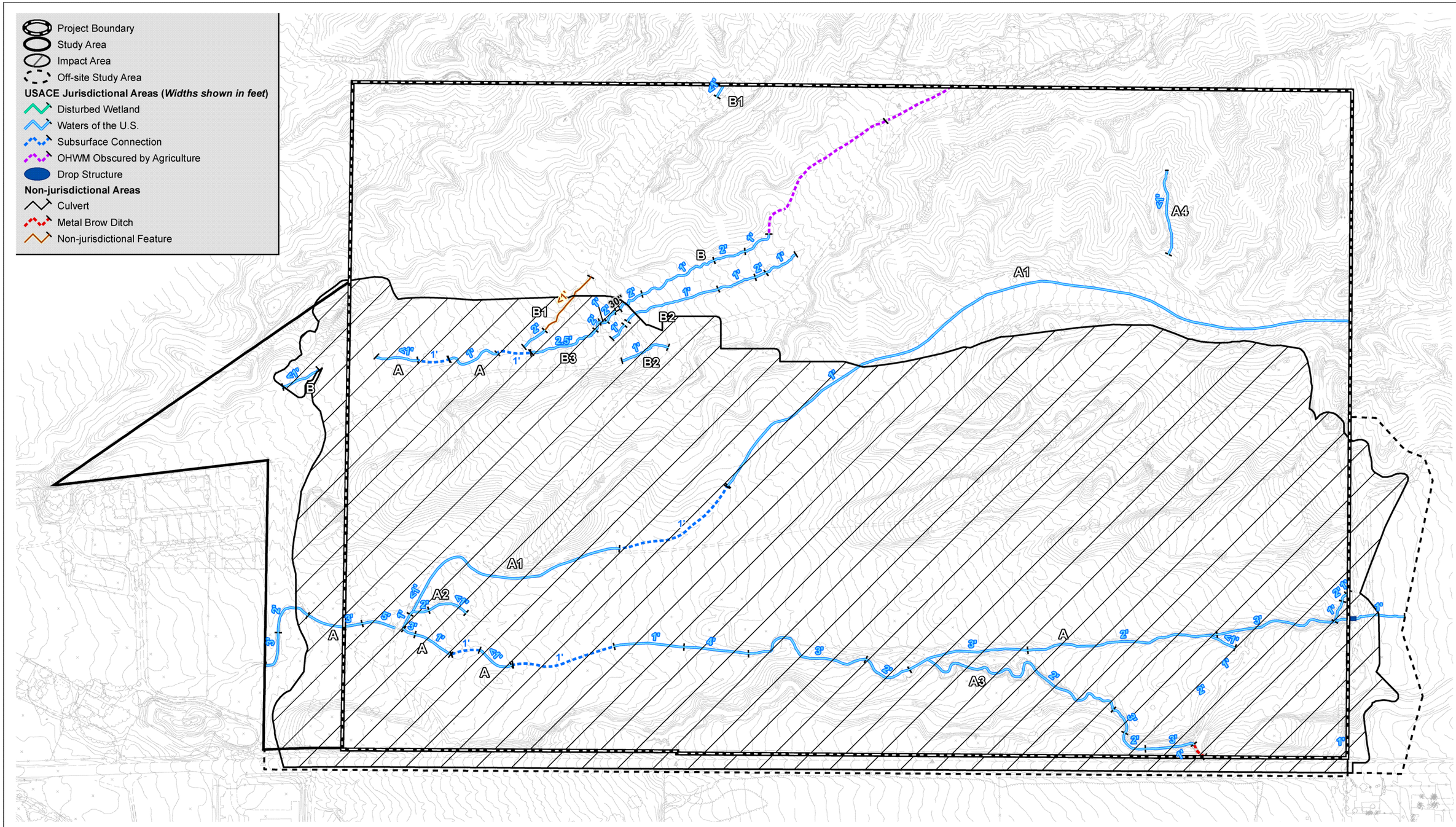



Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-5
# Restoration Areas

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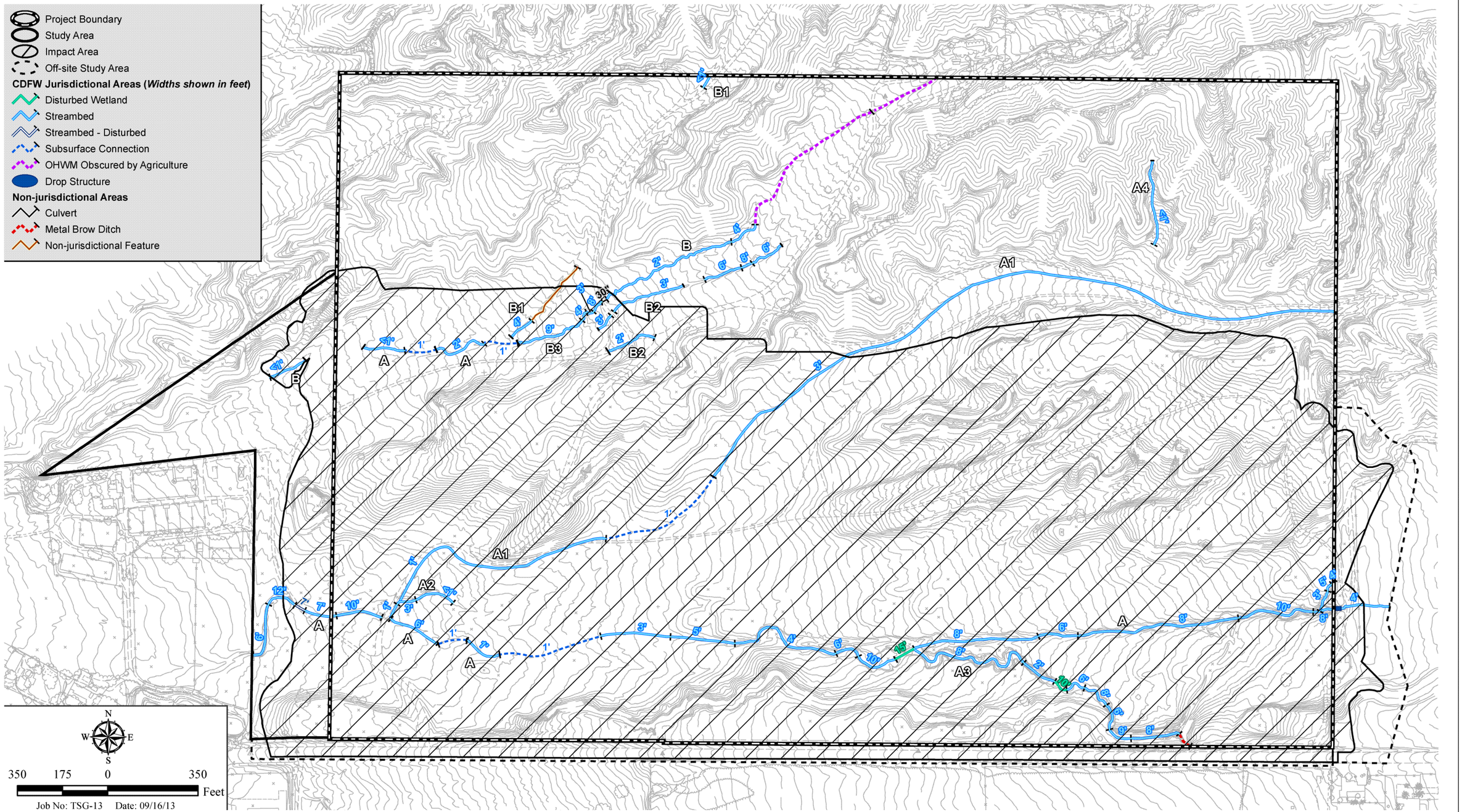



Source: Helix Environmental Planning, November 2013.

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# Exhibit 3.4-6
# USACE Jurisdictional Areas/Impacts

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Source: Helix Environmental Planning, September 2013.

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# Exhibit 3.4-7
# CDFW Jurisdictional Areas/Impacts

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# 3.5 - Cultural Resources

This section provides a discussion of the cultural resource and paleontological resource issues for the project, as well as an analysis of potential impacts that may occur as the result of project implementation. Descriptions and analyses in this section are based on information contained in the following documents:

- County of Riverside, County of Riverside General Plans (2008, 2014).
- The Phase I Cultural Resource Assessment I-10 Gateway Center Tentative Tract Map #36093 Community of Cherry Valley, Riverside County, California, prepared in April 2013 by FirstCarbon Solutions (FCS), included in this Draft EIR as Appendix D.1.
- Phase I Cultural Resources Assessment I-10 Gateway Center and the Paleontological Resources Assessment for the 1-10 Gateway Center project prepared in April 2013 by FCS, included in this Draft EIR as Appendix D.2.

## 3.5.1 - Existing Conditions

The project area is located within a geological formation known as the Beaumont Plain Fault Zone, approximately 2 miles west of the low saddle that separates the San Gorgonio Creek watershed and flows into the Coachella Valley from the San Timoteo Creek watershed. The project is located in incised alluvium with surface flows heading toward the southwest and into the headwaters of San Timoteo Canyon. The project site lies between the northwestern portion of the San Jacinto Mountains and the San Timoteo Badlands, and lies along the southern foothills of the San Bernardino Mountains.

### Information Center Search

The primary purpose of a cultural resource record search is to determine what cultural resources more than 45 years old have been recorded in the project area, and whether such resources will be or could be impacted by development. A records search at the Eastern Information Center (EIC), which is located at the University of California at Riverside, was conducted on September 10, 2012 by Michael Dice of FCS to determine the existence of previously documented cultural resources within the project area. The records search included current inventories of the following:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- California State Historic Resources Inventory (HRI)
- Archival maps for the City and County

A search radius of 1 mile around the project perimeter was used during this effort. Such a radius will ensure the record search includes recorded cultural resources that have the potential to be impacted by the project. To identify any historic properties, FCS examined the current inventories of the NRHP,

CR, CHL, and CPHI. In addition, FCS reviewed the HRI listings for Riverside County and archival maps to determine the existence of previously documented local historical resources.

According to the EIC files, numerous surveys have taken place near the project area; however, all but one are located just outside the project area. In addition, few cultural resources have been recorded near the project area. Most of these are historic-era artifacts and/or historic features. Table 3.5-1 lists the type of previously recorded cultural resources.

**Table 3.5-1: Previously Recorded Cultural Resources**

| Primary # | Location | Type | >1 mile | >½ mile | >¼ mile | On-site? |
|---|---|---|---|---|---|---|
| P33-4115H | Section 34 | Historic foundations and well | ● | | | No |
| P33-6239 | Section 31 | Saahatpa marker (CHL marker) | ● | | | No |
| P33-13717 | Section 36 | 1950 house off Roberts Road | | ● | | No |
| P33-14868 | Section 34 | 1946 house and outbuildings | ● | | | No |
| P33-14869 | Section 34 | Historic refuse | | ● | | No |
| P33-14870 | Section 30 | 1949-50 house and outbuildings | | | ● | No |
| P33-15000 | Section 36 | 1920 house | ● | | | No |
| P33-15002 | Section 36 | Historic irrigation system and 1870 residence | ● | | | No |
| P33-17122 | Section 29 | 1938 Lantis property | ● | | | No |
| Source: FCS, 2013. | | | | | | |

## Native American Heritage Commission Record Search

A request was sent to the Native American Heritage Commission (NAHC) for a search of the Sacred Lands File for the project area. A response from the NAHC was received on September 10, 2012 indicating that no Native American cultural resources were known within the project area. Included with the response was a list of eight Native American representatives who were sent information request letters on September 12, 2012. As of the date of the Phase I Cultural Resources Assessment report, one response was received from Michael Contreras of the Morongo Band, who indicated that there were no sacred lands located within the project area. Associated documents are included in Appendix A of the Cultural Resource Assessment, included in this EIR as Appendix D.1.. In correspondence from the County of Riverside on May 7, 2013, the project planner confirmed that staff received comments from the Soboba Tribe regarding the project.

## Paleontological Resources Assessment Research Results

Kenneth J. Lord, PhD[1] requested a paleontological records check on September 10, 2012. The response was received on October 31, 2012, from Eric Scott, Curator of Paleontology at the San Bernardino County Museum (SBCM). Mr. Scott undertook a literature review and records search of

[1] Formerly Director of Natural Resources for Michael Brandman Associates (MBA), now FirstCarbon Solutions (FCS).

the paleontology of the study area (see Appendix B of the Paleontological Resources Assessment, included in this EIR as Appendix D.2). The paleontological review showed that the project area is situated entirely upon surface exposures of Pleistocene older alluvium with a thin veneer of Holocene or recent alluvium. These deposits have a high potential to contain significant paleontological resources, and they are assigned a high paleontological sensitivity. Excavations into older Pleistocene alluvial sediments throughout the Inland Empire have previously yielded significant fossils of extinct plants and animals from the "Ice Age," including mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, large and small horses, large and small camels, and bison as well as fossilized plant remains.

A search of the Regional Paleontologic Locality Inventory (RPLI) at the SBCM indicates that no paleontologic resource localities are recorded within the boundaries of the project site or within one mile in any direction.

Review of sensitivity maps and reports obtained from the search of the Riverside County Land Information System (RCLIS), indicate that the project area has a high paleontologic sensitivity designation of "A." This sensitivity designation is presumably based upon the Pleistocene age of the project area soils and their high paleontologic sensitivity when they exhibit a fine-grained lithology conducive to the preservation of fossil resources. The categorization of High Sensitivity "A" suggests that significant fossil remains could be encountered at or near the surface as well, if conditions are conducive for fossil preservation.

## 3.5.2 - Regulatory Setting

### State Regulations

#### *California Register of Historical Resources*

As defined by Section 15064.5(a)(3)(A-D) of the CEQA Guidelines, generally a resource shall be considered historically significant if the resource meets the criteria for listing on the CR. The CR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model, since the NRHP provides the highest standard for evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. In addition, a resource that does not meet the NRHP standards may still be considered historically significant at a local or state level.

#### *Senate Bill 18 (SB 18)*

California Senate Bill (SB) 18 states that prior to a local (city or county) government's adoption of any general plan or specific plan, or amendment to general and specific plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. A Cultural Place is defined as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or;
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic

> or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).

According to the Government Code (GC) Section 65352.4, "consultation" is defined as:

> The meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

While consultation is required to take place on a government-to-government level, the SB 18 process begins with a letter from the local government to the NAHC requesting a list of tribal organizations appropriate to the plan or plan amendment area or proposed open space designation. Once contacted by the local government, the tribes have up to 90 days to respond and request consultation regarding the preservation and treatment of known cultural place(s), if any have been identified by the tribe.

Pursuant to SB 18, Riverside County staff met with the Soboba Band of Luiseno Indians on April 3, 2014 to discuss the project. The County of Riverside did not report any additional requests for consultation under SB 18.

### *California Assembly Bill 52*

Assembly Bill 52 (AB 52), which took effect in July of 2015, requires that any public or private "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Tribal cultural resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources."

Under prior law, tribal cultural resources were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA, and extends the consultation and confidentiality requirements to all parties involved, rather than just the Lead Agency and/or projects subject to SB 18 as discussed above.

The parties must consult in good faith, and consultation is deemed concluded when either (1) the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Sample measures include:

- Preservation in place
- Protecting the cultural character and integrity of the resource

- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria

This law applies to any project that has a notice of preparation (NOP), a notice of negative declaration, or mitigated negative declaration filed on or after July 1, 2015. The most recent project NOP was issued on January 6, 2014 and concluded on February 12, 2014. Therefore, the proposed project is not subject to AB 52, although the County has consulted with applicable tribes pursuant to SB18, and will continue to do so throughout the CEQA process and during ground-disturbing activities as warranted.

### *California Environmental Quality Act*

The CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. The CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine if they meet the criteria for listing in the California Register. If an archaeological site is an historical resource, in that it is listed or eligible for listing in the California Register, potential adverse impacts to it must be considered. If an archaeological site is considered not to be an historical resource but meets the definition of a "unique archeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

### *Section 15064.5 of the CEQA Guidelines*

This section of the CEQA Guidelines pertains to determining the significance of impacts to archaeological and historical resources. This section defines what a historical resource is and discusses how CEQA applies to effects on archaeological sites.

### *Appendix G of the CEQA Guidelines*

This appendix to the CEQA Guidelines pertains to potential project impacts to cultural resources, including historical resources, archaeological resources, paleontological resources, and human remains.

## Local Regulations

The applicable policies listed below are from the County of Riverside General Plan, and are intended to ensure the preservation of cultural, historical, archaeological, paleontological, geological, and educational resources in the County.

Cultural resources are evidence of past human activity that become important for scientific, historic, and/or religious reasons to communities, descendant groups, and individuals. They may include objects, buildings, structures, sites (particularly archaeological sites), areas, places, records, or manuscripts associated with history. Some examples of cultural resources are pioneer homes, buildings, or old wagon roads; structures with unique architecture or designed by a notable architect; prehistoric Native American village sites; pioneering ethnic settlements; historic or prehistoric artifacts or objects; rock inscriptions; human burial sites, battlefields, railroad water towers, prehistoric trails, early mines, or important historic industrial sites.

Cultural resources may also include places that have historic or traditional associations or that are important for their natural resources like places where Native Americans have gathered plants for the purpose of making baskets or medicines, places where religious or ceremonial activities have occurred, or places where a significant historic event has occurred. Some of these places may not have physical evidence of their use, but rather may only be recognized through oral history or archival documentation. Other such places may include numerous artifacts and/or ruins above or below ground.

Cultural resources are nonrenewable resources and often yield unique information about past societies and environments, and provide answers for modern day social, scientific, and heritage concerns. The consideration and preservation of important examples of history within Riverside County benefits the public by maintaining historic identity and a sense of place and tradition.

The cultural history of Riverside County is divided chronologically into two primary time periods: the prehistoric and historic, which includes ethnohistoric information. Native American cultures may represent approximately 10,000 years of County history, which is evidenced in the numerous archaeological resources across the County. Tribal oral history and heritage preservation efforts supplement the scientific investigation of archaeological resources by providing interpretive and geographical information. Native American cultures continue to flourish in the County and take an increasing interest and role in the documentation and preservation of their history.

The County also has a rich non-Native American history. Early explorers and settlers (Chinese, European, Mexican, Japanese, and many others) established communities, infrastructure (railroads, canals, etc.), and industries (ranching, mining, agriculture, forestry, recreation, etc.) that shaped the development and identity of the County. The vestiges of their many historic "marks on our land" can still be found today. An initial inventory of Historical Resources in the County was completed and mapped in the 1980s, as shown in Figure OS-6, but many more historic resources are known to exist that have not yet been documented. As objects, buildings, and structures continue to age, they may be considered historical resources under local, state, or national laws.

Technical studies prepared by professionally qualified individuals are often required to identify and evaluate cultural resources as part of the environmental review process associated with proposed development and public project review. These studies have contributed a wealth of knowledge about the prehistory and history of Riverside County and assist the County in identifying cultural resources worthy of preservation.

- **OS 19.2:** The County of Riverside shall establish a cultural resources program in consultation with Tribes and the professional cultural resources consulting community. Such a program shall, at a minimum, address each of the following: application processing requirements; information database(s); confidentiality of site locations; content and review of technical studies; professional consultant qualifications and requirements; site monitoring; examples of preservation and mitigation techniques and methods; and the descendant community consultation requirements of local, state, and federal law.

*A Phase I Cultural Resources Assessment and a Paleontological Resources Assessment have been prepared to address potential impacts of the proposed project. Consultation with local Tribal authorities occurred as part of the preparation of these assessments.*

- **OS 19.3:** Review proposed development for the possibility of cultural resources and for compliance with the cultural resources program.
- **OS 19.5:** Exercise sensitivity and respect for human remains from both prehistoric and historic time periods and comply with all applicable laws concerning such remains.

Paleontological resources are the fossilized biotic remains of ancient environments. They are valued for the information they yield about the history of the earth and its past geologic formations known to potentially contain paleontological resources. Lands with high, low, or undetermined potential for finding paleontological resources are mapped in Figure OS-7, the Paleontological Sensitivity Resources Map of the General Plan. This map is used in the environmental assessment of development proposals and the determination of required impact mitigation. The following policies are intended to ensure that paleontological resources are appropriately considered:

- **OS 19.6:** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity, a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist. The PRIMP shall specify steps to be taken to mitigate impacts to paleontological resources.

  *A Biological Technical Report, a Phase I Cultural Resources Assessment and a Paleontological Resources Assessment have been prepared to address potential impacts of the proposed project.*

## 3.5.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to cultural resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Alter or destroy an historic site?

b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?

c) Alter or destroy an archaeological site?

d) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?

e) Disturb any human remains, including those interred outside of formal cemeteries?

f) Restrict existing religious or sacred uses within the potential impact area?

g) Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?

## 3.5.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Historic Resource

**Impact CUL-1: The project would not alter or destroy a historic site.**

#### *Impact Analysis*

In accordance with CEQA and County of Riverside Archaeological Guidelines, FCS has assessed the effects of potential future development within the project area. A cultural resource record search was conducted on September 10, 2012 by FCS staff at the Eastern Information Center (EIC), which is located at the University of California, Riverside. The search included the project area and a 1-mile radius. To identify any historic properties, the current inventories of the NRHP, CRHR, CHL, and CPHI were examined. Historic-era structural resources were not expected to be present since no structures or structural remains were observed on the historical aerials or topographic maps. In addition, no structures or structural remains were observed during the course of the field survey. The lack of structures or structural remains suggests that the potential for impacting historic-era resources should be considered "none." The results of the cultural resource record search indicate that the potential for impacting buried historic-era resources is negligible. Therefore, the project would have no impact regarding historic sites, and no mitigation is required.

#### *Level of Significance Before Mitigation*

No impact.

#### *Mitigation Measures*

No mitigation measures are required.

#### *Level of Significance After Mitigation*

No impact.

### Historic Resource Significance

**Impact CUL-2: The project would not cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5.**

#### *Impact Analysis*

The probability for detecting historic-era resources appears to be low, because no structures or structural remains were observed on aerial photographs and maps. In addition, no historic structures or resources were observed during the course of the field survey. The lack of structures or footprints of structures suggest that the potential for impact to historic-era resources should be considered "none." A cultural resource record search for the project area and a 1-mile radius was conducted on September 10, 2012 by FCS staff at the Eastern Information Center (EIC), located at the University of California, Riverside. The results of the record search indicate that the potential for impacting buried historic-era resources within the project area is none. Therefore, the project would

not cause a substantial adverse change in the significance of a historic resource, and no mitigation is required.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Alter Archaeological Site

**Impact CUL-3: The project could alter or destroy an archaeological site.**

### *Impact Analysis*

Research on the project area shows that the flatter portions of the project area were plowed in the 1920s or 1930s for dryland farming. Examination of topsoil during the field survey of the project area suggested that plowing had not taken place for at least 20 years in any part of the project site. The primary drainage has been heavily eroded to points about 20 feet deep in the southeast quadrant and vegetation that appears on the ridges in the period from 1940 to 1960 has declined. Exposures of Pleistocene alluvial fan soils crop out at the western edge of the property in the low ridges between the Holocene alluvium. This material has the potential for fossils. Prehistoric deposits were expected on the unplowed finger ridges and unexpected on the flats due to historical plowing in the 1920s or 1930s. However, no cultural resources were observed during the survey on the finger ridges or on the flat areas. The Cultural Resource Assessment (Appendix D.1), Section 7, County Level of Significance Checklist F-6, indicates the project would have no impact regarding alteration or destruction of an archaeological site because no prehistoric-era resources were found in the project area during the field survey and the potential for impacts to such resources is considered "low." However, to ensure that the project has a less than significant impact on archaeological sites, Mitigation Measures CUL-3a through CUL-3d shall be implemented in the event that any resources are found on-site.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM CUL-3a** In the event that buried cultural resources are discovered during construction, operations shall stop within a 100-foot radius of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The archaeologist shall make recommendations to the Lead Agency on the measures to be implemented to protect the resource(s), including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of

but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites.

**MM CUL-3b** Any previously undiscovered resources found during construction within the project area shall be evaluated for significance in terms of CEQA criteria and recorded on appropriate Department of Parks and Recreation (DPR) forms.

**MM CUL-3c** If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by a qualified archaeologist and recommended to the Lead Agency in accordance with Section 21083.2 of the Public Resources Code. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery.

**MM CUL-3d** No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered because of mitigation shall be curated at a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

### *Level of Significance After Mitigation*

Less than significant impact.

## Archeological Resource Significance

**Impact CUL-4: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5.**

### *Impact Analysis*

As stated in Impact CUL-3 above regarding archaeological resources, no archaeological resources were observed during the survey. The Cultural Resource Survey indicates that the project would have no impact regarding alteration or destruction of an archaeological site because no prehistoric-era resources were detected within the project area and the potential for impacts to such resources is considered "low." However, to ensure that the project has a less than significant impact, mitigation is required in the event that any resources are found on-site.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measures CUL-3a through CUL-3d above.

### *Level of Significance After Mitigation*

Less than significant impact**.**

## Archeological Resource Significance

**Impact CUL-5: The project would not disturb any human remains, including those interred outside of formal cemeteries.**

### *Impact Analysis*

Based on a Sacred Lands Search, no human remains are known to exist within the project area. The project site is not currently utilized for cemetery uses and, based on a records search, is not known to contain human remains. As indicated in the Cultural Resource Report, FCS archaeologists Michael Dice, M.A., Arabesque Said, and Andrea Stella conducted a pedestrian survey of the project area on September 13 and 14, 2012. In addition, a site visit was conducted on September 27, 2012 by Mr. Dice. No archaeological resources, including human remains or burial plots, were located as part of this detailed survey. However, there is always the possibility that subsurface construction activities associated with the project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. Accordingly, this is a potentially significant impact. However, if human remains are discovered, implementation of Mitigation Measure CUL-5 would reduce this potential impact to a less than significant level.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM CUL-5** In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.
2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
- The descendant identified fails to make a recommendation.
- The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC by the NAHC fails to provide measures acceptable to the landowner.

### *Level of Significance After Mitigation*

Less than significant impact.

## Sacred Uses

| | |
|---|---|
| **Impact CUL-6:** | **Archaeological Resources: The project would not restrict existing religious or sacred uses within the potential impact area.** |

### *Impact Analysis*

The results of the cultural resource record search indicate that no previously recorded cultural resources are located within the project area. Additionally, no cultural resources were found during the course of the field survey. The project site is not used for existing religious or sacred uses. As indicated in the Cultural Resource Report, FCS archaeologists Michael Dice, M.A., Arabesque Said, and Andrea Stella conducted a pedestrian survey of the project area on September 13 and 14, 2012. In addition, a site visit was conducted on September 27, 2012 by Mr. Dice. No cultural resources, including existing religious or sacred sites, were located as part of this detailed survey. Therefore, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Paleontological Resources

| | |
|---|---|
| **Impact CUL-7:** | **Paleontological Resources: The project could directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature.** |

### *Impact Analysis*

The results of the paleontological records check obtained from the SBCM, the sensitivity maps, and text from RCLIS indicate that the project area has a determination of high paleontologic sensitivity at or slightly below the modern ground surface. Therefore, FCS recommends a monitoring program to mitigate impacts to potentially significant paleontological resources beginning at the modern ground surface in areas that have not been subjected to plowing in the past, such as the finger ridges within

the project area. If detailed geologic borings are available, the specific depths of the highly sensitive areas could be refined. These research findings were confirmed in the field in September 2012 when Dr. Lord conducted a brief field visit (September 13, 2012) in conjunction with a detailed archaeological survey conducted by a three-person crew on September 13, 14, and 27, 2012. The crew was briefed on potential areas to examine with a focus on the north-south ridges along the northern margins of the site.

In the Paleontological Resources Assessment (Appendix D) prepared for the project, FCS concluded that the project area has a high probability of containing paleontological resources potentially at the surface along the ridge margins of the project site. Therefore, a monitoring program to mitigate impacts to paleontologic resources is warranted, as set forth in Mitigation Measures CUL-7a through CUL-7d.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM CUL-7a** During grading and excavation activities, full-time monitoring of excavation activities shall occur, except in the flatter areas where extensive plowing has churned deposits up to depths of 2 feet. Paleontologic monitors shall be equipped to salvage fossils, as they are unearthed, to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.

If the principal paleontologist determines that the sediments present within the subsurface have low potential to contain paleontologic resources and low paleontologic sensitivity, then the full-time monitoring program shall cease and a program of periodic monitoring shall occur.

**MM CUL-7b** If specimens are found, the applicant shall ensure the preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils shall occur and are essential to fully mitigate adverse impacts to the resources.

**MM CUL-7c** If specimens are found, the applicant shall ensure the identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance. The paleontologist shall have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented.

**MM CUL-7d** The paleontologist shall prepare a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontologic resources.

### *Level of Significance After Mitigation*

Less than significant impact.

# 3.6 - Geology and Soils

This section of the Draft EIR includes information related to the geologic properties of the land and soils on the project site and the ability of the land to support development. Descriptions and analyses in this section are based on information contained in the following documents:

- The Pass Area Plan (County of Riverside 2003a)
- September 2008 Fault Investigation by Neblett & Associates, Inc. (Neblett & Associates 2008)
- January 2013 Grading Plan Review by Ginter & Associates, Inc. (Ginter & Associates 2013a)
- November 2014 Grading Plan Review by Ginter & Associates, Inc. (Ginter & Associates 2014)
- Preliminary Water Quality Management Plan (WQMP) by Albert A. Webb Associates (Webb 2014a)
- 2013 Response to Review Comments by Riverside County, TLMA-Planning Regarding the I-10 Gateway Job Center (Ginter & Associates 2013b)
- October 2014 Preliminary Hydrology Study by Albert A. Webb Associates
- Hydrology Analysis for Tentative Parcel Map 36564 by Hunsaker & Associates (Hunsaker 2014a).

Geotechnical documents can be found in Appendix E, and Hydrology documents can be found in Appendix G.

The Ginter &Associates' Grading Plan Review(s)—based on the results of the investigation, engineering analyses, and evaluations, combined with professional experience and judgment from a geologic and geotechnical engineering standpoint—indicate the project site is considered suitable for the proposed project.

## 3.6.1 - Existing Conditions

This section describes the regional and local geology and soils setting.

### Local

The 2014 San Gorgonio Crossing Biological Technical Report (Appendix C.1), prepared by HELIX Environmental Planning, Inc. (HELIX), identifies overall site drainage to be to the west and southwest. Soils on-site are primarily Hanford coarse sandy loam and terrace escarpments with Gorgonio gravelly loamy fine sand, Greenfield sandy loam, Hanford cobbly coarse sandy loam, and Ramona sandy loam.

The Pass Area Plan identifies the Pass as one of the most densely faulted areas in Riverside County. The Pass is considered the narrow gap between Southern California's San Bernardino and San Jacinto Mountains. A majority of the faults are located in the steep slopes of the surrounding mountain ranges. The San Andreas and the San Jacinto fault zones are two of the most active fault systems in

southern California. Other smaller faults associated with the San Andreas fault system also have the potential for generating earthquakes that would result in strong ground shaking, and perhaps surface rupture, in the Pass Area.

The project site is located at the juncture of the Transverse Range and the Peninsular Range in the Western end of the San Gorgonio Pass area. In this area, the Mojave Desert segment and the Coachella Valley segment of the San Andreas Fault Zone are a part of a complex combination of strike-slip faults (in which the rupture is nearly vertical and during an earthquake one side slides past the other) and thrust-and-tear faults (in which the ground on one side of the fault moves up and over adjacent ground) that include the Banning Fault and the San Gorgonio Valley Fault Zones. The Cherry Valley Fault Zone of the project area is considered a western extension of the San Gorgonio Pass Fault Zone (Ginter & Associates 2013a).

The project site is located in what is called the "Badlands" area, which has relatively low hills located southeast of Calimesa. The floor and edges of the San Gorgonio Pass trough consist of dissected old alluvial terrace deposits and younger alluvial sands and gravels. These units are present in the southern portion of the project site (Ginter & Associates 2013a).

The County's Geographic Information System (GIS) shows that the project site is within a County Fault Zone, which runs through the northern portion of the project site. The project site is shown to be in a zone of extremely high (greater than 40 percent) general ground shaking risk.

The northern portion of the project site contains foothills and steep slopes. As shown in the 2008 County of Riverside General Plan Figure S-4, Earthquake Induced Slope Instability Map, the project site appears to be within an area with low to locally moderate susceptibility to seismically induced landslides and rockfalls.

The many regional faults have the potential to generate strong ground motions at the project site. The intensity of ground shaking at a given location depends primarily on the earthquake magnitude, the distance from the epicenter to the site, the type of fault that causes the earthquake, and the response characteristics of the soils or bedrock units underlying the site.

Different types of faults are described below to provide background information for the reader:

- Strike-slip faults are faults in which the rupture is nearly vertical and during an earthquake one side slides past the other.
- Thrust fault are faults in which the ground on one side of the fault moves up and over adjacent ground.
- Tear-faults are relatively small-scale, local strike-slip faults.
- Reverse faults are the opposite of a normal fault. Reverse faults indicate compressive shortening of the crust and for a thrust fault, the ground on one side of the fault moves up and over adjacent ground.

The major faults in the region are discussed below.

### *San Andreas Fault*

The primary strand of the San Andreas Fault in southern California is divided into two segments—the Mojave Desert segment, which separates the San Bernardino Mountains from the San Gabriel Mountains, and the Coachella Valley segment, that separates the Peninsular Ranges from the San Bernardino Mountains. The main strand of the San Andreas Fault deflects west in the San Gorgonio Pass area where the fault zone becomes more complex. The Banning and San Gorgonio Pass Faults, including the Cherry Valley Fault Zone, are a part of this complex fault system in the San Gorgonio Pass Area (Ginter & Associates 2013a).

### *San Gorgonio Pass Fault Zone*

The San Gorgonio Pass Fault Zone is characterized by discontinuous reverse-and-thrust faults (a reverse fault is the opposite of a normal fault—reverse faults indicate compressive shortening of the crust and for a thrust fault, the ground on one side of the fault moves up and over adjacent ground) and associated tear-faults (relatively small-scale, local strike-slip faults), which are generally located at the base of the San Bernardino Mountains. From west to east, this fault zone includes the Cherry Valley Fault Zone (CVFZ), a fault along the toe of the Banning Bench, and a northeast-trending segment crossing the lower part of the Millard Canyon Fan. The CVFZ, which is located in the vicinity of the project site, has been mapped as two sub-parallel faults which merge to the east to form one trace near the eastern property boundary of the project site and then veers northeast (Ginter & Associates 2013a).

### *Banning Fault*

The Banning Fault is considered an ancestral trace of the San Andreas Fault and is no longer active. This fault is located approximately 0.25 mile north of the project site, where it consists of a prominent high-angle trace, which separates Pleistocene San Timoteo Formation on the south from granitic rock to the north (Ginter & Associates 2013a).

### *Mill Creek Fault*

The Mill Creek Fault is located approximately 10 miles north of the project site. It is believed that this strand is no longer an active part of the San Andreas Fault Zone, although it may have been locally reactivated by dip-slip movement (Ginter & Associates 2013a).

### *Beaumont Plain Fault Zone*

The Beaumont Plain Fault Zone has four north-northwest trending normal faults, which terminate near the southeast corner of the project site. These are considered an extensional zone of faults irregularly expressed as scarps in mid-Pleistocene and older surfaces and are considered inactive (Ginter & Associates 2013a).

### *San Jacinto Fault*

The San Jacinto Fault is located approximately 6 miles southwest of the project site and consists of a system of northwest-trending, right-lateral, strike-slip faults. This fault is the closest known active fault to the project site and is considered the most influential regarding the potential for ground shaking and rupture. More large historic earthquakes have occurred on the San Jacinto Fault than on any other fault in southern California (Ginter & Associates 2013a).

### *Site Geology*

The main geologic units within the project site include the Pilo-Pleistocene San Timoteo formation in the northeast and the old alluvium of a dissected alluvial fan in the southwest, with young alluvium along the valley floors. Structurally, the site is dominated by two splays of the Cherry Valley Fault—the North Branch and the South Branch which transect the site in a northwest to southeast trend. Undocumented artificial fill is present on-site as backfill for the fault trenches of former geologic investigations conducted on-site (Ginter & Associates 2013a).

Two main faults, the North and South Branches of the CVFZ, have been mapped on the project site. These two fault splays (parallel strands) associated with the Cherry Valley Fault Zone trend from northwest to southeast across the site. Lineaments and geomorphic evidence suggest a zone of faulting and deformation associated with the CVFZ that may be as wide as 500 to 700 feet. The North Branch is characterized by steeply dipping (near vertical) faulting that is located approximately 200 to 300 feet north-northeast of—and roughly parallel to—the South Branch. The South Branch is characterized by a northwest to east-west-trending, north-dipping reverse fault. Significant changes in stratigraphy, topography, geomorphology, and streamflow direction, are present along the entire mapped trace of this fault.

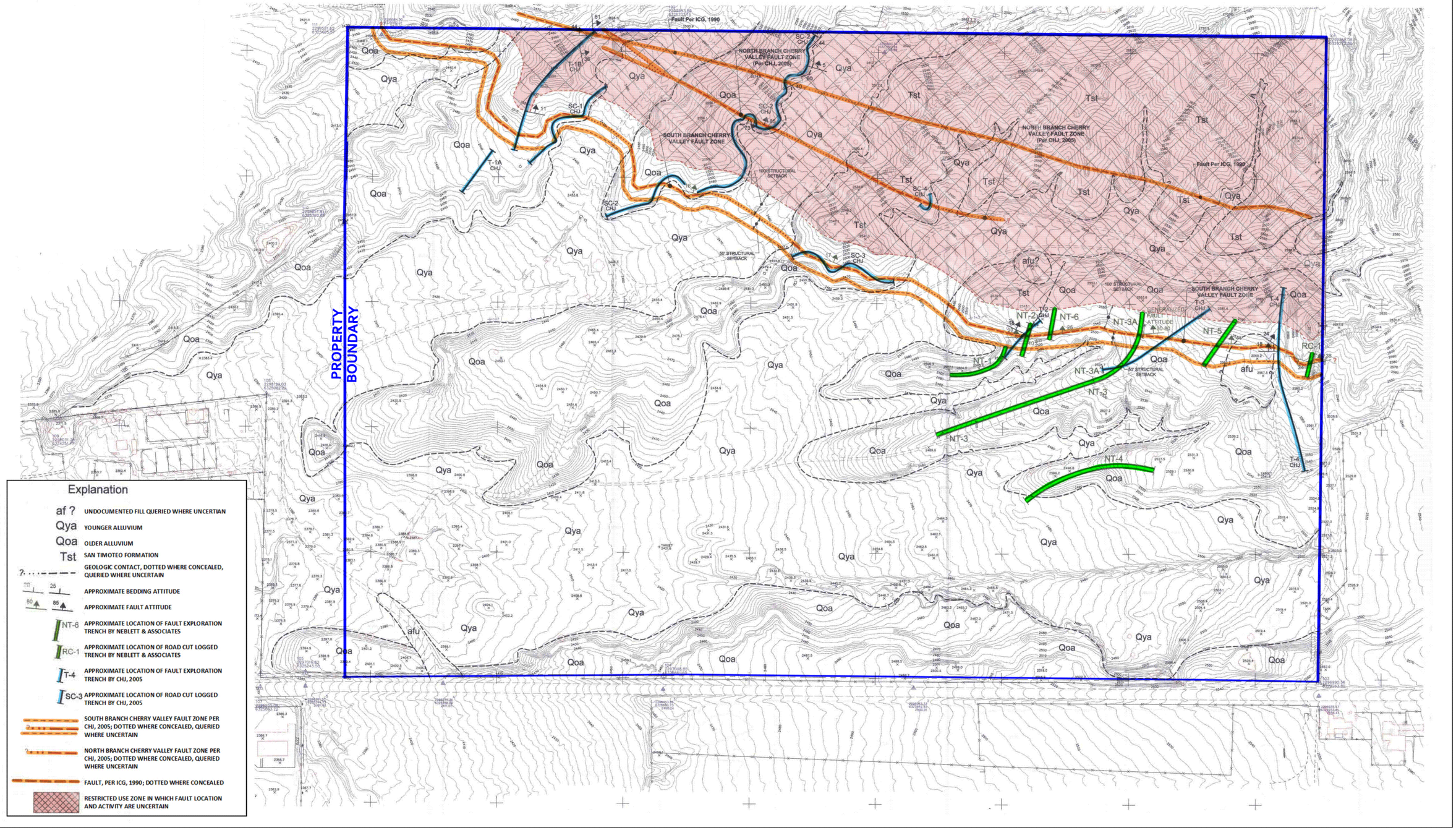
During the fault investigation by Neblett & Associates (September 2008), there was no attempt to age-date the South Branch or the North Branch of the Cherry Valley Fault. The fault investigation focused on refining the location and attitude of the South Branch of the Cherry Valley Fault to position future structures outside the restricted use zone at final grades. There is relatively strong geomorphic and topographic evidence that indicates that the Cherry Valley Fault Zone is potentially active. Thus, Neblett & Associates delineated a setback for the South Branch and "Recommended Restricted Use Zone" from the South Branch extending to the north and northeast property line as shown in Exhibit 3.6-1. No evidence of faulting was observed southerly of the South Branch of the CVFZ in any of the excavations (Ginter & Associates 2013a).

Based on the results of Neblett & Associates' fault investigation (September 22, 2008) using aerial photo lineament analyses, fault trenching, geologic field mapping, observation of exposed roadcuts, and review of previous fault investigations by others, Neblett & Associates located the South Branch of the CVFZ on-site. These analyses have resulted in a structural setback zone located 50 feet south of and 100 feet north of the South Branch. Ginter & Associates also established a Restricted Use Zone (RUZ), which is located north and northeast of the South Branch to the north and northeast property boundary.

## On-site Soils

### *Artificial and Undocumented Fill*

Artificial fill is located within and in the vicinity of the San Gorgonio Pass Water Agency Pipeline easement that traverses the northern portion of the project site. Some of the fault trenches identified by Ginter & Associates indicated that past agricultural activities and trenching have spilled fill along the edges of the flat-topped ridges in the southern half of the project site. Undocumented fill on the project site consists of heterogeneous mixture of pebbly sand, silty sand, sandy silt, and coarse sand with cobbles and an occasional boulder (Ginter & Associates 2013a).




Source: Neblett & Associates, July 2009.

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# Exhibit 3.6-1
# Restricted Use Zone

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### *Alluvium*

Younger alluvial units are located on-site in the active drainages, which generally trend southerly to southwesterly. These materials were only exposed in one of the fault study trenches (NT-4), at the west end of the fault study trench. In this study trench, younger alluvial materials consisted of silty sands and lesser gravelly sands. On-site older alluvial units consist of reddish-brown clayey sands and yellowish-brown silty sands (Ginter & Associates 2013a).

### Groundwater

None of the borings excavated on-site (to a depth of 71 feet) encountered groundwater. Two groundwater wells that were previously used for irrigation are located in the western portion of the site. Measurements of the groundwater in the on-site wells indicated the depth to groundwater to be approximately 198 to 223 feet below ground surface. Based on the measurements of the regional aquifer and the absence of noted perched water in the borings, high groundwater is not expected to be a constraint to the proposed project (Ginter & Associates 2013a).

## 3.6.2 - Regulatory Setting

### Federal Regulation

#### *National Earthquake Hazards Reduction Program*

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

## State Regulations

### *Alquist-Priolo Earthquake Fault Zoning Act*

In response to the severe fault rupture damage of structures by the 1971 San Fernando earthquake, the State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972. This act required the State Geologist to delineate Earthquake Fault Zones along known active faults that have a relatively high potential for ground rupture. An "active fault" is defined as a fault that has experienced movement in the last 11,000 years (i.e., Holocene Epoch). Faults that are zoned under the Alquist-Priolo Act must meet the strict definition of being "sufficiently active" and "well-defined" for inclusion as an Earthquake Fault Zones. The Earthquake Fault Zones are revised periodically. No structures for human occupancy may be built across an identified active fault trace. An area of 50 feet on either side of an active fault trace is assumed to be underlain by the fault, unless proven otherwise. Proposed construction in an Earthquake Fault Zone is permitted only following the completion of a fault location report prepared by a California Registered Geologist.

Under the Act, the California State Geologist identifies areas in the State that are at risk from surface fault rupture. The main purpose of the Act is to prevent construction of buildings used for human occupancy where traces of active faults are evident on the earth's surface. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault zone where the fault breaks along the surface. Such a rupture could potentially displace and/or deform the ground surface.

### *California Building Standards Code (Seismic Hazards Mapping Act of 1990)*

The California Building Standards Code establishes building requirements for construction and renovation. The most recent version of the California Building Standards Code was adopted in 2013 by the California Building Standards Commission and took effect January 1, 2014. The Code is based on the International Code Council's Building and Fire Codes. Included in the California Building Standards Code are the Electrical Code, Mechanical Code, Plumbing Code, Energy Code, and Fire Code.

In the context of earthquake hazards, the California Building Standards Code's design standards have a primary objective of assuring public safety and a secondary goal of minimizing property damage and maintaining function during and following a seismic event. Recognizing that the risk of severe seismic ground motion varies from place to place, the California Building Standards Code seismic code provisions vary depending on location—Seismic Zones 0, 1, 2, 3, and 4, with 0 being the least stringent and 4 being the most stringent.

## Local Regulations

### *County of Riverside General Plan*

*Code Conformance and Development Regulation*

The County of Riverside has zoned fault systems and requires special studies prior to development (County of Riverside 2008). These are referred to as County Fault Zones. They generally represent zones that have been identified from groundwater studies. Until solid field evidence is generated to prove or disprove their existence, they should continue to be considered a hazard.

The County Department of Building and Safety provides technical expertise in reviewing and enforcing the County Building and Fire Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety and welfare of the public. Every 3 years, the County's Building and Fire Codes are adapted from the Uniform Building and Fire Codes. They contain baseline minimum standards to guard against unsafe development. As discussed in the Technical Background Report, project variables may modify the implementation of a particular standard.

At a minimum, it is imperative to enforce the most recently adopted regulatory codes for new development and significant redevelopment, including the County's Land Use Ordinance and Land Division Ordinance, which support the Building and Fire Codes. The California Environmental Quality Act (CEQA) adds another level of safety review, requiring that environmental constraints be considered prior to approval of significant projects. Additional guidelines and standards are introduced through the Safety Element.

Special development regulations can reinforce and augment existing code standards by raising the level of hazard-conscious project design and mitigation engineering. Examples include additional geologic/geotechnical investigation and additional reinforcement of foundations in areas of potential ground failure. While foundation investigations are required by the County's Building Code, it is important to emphasize expected levels of investigation and protection. Furthermore, some requirements that may only apply to critical facilities, such as detailed seismic analyses, could be expanded to include other structures and lifelines. Where engineering methods cannot mitigate the hazards, avoidance of the hazard is appropriate, such as where ground rupture along active or potentially active fault traces are identified during project investigation. Special minimum setbacks away from active faults, which are already required for critical facilities, can also be defined for other structures and lifeline

Below are policies regarding seismic hazards and hazard reduction from the Safety Element of the County of Riverside, General Plan.

- **S 1.1:** Mitigate hazard impacts through adoption and strict enforcement of current building codes, which will be amended as necessary when local deficiencies are identified.

The project would comply with this policy, as it would be required to construct buildings in accordance with the current 2013 California Building Code.

- **S 1.2:** Enforce state laws aimed at identification, inventory, and retrofit of existing vulnerable structures.

This policy does not apply to the project, as there are no existing structures on the project site.

*Hazard Reduction*

Primary ground damage due to earthquake fault rupture typically results in a relatively small percentage of the total damage in an earthquake, but proximity to a rupturing fault can cause profound damage. It is difficult to reduce this hazard through structural design. The primary

mitigative technique is to set back from, and avoid, active faults. The challenge comes in identifying all active faults. Faults throughout southern California have formed over millions of years. Some of these faults are generally considered inactive under the present geologic conditions; that is, they are unlikely to generate further earthquakes. Other faults are known to be active. Such faults have either generated earthquakes in historical times (within the last 200 years), or show geologic and geomorphic indications of relatively recent movement. Faults that have moved in the relatively recent geological past are generally presumed to be the most likely candidates to generate damaging earthquakes in the lifetimes of residents, buildings, or communities.

The State Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting. Surface rupture is the most easily avoided seismic hazard. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Alquist-Priolo Earthquake Fault Zoning Act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Alquist-Priolo Earthquake Fault Zones have been designated by the California Division of Mines and Geology for the Elsinore, San Jacinto, and San Andreas fault zones in Riverside County.

Within the rapidly growing county, State Alquist-Priolo mapping has not kept pace with development. The County of Riverside has zoned fault systems and required similar special studies prior to development. These are referred to as County Fault Zones on Figure S-2 and in the Technical Background Report. They generally represent zones that have been identified from groundwater studies, and should be viewed as doubtful. However, until solid field evidence is generated to prove or disprove their existence, they should continue to be considered a hazard.

Within Alquist-Priolo and County Fault Zones, proposed tracts of four or more dwelling units must investigate the potential for and setback from ground rupture hazards. This is typically accomplished by excavation of a trench across the site, determining the location of faulting, and establishing building setbacks.

As there are many active faults in Riverside County, with new fault strands being continually discovered, all proposed structures designed for human occupancy should be required to investigate the potential for and setback from ground rupture. Also of concern are structures, not for human occupancy, that can cause harm if damaged by an earthquake, such as utility, communications, and transportation lifelines.

The County regulates most development projects within earthquake fault zones. Projects include all land divisions and most structures for human occupancy. Exempted projects include single-family, wood-frame and steel-frame dwellings that are one or two stories, are not part of a development of four units or more, and are not located within 50 feet of a fault.

Before a project can be permitted within an Alquist-Priolo Earthquake Fault Zone, County Fault Zone, or within 150 feet of any other potentially active or active fault mapped in published United States Geological Survey (USGS) or California Division of Mining and Geology reports, a geologic investigation must demonstrate that proposed buildings will not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active

fault is found, a structure for human occupancy must be set back 50 feet from the fault, unless adequate evidence, as determined and accepted by the County Engineering Geologist, is presented to support a different setback.

- **S 2.1:** Minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following policies:
  a. Require geologic studies or analyses for critical structures, and lifeline, high-occupancy, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the Earthquake Fault Studies Zones map.
  b. Require geologic trenching studies within all designated Earthquake Fault Studies Zones, unless adequate evidence, as determined and accepted by the County Engineering Geologist, is presented. The County may require geologic trenching of non-zoned faults for especially critical or vulnerable structures or lifelines.
  c. Require that lifelines be designed to resist, without failure, their crossing of a fault, should fault rupture occur.
  d. Support efforts by the California Department of Conservation, Division of Mining and Geology to develop geologic and engineering solutions in areas of disseminated ground deformation due to faulting, in those areas where a through-going fault cannot be reliably located.
  e. Encourage and support efforts by the geologic research community to define better the locations and risks of County faults. Such efforts could include data sharing and database development with regional entities, other local governments, private organizations, utility agencies or companies, and local universities.

The project would comply with this policy, as all project buildings would be set back more than 50 feet from all known fault traces. The site has been designed to leave the northern area (which contains active faults) undeveloped, with proposed buildings closer to Cherry Valley Boulevard.

*Hillside Development and Slope*

Natural slopes are one of Riverside County's primary aesthetic resources. Foothill and mountain areas, which are visible throughout the County, create a dramatic backdrop for local communities and help define the character of the County.

Hillside areas also provide an important location for habitat as well as for certain lifestyle choices. In addition, there are public safety issues, such as slope failures, landslides, and mudslides, that occur naturally or as a result of development, grading, and landscaping.

The severity of these slopes, the ability to provide infrastructure and services (such as transportation, water, sewer, etc.), and safety considerations can drastically alter the use and development potential of individual properties. Development on hillsides within the County, where land use designations permit, will require careful siting, grading, and design in order to minimize exposure to hazards and to maintain and enhance the scenic quality of the County.

Below is a policy regarding hillside development and slopes from the Land Use Element of the County of Riverside General Plan:

- **LU 11.1:** Apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation:
  a. Require that hillside development minimize alteration of the natural landforms and natural vegetation.
  b. Allow development clustering to retain slopes in natural open space whenever possible.
  c. Require that areas with slope be developed in a manner to minimize the hazards from erosion and slope failures.
  d. Restrict development on visually significant ridgelines, canyon edges and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive.
  e. Require hillside adaptive construction techniques, such as post and beam construction, and special foundations for development when the need is identified in a soils and geology report, which has been accepted by the County.
  f. Encourage the limitation of grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street rights-of-way, parking facilities, and other intended uses.

The proposed project complies with this policy because the site has been designed to leave the northern area, with its steeper hills and slopes, undeveloped and undisturbed, while the proposed on-site buildings are proposed closer to Cherry Valley Boulevard, to minimize development on hillsides/slopes.

*Seismic*

The Pass is one of the most densely faulted areas in Riverside County. Most of the faults are located in the steep slopes of the surrounding mountain ranges. The San Andreas and the San Jacinto fault zones are two of the most active fault systems in southern California. The San Bernardino Mountain segment of the San Andreas fault, while not within the boundaries of this area plan, does have enormous influence on the seismic activity of the region. The Banning fault has a central segment that extends from Calimesa to Whitewater Canyon. Other smaller faults associated with the San Andreas fault system also have the potential for generating earthquakes that would result in strong ground shaking, and perhaps surface rupture, in the Pass Area.

The San Gorgonio fault zone consists of a series of faults dissipating from the mountain westward into the Cherry Valley vicinity. The San Jacinto fault zone, west of the Pass, is part of the San Andreas fault system. The two systems separate near the San Gabriel mountains where the San Jacinto fault extends southeastward toward the San Jacinto Mountains and the San Timoteo Badlands. Additional faults in the area include the Beaumont Plain fault zone, Pinto Mountain fault, and the Crafton Hills fault zone.

A further complication associated with fault activity is liquefaction, which can occur with groundshaking, and in areas where certain soil conditions and shallow groundwater levels exist. The valley between the San Bernardino and the San Jacinto Mountain ranges is prone to moderate liquefaction around Calimesa and westward north of San Timoteo Creek toward San Bernardino

County. Structures built on soils that liquefy during a seismic event may sink, rupture, or even topple over as the soil loses its bearing strength during severe shaking.

Below are policies from The Pass Area Plan related to geology/seismicity.

- **PAP 19.1:** Protect life and property from seismic-related incidents through adherence to the Seismic Hazards section of the General Plan Safety Element.

*Slope*

San Gorgonio Pass is surrounded by severe slopes associated with the San Bernardino and San Jacinto mountain ranges. This spectacular terrain is an integral part of the character and atmosphere of the Pass, providing a visual backdrop and containing important habitat and recreational resources. Many of these areas require special development standards and care to prevent erosion and landslides, preserve significant views, and minimize grading and scarring. The following policies are intended to protect life and property while maintaining the special character of the Pass. Figure 14, Steep Slope, depicts areas of steep slopes in this Area Plan. Also refer to Figure 15, Slope Instability, for areas of possible landslide.

The proposed project complies with this policy, because the project will adhere to applicable seismic design requirements of the County of Riverside.

- **PAP 20.1** Identify the ridgelines that provide a significant visual resource for the Pass through adherence to the Hillside Development and Slope section of the General Plan Land Use Element.

The proposed project complies with this policy, because development of buildings on-site is concentrated to the south, near Cherry Valley Boulevard, which avoids development on ridgelines.

- **PAP 20.2** Protect life and property and maintain the character of the Pass through adherence to the Hillside Development and Slope section of the General Plan Land Use Element and the Slope and Instability section of the General Plan Safety Element.

The proposed project complies with this policy, because development of the proposed project includes careful siting, grading, and design in order to minimize exposure to hazards.

Chapter 15.60—Earthquake Fault Area Construction Regulations, in the County of Riverside Municipal Code states, “All applications for a permit, for a project that lies within an earthquake fault zone shown on the maps prepared by the State Geologist pursuant to the Alquist-Priolo Earthquake Fault Zoning Act, shall be accompanied by a geologic report or request for waiver thereof.”

## 3.6.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to geology and soils are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?

b) Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

c) Be subject to seismic-related ground failure, including liquefaction?

d) Be subject to strong seismic ground shaking?

e) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?

f) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?

g) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

h) Change topography or ground surface relief features?

i) Create cut or fill slopes greater than 2:1 or higher than 10 feet?

j) Result in grading that affects or negates subsurface sewage disposal systems?

k) Result in substantial soil erosion or the loss of topsoil?

l) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?

m) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

n) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?

o) Result in any increase in water erosion either on- or off-site?

p) Be impacted by or result in an increase in wind erosion and blowsand, either on- or off-site?

## 3.6.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

## Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones

**Impact GEO-1: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death.**

### *Impact Analysis*

The site is not located within an Alquist-Priolo Earthquake Fault Zone. However, the northern portion of the site is located within a County of Riverside designated Earthquake Fault Zone, based on the Riverside County GIS Fault Zone Map.[1]

The County of Riverside established a Fault Hazard Management Zone for the CVFZ within and near the project site. It depicts three strands of the CVFZ in the northeast portion of the site (Neblett & Associates 2008).

CHJ Inc. (CHJ) performed a site-specific subsurface investigation of faulting in its report dated August 3, 2005. The results of this investigation identified two fault splays associated with the CVFZ trending northwest to southeast across the site (Neblett & Associates 2008).

One of the objectives of the Fault Investigation for the project site is to refine the location of the South Branch of the CVFZ, with particular attention to the eastern portion of the project site where potential structural setback zones from faulting could impact proposed development. As shown in the latest (October 2014) Grading Plan Review for the proposed project, the North Branch of the Cherry Valley Fault runs through the project site; however, this fault is located over 200 feet north of the development footprint of the proposed project. The overall site plan for the project site shows Buildings 1 and 2 located south of the South Branch of the Cherry Valley Fault. However, this branch of the Cherry Valley Fault runs through the parking lot area north of Building 2.

As addressed in the County of Riverside General Plan EIR's Geology and Soils section, for design purposes, a worst-case scenario earthquake (the maximum credible earthquake [MCE]) for Riverside County is a magnitude 7.9 based on the rupture of the entire southern segment of the San Andreas fault from the Cajon Pass to the Salton Sea. While other scenarios will expose portions of Riverside County to intense ground shaking that is locally as severe as the MCE, the MCE exposes most of the County to very high-intensity ground shaking. Modeling for an MCE within Riverside County found that horizontal ground displacements as great as 25 feet along the San Andreas Fault could occur, with reduced displacement occurring on smaller faults such as the CVFZ. Further, although the project site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone, the standards related to the siting of buildings within the vicinity of an active fault can still apply to the proposed project, as the basic goal of Alquist-Priolo Act (i.e., minimizing structural and human impacts during an earthquake) will also apply to the project. Thus, as typically recommended for structures within or near an Alquist-Priolo Earthquake Fault Zone, on-site structures for human occupancy are not placed upon the fault and are set back from the trace by at least 50 feet or more.

[1] Verified via Riverside County GIS system on April 23, 2014.

The proposed project will be constructed at the approximate elevations listed in the grading plan prepared by Webb & Associates, used as a base for Ginter & Associates Grading Plan (2014), included in Appendix E.

The proposed buildings would be located up to 48.3 feet below the elevation of Cherry Valley Boulevard.

Every 3 years, the County's Building and Fire Codes are adapted from the Uniform Building Code and Fire Codes. They contain baseline minimum standards to guard against unsafe development. The proposed project will be designed in conformance with applicable building standards, such as the Uniform Building Code, and County of Riverside standards regarding structure design such that the proposed project will not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Earthquakes or Faults

| | |
|---|---|
| **Impact GEO-2:** | **The project could be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.** |

### *Impact Analysis*

As described in Impact GEO-1 above, the proposed industrial buildings on-site are located south of both the North and South Branches of the CVFZ. Refer to the discussion in Impact GEO-1 for details. Thus, the proposed industrial buildings would not be constructed across a fault line.

Neblett & Associates conducted a Fault Investigation (2008), which delineated the South Branch of the CVFZ and concurred with CHJ's location of the North Branch of the CVFZ. Only the South Branch would impact the proposed development. Neblett & Associates determined there is no direct evidence that either the South Branch or the North Branch (located northeast of the South Branch) is inactive.

Neblett & Associates designated the South Branch of the Cherry Valley Fault as potentially active, concluding it may be subject to relatively small movements at depth due to sympathetic movement from regional faults and earthquakes (Ginter & Associates 2013a). These analyses have resulted in the following project design features: (1) a structural setback zone located 50 feet south of and 100 feet north of the South Branch and (2) establishing a Restricted Use Zone (RUZ) to be located north and northeast of the South Branch to the north and northeast property boundary (Ginter &

Associates(Ginter & Associates 2013a). See Mitigation Measure (MM) GEO-2 regarding reassessment of the structural setback and RUZ.

The September 22, 2008 Fault Investigation by Neblett & Associates indicated that the location of the South Branch of the CVFZ could impact the need for structural setback zones from faulting, which could affect the location of proposed development. To ensure that proposed development is adequately set back from existing fault lines, Mitigation Measure GEO-2 below shall be implemented.

*Ground Rupture*

The fault traces located on the project site, which are identified in Figure 4 of the project's Fault Investigation, are located north of the proposed buildings on the project site and therefore are not anticipated to have a significant impact regarding ground rupture for the two industrial buildings proposed on-site. Based on the potentially active designation for the South Branch of the Cherry Valley Fault, and a lack of evidence for the surface faulting in this area from observations from a magnitude 5.9 earthquake on July 8, 1986 approximately 10 kilometers northwest of North Palm Springs (epicenter near Mission Creek Fault), the potential for surface rupture of the South Branch of the Cherry Valley Fault that affects the proposed development is considered remote (Ginter & Associates 2013a).

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM GEO-2** Upon the development of a grading plan, the County of Riverside shall verify that consistent with Section 8.0, Future Work, in the Neblett & Associates' 2008 Fault Investigation, the grading plans shall reflect the re-positioning of the structural setback zone based on the proposed grades for the proposed project.

It is recommended that a structural setback zone shall be located 50 feet south and 100 feet north of the trace of the South Branch of the Cherry Valley Fault Zone that transgresses the proposed development envelopes. Additionally, a Restricted Use Zone (RUZ) shall be located north and northeast of the South Branch to the north and northeast property boundary. The RUZ shall be utilized for non-habitable facilities, such as horse stables, soccer fields, etc. that will have fewer than 1,000 hours of human occupancy per year. Future fault investigation in the RUZ area shall be required and approved by the controlling agencies to remove any portions of the RUZ for construction of potential habitable structures.

The footprint of the proposed project shall then be analyzed for conformance with the re-positioned structural setback and the restricted use zone.

### *Level of Significance After Mitigation*

Implementation of Mitigation Measure GEO-2 would ensure that the structures are adequately set back from fault lines to reduce impacts to a less than significant level.

## Liquefaction or Ground Failure

**Impact GEO-3: The project would not be subject to seismic-related ground failure, including liquefaction.**

### *Impact Analysis*

*Liquefaction*

The County's GIS shows that the project site is designated as having low and moderate susceptibility to liquefaction.[2] A Grading Plan Review was prepared for the project site to look specifically at the potential impacts of the proposed project regarding geology (Ginter & Associates 2013a). The majority of liquefaction hazards are associated with un-compacted, saturated or nearly saturated, non-cohesive sandy and silty soils. According to the 2013 Grading Plan Review for the project site, based upon field mapping and the subsurface exploration, the older alluvium consists of unsaturated clayey to silty sands and the younger alluvium consists of unsaturated silty sands and lesser gravelly sands. Thus, the lack of saturated or nearly saturated soils on-site indicates that the potential for liquefaction is low. Groundwater was not encountered at any of the borings excavated on-site to a maximum depth of 71 feet. Because of the absence of perched groundwater and the 200 to 300 foot depth of the regional groundwater, the potential for liquefaction is considered low.

*Settlement*

Some settlements are expected to occur due to potential seismic activity (ground shaking), loading from compacted fill placement, and loading from proposed structures. With the removal of the younger alluvium (Qya) and replacement with compacted fill, seismically induced settlement caused by groundshaking is expected to be generally uniform (Ginter & Associates 2013a).

Regarding fill settlement, the area loading from compacted fill placement will cause settlement due to the compressibility of the fill materials and will include immediate (elastic) and long-term (primary and secondary) settlements. The magnitude of fill settlements would depend on the thickness and the compressibility characteristics of compacted fill and the underlying older alluvium (Qoa). The elastic component of fill settlement will be immediate and complete upon placement of fill. The primary and secondary fill settlements are time-dependent and will occur over a long period. Ginter & Associates proposes positioning settlement monuments at strategic locations in the deeper fill areas as depicted in Figure 1 of the 2014 Grading Plan Review document. These will be monitored on a regular basis until the primary settlement has stabilized (Ginter & Associates 2013a).

Although settlement may occur on-site because of ground shaking from earthquakes, a less than significant impact after mitigation is anticipated, because settlement monuments will be placed at key locations on-site in the deep fill areas, and monitoring will occur until primary settlement has stabilized. Thus, the proposed project is anticipated to have a less than significant impact.

### *Level of Significance Before Mitigation*

Potentially significant impact.

[2] Verified based on Riverside County GIS system 3/13/15.

### *Mitigation Measures*

**MM GEO-3** As depicted in Figure 1 of the November 24, 2015 Grading Plan Review by Ginter & Associates, Incorporated, settlement monuments shall be positioned at strategic locations in the deeper fill areas. These settlement monuments shall be monitored on a regular basis until the primary settlement has stabilized.

### *Level of Significance After Mitigation*

Less than significant impact.

## Groundshaking

**Impact GEO-4: The project could be subject to strong seismic ground shaking.**

### *Impact Analysis*

*Seismic Ground Shaking*

The area's regional faults have the potential to generate strong ground motions at the project site. The intensity of ground shaking at a given location depends primarily on the earthquake magnitude, the distance from the epicenter to the site, the type of fault that causes the earthquake, and the response characteristics of the soils or bedrock units underlying the site. The Peak Horizontal Ground Acceleration (PHGA—the measure of earthquake acceleration on the ground) for the site was estimated using USGS data based on currently available earthquake and fault information. Based on this information, the PHGA with a 10 percent probability of being exceeded in 50 years is estimated to be approximately 0.61 g (Ginter & Associates 2013a). Acceleration between 0.34 g and 0.65 g can result in severe perceived ground shaking and moderate to heavy structural damage to older and/or poorly designed buildings. Structures designed to the specifications of modern building requirements, including those set forth in the California Building Code, can withstand high acceleration velocities for short to moderate lengths of time.

Based on the results of Neblett & Associates' fault investigation, using aerial photo lineament analyses, fault trenching, geologic field mapping, observation of exposed roadcuts, and review of previous fault investigations by others, Neblett & Associates has successfully located the South Branch of the CVFZ on-site (Neblett 2008). Based on the analysis presented in the fault investigation, Neblett & Associates established a structural setback zone located 50 feet south of, and 100 feet to the north of the South Branch. Additionally, Ginter & Associates established a Restricted Use Zone (RUZ) located north and northeast of the South Branch to the north and northeast property boundary (Ginter & Associates 2013a). Mitigation Measure GEO-4, regarding reassessment of the structural setback and RUZ, would reduce impacts to a less than significant level.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM GEO-4** Prior to the issuance of building permits for each structure, the project applicant shall submit a design-level Geotechnical Investigation to the County Engineering Geologist for review and approval. The investigation shall be prepared by a qualified

engineer and identify necessary grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code geologic, soils, and seismic requirements. The measures identified in the approved report shall be incorporated into the project plans.

### *Level of Significance After Mitigation*

Less than significant impact. As with other similar development projects within the Southern California region and the State as a whole, the proposed project would be designed and constructed to meet the specifications contained within the 2013 California Building Code (CBC), Chapter 16, Section 1613—Earthquake Loads. The building and safety standards set forth by the CBC have been established to address structural integrity and to prevent substantial loss and injury during a seismic event.

## Landslides

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| **Impact GEO-5:** | **The project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards.** |

### *Impact Analysis*

*Hydroconsolidation*

As described below, development of the proposed project could result in hydroconsolidation (soil collapse), which would cause soil to become unstable as a result of the proposed project. Although the regional groundwater is at 200 to 300 feet below ground surface and can be ruled out as a potential source for hydrocollapse, shallow perched groundwater from landscape irrigation may saturate some areas and result in hydroconsolidation. CHJ evaluated the potential soil collapse of the loose soils with testing on selected samples. Their results indicate a mild to high potential of hydroconsolidation (Ginter & Associates 2013a). Therefore, impacts from hydroconsolidation are considered potentially significant. The mitigation measures below are anticipated to reduce potential impacts from soil collapse to a less than significant level.

The County of Riverside 2008 General Plan, Figure S-4, Earthquake Induced Slope Instability Map shows the project site's location to be within an area with low to locally moderate susceptibility to seismically induced landslides and rockfalls. The proposed project would have a less than significant impact regarding rockfall hazards because the proposed warehouse buildings are sited away from the steep terrain located in the northern portion of the project site.

*Landslides*

No landslides or other evidence of gross slope instability were observed during Ginter &Associates' investigations on-site, and no landslides are denoted on the published geologic maps and aerial photographs reviewed within and adjacent to the site. Stability of slopes within the San Timoteo Formation is generally considered moderate to locally poor. The proposed cut slope north of Building 2 will expose San Timoteo Formation bedrock, which will likely reveal day-lighted bedding conditions, and a small area of non-engineered fill, which will require removal and replacement with compacted engineered fill located in the cut slope east of Building 2 (Ginter & Associates 2013a). Accordingly, the

mitigation measure below (Mitigation Measure MM GEO-5c) is proposed to reduce impacts from landslides to a less than significant level.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM GEO-5a** Recommendations listed below and contained within the November 24, 2014 Ginter & Associates Grading Plan (contained in this EIR Appendix E) shall be implemented in the design of the project to the satisfaction of the County, prior to issuance of grading and/or building permits.

**MM GEO-5b** To mitigate for hydroconsolidation, prior to issuance of a construction permit, the project applicant shall ensure the complete removal of the younger alluvium (Qya) approximately 20 feet in depth and replacement with compacted engineered fill to the design grades.

**MM GEO-5c** To mitigate potential landside impacts from the proposed cut slope north of Building 2, the County of Riverside shall ensure that during project construction a stabilization fill prism shall be established for this cut slope as depicted in the January 7, 2013 Grading Plan Review by Ginter & Associates, Inc. Additionally, the County of Riverside shall ensure that during construction, conditions will be observed by a qualified individual and additional recommendations will be provided, as appropriate.

### *Level of Significance After Mitigation*

Less than significant impact. The above mitigation will ensure the implementation of design and construction measures that will stabilize the on-site soils and reduce the project's exposure to hydroconsolidation and landslide risk.

## Ground Subsidence

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| **Impact GEO-6:** | **The project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence.** |

### *Impact Analysis*

*Subsidence*

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. Based on the County's Transportation and Land Management Agency (TLMA) website, the proposed project site is susceptible to subsidence.[3] This means the project site is located on a potentially unstable geologic unit that could be affected by the project. Therefore, impacts from subsidence are considered potentially significant, and Mitigation Measures GEO-5a (above) and GEO-6 (below) are required to mitigate this potential impact.

[3] Verified based on Riverside County GIS system March 13, 2015.

*Seismic Design Considerations*

The site, as with all of southern California, is within a zone of seismic activity. Strong ground motion from an earthquake generated along active faults should therefore be anticipated at this site. The proposed project will be built in conformance to applicable California Building Code and Uniform building code standards, which will reduce potential impacts from ground subsidence and unstable soils.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM GEO-6** As recommended in the January 7, 2013 report by Ginter & Associates, Inc., after completion of project construction (or sooner regarding "a." below) and during project operation, the owner of the proposed project shall do the following:

a. Plant landscape planting materials that consist of appropriate drought resistant vegetation as recommended by the Landscape Architect. Landscaping should be completed as soon as possible and properly maintained.
b. Conduct proper irrigation and maintenance and repair of installed irrigation systems to minimize ground saturation. Leaks should be repaired immediately. Sprinklers should be adjusted to provide maximum coverage with a minimum of water usage and overlap. Overwatering with consequent excessive runoff and ground saturation must be avoided.
c. If automatic sprinkler systems are installed, their use must be adjusted to account for natural rainfall conditions.
d. Maintain and clean all drainage devices that have been installed.

### *Level of Significance After Mitigation*

Implementation of Mitigation Measures GEO-5a (specified under Impact GEO-5) and GEO-6 would ensure the project site would contain suitable soils and compaction to reduce impacts from subsidence and unstable soils to less than significant.

## Geologic Hazards

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| **Impact GEO-7:** | **The project would not be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard.** |

### *Impact Analysis*

A seiche is defined as a standing wave in an enclosed or partially enclosed body of water. The nearest large body of surface water is Lake Perris, which is approximately 10 miles southwest of the project site. Because of the project site's distance from Lake Perris, the proposed project will not be subject to impacts associated with a seiche.

Existing drainage flows from off-site areas, including the hilly undeveloped portions of the site to the north, would be conveyed through the site and would ultimately be conveyed off-site to the west

side of the project site. Setbacks will be substantial; thus, any potential of mudflow affecting the project would be less than significant.

There are no volcanoes on or near the project site, thus the proposed project would not be subject to geologic hazards from volcanoes and no impact would occur.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Slopes and Topography

**Impact GEO-8: The project could change topography or ground surface relief features.**

### *Impact Analysis*

Elevations on-site rise from southwest to northeast, ranging from approximately 2,388 to 2,708 feet above mean sea level. The southern and central portions of the project site consist of broad sloping grasslands that transition to steeper ridges and canyons on the north portion of the project site.

The project's mass grading activities would involve on-site cut of 6 million cubic yards and fill of approximately 6 million cubic yards, with a balance of soils on-site. The design of the project will seek to balance the earthwork necessary from grading and avoid the import or export of soil. All grading and earthwork activities will be performed in accordance with the general earthwork and grading specifications of the County of Riverside.

Refer to the discussion in Impact GEO-1 above and Impact GEO-9 below for information regarding slope heights on-site.

Based on the sloping terrain of the project site, a number of manufactured slopes, and possibly retaining walls, will be needed to develop the site. The project site currently consists of sloping terrain. Without manufactured slopes or retaining walls, development on the project site would be limited to the southern portion of the project site, along Cherry Valley Boulevard and the steeper terrain in the northern portion of the site would remain undeveloped. The topography of the project site will be altered greatly by the proposed project; however, manufactured slopes up to 2:1 will be developed on-site. The proposed project's grading plan and geotechnical documents will be reviewed for consistency with the County's grading regulations and with applicable codes and requirements. Therefore, the proposed project is anticipated to have a less than significant impact to proposed changes in site topography.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Slope Height

**Impact GEO-9: The project could create cut or fill slopes greater than 2:1 or higher than 10 feet.**

### *Impact Analysis*

The Tentative Parcel Map dated October, 2014 by Albert A. Webb Associates, and the Overall Preliminary Landscape Plan dated October 2015, by Hunter Landscape, shows that slopes on the project site will exceed 10 feet in height; however, the project would not create cut or fill slopes greater than 2:1. Refer to Impact GEO-1 for additional discussion of proposed slopes and slope heights.

Although the proposed project will result in slopes that are higher than 10 feet, less than significant impacts are anticipated because the project will be designed in conformance with recommendations made in the Grading Plan Review, which include design and construction measures that will stabilize the on-site soils and reduce the project's exposure to landslide risk. Additionally, compliance with the Grading Development Standards of the County of Riverside would be assured through county review of grading plans. The project would be required to conform to county design standards for grading and site design, which would result in a safe design of stable slopes for the proposed project. Based on the Grading Plan Review by Ginter & Associates (2014), the results of the slope stability analyses indicate that the proposed on-site slope safety factors will conform to the County of Riverside standards and are acceptable as planned. Therefore, the project will have less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Subsurface Sewage Disposal Systems

**Impact GEO-10: The project would not result in grading that affects or negates subsurface sewage disposal systems.**

### *Impact Analysis*

Under the existing setting, the project site is undeveloped and does not currently contain any subsurface sewage disposal systems. Thus, any grading associated with the proposed project would not affect subsurface sewage disposal systems on the project site. Thus, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Topsoil

**Impact GEO-11: The project could result in substantial soil erosion or the loss of topsoil.**

### *Impact Analysis*

As detailed in the County of Riverside 2008 General Plan's Figure S-8, the project area has a moderate wind erodibility rating. On-site soils are subject to erosion by wind and water. The potential for erosion is greatest during grading and construction of the site. Project development will require extensive grading operations including excavation and fill throughout the project site in order to provide adequate support for the proposed project Since erosion is greatest during construction, the project is anticipated to have a short-term impact related to soil erosion.

The Ginter & Associates report describes loose surficial soils mantle the natural slopes within the proposed sphere of development, which are prone to erosion, resulting in shallow and surficial failures and debris flow. In addition, two relatively broad drainage channels that trend southwesterly towards the western portion of the project site, and an east-west to southwest trending drainage channel in the northeast portion of the site, have the potential for water surface flows.

Existing drainage flows from off-site areas, including the hilly undeveloped portions of the site to the north, would be conveyed through the site and would ultimately be conveyed off-site to the west side of the project site. As included in the Hydrology analysis for Tentative Parcel Map 36564, there are two drainage areas that exist on-site: Drainage area "A" and "B." The project includes a number of drainage facilities designed to safely convey the off-site 100-year storm runoffs through the project site, limit the storm flow resulting from project activities including: use of bio-treatment best management practices (BMPs) such as extended detention basins and trenches, sized to accommodate the first flush flows generated in the proposed development area; storm drain facilities that would collect and route on-site runoff through a detention basin that is sized to limit

10-year storm discharge from the site to be equal to or less than flows under the existing condition; and a detention basin that would incorporate hydro modification requirements by limiting the increase in the 2-year storm flow caused by the proposed development to less than 10 percent more than existing conditions. The project also includes 4 acres of on-site riparian mitigation along the project frontage.

The installation of these features would control surface drainage and help mitigate the potential erosion and debris flows during storm events. The slopes should be planted as soon as possible upon completion of grading with drought-resistant plants to help mitigate surficial erosion. With incorporation of mitigation, potential impacts from soil erosion are anticipated to be reduced to a less than significant level.

Additionally, regarding slope stability, the Ginter & Associates report and grading plan (2014) gives the results of the slope stability analyses, which indicates the proposed on-site slope safety factors will conform to the County of Riverside standards and are acceptable as planned (2013a). Similarly, the factors for safety for the surficial stability conditions also meet the required minimum safety factor or 1:5.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implementation of Mitigation Measure GEO-2, specified under Impact GEO-2, above.

**MM GEO-11a** As stated in the January 7, 2013 report by Ginter & Associates (EIR Appendix E), after the completion of on-site grading, and prior to the issuance of a final certificate of occupancy for the project, the owner shall ensure that the manufactured slopes on-site shall be planted with drought-resistant plants to help mitigate surficial erosion.

**MM GEO-11b** Prior to the issuance of grading permits, all grading procedures shall comply with County Grading Standards, including requirements for erosion control during rainy months. This measure shall be implemented to the satisfaction of the County of Riverside Planning Department Director.

### *Level of Significance After Mitigation*

Less than significant impact. The above mitigation will ensure the implementation of design and operational measures that will stabilize the on-site soils and reduce the opportunity for erosion impact.

## Expansive Soils

**Impact GEO-12: The project could be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2013), creating substantial risks to life or property.**

### *Impact Analysis*

According to the 2013 Grading Plan Review by Ginter & Associates, in general, the site sub-grade soils are granular with very low soil expansion potential and specialized construction procedures to resist

expansive soil forces are not anticipated at this time. Further, the Grading Plan Review document did not identify the project site as susceptible to expansive soils impacts; however, to ensure that expansive soils are absent from the project and would otherwise not affect the project, incorporation of Mitigation Measure GEO-4 will require preparation of a design-level geotechnical study that complies with the applicable requirements of the latest adopted edition of the California Building Standards Code. A design-level geotechnical study would identify grading and soil engineering practices to ensure that expansive soil conditions are abated. As such, after implementation of mitigation, impacts related to expansive soils would be reduced to a level of less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure GEO-4.

### *Level of Significance After Mitigation*

Less than significant impact. The above mitigation will ensure that the project site's soil expansion potential is thoroughly evaluated and addressed prior to operation of the project.

## Stable Soils

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|---|---|
| **Impact GEO-13:** | **The project would not have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.** |

### *Impact Analysis*

The proposed project will dispose sewage through a municipal treatment plant. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, the project will have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Erosion to River, Stream or Lake Bed

| | |
|---|---|
| **Impact GEO-14:** | **The project would not change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake.** |

### *Impact Analysis*

According to the Tentative Parcel Map 36564 Off-Site Hydrology & Hydraulics Report (Appendix G) prepared for the proposed project and provided in Section 3.9, Hydrology, the rate of runoff from the

project site would not increase by more than 10 percent above pre-development conditions (Albert A. Webb Associates 2014b). According to the Off-Site Hydrology and Hydraulics Report prepared for the project, there are two drainages in existing condition: Drainage Area "A" and "B" (Exhibit 3.9-2). Drainage Area "A" comprises approximately 903.3 acres, with peak stormwater discharge rates of approximately 739.7 cubic feet per second (cfs) and 1171.4 cfs for 10-year and 100-year storms, respectively. Drainage Area "B" comprises approximately 258.1 acres with peak discharge rates of 359.4 cfs and 563.2 cfs for 10-year and 100-year storms, respectively.

The proposed project would not result in an increase in water erosion either on-site or off-site. The project includes a number of drainage facilities designed to:

1. Safely convey the off-site 100-year storm runoffs through the project site;
2. Limit the storm flow resulting from project activities, including use of bio-treatment BMPs such as extended detention basins and trenches that are sized to accommodate the first flush flows generated in the proposed development area;
3. Provide storm drain facilities that would collect and route on-site runoff through a detention basin that is sized to limit 10-year storm discharge from the site to be equal to or less than flows under the existing condition;
4. Provide detention basin that would incorporate hydromodification requirements by limiting the increase in the 2-year storm flow caused by the proposed development to less than 10 percent more than existing conditions.

The project also includes 4 acres of on-site riparian mitigation along the project frontage.

Under the post-project conditions, Drainage Area "A" would comprise approximately 917.2 acres, with peak stormwater discharge rates of approximately 729.0 cfs and 1,165.1 cfs for 10-year and 100-year storms, respectively. Drainage Area "B" would comprise approximately 244.2 acres with peak discharge rates of 344.5 cfs and 537.4 cfs for 10-year and 100-year storms, respectively (Albert A. Webb Associates 2014b). To minimize the increase of the runoff due to the site development, two on-site extended detention basins (one for each sub-watershed) are proposed for water quality treatment and hydromodification.

Runoff will be dispersed to the extended detention basins, further discussed below. Landscaped areas on the north and south will be self-treating pervious areas that will convey the flows generated by the respective areas directly off-site. Runoff will enter Basin A primarily from the on-site storm drain system. The middle of the basin will be the lowest elevation and slope up to the north and south at 0.5 percent. A low-flow trench and collector trenches will convey the runoff to the bottom stage and outlet structure that will be located in the middle of the basin on the east side. The outlet structure has been designed to allow for treatment of the Design Capture Volume. The Design Capture Volume (Vbmp) depth is 3.4 feet. The outlet structure has also been designed to mitigate the 2-year 24-hour and 10-year 24-hour events with orifices and the 100-year event will spill over the top of the outlet structure. The basin depth will be 7.2 feet, including 1 foot of freeboard.

Runoff will enter Basin B primarily from the on-site storm drain systems. The middle of the basin will be the lowest elevation and slope up to the north and south at 0.5 percent. A low-flow trench and collector trenches will convey the runoff to the bottom stage and outlet structure that will be located in the middle of the basin on the west side. The outlet structure has been designed to allow for treatment of the Vbmp. The Vbmp depth is 1.9 foot. The outlet structure and the 100-year event will spill over the top of the outlet structure. The basin depth will be 4.6 feet, including 1 foot of freeboard.

As provided in the Preliminary Water Quality Management Plan, the proposed detention basin has been sized to incorporate hydromodification requirements by limiting the increase in runoff during a 2-year storm event to less than 10 percent more than existing conditions (Albert A. Webb 2014a).

Runoff from the project site is conveyed in a southwesterly direction to an existing storm drain. Project runoff flows discharge to the west at the southwest project boundary and sheet flow to the west, southwest approximately 2.7 miles via existing storm drain improvements to San Timoteo Creek Channel, then northwesterly approximately 15 miles to its confluence with the Santa Ana River. The runoff rate from the project site is anticipated to be slowed by landscaping, bioswales, and extended detention basins proposed on-site. The proposed project is not anticipated to significantly change the deposition, siltation, or erosion that may modify the channel of a river or stream because the proposed project includes stormwater drainage improvements that will convey and collect off-site and on-site stormwater runoff, while limiting both the quantity and velocity of stormwater discharged off-site and subsequently downstream.

The project itself will not alter the channel of a river or the bed of a lake. As indicated in the Biological Technical Report for the project, direct impacts of the project to the California Department of Fish and Wildlife jurisdictional areas would result from development of the project. However, these areas are not considered to be river channels or lake beds. Thus, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Water Erosion

**Impact GEO-15: The project would not result in any increase in water erosion either on- or off-site.**

### *Impact Analysis*

Refer to Impact GEO-14 for discussion of existing and proposed drainage flows as well as information regarding structural improvements as they pertain to hydrology. As previously discussed, the

proposed drainage system includes a number of drainage features including: use of bio-treatment BMPs such as extended detention basins and trenches, sized to accommodate the first flush flows generated in the proposed development area; storm drain facilities that would collect and route on-site runoff through a detention basin that is sized to limit 10-year storm discharge from the site to be equal to or less than flows under the existing condition; and a detention basin that would incorporate hydro modification requirements by limiting the increase in the 2-year storm flow caused by the proposed development to less than 10 percent more than existing conditions. The project also includes 4 acres of on-site riparian mitigation along the project frontage.

Under existing conditions, water flow is erosive. As designed, the detention basins in conjunction with infiltration BMPs (further outlined in Impact GEO-14) will limit the 2-year 24-hour storm runoff, reducing the potential for off-site erosion. Thus, the project would have a less than significant impact.

Thus, the project will have a less than significant impact regarding an increase in water erosion either on-site or off-site.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Wind Erosion and Blowsand

**Impact GEO-16: The project would not be impacted by or result in an increase in wind erosion and blowsand, either on- or off-site.**

### *Impact Analysis*

As shown in Figure S-8, Wind Erosion Susceptibility Map, in the County of Riverside General Plan, the project site is considered to have a moderate susceptibility to wind erosion. Construction activities including but not limited to grading and soil transport have the potential to result in short-term, construction-related impacts associated with wind erosion, and, thus, the project could have a potentially significant related short-term impact. County Ordinance No. 484.2 is not applicable to the proposed project because in accordance with Section (4b) of the Ordinance, the project site is located north of the Agricultural Dust Control Area No. 2 in the Beaumont Cherry Valley community.[4] However, a Storm Water Pollution Prevention Plan is required to be prepared for the project that would reduce impacts from soil erosion during construction that could potentially cause an increase in blowsand or mineral erosion.

During project implementation, potential impacts from wind erosion and blowsand would be less than significant because the project would be developed with landscaping and impervious surfaces

[4] Verified at http://www.clerkoftheboard.co.riverside.ca.us/ords/400/484.2.pdf on April 23, 2014.

(e.g., parking lots and buildings), such that soils or sand would not be exposed and subject to blowing off-site. Further, the proposed operation of the project as a warehouse will not involve the exposure of land that would increase this potential impact. Thus, the proposed project would have a less than significant impact related to an increase in wind erosion or blowsand during construction or operations.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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# 3.7 - Greenhouse Gas Emissions

This section describes the existing greenhouse gas conditions and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the County of Riverside General Plan (2008), and the Air Quality and Greenhouse Gas Analysis Report prepared in August 2016 by FirstCarbon Solutions, included in this Draft EIR as Appendix B.

## 3.7.1 - Existing Conditions

The project is located in the County of Riverside and within the South Coast Air Basin (SoCAB). The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the west, north, and east. The southern limit of the SoCAB is the San Diego County line. The SoCAB consists of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western Coachella Valley portions of Riverside County.

### Introduction to Global Climate Change

Global climate change is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Global climate change is currently one of the most controversial environmental issues in the United States, and much debate exists within the scientific community about whether or not global climate change is occurring naturally or as a result of human activity. Some data suggests that global climate change has occurred in the past over the course of thousands or millions of years. These historical changes to the Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate-shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that global climate change is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide ($CO_2$), nitrous oxide ($N_2O$), methane ($CH_4$), and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed project cannot generate enough greenhouse gas emissions to effect a discernible change in global climate. However, the proposed project may participate in the potential for global climate change by its incremental contribution of greenhouse gasses combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on global climate change. This section will evaluate the potential for the proposed project to have an effect upon the environment as a result of its potential contribution to the greenhouse effect.

### Global Climate Change Defined

Global climate change refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, $CO_2$, $N_2O$, $CH_4$, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their

residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. Global climate change can occur naturally as it has in the past with the previous ice ages. According to the California Air Resources Board (ARB), the climate change since the industrial revolution differs from previous climate changes in both rate and magnitude.

Gases that trap heat in the atmosphere are often referred to as greenhouse gases. Greenhouse gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the Earth's average temperature would be approximately 61degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor to the U.S. emissions inventory total. In 2012, California is estimated to have produced 459 million gross metric tons of carbon dioxide equivalent ($MMTCO_2e$) greenhouse gas emissions, a 1.7 percent increase in total GHG emissions from 2011 and the first emissions increase since 2007. However, since 2000, GHG emissions within the state have decreased from 466 $MMTCO_2e$ to 459 $MMTCO_2e$, a 1.6 percent decrease. From 2000 to 2012, per capita emissions have decreased by 12 percent, despite a population increase of 11.4 percent over the same time period. In-state per capita electricity generation has declined by approximately 22 percent from 2000 to 2012. California has significantly slowed the rate of growth of greenhouse gas emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls.

## Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common greenhouse gases include water vapor, $CO_2$, CH4, $N_2O$, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit greenhouse gases. The presence of greenhouse gases in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface, while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. The global warming potential of a gas is essentially a measurement of the radiative forcing of a greenhouse gas compared with the reference gas, $CO_2$.

Individual greenhouse gas compounds have varying global warming potential and atmospheric lifetimes. Carbon dioxide, the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a greenhouse gas is a measure of how much a

given mass of a greenhouse gas is estimated to contribute to global warming. To describe how much global warming a given type and amount of greenhouse gas may cause, the carbon dioxide equivalent is used. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing greenhouse gas emissions since it normalizes various greenhouse gas emissions to a consistent reference gas, $CO_2$. For example, $CH_4$'s warming potential of 21 indicates that $CH_4$ has 21 times greater warming affect than $CO_2$ on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential. Greenhouse gases defined by Assembly Bill (AB) 32 (see the Climate Change Regulatory Environment section of Draft EIR Appendix B for a description) include $CO_2$, CH4, $N_2O$, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. These greenhouse gases are described further in Table 3.7-1.

**Table 3.7-1: Description of Greenhouse Gases**

| Greenhouse Gas | Description and Physical Properties | Sources |
|---|---|---|
| Nitrous oxide | Nitrous oxide (laughing gas) is a colorless greenhouse gas. It has a lifetime of 114 years. Its global warming potential is 310. | Microbial processes in soil and water, fuel combustion, and industrial processes. |
| Methane | Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 21. | Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter. |
| Carbon dioxide | Carbon dioxide ($CO_2$) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960. | Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. |
| Chlorofluorocarbons | These are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). Global warming potentials range from 3,800 to 8,100. | Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. |
| Hydrofluorocarbons | Hydrofluorocarbons are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700. | Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants. |

**Table 3.7-1 (cont.): Description of Greenhouse Gases**

| Greenhouse Gas | Description and Physical Properties | Sources |
|---|---|---|
| Perfluorocarbons | Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200. | Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing. |
| Sulfur hexafluoride | Sulfur hexafluoride is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900. | This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. |
| Sources: Draft EIR Appendix B, Air Quality and Greenhouse Gases | | |

The State has begun the process of addressing pollutants referred to as short-lived climate pollutants. Senate Bill 605, approved by the Governor on September 14, 2014 requires the ARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants by January 1, 2016. ARB will complete an emission inventory of these pollutants, identify research needs, identify existing and potential new control measures that offer co-benefits, and coordinate with other state agencies and districts to develop measures. The draft emission inventory and strategy were released on September 30, 2015. No date for final adoption was located.

The short-lived climate pollutants include three main components: black carbon, fluorinated gases, and $CH_4$. Fluorinated gases and $CH_4$ are described in Table 3.7-1 and are already included in the California GHG inventory. Black carbon has not been included in past GHG inventories; however, ARB will include it in its comprehensive strategy (ARB 2015c).

Ozone is another short-lived climate pollutant that will be part of the strategy. Ozone affects evaporation rates, cloud formation, and precipitation levels. Ozone is not directly emitted, so its precursor emissions, volatile organic compounds (VOC) and oxides of nitrogen ($NO_x$) on a regional scale and $CH_4$ on a hemispheric scale will be subject of the strategy (ARB 2015c).

Black carbon is a component of fine particulate matter. Black carbon is formed by incomplete combustion of fossil fuels, biofuels, and biomass. Sources of black carbon within a jurisdiction may include exhaust from diesel trucks, vehicles, and equipment, as well as smoke from biogenic combustion. Biogenic combustion sources of black carbon include the burning of biofuels used for transportation, the burning of biomass for electricity generation and heating, prescribed burning of agricultural residue, and natural and unnatural wildfires. Black carbon is not a gas but an aerosol—particles or liquid droplets suspended in air. Black carbon only remains in the atmosphere for days to weeks, whereas other GHGs that can remain in the atmosphere for years. Black carbon can be

deposited on snow, where it absorbs sunlight, reduces sunlight reflectivity, and hastens snowmelt. Direct effects include absorbing incoming and outgoing radiation; indirectly, black carbon can also affect cloud reflectivity, precipitation, and surface dimming (cooling).

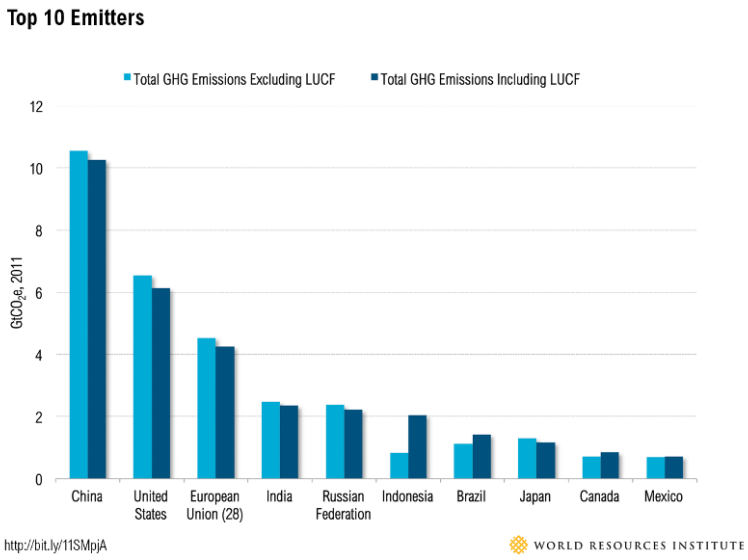
Global warming potentials for black carbon were not defined by the IPCC in its Fourth Assessment Report. The ARB has identified a global warming potential of 3,200 using a 20-year time horizon and 900 using a 100-year time horizon from the IPCC Fifth Assessment. Sources of black carbon are already regulated by ARB, and air district criteria pollutant and toxic regulations that control fine particulate emissions from diesel engines and other combustion sources (ARB 2015c). Additional controls on the sources of black carbon specifically for their GHG impacts beyond those required for toxic and fine particulates are not likely to be needed.

Water vapor is also considered a GHG. Water vapor is an important component of our climate system and is not regulated. Increasing water vapor leads to warmer temperatures, which causes more water vapor to be absorbed into the air. Warming and water absorption increase in a spiraling cycle. Water vapor feedback can also amplify the warming effect of other greenhouse gases, such that the warming brought about by increased $CO_2$ allows more water vapor to enter the atmosphere (NASA 2015b).

## Emissions Inventories

An emissions inventory is a database that lists, by source, the amount of air pollutants discharged into the atmosphere of a geographic area during a given time period. Emissions worldwide were approximately 43,286 million metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2012. As shown in Figure 1, China was the largest GHG emitter with over 10 billion metric tons of CO2e, and the United States was the second largest GHG emitter with over 6 billion metric tons of $CO_2e$ (WRI 2014).

**Figure 1: Greenhouse Gas Emissions Trends**




Source: WRI 2014

Figure 2 shows the contributors of GHG emissions in California between years 2000 and 2012 by economic sector. The main contributor was transportation. The second highest sector was industrial, which includes sources from refineries, general fuel use, oil and gas extraction, cement plants, and cogeneration heat output. ARB reported that California's GHG emissions inventory was 459 $MMTCO_2e$ in 2012 (ARB 2014a).

### *Consequences of Climate Change in California*

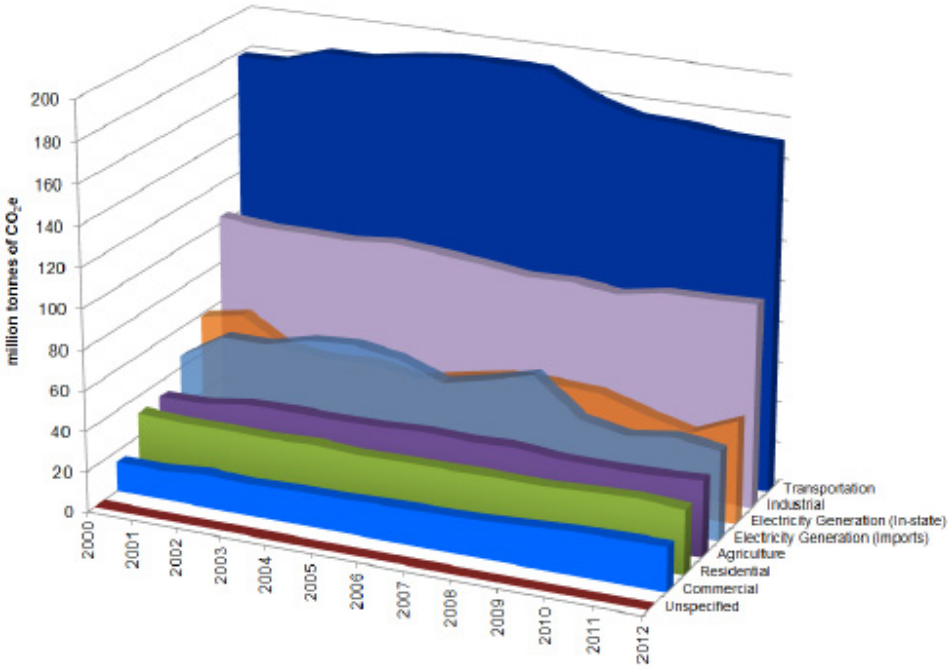
In California, climate change may result in consequences such as the following (from California Climate Change Center 2006 and Moser et al. 2009):

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase that would be expected if rising temperatures remain in the lower warming range. This increase in ozone formation could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

### Human Health Effects of GHG Emissions

The cumulative effects to global climate change of GHG emissions have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). The potential health effects of ozone and particulate matter are discussed in criteria pollutant analyses. At very high indoor concentrations (not at levels existing outside), $CO_2$, $CH_4$, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen (CDC 2010 and OSHA 2003).

**Figure 2: Greenhouse Gas Emission Trends by Sector in California**




Source: ARB 2014a

## 3.7.2 - Regulatory Setting

### International

Climate change is a global issue involving greenhouse gas emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce greenhouse gases.

**Intergovernmental Panel on Climate Change**. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the

scientific, technical and socio economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

**United Nations Framework Convention on Climate Change (Convention).** On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

**Kyoto Protocol**. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of five per cent against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2° Celsius above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the U.N. Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. . This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts, and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties, or COP 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly will not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a).

## National

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

**Greenhouse Gas Endangerment**. *Massachusetts v. EPA* (Supreme Court Case 05-1120) decided on April 2, 2007, the Supreme Court found that four GHGs, including $CO_2$, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the United States Environmental Protection Agency (EPA) Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide,

hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.

- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the United States Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator findings (EPA 2009b).

**Clean Vehicles**. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of $CO_2$ per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this $CO_2$ level solely through fuel economy improvements. Together, these standards would cut $CO_2$ emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012 (EPA 2012c). The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of $CO_2$ in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20-percent reduction in $CO_2$ emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10-percent reduction for gasoline vehicles and a 15-percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10-percent reduction in fuel consumption and $CO_2$ emissions from the 2014 to 2018 model years.

**Mandatory Reporting of Greenhouse Gases**. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

**New Source Review**. The EPA issued a final rule on May 13, 2010 that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the federal code of regulations, the EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

**Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units**. As required by a settlement agreement, the EPA proposed new performance standards for emissions of $CO_2$ for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatt would be required to meet an output based standard of 1,000 pounds of $CO_2$ per megawatt-hour, based on the performance of widely used natural gas combined cycle technology.

**Cap and Trade**. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the $NO_x$ Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Regional Greenhouse Gas Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps $CO_2$ emissions from power plants, auctions $CO_2$ emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap and trade system January 1, 2014 and joint offset auctions have taken place in 2015 (C2ES 2015).

**SmartWay Program.** The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both greenhouse gas emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (EPA 2014):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks will have to comply with the ARB Greenhouse Gas Regulation that is designed with the SmartWay Program in mind, to reduce greenhouse gas emissions by making them more fuel-efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies—less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

## California

### *Legislative Actions to Reduce GHGs*

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

**AB 32**. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include $CO_2$, $CH_4$, $NO_x$, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California Air Resources Board (ARB) is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007 (ARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a "business as usual" (BAU) scenario were estimated to be 596

$MMTCO_2e$, which do not account for reductions from AB 32 regulations (ARB 2008). At that level, a 28.4 percent reduction was required to achieve the 427 million $MTCO_2e$ 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 million $MTCO_2e$. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels (ARB 2010).

*Progress in Achieving AB 32 Targets and Remaining Reductions Required*

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 (ARB 2014a). The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 million $MTCO_2e$ (AB 32 2020 target)
- 2000: 463 million $MTCO_2e$ (an average 8-percent reduction needed to achieve 1990 base)
- 2010: 450 million $MTCO_2e$ (an average 5-percent reduction needed to achieve 1990 base)

The ARB has also made substantial progress in achieving its goal of achieving 1990 emissions levels by 2020. As described earlier in this section, ARB revised the 2020 BAU inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4 percent and the latest reduction from 2020 BAU is 21.7 percent.

- 2020: 545 million $MTCO_2e$ BAU (an average 21.7-percent reduction from BAU needed to achieve 1990 base)

**ARB Scoping Plan**. The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32 (ARB 2008). The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;

- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities Climate for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long term 2050 goal of Executive Order S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050 (ARB 2014).

The ARB has no legislative mandate to set a target beyond the 2020 target from AB 32 or to adopt additional regulations to achieve a post-2020 target. The Update estimates that reductions averaging 5.2 percent per year would be required after 2020 to achieve the 2050 goal. The State Legislature is currently considering legislation (SB 32) that would set a target of a 40 percent reduction below 1990 levels by 2030. Until the legislation is enacted, no post-2020 mandate currently exists. With no estimate of future reduction commitments from the State, identifying a feasible strategy including plans and measures to be adopted by local agencies is not currently possible. The ARB has initiated preparation of a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15 that should provide more details of the State's post-2020 reduction strategy, but would still require legislation to require actions beyond those by State agencies subject to the Executive Order.

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the amount of reductions California must achieve to return to the 1990 emissions level by 2020 as required by AB 32. The no-action scenario is known as "business-as-usual" or BAU. The ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Scoping Plan.

As part of CEQA compliance for the Scoping Plan, ARB prepared a Supplemental Functional Equivalent Document (FED) in 2011. The FED included an updated 2020 BAU emissions inventory projection based on current economic forecasts (i.e., as influenced by the economic downturn) and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. ARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state's average emissions from 2006–2008. The new BAU estimate includes emission reductions for the million-solar-roofs program, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the Low Carbon Fuels Standard. In addition, ARB factored into the 2020 BAU inventory emissions reductions associated with 33-percent Renewable Energy Portfolio Standard (RPS) for electricity generation. The updated BAU estimate of 507 $MMTCO_2e$ by 2020 requires a reduction of 80

$MMTCO_2e$, or a 16-percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 $MMTCO_2e$) by 2020.

In order to provide a BAU reduction that is consistent with the original definition in the Scoping Plan and with threshold definitions used in thresholds adopted by lead agencies for CEQA purposes and many climate action plans, the updated inventory without regulations was also included in the Supplemental FED. The ARB 2020 BAU projection for GHG emissions in California was originally estimated to be 596 $MMTCO_2e$. The updated ARB 2020 BAU projection in the Supplemental FED is 545 $MMTCO_2e$. Considering the updated BAU estimate of 545 $MMTCO_2e$ by 2020, ARB estimates a 21.7-percent reduction below the estimated statewide BAU levels is necessary to return to 1990 emission levels (i.e., 427 $MMTCO_2e$) by 2020, instead of the approximate 28.4-percent BAU reduction previously reported under the original Climate Change Scoping Plan (2008).

**Cap and Trade Program**. The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to ARB, a cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80-percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

ARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. See 17 CCR §§ 95800 to 96023. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25.000 $MTCO_2e$ per year must comply with the Cap-and-Trade Program. Triggering of the 25.000 $MTCO_2e$ per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, ARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" 30 for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30 percent of the prior year's compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30 percent of its 2013 GHG emissions.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade program is that it does not guarantee

GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by ARB in the First Update:

> The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative (ARB 2014).

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

> The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures (ARB 2014).

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle-miles traveled (VMT) are covered by the Cap-and-Trade Program (ARB 2015).

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.[1]

**SB 375—the Sustainable Communities and Climate Protection Act of 2008**. Passing the Senate on August 30, 2008, Senate Bill (SB) 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28 states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets.

[1] On March 17, 2011, the San Francisco Superior Court issued a final decision in *Association of Irritated Residents v. California Air Resources Board* (Case No. CPF-09-509562). While the Court upheld the validity of the ARB Scoping Plan for the implementation of AB 32, the Court enjoined ARB from further rulemaking under AB 32 until ARB amends its CEQA environmental review of the Scoping Plan to address the flaws identified by the Court. On May 23, 2011, ARB filed an appeal. On June 24, 2011, the Court of Appeal granted ARB's petition staying the trail court's order pending consideration of the appeal. In the interest of informed decision-making, on June 13, 2011, ARB released the expanded alternatives analysis in a draft Supplement to the AB 32 Scoping Plan Functional Equivalent Document. The ARB Board approved the Scoping Plan and the CEQA document on August 24, 2011.

2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).

3. Incorporates the mitigation measures required by an applicable prior environmental document.

**AB 1493 Pavley Regulations and Fuel Efficiency Standards**. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30-percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

**SB 1368—Emission Performance Standards**. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower GHG emissions associated with California's energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out-of-state producers that cannot satisfy the performance standard for GHG emissions required by SB 1368. The California Public Utilities Commission adopted the regulations required by SB 1368 on

August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 lbs $CO_2$ per megawatt-hour (MWh).

**SB 1078—Renewable Electricity Standards**. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 1078 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

**SBX 7-7—The Water Conservation Act of 2009**. The legislation directs urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this statewide goal of 20 percent decrease in demand will result in a reduction of almost 2 million acre-feet in urban water use in 2020 and related reduction in energy use for transporting and treating water.

**SB 350—Clean Energy and Pollution Reduction Act of 2015.** The legislature recently approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

### *Executive Orders Related to GHG Emissions*

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

**Executive Order S-3-05**. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S 3-05, the following reduction targets for GHG emissions:

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

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

**Executive Order S-01-07—Low Carbon Fuel Standard**. The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

The Low Carbon Fuel Standard was challenged in the United States District Court in Fresno in 2011. The court's ruling issued on December 29, 2011 included a preliminary injunction against ARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the ARB to continue to implement and enforce the regulation. The Ninth Circuit Court's decision filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that Low Carbon Fuel Standards adopted by ARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled ARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for Low Carbon Fuel Standards. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of ARB approving Low Carbon Fuel Standards (LCFS) regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-CI fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing was held on September 24, 2015 and September 25, 2015 where the LCFS Regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with Office of Administrative Law (OAL) on October 2, 2015. OAL has until November 16, 2015 to make a determination (ARB 2015d).

**Executive Order S-13-08**. Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its

population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

**Executive Order B-30-15**. On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's greenhouse gas reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The executive order sets a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of $CO_2$ equivalent ($MMCO_2e$). The executive order also requires the state's climate adaptation plan to be updated every three years and for the state to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this executive order is not legally enforceable for local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

### *California Regulations and Building Codes*

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

**Title 20 Appliance Efficiency Standards**. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment (CEC 2012).

**Title 24 Energy Efficiency Standards and California Green Building Standards**. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The newest version of Title 24 was adopted by the California Energy Commission (CEC) on May 31, 2012 and became effective on July 1, 2014.

The California Energy Commission (CEC) indicates that the 2013 Title 24 standards will reduce energy consumption by 30 percent above that achieved by 2008 Title 24 (CEC 2012). More specifically,

based on a comparison of 2008 to 2013 Title 24 reductions required, newly constructed non-residential buildings result in an overall reduction of approximately 22 percent energy demand, while non-residential redevelopment (which would apply to existing buildings) results in an overall reduction of only approximately 10 percent energy demand. Additionally, the 2013 Title 24 standards currently in effect yield an approximately 68 percent energy savings when compared with the 2005 Title 24 standards (in place pre-AB 32)[2].

At this time, the 2013 Title 24 standards are currently in effect; notwithstanding, it is likely that by the time the building permits are processed for this Project, the 2016 Title 24 standards will be in effect (the 2016 Title 24 standards take effect on January 1, 2017). The analysis did not take any credit for implementation of the more restrictive 2016 Title 24 standards for which the CEC estimates will provide 5 percent electric energy savings from non-residential buildings compared to 2013 Title 24.[3]

California Code of Regulations, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011 administered by the California Building Standards Commission. The code is updated on a regular basis, with the most recent update consisting of the 2013 California Green Building Code Standards that became effective January 1, 2014. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they establish a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. The California Green Building Standards Code requires:

- Short-term bicycle parking. If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- Designated parking. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).

[2] See Table 2: Summary of First-Year-Electricity Savings in the Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings, November 2007. See Table 2: Summary of First-Year-Electricity Savings in the California Energy Commission's Consultant Report: Impact Analysis California's 2013 Building Energy Efficiency Standards, July 2013.

[3] See CEC 2015. 2016 Building Energy Efficiency Standards Adoption Hearing Presentation. Website: http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf. Accessed May 11, 2016.

- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (5.410.1).
- Construction waste. A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and 80 percent for new homes and 80-percent for commercial projects (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods:
  - The installation of water-conserving fixtures or
  - Using nonpotable water systems (5.303.4).
- Water use savings. 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35 and 40-percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (5.404).
- Building commissioning. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

**Model Water Efficient Landscape Ordinance**. The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

**ARB Refrigerant Management Program.** The ARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, California Code of Regulations. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

**Tractor-Trailer Greenhouse Gas Regulation**. The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

**SB 97 and the CEQA Guidelines Update**. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA.

On April 13, 2009, the Office of Planning and Research submitted to the Secretary for Natural Resources its recommended amendments to the CEQA Guidelines for addressing GHG emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Following a 55-day public comment period and two public hearings, the Natural Resources Agency proposed revisions to the text of the proposed Guidelines amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

A new section, CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project's estimated GHG emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. GHG mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b).

In addition, the amendments revised Appendix F of the CEQA Guidelines, which focuses on Energy Conservation. The sample environmental checklist in Appendix G was amended to include GHG questions.

## Regional

The project is within the SoCAB, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

### *South Coast Air Quality Management District*

The SCAQMD is the agency responsible for air quality planning and regulation in the SoCAB. For greenhouse gases, the agency addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

The SCAQMD formed a working group to identify greenhouse gas emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document—Interim CEQA Greenhouse Gas Significance Threshold, that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides

substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - All land use types: 3,000 $MTCO_2e$ per year
  - Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year
- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans;
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft threshold uses the Executive Order S-3-05 year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap $CO_2$ concentrations at 450 ppm, thus stabilizing global climate.

The SCAQMD only has authority over GHG emissions from development projects that include air quality permits. The project does not include stationary sources of emissions subject to SCAQMD permit; however, the SCAQMD has adopted a regulation that includes voluntary programs that are available for use in CEQA compliance.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.

- Rule 2702, Greenhouse Gas Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

## Local

The County of Riverside adopted a Climate Action Plan (CAP) on December 8, 2015. The CAP was part of the County's General Plan and contains further guidance on Riverside County's GHG Inventory reduction goals, policies, guidelines, and implementation programs. In particular, the CAP elaborates on the General Plan goals and policies relative to GHG emissions and provides a specific implementation tool to guide future decisions of the County.

As part of the CAP, the County of Riverside published a guidance document titled "Greenhouse Gas Emissions, Screening Tables, County of Riverside, California" (December 2015). As part of this guidance, the County determined the size of development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or alternate emissions analysis method. The County's analysis determined that the 3,000 $MTCO_2e$ per year value be used in defining small projects that, when combined with modest energy efficiency measures shown in the bullet points below are considered less than significant and do not need to use the Screening Tables or alternative calculations. The efficiency measures required of small projects are summarized below:

- Energy efficiency at least five percent greater than 2010 Title 24 requirements, and
- Water conservation measures that matches the California Green Building Code in effect as of January 2011.

If the project exceeds the 3,000 $MTCO_2e$ per year threshold, then project emissions would need to be reduced by 25 percent from year 2011 emissions levels or alternatively the project would need to achieve a minimum of 100 points pursuant to the CAP Screening Tables. The screening tables also allow developers to tailor their mitigation measures to the project's needs, rather than have them be subject to one-size fits all mitigation measures that may be too stringent for them.

The CAP Screening Table (CAP Appendix F) includes a discussion of how the 100 point minimum relates to the County's emission reduction target. In order to correctly allocate the emission reductions within the Screening Table, the amount of emission reductions afforded new development was segregated out of the aggregate total. Once the process of segregating new development out of the aggregate reduction totals was completed, the points were then proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial/industrial uses by the year 2020 and proportioning the appropriate Implementation Measure reduction quantities for new development to the residential and commercial/industrial land use sectors within the Screening Table. These calculations result in point values that are allocated by residential unit or commercial/industrial square footage (measured in 1000 square feet). Because of this, the size of the project is not relevant to the Screening Table. Regardless of size, each project needs to garnish

100 points to demonstrate consistency with the Technical Report. Efficiency, not size of the project is critical.

Therefore, projects that achieve at least 100 points are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

## 3.7.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts from greenhouse gas emissions are significant. Would the project:

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

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." With regard to establishing a significance threshold, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, " . . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . . ; or (2) Rely on a qualitative analysis or performance based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency may take into account the following three considerations in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3**: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding

compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

### *Biological Diversity v. California Department of Fish and Wildlife* ("Newhall Ranch")

On November 30, 2015, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* ("*Newhall Ranch*") invalidated the GHG analysis for a large, master planned residential development in Los Angeles County consisting of over 20,000 residential dwelling units and other uses, determining that the GHG significance finding was "not supported by a reasoned explanation based on substantial evidence." In particular, the Court upheld: (1) use of the statewide emissions reduction goal in AB 32 as a significance criterion (pp. 15–19), (2) use of the Scoping Plan's BAU model "as a comparative tool for evaluating efficiency and conservation efforts" of the project (pp. 18–19), and (3) a comparison of the project's expected emissions to a BAU model rather than a baseline of pre-project conditions (pp. 15–19).

Notwithstanding, however, the Court invalidated the GHG analysis on the grounds that the "administrative record discloses no substantial evidence that the Newhall Ranch's project-level reduction of 31 percent in comparison to [BAU] is consistent with achieving AB 32's statewide goal of a 29 percent reduction from [BAU] . . . " (p. 19, original italics; see also p. 23 ("Nor is Justice Corrigan correct that our analysis 'assumes project-level reduction in greenhouse gas emissions must be greater than the reduction California is seeking to achieve statewide.' [internal citations omitted] . . . [W]e only hold that DFW erred in failing to substantiate its assumption that the Scoping Plan's statewide measure of emissions reduction can also serve as the criterion for an individual land use project.")

In so doing, the Court in *Newhall Ranch* questioned whether "a greater degree of reduction may be needed" from new versus existing development to achieve the statewide goal set forth in AB 32 (p. 20). The Court also stated that the EIR failed to contain sufficient evidence to conclude that the "land use density" assumptions used in the EIR's GHG emissions model relate to the land use density assumptions used in the Scoping Plan's BAU model (p. 21–22). Because this information was not contained in the *Newhall Ranch* EIR, the Court determined that the record in *Newhall Ranch* did not contain substantial evidence supporting the BAU threshold.

The Court in *Newhall Ranch* outlined "potential pathways to compliance" that future EIRs could use to determine if GHG emissions from a given project are significant. Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location (p. 25).
- **Compliance with Regulatory Programs or Performance Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities.

(See Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.'].) To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions.' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions']])" (p. 25).

- **Compliance with GHG Reduction Plans or Climate Action Plans (CAPs)**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (p. 26.)
- **Compliance with Local Air District Thresholds**. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (p. 27).

Therefore, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4 and the *Newhall Ranch* opinion, the following thresholds are considered in determining the significance of impacts from GHG.

- **Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs (see Impact GHG-1)?**

  Analysis under Impact GHG-1 involves a analysis of the project's compliance with the County of Riverside's CAP. The CAP is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change. This threshold is also consistent with the SCAQMD's draft interim threshold Tier 2, which consists of determining whether a project is consistent with a qualified greenhouse gas reduction plan.

- **Would the project conflict with the ARB Scoping Plan and regulations adopted for the purpose of reducing emissions of greenhouse gases (see Impact GHG-2)?**

  Analysis under Impact GHG-2 involves a qualitative analysis of the project's consistency with the ARB's Scoping Plan and with GHG emission reducing regulations. The Scoping Plan (and its adopted regulations) are considered a statewide plan, policy, or regulation adopted by a public agency to reduce GHG emissions that may be used to assess consistency with AB 32.

The County has further determined that each one of the above-two thresholds is considered to be a separate and independent basis upon which to substantiate the significance of the project's GHG impact.

## 3.7.4 - Methodology

FirstCarbon Solutions (FCS) used CalEEMod Version 2013.2.2 to quantify emissions associated with the construction and operation of the proposed project. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows South Coast Air Quality Management District (SCAQMD) recommendations for quantification of emissions and evaluation of potential greenhouse gas impacts. Supporting information is provided in Appendix F.

### Existing Emissions

The project site is currently vacant. Therefore, for the purposes of this analysis, existing GHG emissions at the project site are assumed to be zero, and all activities related to the project are considered potential increases in GHG emissions.

### Greenhouse Gas Emissions Quantification

GHG emissions per unit of activity, also referred to as emission factors, are incorporated in CalEEMod for each analysis year. Quantification of project-related greenhouse gas emissions is based on the project's buildout year of 2017.

### Construction Emissions

The project would emit GHGs from upstream emission sources and direct sources from construction activities (combustion of fuels from worker vehicles and construction equipment).

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited to the following: emissions from the manufacture of cement; emissions from the manufacture of steel; and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they are expressly not within the purview of EIRs, according to CEQA Guidelines Section 15144. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change states "The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level" (CAPCOA 2008). Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream/life cycle emissions are speculative; no further discussion is provided.

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions ($CO_2$, $CH_4$, and $N_2O$) from heavy-duty construction equipment and motor vehicle operation. Off-site emissions are caused by motor vehicle exhaust ($CO_2$, $CH_4$, and $N_2O$) from delivery vehicles and worker traffic.

The project would emit greenhouse gases from upstream emission sources and direct sources (combustion of fuels from worker vehicles and construction equipment). Greenhouse gas emissions

from project construction equipment and worker vehicles are based on CalEEMod default values. The emissions are from all phases of construction. The emissions analysis assumed full buildout of the project in 2017. The construction schedule utilized in the analysis, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[4] In order to provide a conservative analysis, the short-term construction emissions have been amortized over the expected (long-term) operational life of the project and are included in the quantification of operational emissions. The operational life of a conventional commercial/industrial building is estimated to be 30 years in accordance with SCAQMD guidance.

GHG emissions from project construction equipment and worker vehicles are shown in Table 3.7-2. The emissions are from all phases of construction.

**Table 3.7-2: Construction Greenhouse Gas Emissions**

| Phase | Total $MTCO_2e$ per year |
|---|---|
| 2016 | 1,180.13 |
| 2017 | 1,870.48 |
| *Total* | *3,050.61* |
| **Amortized over 30 years** | **102** |

Notes:
Total $MTCO_2e$ may be different from CalEEMod output due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalents
Source: GHG Modeling Results (Appendix F).

## Operational GHG Emissions

Operational or long-term emissions occur over the life of the project. Sources of operational emissions include:

- **Area**. Refers to consumer products, area architectural coatings, and landscaping equipment. Area emissions were estimated using CalEEMod.
- **Indirect Electricity**. Refers to the GHG emissions generated by off-site power plants to supply electricity required for the project. Electricity emissions were estimated using CalEEMod.
- **Mobile**. Refers to motor vehicle/exhaust emissions from the employee and customer vehicles and heavy-duty trucks that would access the project site. Motor vehicle and truck emissions were calculated using CalEEMod and information contained in the project's traffic impact study.

[4] As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2013.2, Table 3.4 "OFFROAD Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

- **Natural Gas**. Refers to exhaust from natural gas usage. Carbon dioxide emissions were estimated using CalEEMod.
- **Water**. Estimates the land uses contribution of greenhouse gas emissions associated with supplying and treating the water and wastewater. Water emissions were estimated using CalEEMod.
- **Waste**. Refers to the greenhouse gas emissions associated with disposal of solid waste into landfills. Waste emissions were estimated using CalEEMod.

## Proposed Project Emissions

This analysis is restricted to greenhouse gases identified by AB 32, which include $CO_2$, $CH_4$, $N_2O$, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project would generate a variety of greenhouse gases during construction and operation, including several defined by AB 32 such as $CO_2$, $CH_4$, and $N_2O$.

The project may also emit greenhouse gases that are not defined by AB 32. For example, the project may generate aerosols. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty. Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities. The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain greenhouse gases defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they are not within the control of the project and to do so would be speculative. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change supports this conclusion by stating, “The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level.” Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream/life cycle emissions are speculative and no further discussion is necessary.

The operational emissions for the project based on the anticipated 2017 opening year are shown in Table 3.7-3. As shown, the project would emit approximately 29,041 $MTCO_2e$ under the 2017 opening year scenario. For the complete assumptions, please refer to Appendix F.

**Table 3.7-3: Project Operational Emissions**

| Source | Emissions ($MTCO_2e$ per year) |
|---|---|
| Area | <1 |
| Energy | 1,954 |
| Mobile—Passenger Vehicles | 2,948 |
| Mobile—Trucks | 23,175 |
| Waste | 780 |
| Water | 84 |
| Construction Emissions Amortized over 30 years | 102 |
| **Total** | **29,041** |

Notes:
Total $MTCO_2e$ may be different from CalEEMod output due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalents
Source: GHG Modeling Results (Appendix F).

## 3.7.5 - Project Impact Analysis and Mitigation Measures

### Conflict with Applicable Plan, Policy, or Regulation

**Impact GHG-1:** **The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.**

#### *Impact Analysis*

As discussed in the *Newall Ranch* decision, a lead agency may asses the significance of GHG emissions by determining a project's consistency with a local GHG reduction plan or CAP that qualifies under Section 15183.5 of the CEQA Guidelines. The County of Riverside's CAP serves to fulfill this role.

The CAP is designed to ensure that the development accommodated by the buildout of the General Plan supports the goals of Assembly Bill (AB) 32—the Global Warming Solutions Act of 2006. The California Air Resources Board (ARB) adopted the State's strategy for achieving AB 32 targets in its Climate Change Scoping Plan (Scoping Plan) in 2008. The Scoping Plan greenhouse gas reduction goal is to reduce statewide emissions to 1990 levels by 2020. The Riverside County CAP includes strategies that will achieve this target. The CAP target is to reduce County emissions by the amount recommended in the Scoping Plan for local government of 15 percent below 2008 levels by 2020. This was roughly equivalent to the 28.4 percent overall reduction in statewide emissions from BAU in 2020. The strategy will continue to provide reductions past 2020 and includes a commitment to

update the CAP beginning in 2017. The new plan will include a specific target for GHG reductions for 2035 and 2050. The targets will be consistent with broader state and federal reduction targets and with the scientific understanding of the needed reductions by 2050. The CAP includes analysis that includes the conceptual reductions required to achieve the percent reductions that would be required to achieve the levels needed to achieve the 2050 target outlined in Executive Order S-3-05, but the CAP does not include a comprehensive strategy to achieve the later targets pending adoption of a statewide strategy for those later years.

In determining whether the project conflicts with any applicable plan, policy, or regulation, the California Resources Agency has stated that in order to be used for the purpose of determining significance, a plan must contain specific requirements that result in reductions of greenhouse gas emissions to a less than significant level. The following from CEQA Guidelines Section 15083.5(b) lists the requirements for greenhouse gas reduction plans used for this purpose:

(1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:
   (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
   (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
   (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
   (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
   (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
   (F) Be adopted in a public process following environmental review.

(2) Use with Later Activities. A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project.

The CAP meets these requirements as shown below:

- The CAP quantifies emissions for a 2008 base year and future inventories for 2020, 2035, and 2050 for the County.
- The CAP has adopted a target of reducing GHG emissions down to 15 percent below 2008 levels within the County of Riverside by 2020. This reduction target is compliant with AB 32; the AB 32 Climate Change Scoping Plan states: "In recognition of the critical role local governments will play in the successful implementation of AB 32, ARB recommended a greenhouse gas reduction goal for local governments of 15 percent below today's levels by 2020 to ensure that their municipal and community-wide emissions match the State's reduction target" (Scoping Plan page ES-5, ARB December 2008). As such, the County is consistent with the State's efforts to reduce GHG emissions globally and substantially lessen the cumulative contribution.
- The CAP analyzed the GHG emissions resulting from specific sources under the jurisdiction of the County or within the County's ability to influence including source categories common to most climate action plans in California.
- The CAP identified specific measures that would reduce GHG emissions by the required amount from regulations that apply to existing and new development and local measures that apply to the sources of emissions including:
  - Land Use and Transportation
  - Transportation Facilities Strategies
  - Transportation Demand Strategies
  - Energy Conservation Strategies for New and Existing Buildings
  - Waste Diversion and Recycling and Energy Recovery
  - Strategies for Existing Development
  - Municipal Strategies
- The CAP includes procedures for tracking and monitoring plan performance measures including annual and triennial data collection and reporting to identify trends and potential shortfalls requiring corrective actions.
- The CAP was included as part of the General Plan Update Master Environmental Impact Report and was adopted and certified in a public hearing on December 08, 2015.
- The CAP includes binding and enforceable requirements that apply to development projects to ensure plan consistency. All emission reductions required to reach the plan 2020 targets are achieved through compliance with adopted regulations, ordinances, and code enforced by the State and the County. Reductions from mobile sources anticipated through implementation of the County's land use plan are enforced through the development review process. Conditions of approval may be applied for measures requiring project specific actions not specifically addressed by the regulation or code.

The point values in the Screening Tables were derived from the projected emissions reductions that each of the Implementation Measures (IM) within the Riverside County GHG Technical Report would achieve. The total emission reductions offered by each measure is based on both changes in existing

land use activities as well as how new development is designed and built. In order to correctly allocate the emission reductions within the Screening Table, the amount of emission reductions afforded new development had to be segregated out of the aggregate total in a manner that is described below. Once the process of segregating new development out of the aggregate reduction totals was completed, the points were then proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial/industrial uses by the year 2020 and proportioning the appropriate IM reduction quantities for new development to the residential and commercial/industrial land use sectors within the Screening Table. These calculations result in point values that are allocated by residential unit or commercial/industrial square footage (measured in 1000 square feet). Because of this, the size of the project is not relevant to the Screening Table. Regardless of size, each project needs to garnish 100 points to demonstrate consistency with the Technical Report. Efficiency, not size of the project is critical. The following emission factor can be used in determining the amount of emissions reduced per point in the Screening Table:

- The respective calculated emission values are in metric tons of carbon dioxide equivalents ($MTCO_2e$)
- For Residential Projects: 0.069 $MTCO_2e$ per Point per Residential Unit
- For Commercial and Industrial Projects: 0.031 $MTCO_2e$ per Point per 1,000 Square Feet of gross Commercial/Industrial building area
- The first step in developing the point system was the need to determine the total reductions afforded the GHG Plan. In total 4,288,863 $MTCO_2e$ will be reduced as a result of the GHG Plan.

As shown in the GHG Plan, 1,807,866 $MTCO_2e$ will be reduced through state strategies. The next step in developing the point system is to segregate out the County's efforts in reducing GHG emissions. As shown in the GHG Plan, 2,448,997 $MTCO_2e$ are reduced by the County's Implementation Measures. This amount includes reductions afforded existing building retrofits, other changes to activities associated with existing land uses, as well as reductions associated with new development.

The next step is to segregate out of the 2,448,997 MT $CO_2e$ that the County needs to reduce, the total the amount of emissions that will be reduced by new development.

The GHG Plan summarizes the reduction in emissions afforded new development from the Implementation measures. As summarized in the GHG Plan, 1,302,569 $MTCO_2e$ will be reduced from new development as a result of the County strategies. Within the 1,302,569 $MTCO_2e$ of new development reductions afforded County strategies, 619,336 $MTCO_2e$ of emissions reduced is accomplished through new Commercial and Industrial Projects, and 683,233 $MTCO_2e$ of emissions reduced is accomplished through new residential projects.

The next step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated by year 2020. The County predicts that 100,477 new residential units will be needed by 2020 to accommodate the population growth by 2020. A total of approximately

195,547,000 square feet of new commercial and industrial buildings within the unincorporated County area is needed to accommodate anticipated job growth. This estimate is based on the relationship between past growth in employment to the average growth in commercial/industrial building area for Riverside County.

Dividing the 683,233 $MTCO_2e$ reductions of emissions afforded the Implementation Measures for new residential development by the anticipated 100,477 new residential units that will be built yields 6.80 $MTCO_2e$ per residential unit that needs to be reduced to fulfill the anticipated reductions of the GHG Technical Report. That amount equals 100 points, producing the following for the point values: 0.0680 $MTCO_2e$ per Point per Residential Unit

A similar process was used to derive the point value for new commercial/Industrial development. Because commercial/industrial land uses are typically described in thousand square feet of building space, the point value was calculated as follows: 0.031 $MTCO_2e$ per 1,000 square feet of gross Commercial/Industrial building area.

The final step was to allocate points to each of the reduction measures in order to provide the menu of point values. Table 3.7-4 shows the requisite points afforded each measure. Note that emissions associated with new development are reduced by the State's measures, as well as the County's Implementation measures. The Screening Tables focus on those measures the County is implementing associated with new development within the unincorporated County area. For this reason, the menu of options pertains to all of the Implementation Measures pertaining to new development.

Pursuant to the CAP, Projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

In order to enforce the requirements of the CAP Screening Tables, Mitigation Measure GHG-1 requires that the project implement at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables. Table 3.7-4 displays the points that are anticipated to be used by the project; during construction and operation of the project, the points may be switched for feasibility. Therefore, since the project will incorporate at least 100 points from the screening tables, the project's impact on greenhouse gas emissions is less than significant.

**Table 3.7-4: County of Riverside Greenhouse Gas Screening Table**

| Feature | Description | Project Consistency | Points |
|---|---|---|---|
| E5.A.1 | Insulation: Modestly enhance insulation (walls R-13, roof/attic R-38) | The project will satisfy this measure by installing wall insulation rated at R-13 or better and roof/attic insulation at R-38 or better for the office portions of the building. | 15 |

## Table 3.7-4 (cont.): County of Riverside Greenhouse Gas Screening Table

| Feature | Description | Project Consistency | Points |
|---|---|---|---|
| E5.A.2 | Window Insulation: Modestly enhanced window insulation (5% > Title 24) | The project will satisfy this measure by installing windows with insulation that exceeds the incumbent 2013 Title 24 standards by a minimum of 5 percent. | 7 |
| E5.A.4 | Air infiltration: Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. Modest Building Envelope Leakage (5% > Title 24). | The project will satisfy this measure by designing the building envelope to ensure that there is minimal building envelope leakage for the conditioned space. The building envelope will exceed the incumbent 2013 Title 24 standards by a minimum of 5 percent. | 4 |
| E5.B.1 | Heating/Cooling Distribution System: Minimum Duct Insulation (R-4.2 required) | — | 0 |
| E5.B.2 | Space Heating/Cooling Equipment: High efficiency HVAC (EER15/72% AFUE or 8.5 HSPF) | The project will satisfy this measure by installing a high efficiency HVAC unit rated EER15/72% AFUE or 8.5 HSPF or better. | 8 |
| E5.B.4 | Water Heaters: 2008 Minimum Efficiency (0.57 Energy Factor) | — | 0 |
| E5.B.5 | Daylighting: All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) | The project will satisfy this measure by installing daylighting such that all of the conditioned space will have daylight through the use of windows, solar tubes, skylights or equivalents. For example, the warehouse buildings will have skylights and the office areas will contain windows. | 5 |
| E5.B.6 | Artificial Lighting: High efficiency lights (50% of in-unit fixtures are high efficacy) | The project will satisfy this measure by installing high efficacy lighting at a minimum of 50 percent of the in-unit lighting fixtures. | 12 |
| E6.A.1 | Solar Photovoltaic panels: 23 percent of the power needs of the project | As identified in the Project Description, Section 2.3.1 of the DEIR, the project includes the use of solar panels on its roofs, which would provide approximately 23 percent of the project's power needs. | 14 |
| W1.C.1 | Water Efficient Landscaping: Eliminate turf and only provide drought tolerant plants | The project will satisfy this measure through compliance with the landscaping plan that identifies the use of drought tolerant plants. | 4 |
| W1.C.2 | Water Efficient Irrigation Systems: Weather based irrigation control systems combined with drip irrigation (demonstrate 20 percent reduced water use) | The project will satisfy this measure through compliance with the MWELO as required by the Riverside County Ordinance 859.2. Implementation of the MWELO will result in a minimum of 20 percent reduced water use for outdoor irrigation. Specifically, the irrigation | 5 |

## Table 3.7-4 (cont.): County of Riverside Greenhouse Gas Screening Table

| Feature | Description | Project Consistency | Points |
|---|---|---|---|
| | | system will be designed utilizing "state of the art" irrigation equipment such as smart controllers, rain shut-off devices, master valves and flow sensors, as well as water-efficient irrigation heads. Plant materials will also be separated by hydrozones. | |
| W1.D.1 | Showers: Water Efficient Showerheads (2.0 gpm) Title 24 standard (required) | The project will satisfy this measure through compliance with the 2013 California Plumbing Code Section 408.0 Showers, showerheads shall have a maximum flow rate of 2.0 gallons per minute consistent with 2013 CALGreen which currently applies to the project. | 3 |
| W1.D.2 | Toilets: Water Efficient Toilets/Urinals (1.5gpf) | The project will satisfy this measure through compliance with the 2013 California Plumbing Code Section 403.2.1 Water Closets, either flush tank, flushometer tank, or flushometer valve operated, shall not exceed the effective flush volume of 1.28 gallons. Urinals shall have an average water consumption not to exceed 0.125 gallon per flush. Both of these requirements are consistent with 2013 CALGreen, which currently applies to the project. | 3 |
| W1.D.3 | Faucets: Water Efficient faucets (1.28gpm) | The project will satisfy this measure through compliance with the 2013 California Plumbing Code Section 403.8 Lavatory Faucets, the maximum flow rate of lavatory faucets shall not exceed 1.0 gallon per minute. | 3 |
| T1.A.2 | Car/vanpools: Car/vanpool program with preferred parking | The project will satisfy this measure through compliance with the 2013 Cal Green Code section 5.106.5.2, the project will provide designated parking stalls for low-emitting, fuel-efficient, and/or carpool/vanpool vehicles. As such, the project will provide a minimum of 36 preferred parking spaces for car/vanpools or low-emitting/fuel efficient vehicles. | 2 |
| T1.A.3 | Bike lockers and secure racks Showers and changing facilities | The project will satisfy this measure through compliance with MM AQ-8 c) which requires that, each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided. Pursuant to MM AQ-8 d) Each building shall provide a minimum of two shower and changing facilities within 200 yards of a building entrance. | 3 |

## Table 3.7-4 (cont.): County of Riverside Greenhouse Gas Screening Table

| Feature | Description | Project Consistency | Points |
|---|---|---|---|
| T4.A.1 | Parking: Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles. | The project will satisfy this measure through compliance with MM AQ-8 e) which requires that, each building shall provide preferred parking for low-emitting and fuel-efficient vehicles equivalent to 5 percent of the required number of parking spaces. This measure is also consistent with 2013 Cal Green Code section 5.106.5.2, which requires that the project provide designated parking stalls for low-emitting, fuel-efficient, and/or carpool/vanpool vehicles for 5 percent of required spaces. As such, the project will provide a minimum of 36 preferred parking spaces for car-share, carpool, and ultra-low or zero emission vehicles. | 1 |
| T7.B.1 | Electric Vehicle Recharging: Install electric vehicle charging stations in parking areas. | The project will satisfy this measure through compliance with MM AQ-8 b) which requires that, a minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building. As such, the project will provide a minimum of four electric vehicle-charging stations for automobiles or light-duty trucks at the site. | 16 |
| T8.A.1 | Vehicle Idling Restriction: All commercial vehicles are restricted to 5-minutes or less per trip on-site and at loading docks | The project will satisfy this measure through compliance with, MM AQ-7 b), which requires the project to post signs in all dock and delivery areas containing the following: truck drivers shall turn off engines when not in use; trucks shall not idle for more than five minutes; telephone numbers of the building facilities manager and the California Air Resources Board to report violations. | 2 |
| L2.B.1 | Landscaping Equipment: Project provides electrical outlets on the exterior of all buildings so that electric landscaping equipment is compatible with all built facilities | The project will satisfy this measure through installation of electrical outlets on the exterior of all buildings. | 2 |
| SW1.B.1 | Recycling: Provide separated recycling bins within each building/floor and provide large external recycling collection bins at central location for pick-up | The project will satisfy this measure through requiring the provision of separated recycling bins within each building and will include a recycling collection bin for pick-up by the local waste hauler consistent with the requirements of Assembly Bill 341. | 2 |

**Table 3.7-4 (cont.): County of Riverside Greenhouse Gas Screening Table**

| Feature | Description | Project Consistency | Points |
|---|---|---|---|
| SW2.B.1 | Recycling of Construction/Demolition Debris: Recycle at least 20 percent of debris | The project will satisfy this measure by requiring that the project will implement and develop a plan to recycle a minimum of 20 percent of construction debris. | 6 |
| | | **Total** | **117** |
| Source: TSG-Cherry Valley L.P., personal communication, July 2016. | | | |

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measures AQ-7 and AQ-8, which serve to reduce mobile source emissions, and the following:

**MM GHG-1** Prior to issuance of building permits, the applicant shall provide documentation to the County of Riverside Building Department demonstrating that the project will implement the above described project features that will achieve at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables or achieve equivalent emission reductions from other measures approved by the County of Riverside.

### *Level of Significance After Mitigation*

Less than significant impact.

**Impact GHG-2: The proposed project is consistent with the ARB Scoping Plan and regulations adopted for the purpose of reducing the emissions of greenhouse gases.**

Impact GHG-2 assesses the project's consistency with the overarching goals of AB 32 and the strategies of ARB's Scoping Plan as well as the regulatory measures adopted to further AB 32's goals.

CEQA allows lead agencies to consider whether regulatory programs are adequate to reduce a project's potentially significant environmental effects. Under AB 32, the State's emission inventory must be reduced to 1990 levels by 2020. One of the questions in the CEQA Guidelines checklist regarding GHG asks whether a project conflicts with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The ARB Scoping Plan and its implementing regulations provide the regulatory framework for the State to achieve its target and to track its progress. Moreover, *Newhall Ranch* describes that a lead agency may assess consistency with AB 32's goal in whole or in part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities . . . [Newhall, p. 25]. *Newhall Ranch* further describes that "[t]o the extent a project's design features comply with or exceed the

regulations outlined in the Scoping Plan and adopted by the Air Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions.' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions'].)"

An important underlying assumption when making a significance determination based on compliance with regulations is that the regulations are adequate to address the impact to a less than significant level. If compliance with regulations is sufficient to mitigate the impact to a less than significant level, then a project is not required to provide any additional mitigation to further reduce the impact. If, however, regulations are only partially effective in mitigating the impacts, or if the regulatory program is not fully implemented, there may be a gap between the amount that can be reasonably claimed from regulation and the amount needed to achieve the less than significant target.

The ARB 2008 Scoping Plan includes a regulatory strategy that will result in the State achieving the AB 32 target by 2020, accounting for growth projected by 2020. The measures in the 2008 Scoping Plan have all been in place since 2012. In the 2014 Scoping Plan Update was adopted in May 2014; however, ARB confirmed that the State had now adopted sufficient laws and regulations to achieve the AB 32 target and no new measures or targets were identified.

*Measures of Plan Consistency or Conflict*

Determining project consistency with greenhouse gas plans presents unique challenges because the impact is global and inherently cumulative in nature and the solutions require global and local action. A single state or nation or project cannot solve the problem and there are no binding international agreements in place that will achieve the amount of reductions scientists estimate will be required to prevent catastrophic climate change. California recognized this and decided to identify reduction targets for itself in AB 32 that would lead to California providing its fair share of reductions regardless of what other states or the federal government or other countries do to reduce their fair share. The hope is that this leadership by example will spur other governments to take action to reduce their greenhouse gas impacts. California through AB 32 set its fair-share reduction at the amount required to reduce emissions to 1990 levels by 2020.

The analysis below qualitatively examines the measures contained in the applicable plans and subsequent adopted regulations and how they interrelate with the project to achieve the State's goals.

*Applicable Plans*

The Scoping Plan provides the State's overall strategy in the form of measures that apply to emission sectors that comprise the State's greenhouse gas emission inventory. The Scoping Plan is the State's view from 30,000 feet for achieving the AB 32 mandates. The State's on-the-ground implementation strategy primarily takes the form of source specific regulations adopted by State agencies such as ARB, and the CEC. The State has adopted regulations described earlier in this section to implement the Scoping Plan measures and achieve the emission reductions required. The Scoping Plan

envisions a limited role for local government in implementing the State's GHG reduction strategy focusing on local government's authority over land use and some transportation projects.

*Relating Plans to Projects*

The ARB Scoping Plan examines California's greenhouse gas profile in two ways—emissions-based and end use (demand side)-based. While it is possible to illustrate the inventory many different ways, no chart or graph can fully display how diverse economic sectors fit together. California's economy is a web of activity where seemingly independent sectors and subsectors operate interdependently and often synergistically. For example, reductions in water use reduce the need to pump water, directly lowering electricity use and associated greenhouse gas emissions. Similarly, reducing the generation of waste reduces the need to transport the waste to landfills—lowering transportation emissions and, possibly, landfill $CH_4$ emissions. Increased recycling or re-use reduces the carbon emissions embedded in products—it takes less energy to make a soda can from recycled aluminum than from virgin feedstock.

Development projects are assessed for direct emissions from combustion of fuels for heating buildings and indirect emissions for fuel use from transportation activities associated with the project. Development projects are also end users of electricity that is often generated by power plants that are located far from the project site. Project emissions from electricity consumption are based on the projected use and the average emission rate for the electric utility serving the project.

The regulations implementing the Scoping Plan apply directly to the project in regards to energy efficiency of the buildings, water conservation, and refrigerant usage. Scoping Plan measures regarding motor vehicle fuel efficiency apply to vehicle manufacturers, but result in lower emissions from vehicles accessing the project site. The Renewable Portfolio Standard applies to electric utilities, but reduce emissions related to electricity used by the project. Transportation sector measures from the Scoping Plan are also implemented through SB 375—The Sustainable Communities and Climate Protection Act of 2008 which targets emissions from the transportation system through actions that make transportation more efficient at the regional level. Individual development projects have no direct requirements from SB 375 but may benefit from being located in areas designated as Transit Priority Areas and from systemwide infrastructure improvements that reduce congestion and improve traffic flow for all system users.

Development projects are constructed to accommodate California's population and economic growth accounted for by the Scoping Plan. As described above, the regulations implementing the Scoping Plan touch many of the operations of the buildings and the day-to-day activities of people that will work and shop at the project. Most of the greenhouse gas regulations apply behind the scenes so that end users of the project do not notice them except to the extent that the types of cars available for purchase are more fuel efficient. The developer is directly impacted by building energy efficiency and conservation regulations that must be followed during building construction. The cost of the efficiency measures is built into the construction cost of the building and rents but the owners and tenants benefit from lower energy bills and water bills resulting from the increased energy efficiency.

The Scoping Plan includes measures that reduce emissions from the following sectors:

- Transportation
- Electricity and Natural Gas
- Water
- Green Building
- Industry
- Recycling and Waste Management
- Forests
- High Global Warming Potential
- Agriculture

The 2008 Scoping Plan included 18 measures to reduce emissions from the various sectors. The measures often overlap and have interdependent relationships with other measures as described earlier. The measures are implemented with regulations and programs applicable to specific sources of emissions. More detailed descriptions of the measures are provided in Scoping Plan Appendix C, Sector Overview and Emission Reduction Strategies. The State has been very aggressive in adopting regulations to implement the Scoping Plan and as a result, the state is on track to achieve the 2020 target as discussed above.

Most of the reductions required to reach AB 32's 2020 reduction target will be achieved by regulations that apply to both existing and new development, including the RPS, Pavley standards, LCFS, landfill regulations, regulations and programs on high global warming potential (GWP) gases, initiatives on water conservation (such as SB X7-7), and the indirect influence of the Cap and Trade system on electricity and transportation fuel prices.

The project's significance with respect to consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emission have been evaluated below and addressed for each sector.

**Transportation**

Approximately 90 percent of the project's opening year GHG emissions as summarized in Table 3.7-3 are from transportation (mobile sources), heavy-duty trucks in particular. Transportation emissions are heavily regulated at the source, including but not limited to engine emissions standards and fuel requirements. Because these regulations and policies reduce GHG emissions at the source, the project will be subject to and therefore not conflict with these transportation measures.

### *State Regulations/Scoping Plan Measures*

Adopted regulations that will reduce the project's GHG emissions through engine emission standards and fuel requirements are described in detail in Section 3.7.2 above. These regulations are discussed in the following paragraphs.

*California Light-Duty Vehicle Greenhouse Gas Standards*

AB 1493/Pavley I and II required ARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30-percent reduction. The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025.

This measure applies to all new passenger vehicles starting with model year 2009. The project is consistent with this measure and its implementation as it would apply to all new passenger vehicles purchased in California. As such, any passenger vehicles associated with construction and operation of the project would be required to comply with the Pavley emissions standards.

*Executive Order S-01-07—Low Carbon Fuel Standard (LCFS)*

The LCFS regulation became fully effective in 2010 and will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. The proposed Project will utilize these emissions reductions as they are implemented into 2020 from all operational mobile emissions sources.

This measure applies to transportation fuels utilized by vehicles in California. The project is consistent with this measure and its implementation as motor vehicles associated with construction and operation of the project would utilize low carbon transportation fuels as required under this measure.

*Medium/Heavy-Duty Vehicles*

As part of the Heavy-duty Vehicle Greenhouse Gas Regulation, ARB also implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address and reduce emissions from trucks. Since the proposed Project has a large truck component, these regulations will aid in reducing GHG emissions from the project.

This measure applies to medium and heavy-duty vehicles that operate in the state, and thus would apply to medium and heavy-duty vehicles that serve the project. The project is consistent with this measure and its implementation as medium and heavy-duty vehicles associated with construction and operation of the project would be required to comply with the requirements of this regulation.

*Tractor-Trailer Greenhouse Gas Regulation*

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. The project is consistent with this measure and its intended implementation, since the project will be required to become a SmartWay Partner and the facility operator will be required to incorporate incentives and requirements such that a maximum feasible number of truck trips will be carried by SmartWay 1.0 or greater carriers pursuant to MM AQ-7 e) and MM AQ-7 f).

*Cap-and-Trade Program*

Notably, the Cap-and-Trade Program covers transportation fuel suppliers to address emissions from fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are supplied, or delivered into commerce. Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all of GHG emissions from CEQA projects associated with VMT are covered by the Cap-and-Trade Program.

In September 2013, the SCAQMD adopted two Negative Declarations stating that GHG emissions subject to the ARB Cap-and-Trade Program do not count against the 10,000 MT $CO_2e$ significance threshold the SCAQMD applies when acting as a lead agency. In addition, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has recently taken this one issue step further and adopted a policy: "CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation." This policy applies when the SJVAPCD is the lead agency and when it is a responsible agency. In short, the SJVAPCD "has determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…." The SJVAPCD classifies ARB's Cap-and-Trade Program as an approved GHG emission reduction plan or GHG mitigation program under CEQA Guidelines Section 15064(h) (3). The policy acknowledges that "combustion of fossil fuels including transportation fuels used in California (on and off road including locomotives), not directly covered at large sources, are subject to Cap-and-Trade requirements, with compliance obligations starting in 2015." As such, the SJVAPCD concludes that GHG emissions associated with VMT cannot constitute significant increases under CEQA. This regulatory conclusion is therefore directly applicable to the proposed project because VMT is by far the largest source of project GHG emissions.

Since the proposed project has a large mobile source component and Cap-and-Trade emission reductions are difficult to calculate on a project-level, the proposed project's mobile source emissions are very conservative, making the total emission calculations conservative. The phase-in of the Cap-and-Trade Program compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved and modeled by the Pavley Standard and LCFS.

### *Regional and Local Measures*

Southern California is a major hub for importing and exporting goods. SCAG estimates that over $2 trillion in cargo was moved across the region in 2010 alone, much of which travels through inland Southern California, including Western Riverside County. However, the many warehouses and distribution facilities employ non-passenger vehicles that contribute to GHG emissions. At the state level, more standards are being implemented to increase vehicle efficiencies and the 2012 RTP/SCS and SCAQMD are supporting greater penetration of low-emission trucks in the region. While goods will continue to be moved to support local and regional economies, electrification and other low-emission technologies installed in vehicles can reduce the GHG emissions of goods movement.

The Inland Empire is the heart of the region's warehouse Goods Movement network for goods that enter the Ports and are moved east to the rest of the country. The entire Goods Movement network is based on the Ports of Los Angeles/Long Beach (Ports of LA/LB) and all truck trips generated by the project are conservatively assumed to come from the Ports of Los Angeles/Long Beach (Ports of LA/LB). The Ports have adopted several plans and policies to reduce GHG emissions including Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, the Port of LA CAP, the Long Beach Sustainable City Action Plan, and the San Pedro Bay Ports Clean Air Action Plan.

As identified in the Riverside County CAP, the County has adopted several General Plan Policies that reduce automobile use and consequently GHG emissions, these measures go above and beyond the regulatory requirements of AB 32. A summary of applicable measures identified in the CAP are as follows:

*R2-T1: Employment Based Trip and VMT Reduction*

This measure would implement General Plan Policies AQ 3.3, AQ 10.1, AQ 10.3, and AQ 10.4 through the adoption of a voluntary trip reduction program for new commercial and industrial development that promotes commuter choices, employer transportation management, guaranteed ride home programs and commuter assistance and outreach type programs intended to reduce commuter vehicle miles traveled. The project is consistent with this measure and its intended implementation as the project will be required to participate in Riverside County's Rideshare Program pursuant to MM AQ-8 a).

*R2-T4: Preferential Parking*

This measure would implement General Plan Policies AQ 3.3 and AQ 10.3 by encouraging proposed development projects to incorporate a comprehensive parking program to facilitate carpooling and alternate transportation. The project is consistent with this measure and its intended implementation as the project will be required, pursuant to MM AQ-8 b) and MM AQ-8 e) to install a minimum of two electric-vehicle charging stations per building, and each building shall provide preferred parking for low-emitting and fuel-efficient vehicles equivalent to 5 percent of the required number of parking spaces.

*R2-T5: Roadway Improvements Including Signal Synchronization and Transportation Flow Management*

This R2 measure would implement General Plan Policies AQ 12.1 and AQ 12.3. Proposed development projects that pay fare-share fees toward signal synchronization improvements or construct signalized intersections within a traffic signal synchronization system. These modifications include, but are not limited to, synchronization of signals, improvement of traffic flow, the development of parallel roadways and support for the extension of freight rail into Riverside County's industrial areas. The project is consistent with this measure as it will implement any required traffic signal synchronization or construction of new traffic signals as identified in the project's traffic impact analysis.

### *Project Design Features and Mitigation Measures*

Lastly, the project will incorporate several project design features and mitigation measures that will further reduce the project's GHG emissions from transportation. These measures further support

the AB 32/Scoping Plan reduction goals. A summary of mitigation measures that will reduce transportation-related GHG emissions are as follows:

**MM AQ-2** All Heavy-Heavy Duty Haul Trucks (HHD) accessing the project site shall use year 2007 or newer engines during all construction activities.

**MM AQ-7** The project shall implement the following measures to reduce emissions from on-site heavy duty trucks within six months after operations commence:

b) Post signs in all dock and delivery areas containing the following: truck drivers shall turn off engines when not in use; trucks shall not idle for more than five minutes; telephone numbers of the building facilities manager and the California Air Resources Board to report violations.
c) Tenants shall maintain records on its fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles serving the warehouses within the project are in good condition, and in proper tune pursuant to manufacturer's specifications. Tenants shall maintain records on its fleet equipment and ensure that all Heavy-Heavy Duty Trucks (HHD) accessing the project site use year 2010 or newer engines. The records shall be maintained on-site and be made available for inspection by the County.
d) The facility operator will ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at California Air Resources Board approved courses (such as the free, one-day Course #512).
e) Require facility operator to become a SmartWay Partner.
f) Require facility operator to incorporate incentives and requirements such that the maximum feasible number of truck trips will be carried by SmartWay 1.0 or greater carriers.

**MM AQ-8** The following measures shall be incorporated into each building to reduce motor vehicle emissions:

a) All tenants shall participate in Riverside County's Rideshare Program. The purpose of the program would be to discourage single-occupancy vehicle trips and encourage alternate modes of transportation such as carpooling, transit, walking, and biking. The program shall provide employees with assistance in using alternate modes of travel, including carpooling encouragement, ride-matching assistance, and vanpool assistance.
b) A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building.
c) Each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided.
d) Each building shall provide a minimum of two shower and changing facilities within 200 yards of a building entrance.

e) Each building shall provide preferred parking for low-emitting and fuel-efficient vehicles equivalent to five percent of the required number of parking spaces.

### *Energy*

The second largest source, approximately 7 percent, of GHG emissions shown in Table 3.7-3 from the project is energy consumption from electricity and natural gas.

*State Regulations/Scoping Plan Measures*

Energy-related emissions are also heavily regulated at the source, including, but not limited to energy efficiency standards and renewable energy requirements. Because these regulations and policies reduce GHG emissions at the source, the project will be subject to and therefore implement these energy measures.

*Energy Efficiency—Title 24/CalGreen*

As previously discussed in Section 3.7.2, the CEC indicates that the 2013 Title 24 standards will reduce energy consumption by 30 percent above that achieved by 2008 Title 24 (CEC 2012). More specifically, based on a comparison of 2008 to 2013 Title 24 reductions required, newly constructed non-residential buildings result in an overall reduction of approximately 22 percent energy demand. Additionally, the 2013 Title 24 standards currently in effect yield an approximately 68 percent energy savings when compared with the 2005 Title 24 standards (in place pre-AB 32)[5].

At this time, the 2013 Title 24 standards are currently in effect; notwithstanding, it is likely that by the time the building permits are processed for this Project, the 2016 Title 24 standards will be in effect (the 2016 Title 24 standards take effect on January 1, 2017). The analysis did not take any credit for implementation of the more restrictive 2016 Title 24 standards for which the CEC estimates will provide 5 percent electric energy savings from non-residential buildings compared to 2013 Title 24.[6]

The proposed project is also subject to the CalGreen Code Title 24 building energy efficiency requirements that offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

*Renewable Portfolio Standard*

As previously described above in Section 3.7.2, California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy sources to 33 percent of total retail sales by 2020 as established under SB 1078 and accelerated under SB 107 and SBX1-2. Additionally, SB 1368 prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. As a customer of Southern

[5] See Table 2: Summary of First-Year-Electricity Savings in the Impact Analysis *2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings, November 2007. See Table 2: Summary of First-Year-Electricity Savings in the California Energy Commission's Consultant Report: Impact Analysis California's 2013 Building Energy Efficiency Standards, July 2013.*

[6] See CEC 2015. 2016 Building Energy Efficiency Standards Adoption Hearing Presentation. Website: http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf. Accessed May 11, 2016.

California Edison, the proposed project will purchase from an increasing supply of renewable energy sources and more efficient baseload generations and thereby reduce GHG emissions.

*Million Solar Roofs Program*

The Million Solar Roofs Program set a goal to install 3,000 megawatts (MW) of new solar capacity by 2017—moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. The Million Solar Roofs Initiative is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.

The project is consistent with this scoping plan measure as the project includes the use of solar panels on its roofs, which would provide approximately 23 percent of the project's power needs.

### *Regional and Local Measures*

As identified in the Riverside County CAP, the County has adopted several General Plan Policies that reduce energy use and consequently GHG emissions, these measures go above and beyond the regulatory requirements of AB 32. A summary of applicable measures identified in the CAP are as follows:

*R2-E5: Commercial/Industrial Energy Efficiency Program*

This R2 measure would implement General Plan Policies AQ 5.2, AQ 5.4, LU 4.1e, OS 16.1 and OS 16.9, and involves the adoption of a Riverside County Program that facilitates the energy efficient design for new commercial buildings so that new commercial buildings are 5% to 20% more efficient than the current Title 24 Standards. The high end of this voluntary energy efficiency program is 10% greater than the minimum requirements of the LEED and ENERGY STAR programs. As energy efficiency standards increase, Riverside County may want to periodically re-evaluate their percentage beyond Title 24 goal to ensure it is still a feasibly achievable goal.

Commercial developments within the unincorporated portions of Riverside County are encouraged to participate in the voluntary Commercial Energy Efficiency Program. This voluntary program would set a minimum goal of achieving energy efficiency of 5% greater than current Title 24 Standards. Incentives to participate in this volunteer program would include prioritization and streamlining of the application process for commercial/industrial projects that achieve the minimum goal. The project is consistent with this measure as it will exceed the Title 24 Standards by a minimum of 5 percent pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

*R2-E6: Commercial/Industrial Renewable Energy Program*

This R2 measure would implement General Plan Policies OS 10.1, OS 11.2 and OS 11.3, and facilitate the voluntary incorporation of on-site renewable (solar or other renewable) energy generation into the design and construction of new commercial, office and industrial development.

The project is consistent with this measure as the project includes the use of solar panels on its roofs, which would provide approximately 23 percent of the project's power needs.

### *Project Design Features*

Lastly, as identified in the Project Description, Section 2.3.1 of the DEIR, the project intends to construct buildings that will also be designed to provide CalGreen Standards with Leadership in Energy and Environmental Design (LEED) to be eligible for a Silver Certification level. This includes design considerations related to the building envelope, HVAC, lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.

For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements. Additionally, the proposed project will implement design features for future office improvement to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes installation of insulation to minimize heat transfer and thermal bridging and to limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption.

### *Water*

GHG emissions also result from electricity consumption related to water supply, treatment, and distribution, as well as wastewater treatment. As shown in Table 3.7-3, the project's GHG emissions related to water consumption are less than one percent of total GHG emissions.

*State Regulations/Scoping Plan Measures*

**Renewable Portfolio Standard Related to Water Supply and Conveyance**

This measure would increase electricity production from eligible renewable power sources to 33% by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 MMT $CO_2e$, representing 15.2% of emissions from electricity generation (in-state and imports).

As previously discussed, as a customer of Southern California Edison, the proposed project will purchase from an increasing supply of renewable energy sources and more efficient baseload generations consistent with RPS and thereby reduce GHG emissions.

**Model Water Efficient Landscape Ordinance (MWELO)**

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance.

The project is required to comply with the MWELO as required by Riverside County Ordinance 859.2 which will result in a minimum of 20 percent reduced water use for outdoor irrigation. The project is consistent with this measure as it will result in a minimum 20 percent reduced water use pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

*Regional and Local Measures*

As identified in the Riverside County CAP, the County has adopted several General Plan Policies that reduce water use and consequently GHG emissions, these measures go above and beyond the regulatory requirements of AB 32. A summary of applicable measures identified in the CAP are as follows:

**R2-W1: Water Use Reduction Initiative**

This measure would implement General Plan Policies LU 4.1d and f, C 5.2 and OS 2.1 through OS 2.4 and provide incentives for all new proposed development projects to comply with the California Green Building Standards Code. Under the California Green Building Code, new developments are required to reduce indoor potable water use by 20% beyond the Energy Policy Act of 1992 fixture performance requirements, and to reduce outdoor potable water use by 50% from a mid-summer baseline average consumption through irrigation efficiency, native plant selection, the use of recycled water and/or captured rainwater, for example. The state is dependent upon local water purveyors and jurisdictions to implement these new requirements.

The project is consistent with this measure as it will provide water efficient landscaping, irrigation, showerheads, toilets, and faucets pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

### *Project Design Features/Mitigation*

The proposed project will implement a drought tolerant landscape plan that identifies the use of drought tolerant plants. The project will also provide water efficient landscaping, irrigation, showerheads, toilets, and faucets pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

*Waste Diversion*

Disposal of solid waste in landfills contributes approximately three percent of GHG emissions from the project as shown on Table 3.7-3.

*State Regulations/Scoping Plan*

The ARB Scoping Plan recommends three measures for reducing emissions from Municipal Solid Waste at the state level, including (1) landfill methane control; (2) increase the efficiency of landfill methane capture; and (3) high recycling/zero waste. ARB is in the process of developing a discrete early action program for methane recovery (1), which was adopted in early 2010. This measure is expected to result in a 1.0 MMT $CO_2e$ reduction by 2020. Other measures proposed by ARB include increasing efficiency of landfill methane capture (2) and instituting high recycling/zero waste policies (3). Potential reductions associated with these measures are still to be determined.

Implementation of the CalGreen code and state measures reduce the amount of solid waste disposed of in landfills. The CalGreen code requires jurisdictions to divert a minimum of 50% of their nonhazardous construction and demolition waste from landfills. The City of Riverside reported a 64 percent waste diversion rate for the year 2006. In addition SB 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. The proposed project is subject to these regulations as well as SB 341's policy goal and thereby reduce GHG emissions.

*Regional and Local Measures*

As identified in the Riverside County CAP, the County has adopted several General Plan Policies that reduce waste and consequently GHG emissions, these measures go above and beyond the regulatory requirements of AB 32. A summary of applicable measures identified in the CAP are as follows:

**R2-S1: County Diversion Program**

This R2 measure would implement General Plan Policy AQ 4.1 and AQ 5.1 through a countywide waste diversion plan to further exceed the state requirements by diverting 75% of all waste from landfills by 2020. The following is a potential list of waste reduction measures that can be incorporated into development projects that will further strengthen existing waste reduction/diversion programs:

- Encourage commercial, office, and industrial development to adopt a voluntary procurement standard and prioritize those products that have less packaging, are reusable, recyclable, or compostable;
- Include recycling and green waste collection infrastructure (assigned areas with separate designated bens for each type of recycled material) within residential, commercial, and industrial development;
- Require a minimum of 15% of materials used in construction be sourced locally, as feasible; and
- Encourage the use of recycled building materials and cement substitutes for new developments.

The project is consistent with this measure as it will provide separated recycling bins within each building and a large external recycling collection bin, the project will also implement and develop a plan to recycle a minimum of 20 percent of construction debris pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

### *Project Design Features/Mitigation*

As discussed previously, the project will provide separated recycling bins within each building and a large external recycling collection bin, the project will also implement and develop a plan to recycle a minimum of 20 percent of construction debris pursuant to the Riverside County CAP Checklist implementation identified on Table 3.7-4 previously presented.

*Consistency with Executive Orders S-3-05 and B-30-15*

At the state level, Executive Orders S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. The goal of Executive Order S-3-05 is to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). The project, as analyzed above, is consistent with AB 32. Therefore, the project does not conflict with this component of Executive Order S-3-05. The Executive Orders also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. These goals have not been codified. However, studies have shown that, in order to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, ARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update, however, ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; largescale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." Due to the technological shifts required and the unknown parameters of the regulatory framework in 2030 and 2050, quantitatively analyzing the project's impacts further relative to the 2030 and 2050 goals is speculative for purposes of CEQA. Moreover, ARB has not calculated and released the BAU emissions projections for 2030 or 2050, which are necessary data points for quantitatively analyzing a CEQA project's consistency with these targets (ARB 2014).

Although the proposed project's emissions levels in 2030 and 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the proposed project's emissions level (14,008 metric tons of $CO_2e$ per year) to decline as the regulatory initiatives identified by ARB in the First Scoping Plan Update are implemented, and other technological innovations occur. Stated differently, the proposed project's emissions total presented in Table 3.6-7, represents the maximum emissions inventory for the project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. As such, given the reasonably anticipated decline in proposed project emissions once fully constructed and operational, the proposed project is consistent with the Executive Orders' goals.

The Scoping Plan recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California's greenhouse gas emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, ARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by ARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

1. Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed Project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the proposed Project's emissions level.
2. Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the proposed Project's emissions level.
3. Water Sector: The proposed Project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.
4. Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the proposed Project's emissions level.

While the 2020 cap would remain in effect post-2020, the Cap-and-Trade Program is not currently scheduled to extend beyond 2020 in terms of additional GHG emissions reductions. However, ARB has expressed its intention to extend the Cap-and-Trade Program beyond 2020 in conjunction with setting a mid-term target. The "recommended action" in the First Update for the Cap-and-Trade Program is: "Develop a plan for a post-2020 Cap-and-Trade Program, including cost containment, to provide market certainty and address a mid-term emissions target." The "expected completion date" for this recommended action is 2017. In addition to ARB's First Update, in January 2015, during his inaugural address, Governor Jerry Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions: (1) increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030; (2) cutting the petroleum use in cars and trucks in half; and (3) doubling the efficiency of existing buildings and making heating fuels cleaner. These expressions of Executive Branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change (Brown 2015). Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050.

Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target (Energy and Economics (2015).

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends, such as the increasing importance of web-based shopping, the emergence of different driving patterns by the "millennial" generation and the increasing effect of Web-based applications on transportation choices, are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years, and will require the creation of new

models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the project would comply with whatever measures are enacted that state lawmakers decide would lead to an 80-percent reduction below 1990 levels by 2050. Note again that the project already includes several project design features that exceed regulatory requirements and reduce vehicle miles traveled.

Accordingly, taking into account the proposed project's emissions, project design features, standard measures and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the project furthers the State's goals of reducing greenhouse gas emissions to 1990 levels by 2020 and an 80-percent reduction below 1990 levels by 2050, and does not obstruct their attainment.

*Summary*

The project is consistent with all applicable Scoping Plan goals and policies as evaluated herein. Additionally, the project incorporates a number of project design features and mitigation measures that go beyond the Scoping Plan requirements that would further minimize GHG emissions. The project promotes the goals of the Scoping Plan through implementation of the design measures that reduce energy consumption and water consumption. In addition, the project is required to comply with the regulations described in this section that have been adopted to implement the Scoping Plan and to achieve the AB 32 2020 target. Therefore, the project does not conflict with any plans to reduce GHG emissions and furthers the State's goals relative to this impact. The impact is less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

# 3.8 - Hazards and Hazardous Materials

This section describes the existing setting regarding hazards and hazardous materials and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based in part on information contained in Updated Phase I Environmental Site Assessment, by RM Environmental, Inc. (RM Environmental), conducted in April 2009 for the project site, included in this Draft EIR's Appendix F.

## 3.8.1 - Existing Conditions

### Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of characteristics of hazardous waste (California Department of Toxic Substances, 2010).

### Phase I Environmental Site Assessment

An Updated Phase I Environmental Site Assessment (ESA), dated April 9, 2009 was prepared by R M Environmental for the project. The purpose of the Updated Phase I ESA is to further assess the potential for the presence or likely presence of hazardous substances or petroleum products on the property, and whether there are any conditions which indicate an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water in connection with the property.

The site consists of undeveloped land with miscellaneous dirt access roads. Several areas of miscellaneous non-hazardous debris were observed throughout the property. Additionally, two burned mobile trailers were observed in the central portion of the site. A transmission waterline with associated structures was observed to traverse through the northern portion of the property. No additional site developments were observed on the subject property (R M Environmental 2009).

The site reconnaissance for the Updated Phase I ESA was performed between March 19 and 24, 2009. Site reconnaissance consisted of traversing the site to observe surficial soil conditions, structures, possible generators or storage of hazardous materials, drainage, land use, vegetation, and any notable surface conditions, which would indicate the presence of hazardous waste or petroleum product contamination on or near the site (R M Environmental 2009).

On March 20, 2009, an environmental assessor from R M Environmental interviewed Mr. Randy Downing, property owner of a parcel located north and adjacent to the site. Mr. Downing indicated he had lived at this location for approximately nine years. Mr. Downing had no knowledge of hazardous substances ever being present on the subject site. Mr. Downing also indicated he had no knowledge of any storage or use of petroleum substances on the subject property. In conformance with the American Society for Testing and Materials (ASTM), E 1528, the environmental assessor administered to Mr. Randy Downing a Transaction Screen Questionnaire (R M Environmental 2009).

### *Agency Findings*

Information obtained by the database search and governmental agency review indicated the following:

- No Federal, National Priority List, Resource Conservation and Recovery Act, Corrective Action Reports, or treated, stored or disposed of (TSD) sites are located within one mile of the site.
- No known oil or gas wells are on record within one mile of the site.
- There are no known CAL-SITES (formerly Abandoned Site Program Information System), California Hazardous Material Incident Reporting System, or Hazardous Waste Information System (HAZNET) sites located within one mile of the site.
- There are no Solid Waste Facility/Landfill or Leaking Underground Storage Tank sites within a half-mile of the site.

### *Sanborn Map Report*

Sanborn fire insurance maps consist of documented sites, which previously or currently contain chemicals/substances that pose a possible increase in fire potential or threat. The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Sanborn Maps were originally created for assessing fire insurance liability in urbanized areas. A Sanborn fire insurance map search was conducted for the area north of Cherry Valley Boulevard. No Sanborn Maps were found for the information submitted.

### *Environmental Lien Search*

An environmental lien search was not conducted for the Updated Phase I ESA. Based on the findings of the prior Phase I Site Assessment of the site (R M Environmental 2009), environmental liens were not identified for the site. It is the professional opinion of R M Environmental that the absence of an additional environmental lien search is insignificant.

### *Review of Previous Environmental Investigations*

In May 2007, R M Environmental performed a Phase I Environmental Site Assessment of the project site and the adjacent property (APNs 413-270-012 and 413-270-013). The scope of work completed for the investigation included a field reconnaissance of the site and surrounding areas, personal interviews, record and document review, historic map and aerial photo review, selected soil sampling and laboratory analysis, evaluation of the data collected, and submittal of a Phase I report (R M Environmental 2009).

The findings of the above Phase I Environmental Site Assessment indicated no significant evidence of recognized environmental hazardous conditions pertaining to the site. Based on the absence of any evidence of recognized hazardous conditions, no additional environmental investigation was recommended for the project site (R M Environmental 2009).

### *Site History*

Site history is based on historical maps and aerial photographs and information gathered from interviews. Several of the historical resources used for the review of the site history are included in Appendix F, Updated Phase I ESA.

The earliest aerial photographs of the project site suggest that the flattest parts of the project area had been cleared of native vegetation by plowing. The land was not being irrigated at the time and the plowing was probably undertaken to foster the growth of grass for grazing. During this period it may have been possible to grow a dryland hay crop in the spring because of cooler temperatures and higher soil moisture content. By 1959, plowing had been extended even further into the small canyons north of the project area leaving finger ridges between each flat spot with dense native vegetation upon them. The images show a small gully being formed because of runoff from Cherry Valley Boulevard (aka Woodland Avenue): this has subsequently enlarged and deepened to about 15 feet below the plain. In 1967 the native vegetation on the property seems to have declined (there was no sign of fire on these ridges) and the decline has accelerated to the point where today most of the original native vegetation on the low finger ridges in the project area is nearly gone.

Site history is based on historical maps and aerial photographs and information gathered from interviews. Several of the historical resources used for the review of the site history are included in the Updated Phase I ESA's in Appendix F.

### *Site Geology*

The physical site setting, including site geology, provides background information for an environmental assessment of a project site. Specifically, site geology is useful in understanding underlying sediment types and the potential for natural environmental hazards and migration of anthropogenic contamination.

The site is located in the western margin of the San Gorgonio Pass between the Traverse Ranges Geomorphic Province to the north and the Peninsular Ranges Geomorphic Province to the south. Lateral displacement and uplift of the region has occurred on a series of major, northwest-trending faults, which are thought to be related to the regional tectonic framework. Some of these fault zones have remained active to the present time which include the Cherry Valley Fault zone located

approximately 0.25 to 0.5 mile to the northeast, the Banning Fault zone located approximately two miles to the northeast, the San Andreas Fault zone located approximately seven miles to the northeast, and the San Jacinto Fault zone located approximately eight miles to the southwest. Locally, the site is underlain by several hundred feet of Quaternary age sedimentary deposits.

### *Hydrogeologic Setting*

The site is located in the Singleton storage unit of the San Timoteo Creek Drainage Basin. The depth to the regional groundwater in the vicinity of the site is approximately 150 to 200 feet below the ground surface.

Two inactive groundwater wells (Well Nos. 1 and 2) are located west and adjacent to the site. Based on well measurements of Well No. 1 conducted on May 22, 2007, the depth to groundwater is approximately 195 feet below ground surface (bgs). Based on a conversation with Mr. Randy Downing, owner of property north and adjacent to the project site, the depth to groundwater in wells located in Mr. Downing's property have varied from 50 to 100 feet bgs.

### *Recognized Environmental Conditions*

The Updated Phase I ESA concludes that there is no evidence of recognized environmental conditions in connection with the property except for the following:

- Areas of miscellaneous non-hazardous debris were observed on the subject property. These materials should be properly removed and disposed of prior to site development.

Listed below is the specific data gap identified in the Updated Phase I ESA and the significance of the missing data.

- An environmental lien search was not conducted for the Updated Phase I ESA. Based on the findings of the prior Phase I Site Assessment of the site (R M Environmental 2009), environmental liens were not identified for the site. It is the professional opinion of R M Environmental that the absence of an additional environmental lien search is insignificant.

No additional data gaps are known for the subject property.

## Fire Hazards

To understand the existing fire protection services setting in the project area and whether implementation of the project could potentially impact existing fire protection facilities in the area, Ben Johnson, Planning and Development Supervisor with the California Department of Forestry and Fire Protection (CAL FIRE) was contacted via email on June 11, 2013.

According to the Riverside County Transportation Land Management Agency (TLMA) Geographic Information System, the project area is categorized as having a "High Fire" risk from wildland fires. The area is not listed as a Very High Fire Hazard Severity Zone for Local Response Areas by CAL FIRE (Johnson, personal communication, June 11, 2013).

Based on the Addendum to the Strategic Plan and confirmation by the Riverside County Fire Department (RCFD), the project area would be considered to be within the suburban category. Suburban is described as medium- to medium-high density residential, light industrial and/or light commercial. As a light industrial use, the project would align with the aforementioned characterization. The standard response time for a "suburban" land use is 6 minutes 30 seconds.

The nearest fire station, Station 21 (Calimesa) located at 906 Park Avenue, Calimesa, California, 92320 has a Total Response Time of 7 minutes and 5 seconds), thereby not meeting the response time standard for a "suburban" land use as defined by RCFD.

### Airports/Airfields

The closest airport to the project site is the Banning Municipal Airport, which is located approximately 9.6 miles southeast of the project site. There are no private airfields located within two miles of the project site.

### Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) belong to a broad family of manufactured organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. Electrical transformers historically contained cooling lubricant containing PCB compounds. Other products that may contain PCBs include voltage regulators, switches, reclosers, bushings, and electromagnets.

During the site reconnaissance of the project site, three pole-mounted transformers were observed. No leaking or soil staining was observed.

### Radon

According to the Environmental Protection Agency (EPA) Map of Radon Zones, Riverside County is located in Zone 2 of the EPA Radon Zone Map. Zone 2 is designated as a moderate potential radon zone with levels between 2 and 4 picocuries per liter (pCi/l) of air, but is not considered an adverse environmental condition on the project site.

### Asbestos and Lead-Based Paint

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fireproofing and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air, they may be inhaled into the lungs where they can cause significant health problems. The California Occupational Health and Safety Administration (CalOSHA) defines asbestos-containing building materials (ACBM) as any material that contains 0.1 percent asbestos by weight.

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities,

to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint (LBP), lead contaminated dust, and lead contaminated soil.

The project site is currently undeveloped and does not contain structures with a high possibility of containing ACBM and LBP.

## 3.8.2 - Regulatory Setting

Federal, state, and local county regulations pertain to the use and storage of hazardous materials. This section discusses each of the agencies' roles in regulating hazardous materials.

### Federal Regulations

#### *Resource Conservation and Recovery Act*

The Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. RCRA establishes a system that uses hazardous waste manifests to track the movement of hazardous waste from generation to disposal (cradle-to-grave). The 1984 amendments to RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires States to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and containment systems for underground storage tanks (USTs) that hold hazardous materials. Owners of USTs must demonstrate financial assurance for the cleanup of a potential leaking tank. As of 2001, an estimated 85 percent of USTs complied with the required standard.

#### *Comprehensive Environmental Response, Compensation and Liability Act*

The U.S. Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) in 1980. The purpose of CERCLA is identifying and remediating chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

#### *Superfund Amendments and Reauthorization Act*

The Superfund Amendments and Reauthorization Act (SARA) primarily pertain to emergency management of accidental releases. SARA requires the formation of State and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for their planning. Chemical inventory data is made available to the public under the "right-to-know" provision of this Act. SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory.

#### *Hazardous Material Transportation Act*

The Hazardous Materials Transportation Act serves as the statutory basis for the body of regulations designed to ensure the safe transport of hazardous materials via water, rail, highways, air, or pipelines. This Act includes provisions for material classification, packaging, marking, labeling, placecarding, and shipping documentation.

The U.S. Department of Transportation (DOT), along with the Federal Highway Administration and the Federal Railroad Administration, regulate the transportation and handling of hazardous materials through the Federal Hazardous Materials Transportation (HMT) Act and through the Resource Conservation and Recovery Act (RCRA). Through these regulations, Congress directed the EPA to create regulations to manage hazardous materials from "the cradle to the grave." Under this mandate, the EPA developed strict requirements for all aspects of hazardous materials management, including the treatment, storage, and disposal of hazardous substances. In addition to those federal requirements, states may develop more stringent requirements that are broader in scope than the federal regulations.

In California, the California Department of Transportation (Caltrans) implements and the California Highway Patrol enforces these regulations. Carriers that violate these regulatory requirements subject themselves to possible civil and criminal liability.

### *Asbestos and Lead-Based Paint*

The EPA declared asbestos a hazardous air pollutant under the Clean Air Act (CAA) and distributed National Emissions Standards for Hazardous Air Pollutants (NESHAP) that regulates the demolition and/or renovation of facilities containing asbestos. The NESHAP imposes procedures for the handling and disposal of asbestos-containing materials (ACM). In California, most of the State's regional air districts are delegated by the EPA to implement the NESHAP requirements. The California Air Resources Board enforces the NESHAP in air districts not delegated by the EPA.

The first federal regulatory effort regarding lead was the Lead-Based Paint Poisoning Prevention Act of 1971 (LBPPA), which defined lead as a serious health threat and called for the detection and abatement of existing lead-based paint hazards in residential structures. The LBPPA amendments in 1973 designated the U.S. Department of Housing and Urban Development (HUD) as the lead agency in eliminating lead-based paint hazards in residential dwellings. The Housing and Community Development Act of 1987 (HCDA) changed the definition of lead-based paint hazards to include all surfaces, including exterior ones. The latest source of HUD authority regarding lead is the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X). Along with the Lead-Based Paint Exposure Reduction Act of 1992 (Title IV) of the Toxic Substances Control Act (TSCA), Title X outlines needed actions aimed at reducing lead exposure to children and the general public.

## State Regulations

### *California Health and Safety Code*

The California Environmental Protection Agency has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, et seq., incorporate the requirement of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

### *CAL FIRE*

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of California's privately owned wildlands. In addition, CAL FIRE provides varied emergency services in 36 of the State's 58 counties via contracts with local governments. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn nearly 172,000 acres annually (CAL FIRE 2012a.)

According to CAL FIRE's Fire Hazard Severity Zones in State Responsibility Area (SRA) Map, the project site is located in a high fire hazard severity zone within a State Responsibility Area (CAL FIRE 2012b.)

### *California Strategic Fire Plan*

The 2010 Strategic Fire Plan is a statewide fire plan developed as a cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection. The Fire Plan builds upon the concept first developed in the 1996 California Fire Plan, which led to collaborative efforts in fire prevention. The primary goals of the 2010 Strategic Fire Plan that are critical to reducing and preventing the impacts of fire revolve around both suppression and prevention efforts. Major components include improved availability and use of information on hazard and risk assessment; land use planning, including general plans, new development, and existing developments; shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans (CWPP); establishing fire resistance in assets at risk, such as homes and neighborhoods; shared vision among multiple fire protection jurisdictions and agencies; levels of fire suppression and related services; and post-fire recovery.

### *The California Hazardous Waste Control Law*

The Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in the State of California. HWCL implements RCRA as a "cradle-to-grave" waste management system in the State. The Law states that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. HWCL also establishes criteria for the reuse and recycling of hazardous wastes. The Law exceeds federal requirements by mandating source reduction planning, and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by RCRA.

### *California Code of Regulations*

Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5. Title 22 contains detailed compliance requirements for hazardous waste generators and transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized State according to RCRA, most RCRA regulations (those contained in 40 Code of Federal Regulations [CFR] 260, et seq.) have been duplicated and integrated into Title 22. However, because the DTSC regulates hazardous waste more stringently than the U.S. EPA, Title 22 contains fewer exemptions and exclusions than 40 CFR 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than RCRA regulations in 40 CFR 260. To make regulatory

requirements more accessible and easier to follow, California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated CCR Title 26 "Toxics." However, California hazardous waste regulations are still commonly referred to as Title 22.

## Local Regulations

### *Riverside County Fire Department*

The Riverside County Fire Department is the Operational Area Coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The Riverside County Fire Department also has several automatic aid agreements with other city jurisdictions as well as the adjacent National Forests. The County of Riverside contracts with the State of California for fire protection. Public Resources Code (PRC) 4142 affords legal authority for the California Department of Forestry and Fire Protection (CAL FIRE) to enter into agreements with local government entities to provide fire protection services with the approval of the Department of General Services. By virtue of this authority, CAL FIRE administers the Riverside County Fire Department (Riverside County Fire Department 2003a).

### *Southern California Hazardous Waste Management Authority*

The County of Riverside is a member of the Southern California Hazardous Waste Management Authority (SCHWMA), and therefore, has agreed to work on a regional level to solve problems involving hazardous waste. SCHWMA was formed through a joint powers agreement between Santa Barbara, Ventura, San Bernardino, Orange, San Diego, Imperial, and Riverside Counties and the cities of Los Angeles and San Diego. Using a "fair share" approach, each SCHWMA county has agreed to take responsibility for the treatment and disposal of hazardous waste in an amount that is at least equal to the amount generated within that county. This responsibility can be met by siting hazardous waste management facilities (transfer, treatment and/or repository) capable of processing an amount of waste equal to or larger than the amount generated within the county, or by creating intergovernmental agreements between counties to provide compensation to a county for taking another county's waste, or through a combination of both facility siting and intergovernmental agreements. Once an application to site a facility has been received, the County of Riverside will review the requested facility and its location against a set of established siting criteria to ensure that the location is appropriate, and may deny the application based on the findings of this review. Presently, the County of Riverside does not have any of these facilities within its jurisdiction and therefore must rely on intergovernmental agreements to fulfill its fair share responsibility to SCHWMA (Riverside General Plan Safety Element 2014a).

### *The Riverside County Hazardous Waste Management Plan (CHWMP)*

As indicated in the Safety Element of the County of Riverside General Plan, the Board of Supervisors adopted the Riverside County Hazardous Waste Management Plan (CHWMP) on September 12, 1989. With a framework of 24 existing and recommended programs, the CHWMP serves as the County's primary planning document for the management of hazardous substances. The CHWMP is a comprehensive document containing all of the County programs for managing hazardous materials and waste.

### *The Pass Area Plan*

The information below regarding wildland fires is from The Pass Area Plan, which sets forth policies for The Pass Area, in which the project is located. As a result of the vast amounts of undeveloped, sloping terrain and the presence of certain types of vegetation such as the oak woodlands and chaparral habitat, much of the Pass Area is subject to a high risk of fire hazards. Methods to address this hazard include such techniques as avoidance of building in high-risk areas, creating setbacks that buffer development from hazard areas, maintaining brush clearance to reduce potential fuel, use of low fuel landscaping, and careful application of fire retardant building techniques. The Pass Area Plan contains the following policy regarding wildfire hazards:

- **PAP 18.1:** Protect life and property from wildfire hazards through adherence to the Fire Hazards section of the General Plan Safety Element.

The project will comply with all required County regulations regarding protection of life and property from wildfire hazards. The project includes on-site water storage tanks and adequate emergency/fire vehicle access and the project will meet all fire flow requirements of Riverside County.

## 3.8.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

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

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

d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

f) Airports: Result in an inconsistency with an Airport Master Plan?

g) Airports: Require review by the Airport Land Use Commission?

h) Airports: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

i) Airports: For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?

j) Hazardous Fire Area: Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

## 3.8.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Routine Use

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|---|---|
| **Impact HAZ-1:** | **The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.** |

#### *Impact Analysis*

*Short-Term Impacts*

**Construction Activities**

Grading and construction activities may involve the limited transport, storage, usage, or disposal of hazardous materials, such as the fueling/servicing of construction equipment. However, such activity is short-term in nature and is subject to federal, state, and local health and safety requirements. While no impacts are anticipated due to contaminated soils or from the existing rubbish and burned motor homes located on-site, if such soils or rubbish are later determined to be hazardous, all standard hazardous materials remediation and removal procedures will be adhered to. Thus, with adherence to federal, state, and local health and safety requirements, potential impacts associated with construction activities creating a significant hazard to the public or the environment during the routine transport, use, or disposal of hazardous materials would remain less than significant.

*Long-Term Impacts*

**Hazards and Hazardous Materials**

In May 2007, R M Environmental performed a Phase I Environmental Site Assessment of the subject property and the adjacent property (APNs 413-270-012 and -013). The scope of work completed for the investigation includes a field reconnaissance of the site and surrounding areas, personal interviews, record and document review, historic map and aerial photo review, selected soil sampling and laboratory analysis, evaluation of the data collected, and submittal of a report.

The findings of the 2007 Phase I ESA indicated no significant evidence of recognized environmental conditions pertaining to the site. No additional environmental investigation was recommended for the project site. Therefore, potential impacts from the routine transport, use, or disposal of hazardous materials would be less than significant.

The project site is not listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project is not anticipated to create a significant hazard to the public or

environment through the routine transport, use, or disposal of hazardous materials. Although a limited amount of cleaning supplies and other potentially hazardous cleaning-related supplies may be stored on-site, they are not anticipated to be of sufficient quantity to pose a significant hazard to the public or environment. Additionally, the project would comply with all applicable laws regarding the use, storage, and disposal of hazardous materials. Therefore, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Accident Conditions

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|---|---|
| **Impact HAZ-2:** | **The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.** |

### *Impact Analysis*

The project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment. The operations on-site would comply with all applicable federal, state, and local laws regarding industrial land uses, and there are no uses contemplated that would involve the use of hazardous materials.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Although a limited amount of cleaning supplies and other potentially hazardous cleaning-related supplies may be stored on-site, they are not anticipated to be of sufficient quantity to pose a significant hazard to the public or environment. Additionally, the project would comply with all applicable laws regarding the use, storage, and disposal of such materials. Thus, the project is anticipated to have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Emergency Plans

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|---|---|
| **Impact HAZ-3:** | **The project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.** |

### *Impact Analysis*

The project will not impair the implementation of, or physically interfere with, an emergency response plan and/or emergency evacuation plan. The County of Riverside has an established Emergency Operations Plan, which this project is not anticipated to interfere with (Riverside County Operational Area Emergency Operations Plan 2006). The project will include adequate access for emergency response vehicles and personnel, as developed in consultation with County Fire Department personnel. Project frontage improvements will provide adequate access for emergency vehicles. Therefore, the project would have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Hazardous Emissions

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|---|---|
| **Impact HAZ-4:** | **The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.** |

### *Impact Analysis*

The nearest school, Tournament Hills Elementary School, is located approximately 1.10 miles south of the project site. No existing or proposed schools are located within one-quarter the project site. Therefore, implementation of the project will not produce hazardous emissions or otherwise cause hazardous materials impacts upon school facilities located within one-quarter mile of an existing or proposed school.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Hazardous Materials Listing

**Impact HAZ-5: The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.**

### *Impact Analysis*

The project site is not listed on the State's list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2012). Thus, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Airport Master Plan

**Impact HAZ-6: Airports: The project would not result in an inconsistency with an Airport Master Plan.**

### *Impact Analysis*

The project will not result in an inconsistency with an Airport Master Plan. The project is not located in the vicinity of an airport. The nearest airport to the project site is the Banning Municipal Airport, located approximately 9.6 miles southeast of the project site. A review of the Banning Municipal Airport Master Plan Update shows that the project site does not fall within the boundaries of the plan. As a result, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Airport Land Use Commission

**Impact HAZ-7: Airports: The project would not require review by the Airport Land Use Commission.**

### *Impact Analysis*

The project will not require review by the Riverside County Airport Land Use Commission because the project is not located in the vicinity of an airport. The nearest airport to the project site is the

Banning Municipal Airport, located approximately 9.6 miles southeast of the project site. The Redlands Airport is located approximately 9.7 miles northwest of the project site. The March Air Force Base is located approximately 14 miles southwest of the project site. The Hemet Ryan airport (i.e., Ryan Field) is located approximately 16 miles south of the project site. Because of the project's distance from the closest airports, the project would not require review by the Riverside County Airport Land Use Commission. Additionally, the buildings proposed on the project site would be approximately 39 feet in height, will not create any substantial glare or have operations that would cause a risk to air traffic, and therefore, would not interfere with any flight patterns for aircraft or helicopters. Thus, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Airport Land Use Plan

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| **Impact HAZ-8:** | **Airports: The project is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and the project would not result in a safety hazard for people residing or working in the project area.** |

### *Impact Analysis*

The nearest airport from the project is the Banning Municipal Airport, located approximately 9.6 miles southeast of the project site. Additionally, the Redlands Municipal Airport is located approximately 9.7 miles northwest of the project site (Google Earth 2015). As adopted by the Riverside County Airport Land Use Commission (ALUC), the Riverside County Airport Land Use Compatibility Plan Policy Document establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County. As shown in this document in Exhibit 3-10.2 Surrounding Existing Land Use Designations, the project site is not within a compatibility zone for the Banning Municipal Airport (ALUC 2004). Furthermore, according the Riverside County TLMA Geographic Information System, the project is not located in an airport influence area or an airport compatibility zone. The project is a typical warehouse/industrial project that will not have any unique operations or features that would place a higher safety risk for the site than would be typical throughout the region. Therefore, the project does not include any inhabitable structures that would put people at risk of safety hazard related to a nearby airport.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Private Air Strip

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| **Impact HAZ-9:** | **Airports: For a project within the vicinity of a private airstrip, or heliport, the project would not result in a safety hazard for people residing or working in the project area.** |

### *Impact Analysis*

There are no private airstrips or helipads in the vicinity of the project site (AirNav.com 2013; Google Earth 2015). The nearest heliport to the project site is Riverside County Regional Medical Center Heliport, located approximately 10.5 miles southwest of the project site. As discussed, the project is a typical warehouse/industrial project that will not have any unique operations or features that would place a higher safety risk for the site than would be typical throughout the region. Therefore, the project will not present a safety hazard for people residing or working in the project area.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Hazardous Fire Area

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| **Impact HAZ-10:** | **Hazardous Fire Area: The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.** |

### *Impact Analysis*

Fire hazard severity zones are delineated at a state level, via the State Responsibility Area (SRA), and at a local level, via the Local Responsibility Area (LRA). The area is not listed as a Very High Fire Hazard Severity Zone for Local Response Areas by Cal Fire (Johnson, pers. comm.). The project site falls within the State Responsibility Area, which is discussed below.

*State*

A State Responsibility Area (SRA) is defined in Section 4102 of the Public Resources Code as, “areas of the State in which the financial responsibility of preventing and suppressing fires has been determined by the board pursuant to Public Resources Code Section 4125, to be primarily the responsibility of the State.”

CAL FIRE determines fire hazard areas based on the severity of fire hazard expected to prevail there. These areas, or "zones," are based on factors such as fuel, slope, and weather. There are three zones, based on increasing fire hazard: medium, high, and very high. Using the latest fire science, CAL FIRE has developed and field-tested a model that serves as the basis of zone assignments. The model evaluates property using characteristics that affect the probability of the area burning and potential fire behavior in the area. Many factors are considered, such as fire history, existing and potential fuel, flame length, blowing embers, terrain, weather, and the likelihood of buildings igniting (CAL FIRE 2010).

The project site is located within a "High Fire Area" as depicted in the Riverside County Transportation Land Management Agency Geographic Information System. Therefore, the project may have potential risks related to wildland fire hazards. The project will be designed to provide required fire flow for the project site. Development of the project could reduce the potential for a fire because the site would be developed with buildings and would not remain in its current state. Additionally, the proposed buildings and site improvements could act as a fire break. Impacts would therefore be less than significant.

The project does not propose any residential land uses on-site and no one would reside on the project site. Additionally, the project site has excellent access along Cherry Valley Boulevard, close to the I-10 Freeway, providing any on-site workers plenty of time and access to evacuate the site. For additional discussion, see Section 3.14, Public Services, regarding fire protection services. A less than significant impact is anticipated because prior to permit issuance, grading and building permit applications will require clearance by the County of Riverside Fire Department Fire Chief. Additionally, as outlined in Senate Bill 1241, the County of Riverside shall make the findings below regarding the project prior to approval:

(1) A finding supported by substantial evidence in the record that the design and location of each lot in the subdivision, and the subdivision as a whole, are consistent with any applicable regulations adopted by the State Board of Forestry and Fire Protection pursuant to Sections 4290 and 4291 of the Public Resources Code.

(2) A finding supported by substantial evidence in the record that structural fire protection and suppression services will be available for the subdivision through any of the following entities:
   (A) A county, city, special district, political subdivision of the state, or another entity organized solely to provide fire protection services that is monitored and funded by a county or other public entity.
   (B) The Department of Forestry and Fire Protection by contract entered into pursuant to Section 4133, 4142, or 4144 of the Public Resources Code.

(3) A finding that to the extent practicable, ingress and egress for the subdivision meets the regulations regarding road standards for fire equipment access adopted pursuant to Section 4290 of the Public Resources Code and any applicable local ordinance.

The project may have potential risks related to wildland fire hazards. The project will be designed to provide required fire flow for the project site. Development of the project could reduce the potential for a fire because the site would be developed with buildings and would not remain in its

current state. Additionally, the proposed buildings and site improvements could act as a fire break. Prior to permit issuance, grading and building permit applications will require clearance by the County of Riverside Fire Department Fire Chief. Additionally, as outlined in Senate Bill 1241, the County of Riverside shall make the findings above regarding the project prior to approval: These factors would reduce impacts from wildland fires to less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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# 3.9 - Hydrology and Water Quality

This section describes the existing setting regarding hydrology and water quality and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Project Specific Water Quality Management Plan (WQMP) (Albert A. Webb Associates 2014a); TPM 36564 Off-Site Hydrology & Hydraulics Report (Albert A. Webb Associates 2014b); Preliminary Hydrology Study (Albert A. Webb Associates 2014c); and Infiltration Rate Evaluation (Ginter 2012), all of which are included in this EIR as Appendix G.

## 3.9.1 - Existing Conditions

### Climate

Temperatures in the project area range from an average high of 78 degrees Fahrenheit (°F) and an average low of 49°F. The record high for the area is 117 degrees and the record low is 17 degrees. The annual average rainfall for the area is approximately 16 inches per year. The climate is characterized by hot dry summers when temperatures can rise above 100 degrees, and moderate winters. Most of the precipitation in the project area occurs between the months of December and March (Yucaipa Valley Water District 2010).

### Flood Zone

The project area is classified as flood Zone X, according to Flood Insurance Rate Map No. 06065C0785G published by the Federal Emergency Management Agency (FEMA) (Exhibit 3.9-1). This zone is described as, "areas determined to be outside the 0.2 percent annual chance floodplain," which means that the project is in an area determined to be outside the 500-year annual chance floodplain (FEMA 2013). In addition, the Department of Water Resources has delineated the southern portion of the project site as being located within a floodplain. Development within this floodplain is subject to the development guidelines identified in Riverside County Ordinance 458. The intent of the ordinance is to: (1) ensure that any new construction and/or substantial improvement within a mapped floodplain is done in a manner that reduces damage to the public and property; and (2) discourage any new development within floodways. The Riverside County Flood Control and Water Conservation District is designated to administer this program in most of the western parts of the County.

### Regional Surface Water Hydrology

Riverside County incorporates four major watershed areas in which river systems, lakes and reservoirs, and natural drainage areas are located. Specifically, the project site is located within the Santa Ana River Watershed. The County of Riverside's supply of water is limited by its arid climate, agricultural practices, projected population growth and its associated demand and development, and the dependence on low quality imported water. Additionally, the availability of imported surface water has been reduced due to changing regulations, despite an ever-increasing water demand (County of Riverside General Plan 2014).

### Local Surface Water Hydrology

As included in the Off-site Hydrology Report for Tentative Parcel Map 36564 (Appendix G) prepared for the project, there are two drainage areas in the existing condition: Drainage Areas "A" and "B"

(Exhibit 3.9-2). Drainage Area "A" comprises approximately 903.3 acres, with peak stormwater discharge rates of approximately 739.7 cubic feet per second (cfs) and 1171.4 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" comprises approximately 258.1 acres, with peak discharge rates of 359.4 cfs and 563.2 cfs, for 10-year and 100-year storms, respectively.

## Surface Water Quality

The cumulative effect of runoff from land uses in a region can have significant impacts on surface water quality, with both point- and non-point-source discharges contributing contaminants to surface waters. The land uses surrounding the project site vary from rural mountainous open space to low-density residential.

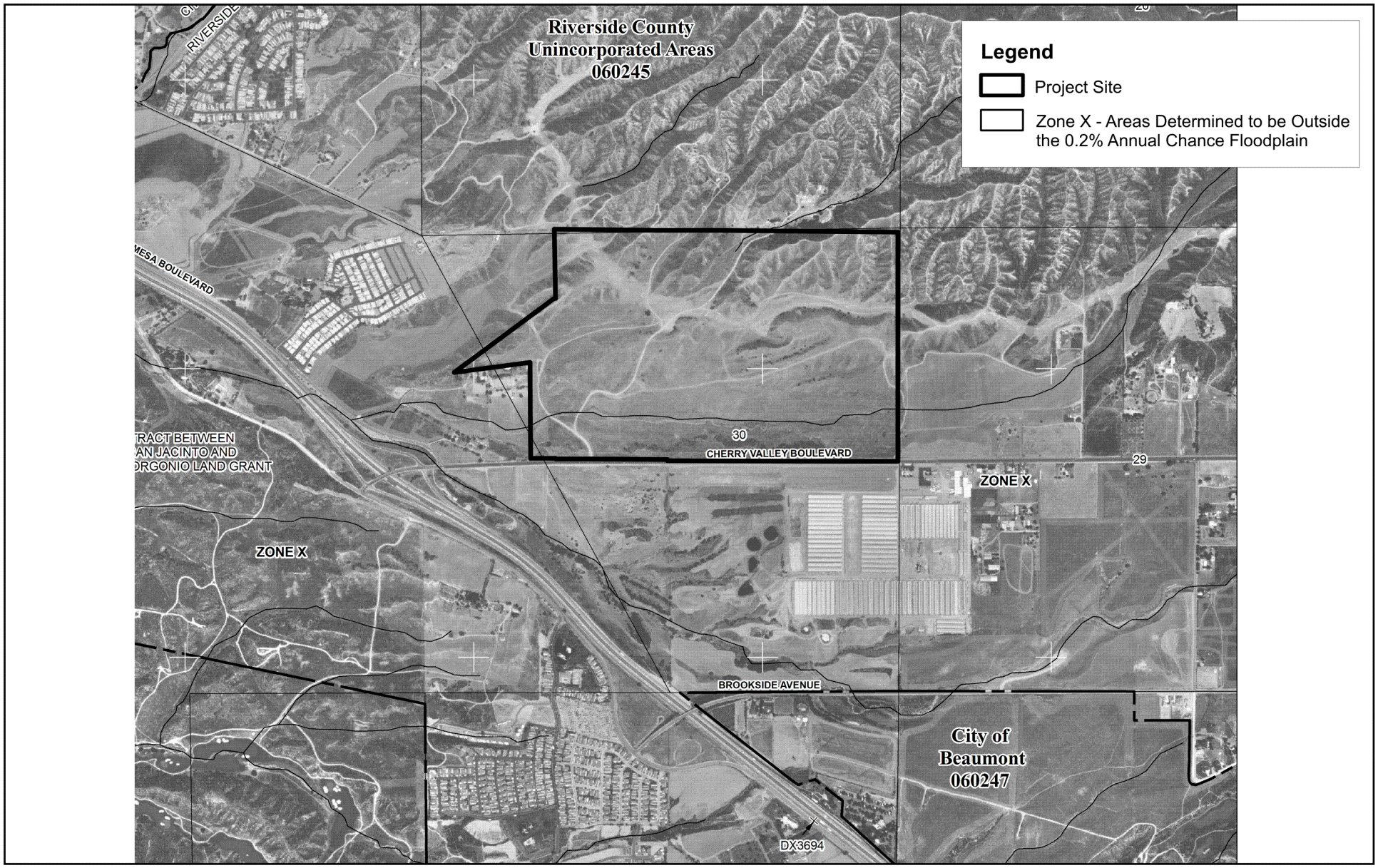
The project is within the jurisdiction of the Santa Ana Regional Water Quality Control Board (Region 8) and in the Santa Ana River Watershed, San Timoteo Creek Sub-watershed. Santa Ana River (Reach 3) is currently on the State's 303(d) List of Water Quality Limited Segments as impaired for Pathogens, Copper, and Lead; Reach 4 is on the list for Salinity, TDS, Chlorides, and Pathogens. Prado Basin Management Zone is also on the State's 303(d) List of Water Quality Limited segments as impaired for Nutrients and Pathogens.

Table 3.9-1 shows the receiving waters for urban runoff from the project site.

**Table 3.9-1: Receiving Waters for Urban Runoff from Site**

| Receiving Waters | 303 (d) List Impairments | Designated Beneficial Uses (acronym list in Table 3.9–2) | Proximity to RARE Beneficial Use |
|---|---|---|---|
| San Timoteo Creek Reach 3 (HUC 901.62) | None | GWR, MUN, REC1, REC2, WARM, WILD | Not Applicable |
| San Timoteo Creek Reach 2 Hydrologic Unit 801.61 | None | GWR, MUN, REC1, REC2, WARM, WILD | Not Applicable |
| San Timoteo Creek Reach 1A Hydrologic Unit 801.52 | None | AGR, MUN, REC1, REC2, WARM, WILD | Not Applicable |
| San Timoteo Creek Reach 1B | None | MUN, AGR, GWR, REC1, REC2, WARM, WILD | Not Applicable |
| Santa Ana River (Reach 5) Hydrologic Unit 801.52 | None | MUN, AGR, GWR, REC1, REC2, WARM, WILD | 17 miles |
| Santa Ana River (Reach 4) Hydrologic Unit 801.27 | Salinity, TDS, Chlorides, Pathogens | WARM, WILD, GWR, MUN, RARE, REC1, REC2, SPWN | 18 miles |
| Santa Ana River (Reach 3) Hydrologic Unit 801.25 | Copper, Lead, Pathogens | AGR, GWR, REC1, REC2, SPWN, WARM, WILD, RARE | 25 miles |
| Prado Basin Management Zone | Nutrient, Pathogens | MUN, REC1, REC2, WARM, WILD, RARE | 40 miles |

Notes:
The REC 1 and REC 2 beneficial use of designations assigned to surface waterbodies in this Region should not be construed as encouraging recreational activities. In some cases, such as Lake Matthews and certain reaches of the Santa Ana River, access to the waterbodies is prohibited because of potentially hazardous conditions and/or because of the need to protect other uses, such as municipal supply or sensitive wildlife habitat. Where REC 1 or REC 2 is indicated as a beneficial use in this table, the designations are intended to indicate that the uses exist or that the water quality of the waterbody could support recreational uses.
Source: Albert A. Webb 2014a.

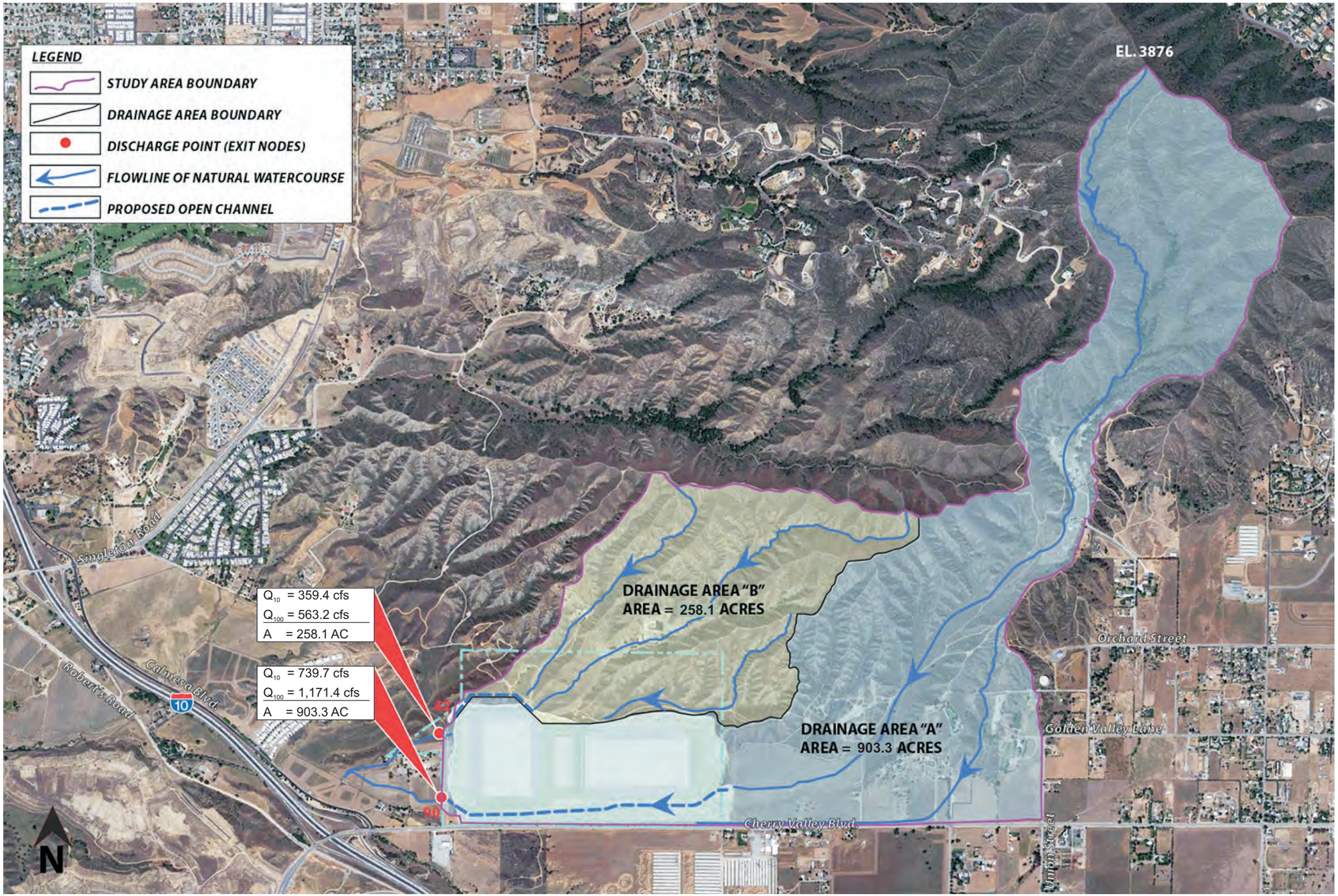



Source: FEMA National Flood Insurance Program.

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# Exhibit 3.9-1
# FEMA Flood Zones

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Exhibit 3.9-2
Existing Drainage Area

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Each of the beneficial uses listed in Table 3.9-2 is also described in the Santa Ana Region Basin Plan (2008).

**Table 3.9-2: Beneficial Use Designations**

| Abbreviation | Meaning | Beneficial Use |
|---|---|---|
| AGR | Agricultural Supply | Uses for farming, horticulture or ranching. These uses may include but are not limited to irrigation, stock watering, and support of vegetation for range grazing. |
| COMM | Commercial and Sport Fishing | Uses for commercial or recreational collection of fish or other organisms, including those collected for bait. These uses may include but are not limited to uses involving organisms intended for human consumption. |
| GWR | Groundwater Recharge | Uses for natural or artificial recharge of groundwater for purposes that may include but are not limited to future extraction, maintaining water quality or halting saltwater intrusion into freshwater aquifers. |
| IND | Industrial Service Supply | Uses for industrial activities that do not depend primarily on water quality. These uses may include but are not limited to mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well re-pressurization. |
| MAR | Marine Habitat | Supports marine ecosystems that include but are not limited to preservation and enhancement of marine habitats, vegetation (e.g., kelp), fish and shellfish and wildlife (e.g., marine mammals and shorebirds). |
| MUN | Municipal and Domestic Supply | Uses for community, military, municipal or individual water supply systems. These uses may include but are not limited to drinking water supply. |
| NAV | Navigation | Uses for shipping, travel or other transportation by private, commercial or military vessels. |
| RARE | Rare, Threatened or Endangered Species | Supports the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered. |
| REC 1* | Water Contact Recreation | Uses for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include but are not limited to swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing and use of natural hot springs. |
| REC 2* | Non-contact Water Recreation | Uses for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include but are not limited to picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities. |

**Table 3.9-2 (cont.): Beneficial Use Designations**

| Abbreviation | Meaning | Beneficial Use |
|---|---|---|
| SHEL | Shellfish Harvesting | Supports habitats necessary for shellfish (e.g., clams, oysters, limpets, abalone, shrimp, crab, lobster, sea urchins, and mussels) collected for human consumption, commercial or sport purposes. |
| SPWN | Spawning, Reproduction and Development | Supports high quality aquatic habitats necessary for reproduction and early development of fish and wildlife. |
| WARM | Warm Freshwater Habitat | Supports warm water ecosystems that may include but are not limited to preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates. |
| WILD | Wildlife Habitat | Supports wildlife habitats that may include but are not limited to the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife. |

### Groundwater

Groundwater resources in the County are delineated by their quality and quantity. Most groundwater basins within the County of Riverside store local and imported water and are used to satisfy seasonal and drought-year demands. Under groundwater recharge programs, groundwater basins are artificially replenished in wet years with surplus imported water. Water is then extracted during drought years or emergencies. Groundwater recharge may also involve the recharge of reclaimed water, thereby enhancing the region's ability to meet water demand during years of short supply and increasing overall local supply reliability (Riverside General Plan 2014).

The depth to the regional groundwater in the vicinity of the site is approximately 150 to 200 feet below the ground surface. Two inactive groundwater wells (Well Nos. 1 and 2) are located to the west of the site. Based on well measurements of Well No. 1 conducted on May 22, 2007, the depth to groundwater is approximately 195 feet below ground surface (R M Environmental 2009).

### Seismically Induced inundation

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay, or harbor, in response to ground shaking during an earthquake. The following water bodies are located in the vicinity of the project site: Lake Perris (approximately 9.7 miles southwest), Big Bear Lake (approximately 19 miles north), Diamond Valley Lake (approximately 19 miles south), and Lake Elsinore (approximately 27 miles southwest).

## 3.9.2 - Regulatory Setting

### State Regulations

In California, the regulation, protection, and administration of water quality are carried out by the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards

(RWQCBs). The State is divided into nine regions due to regional issues related to water quality and quantity. In compliance with Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, each RWQCB is required to adopt a Water Quality Control Plan or Basin Plan which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface water, local water quality conditions and problems, and Total Maximum Daily Loads (TMDL). The project site is located within the Santa Ana Region, which is addressed in the Water Quality Control Plan for the Santa Ana Basin, dated January 24, 1995, updated in 2008. The Santa Ana Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of its regional waters. The Santa Ana RWQCB has the authority to implement water quality protection standards through the issuance of permits to waters within its jurisdiction.

States are required to develop a TMDL to address each pollutant causing impairment. A TMDL defines how much of a pollutant a water body can tolerate and still meet water quality standards. Each TMDL must account for all sources of the pollutant, including discharges from wastewater treatment facilities; runoff from homes, forested lands, agriculture, and streets or highways; contaminated soils/sediments, legacy contaminants such as dichlorodiphenyltrichloroethane (DDT) and polychlorinated biphenyls (PCBs), on-site disposal systems (septic systems) and deposits from the air. Federal regulations require that the TMDL, at a minimum, account for contributions from point sources (permitted discharges) and contributions from non-point sources, including natural background. In addition to accounting for past and current activities, TMDLs may consider projected growth that could increase pollutant levels. TMDLs allocate allowable pollutant loads for each source, and identify management measures that, when implemented, will assure that water quality standards are attained.

The Santa Ana RWQCB administers the National Pollutant Discharge Elimination System (NPDES) permit requirements for the project area, including the project site. In 1990, the United States Environmental Protection Agency (EPA) established Phase I of the NPDES stormwater program to address discharges from construction activities disturbing 5 acres or more of land. In 1992, the State adopted a related NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Construction Activities General Permit) for projects greater than 5 acres in size. The permit required applicable projects have a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP specifies Best Management Practices (BMPs) that would prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off-site into receiving waters; eliminates or reduces non-stormwater discharges to storm sewer systems and waters of the State; and, provides a monitoring program for the routine inspection of all BMPs.

In 1999, the State adopted the NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Construction Activities General Permit) (SWRCB Order No 99-08-DWQ, NPDES CAS000002) which requires the development and implementation of a SWPPP for applicable projects, where the threshold was reduced from 5 acres or greater of soil disturbance, set by the 1992 General Construction Permit, to 1 acre or greater of soil disturbance. The SWPPP is required to achieve two major objectives: to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and, to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges.

The SWRCB has jurisdiction throughout California. It was created by the State Legislature in 1967, and it protects water quality by setting statewide policy, coordinating and supporting the Regional Water Board efforts, and reviewing petitions that contest Regional Board actions. There are nine RWQCB s that exercise rulemaking and regulatory activities by basins (California SWRCB 2013a).

The new Construction General Permit (CGP) 2014-0057-DWQ was adopted April 1, 2014. Once effective (July 1, 2015), it will replace the current permit. The CGP requires electronic applications and reporting (California SWRCB 2015b). This order regulates stormwater runoff and urban runoff, which includes stormwater and authorized non-stormwater discharges from traditional construction activities such as residential, commercial, and industrial development, as well as linear underground/overhead construction projects. Order No. 2009-0009-DWQ authorizes the discharge of stormwater runoff from construction projects that may result in land disturbance of one (1) acre or more (or less than one acre, if it is part of a larger common plan of development or sale, which is one acre or more). Unlike some of its predecessors, this General Construction Permit classifies construction sites under three Risk Levels. Risk Level 1 sites are subject to requirements similar to those established in Order No. 99-08-DWQ. Risk Level 2 sites are subject to Numeric Action Levels (NALs) for pH and turbidity, in addition to Risk Level 1 requirements. Risk Level 3 sites are subject to Numeric Effluent Limits (NELs), in addition to Risk Level 1 and 2 requirements. Project Risk Levels are determined by the project's sediment discharge risk and its receiving water risk. The discharger shall develop a SWPPP and a construction site monitoring program prior to the commencement of any of the construction activities, to be implemented until project completion.

### *California Fish and Wildlife Code Sections 1601-1603*

This legislation is intended to protect and conserve fish and wildlife resources of the state by requiring a permitting procedure for diverting, changing, or otherwise disturbing a current natural waterway. A Streambed Alteration Permit is required from the California Department of Fish and Wildlife (CDFW) (formerly the California Department of Fish and Game), for any changes to the stream, stream channel, or banks. For the project, compliance with this code would be required if tributaries on the project site are diverted, changed, or otherwise disturbed. Compliance is usually satisfied with issuance of a permit from CDFW, typically referred to as a "1602 Permit."

## Local Regulations

### *County of Riverside General Plan (2014)*

*Water Conservation Policies*

Riverside County incorporates four major watershed areas in which river systems, numerous lakes and reservoirs, and natural drainage areas are located. Water resources are mapped in Figure OS-1. The County's supply of water is limited by its arid climate, agricultural practices, projected population growth and its associated demand and development, and the dependence on low-quality imported water. Further, the availability of imported surface water has been reduced by changing regulations, despite an ever-increasing water demand.

In some areas within Riverside County, contamination from natural or manufactured sources has reduced groundwater quality such that its use requires treatment. Management of the amount of

water available (local and imported) and its quality is an important response to the gap between supply and demand in Riverside County.

Following are water conservation policies that seek to manage existing supplies, by promoting the efficient use of water to the maximum extent possible, so that they can be maintained for future use.

- **OS 2.1:** Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.
- **OS 2.2:** Where feasible, decrease stormwater runoff by reducing pavement in development areas, and by design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention.
- **OS 2.3:** Encourage native, drought-resistant landscape planting.

The project includes pervious areas for the site, including extended stormwater detention basins, riparian mitigation areas and other miscellaneous landscape areas, which include private parkway landscaping manufactured slopes, and low-flow gravel trenches. These areas shall include native/drought tolerant plant species.

*Water Quality Policies*

Water quality problems that have occurred in Riverside County have been related to inadequate subsurface sewage disposal, waste disposal management of the Santa Ana River, agriculturally related problems such as agricultural runoff in the western County and increasing salinity of the desert groundwater basins, sediment buildup of water bodies from construction-related erosion, lake water quality problems, and pollution due to urban stormwater system runoff. RWQCBs for Regions 7, 8, and 9 provide state-level water quality policy for the County. Further, the National Pollutant Discharge Elimination System mandates BMPs in order to effectively minimize the adverse effects of pollution and protect water quality.

The following policy is intended to provide local guidance for the protection and maintenance of water quality in Riverside County.

- **OS 3.3:** Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.

Through the preparation of an NPDES permit and SWPPP, the incorporation of both construction and operational BMPs, and the installation of numerous stormwater drainage improvements, the project will collect and contain a majority of on-site and adjacent off-site surface flows and any constituents contained within.

*Groundwater Recharge Policies*

Refer to the Groundwater discussion above regarding County of Riverside groundwater policies.

In order to facilitate groundwater recharge, the following policies may apply:

- **OS 4.3:** Ensure that adequate aquifer water recharge areas are preserved and protected.
- **OS 4.4:** Incorporate natural drainage systems into developments where appropriate and feasible.
- **OS 4.5:** Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.

The project's stormwater drainage system includes open channels, storm drain facilities, and detention basins. These drainage improvements will prevent flood hazard impacts while collectively encouraging on-site and adjacent off-site percolation and groundwater recharge.

*Floodways, the Floodplain Fringe, and Riparian Area Policies*

Floodplains are subject to geomorphic (land-shaping) and hydrologic (water flow) processes. The watercourse and its floodway are usually the focus of construction and control; while fertile, flat and "reclaimed" floodplain lands are usually the focal points for other activities such as agriculture, commerce, and residential development. These areas form a complex physical and biological system that not only supports a variety of natural resources, but also provides natural flood and erosion control. In addition, the floodplain represents a natural filtering system, with water percolating back into the ground and replenishing groundwater. When a watercourse is divorced from its floodplain with levees and other flood control facilities, then natural, built-in benefits are lost, altered, or significantly reduced.

The conventional assumption that flooding can be completely eliminated has meant not only an unrealistic reliance on manufactured flood protection, but also the development of a flood control system that squeezes rivers into artificially narrow channels, adds steeply sloped levees (devoid of riparian vegetation), and eliminates historic floodplains, all in the name of reclamation, flood protection and urban growth. Unfortunately, this highlights the fact that floods have been viewed for far too long as everything except part of the natural life cycle of rivers and floodplains. Flooding is part of the dynamic nature of healthy rivers and ecosystems. High flows and floodwaters are needed to cleanse the channels of accumulated debris, build stream banks, import gravels for aquatic life, thin riparian forests and create riparian habitat. The open space of floodplains adjacent to rivers and streams helps store and slowly release floodwaters, thus reducing flood flow and peaks and their subsequent impacts during small and frequent flood events.

Further, riparian habitat within floodplains is of great value to resident and migratory animal species, as it provides corridors and linkages to and from the biotic regions of the County. The numerous essential habitat elements provided by the remaining riparian corridors of Riverside County make them a significant contributor to wildlife habitat throughout the County. The intent of the County is to sustain "living" riparian habitats to the maximum extent possible.

The following set of policies addresses floodways, the floodplain fringe, and riparian areas in the County.

- **OS 5.3:** Based upon the site-specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues:
  a. Public safety;
  b. erosion;
  c. riparian or wetland buff;

d. wildlife movement corridor or linkage; and
e. slopes.

- **OS 5.5:** New development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.
- **OS 5.6:** Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

*Flood and Inundation Hazard Abatement*

While local agencies operate and maintain many flood control facilities, funding for the construction of such facilities often is shared with federal and state agencies. Nevertheless, local agencies independently fund many local projects without financial assistance from the federal or state governments.

Flooding susceptibility in Riverside County is primarily associated with several major stream drainages, including but not limited to the Santa Ana, San Jacinto and Whitewater Rivers, as well as smaller-scale and flash flood events on many of the alluvial fans that flank the County's hillsides. Large-scale developments have utilized golf courses and greenbelts as part of a network of channels that collect flood flows on the upstream side of a project, carry it safely through the project, and disperse it on the downstream side. However, given the low permeability of the underlying bedrock, heavy runoff from the surrounding hills and mountains during strong storms cannot be prevented.

The nation has seen several catastrophic collapses of highway and railroad bridges, due to scouring and a subsequent loss of support of foundations. Major bridge crossings that are vital to the County of Riverside should be designed and built to withstand scouring. Scour at highway bridges involves floodwater sediment-transport and erosion processes that cause streambed material to be removed from the bridge vicinity. The State of California participates in the bridge scour inventory and evaluation program. In addition, California's seismic retrofit program of bridges includes underpinning of foundations. In western Riverside County, this is expected to help reduce the vulnerability of foundations to be undermined by scour. However, since the eastern portion of the County has only a moderate seismic risk, bridges in these areas are of lower priority for seismic underpinning.

A review of records maintained at the California Office of Emergency Services provided potential failure inundation maps for 23 dams affecting Riverside County. These maps were compiled into the geographic information system digital coverage of potential dam inundation zones for Riverside County. These maps are intended to be used by state and local officials for the development and approval of dam failure emergency procedures as described in Section 8589.5 of the California Government Code. The maps are also used to provide information needed to make natural hazard disclosure statements required under recent legislation (Assembly Bill 1195 Chapter 65, June 9, 1998; Natural Hazard Disclosure Statement).

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave

that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay or harbor, in response to ground shaking during an earthquake. Seismically induced inundation can also occur if strong ground shaking causes structural damage to aboveground water tanks. In response to this hazard, a new tank design includes flexible joints that can accommodate movement in any direction.

The following set of policies addresses flood and inundation hazard abatement in the County:

- **S 4.5:** Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property, nor adversely affect adjacent wetlands or riparian habitat.
- **S 4.7:** Any substantial modification to a watercourse shall be done in the least environmentally damaging manner possible in order to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.
- **S 4.10:** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

The project's stormwater drainage system includes open channels, storm drain facilities, and extended detention basins. Additionally, a riparian mitigation area along the majority of southern project site boundary, as well as other mitigation, will be provided to offset project impacts to natural water/drainage courses and riparian areas.

### *The Pass Area Plan*

*Watersheds*

Portions of the Pass Area are located in each of three watersheds: Santa Ana River, San Jacinto River, and Salton Sea. Rivers and creeks flowing from the mountains such as the San Gorgonio River, San Timoteo Creek, and Smith Creek provide habitat corridors through developed land, and link a wide variety of open space. The following policy preserves and protects these important watersheds (The Pass Area Plan).

- **PAP 14.1:** Protect the Santa Ana, San Jacinto, and Salton Sea watersheds and surrounding habitats, and provide flood protection through adherence to the Watershed Management section of the General Plan Multipurpose Open Space Element.

Through the preparation of an NPDES permit and a SWPPP, the incorporation of both construction and operational BMPs, and the installation of numerous stormwater drainage improvements, the project will collect and contain a majority of on-site and adjacent off-site surface flows and any constituents contained within.

*Flooding*

When flooding occurs, it originates in the foothills areas to the north and east and often produces spectacular flash floods. The speed and volume of the floods allows them to carry a significant amount of debris. When this occurs, debris can block flood control channels, particularly where they cross under roadways or rail lines, forcing water to spill over into adjacent areas. Flash flooding is

the most life-threatening hazard because only minimum notice can be given, and the combined flow of floodwater and debris can be extremely damaging. Many techniques may be used to address the danger of flooding, such as avoiding development in vulnerable floodplains, altering the water channels, using certain building techniques, elevating structures that are in floodplains, and enforcing setbacks. The policies below from The Pass Area Plan address hazards associated with flooding and dam inundation.

- **PAP 17.1:** Protect life and property from the hazards of flood events through adherence to the Flood and Inundation Hazards section of the General Plan Safety Element.

The project is not within a 100-year flood hazard area and will not be placed within an area where structures would impede flows according to the federal Flood Hazard Boundary.

## 3.9.3 - Thresholds of Significance

According to the County of Riverside CEQA Thresholds, to determine whether impacts to hydrology and water quality are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

b) Violate any water quality standards or waste discharge requirements?

c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

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

e) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

f) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

g) Otherwise substantially degrade water quality?

h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors)?

i) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

j) Changes in absorption rates or the rate and amount of surface runoff?

k) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area)?

l) Changes in the amount of surface water in any water body?

## 3.9.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Drainage Pattern

| | |
|---|---|
| **Impact HYD-1:** | **The project would not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site** |

#### *Impact Analysis*

Development of the project will increase runoff from the site by increasing the amount of impervious surfaces and decreasing the pervious surfaces that could allow infiltration of precipitation. Impervious and paved areas for the site include project streets, curbs, sidewalks and gutters, concrete ribbon, terrace and down drains, parking areas, driveways and the impervious roofs of each building and the top of the two on-site water tanks (Albert A. Webb 2014a).

However, the project includes pervious areas for the site, including stormwater detention basins, landscaped areas, and the conserved riparian zone along the project frontage. These areas shall include native/drought tolerant plant species. All private landscaping shall be maintained by the owner. Landscaping located in the public areas will be owned and maintained by the County of Riverside through Cherry Valley #27 County Service Area (Hunter Landscape 2014).

As included in the Off-site Hydrology Report for Tentative Parcel Map 36564 (Appendix G) prepared for the project, there are two drainage areas in the existing condition: Drainage Area "A" and "B" (Exhibit 3.9-2). Drainage Area "A" comprises approximately 903.3 acres, with peak stormwater discharge rates of approximately 739.7 cfs and 1171.4 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" comprises approximately 258.1 acres, with peak discharge rates of 359.4 cfs and 563.2 cfs, for 10-year and 100-year storms, respectively.

The project would not result in a substantial increase in water erosion or siltation either on-site or off-site. The drainage system includes a number of drainage features including:

- Concrete channels;
- Landscape areas to the north and south that provide self-treating infiltration and convey flows directly off-site;
- Storm drain facilities that will collect and route on-site runoff through detention basins that are sized to limit 10-year and 100-year storm discharge from the site to be equal or less than flows under existing conditions;

- A water quality basin west of Building 2;
- A grouted riprap berm and a water quality infiltration trench located north of Building 2. (Riprap is a foundation or sustaining wall of stones or chunks of concrete, which can be used to line channels);
- Riprap berms located east of Building 2.
- A publicly maintained trapezoidal concrete channel located between the building sites and Cherry Valley Boulevard;
- On-site wetland mitigation areas.
- Detention basins that will incorporate hydromodification requirements by limiting the increase in 2-year storm flow caused by the proposed development to less than 10 percent beyond existing conditions.

Additionally, off-site drainage improvements are required to capture and direct flows. The east side drainage improvements would include a rock protection berm (Exhibit 3.9-3). This berm would capture the off-site runoff and drain into a concrete wingwall structure. This inlet structure will be connected to a concrete culvert and will discharge into the trap channel on site. This water will eventually drain from the outlet structure on the Calimesa side (western side) of the project. Improvements within the City of Calimesa consist of drainage channels and appurtenances, including a concrete trap channel, a concrete box culvert, two concrete outlet structure and rip rap rock energy dissipaters. The Applicant has also agreed to construct a rock-lined berm to protect the adjacent property owners (see Exhibit 3.9-3 below).

Under the proposed post-project conditions, Drainage Area "A" would comprise approximately 917.2 acres, with peak stormwater discharge rates of approximately 729.0 cfs and 1,165.1 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" would comprise approximately 244.2 acres, with peak discharge rates of 344.5 cfs and 537.4 cfs, for 10-year and 100-year storms, respectively (Albert A. Webb Associates 2014b). To minimize the increase of the runoff due to the site development, two on-site extended detention basins (one for each sub-watershed) are proposed for water quality treatment and hydro-modification. Although the mitigation for 100-year storm events is not required, the Hydrological Reports (Appendix G) show that the proposed development (with its storm drain and detention facilities) will not cause adverse impacts to the downstream properties at either exit point.

As discussed in 3.9.1 Existing Conditions, there is a watercourse that flows westerly through the southerly portion of the site that is delineated by the DWR, and is governed by County Ordinance 458. The proposed site will replace this natural channel with an improved channel that will convey the off-site runoff and treated on-site flows to the west toward the basin west of Roberts Street. The northerly off-site flows will be conveyed to the west by a channel and will not enter the site. All flows will continue to reach San Timoteo Creek, and impacts would be less than significant. Furthermore, the intent of Ordinance 458 is to: (1) ensure that any new construction and/or substantial improvement within a mapped floodplain is done in a manner that reduces damage to the public and property; and (2) discourage any new development within floodways. The project would not damage

the public or property. Additionally, the project would not substantially alter the existing flows through this channel. However, because the watercourse would be channelized as part of the project, the County's Environmental Programs Department (EPD) will review and approve the planned channelization of the area. Project compliance with Ordinance 458 would reduce any impacts to drainage patterns to less than significant. Thus, no mitigation is required.

Building 1 with associated parking, loading docks, drive aisles, and landscaped areas will drain to Extended Detention Basin A. Building 2 with associated parking, loading docks, drive aisles and landscaped areas will drain to Extended Detention Basin B. The runoff will be conveyed to each basin by surface flow and an on-site storm drain system. Each basin will outlet to a storm drain pipe, which discharges to the on-site channel along the southern property boundary and conveys off-site flows through the site.

The proposed detention basins will reduce the 2-year, 10-year, and 100-year, 24-hour duration stormwater runoffs to less than existing conditions for applicable storm events.

As provided in the Preliminary Water Quality Management Plan, the proposed detention basins have been sized to incorporate hydromodification requirements by limiting the increase in runoff during a 2-year storm event to less than or equal to existing conditions (Albert A Webb 2014). Basin A and Basin B will include a low-flow trench and collector trenches to convey runoff to the bottom stage and outlet structure, which will be located in the middle of the basin on the east and west sides, respectively. The outlet structure has been designed to mitigate the 2-year, 24-hour and 1-year 24 hour events with orifices, and the 100-year event will spill over the top of the outlet structure.

Under existing conditions, water flow is erosive. As designed, the detention basin in conjunction with infiltration BMPs will limit the 2-year, 24-hour storm runoff, reducing the potential for off-site erosion. Thus, the project would have a less than significant impact with regard to erosion.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

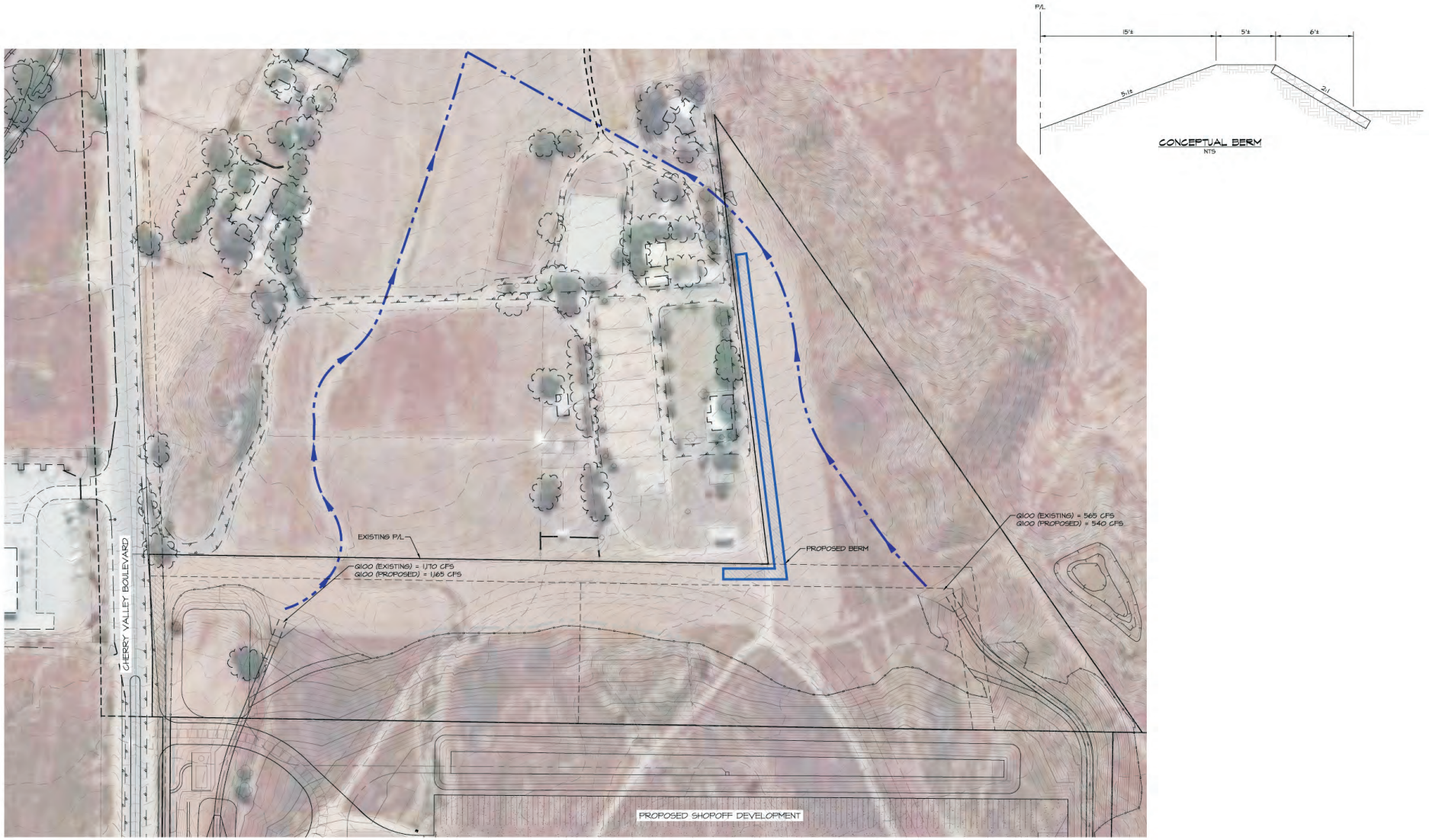
## Water Quality Standards

**Impact HYD-2: The project could violate water quality standards or waste discharge requirements.**

### *Impact Analysis*

*Construction Impacts*

Implementation of the project would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters, potentially impacting the water quality of the Santa Ana Watershed. Generally, construction-phase activities could generate pollutants such as increased silts, debris, chemicals, and dissolved solids related to the activities described below:




Source: Albert Webb, Assoc, 2015

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# Exhibit 3.9-3
# Proposed Protection Berm

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- Grading—Disruption of surface soils and increased susceptibility to erosion.
- Building construction—Use of sealants, glues, wood preservatives, oils, concrete, and the generation of debris related to construction activities.
- Painting—Paint fragments and stucco flakes.
- Construction equipment and vehicle maintenance—Washing, chemical degreasing.

Water quality in jurisdictional areas can be negatively affected by potential surface runoff and sedimentation during construction. The use of petroleum products (e.g., fuels, oils, and lubricants) and erosion of cleared land during construction could potentially contaminate surface water. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources. Impacts to water quality would be significant unless mitigated.

Indirect impacts associated with water quality shall be mitigated to below a level of significance through compliance with National Pollutant Discharge Elimination System requirements, identified in the mitigation below.

Because construction activities could result in increased pollutants to surface water, construction of the project could potentially result in a short-term degradation to surface water quality. Accordingly, prior to the issuance of grading or construction permits, the project applicant will prepare a SWPPP that conforms to the SWRCB NPDES permit. The SWPPP shall identify BMPs to prevent construction related pollutants from reaching stormwater and all products of erosion from moving off-site. Therefore, temporary construction impacts would be considered less than significant.

### Long-Term Operational Impacts

Long-term operations of the project would increase the potential of stormwater runoff transporting contaminants from roadway surfaces, parking lots, roofs and other exposed structural and landscape surfaces into the storm drain system. Typical industrial runoff contaminants (i.e., oil, grease, surfactant, heavy metals, solvents, pesticides, nutrients, or fecal coliform bacteria) can be expected within runoff.

According to the WQMP for the project, there are no known existing water quality problems associated with the site. The site does not contain any areas of biological significance (ASBS) or environmentally sensitive areas (ESAs) as defined by the Santa Ana RWQCB. Project runoff flows discharge to the west via the southwest project boundary and sheet flow to the west, southwest approximately 2.7 miles via existing storm drain improvements to San Timoteo Creek Channel, thence northwesterly approximately 15 miles to its confluence with the Santa Ana River. The Santa Ana River (Reaches 3 and 4) is currently on the State's 303(d) List of Water Quality Limited Segments as impaired. Reach 3 is impaired for Copper, Lead, and Pathogens; Reach 4 is impaired for Salinity, Total Dissolved Solids (TDS), Chlorides, and Pathogens.

Table 3.9-3 provides information from the project's WQMP that shows the potential pollutants generated by commercial industrial development.

**Table 3.9-3: Potential Pollutants Generated by Commercial Industrial Development**

| Type of Development (Land Use) | Sediment | Nutrients | Toxic Organic Compounds | Trash & Debris | Bacteria Indicators | Oil & Grease | Pesticides | Metals |
|---|---|---|---|---|---|---|---|---|
| Commercial Industrial Development | P[1] | P[1] | P[2] | P | P[3] | P | P[1] | P |

Notes:
P = Potential
[1] A potential pollutant if landscaping or open area exists on the project site
[2] Specifically, solvents.
[3] A potential pollutant if land use involves animal waste
Source: Albert A. Webb, 2014a.

As indicated in the WQMP prepared for the project, based on current receiving water impairments (303d List) and allowable discharge requirements (EPA TMDL List), the project's pollutants of concern are Pathogens, Metals, Chlorides, Salinity, and Nitrates. The expected stormwater and urban runoff pollutants reasonably expected to have the potential to occur and which are associated with a commercial industrial development are as follows:

**Trash and Debris (expected)**—Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash and debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality.

**Oil and Grease (expected)**—Oil and grease are characterized as organic compounds of high molecular weight. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas.

**Sediments (potential)**—Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms' survival rates, smother bottom-dwelling organisms, and suppress aquatic vegetation growth.

**Nutrients (potential)**—Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in Urban Runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

**Pathogens (potential)**—Pathogens (bacteria and viruses) are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life.

**Pesticides (potential)**—Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive or improper application of a pesticide may result in runoff containing toxic levels of its active ingredient.

**Metals (potential)**—The primary source of metal pollution in Urban Runoff is typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish.

## Water Quality Features

A water quality basin would be constructed to the west of Building 1. A rectangular concrete channel would be located north and south of Buildings 1 and 2. Additionally, a grouted riprap berm and a water quality infiltration trench would be located north of Building 2. Riprap is a foundation or sustaining wall of stones or chunks of concrete, which can be used to line channels. Riprap berms would also be located east of Building 2, and a water quality basin is planned west of Building 2. Additionally, a publicly maintained trapezoidal concrete channel would be located between the building sites and Cherry Valley Boulevard.

The proposed site will replace the natural channel with an improved channel which will continue to convey off-site flows and treated on-site flows to the west, toward the basin west of Roberts Street. The northerly off-site flows will be conveyed to the west by a channel and will not enter the site. All flow will continue to reach San Timoteo Creek.

The Design Capture Volume will be treated by two extended detention basins. In general, each building with associated parking, loading docks, drive aisles, and landscaped areas will drain to its respective extended detention basin. Both basins are located in fill material and treat very large areas, so infiltration and bio-retention were not feasible treatment options for the project.

## Best Management Practices

This project is designated as a Priority Project. Therefore, treatment control BMPs are required to remove pollutants typically associated with urban runoff.

Water quality treatment for the project site includes implementation of a vegetated swale system in the southern portion of the project. There is adequate treatment length to treat the first flush generated from the site. To prevent pollution from on-site storm drain catch basins and grated

inlets, the applicant shall install appropriate signage indicating no dumping is allowed. Furthermore, to prevent the spread of debris throughout the site, all trash areas shall be enclosed with a roof.

For the drainage area of Building 1, approximately 209,945 square feet of the site would be self-treating. The roof, landscaping, and concrete/asphalt areas would be treated by the basin (811,000 square feet, 317,290 square feet, and 757,798 square feet respectively). For the drainage area of Building 2, approximately 1,142,153 square feet would be self-treated, and roofs, landscaping and concrete/asphalt would be treated by the basin (1,012,760 square feet, 760,661 square feet, and 870,554 square feet respectively).

The final Water Quality Management Plan shall provide detailed descriptions and instructions for implementing the various BMPs for the project. Refer to Mitigation Measure MM HYD-2, below. Long-term stormwater quality concerns will be managed pursuant to a County-approved WQMP or SWPPP. Conformance with the mandatory requirements of a SWPPP and/or a WQMP for the project would ensure that no substantial degradation of water quality associated with long-term construction activities would occur.

In addition, the project will need to apply for an Industrial Storm Water General Permit 2014-0057-DWQ (Industrial General Permit), which is an NPDES permit that regulates discharges associated with 10 broad categories of industrial activities. Industrial General Permit 2014-0057-DWQ shall become effective July 1, 2015, and the project would be subject to this new permit since construction will commence after the effective date. As indicated on the State Water Resources Control website, the General Industrial Permit requires implementation of management measures to achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). Additionally, the General Industrial Permit requires the development of a SWPPP and a monitoring plan. The SWPPP facilitates the identification of pollutant sources and the means by which to manage pollutant sources to reduce stormwater pollution (California SWRCB 2013c).

With implementation of Mitigation Measure HYD-2 below, potential impacts regarding water quality would be reduce to a less than significant level.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM HYD-2** Prior to the issuance of grading permits for any portion or phase of the project, the developer shall prepare and submit a WQMP and a SWPPP to the County for review and approval. The WQMP and SWPPP shall contain specific Best Management Practices (BMPs) to prevent stormwater pollution from construction sources. These BMPs shall identify a practical sequence for site restoration, implementation, contingency measures, responsible parties, and agency contacts. The developer shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories:

- Soil stabilization practices
- Dewatering practices (if necessary)
- Sediment and runoff control practices
- Monitoring protocols
- Waste management and disposal control practices

Once approved by the County, contractors working on the site shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the WQMP and SWPPP.

The WQMP and SWPPP shall identify pollutant sources that could affect the quality of stormwater discharges from the construction site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project construction sites. To protect receiving water quality, the WQMP and SWPPP shall include, but is not limited to, the following elements:

- Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas.
- No disturbed surfaces will be left without erosion control measures in place during the winter and spring months (September 30–March 30).
- Sediment shall be retained on-site by one or more basins, traps, or other appropriate improvements. Of critical importance is the protection of existing catch basins that eventually drain to the Santa Ana River.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.
- BMPs performance and effectiveness shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.
- Native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance.

### *Level of Significance After Mitigation*

Less than significant impact. Mitigation Measure HYD-2 will require the submittal of a WQMP and a SWPPP to identify sources that could affect the quality of stormwater discharges from the project site. A series of BMPs would also be included for effective treatment of target pollutants in stormwater discharges anticipated from project construction sites.

## Groundwater Supplies

**Impact HYD-3:** **The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).**

### *Impact Analysis*

Implementation of the project will increase the amount of impervious surfaces on-site. The conversion of permeable land to impervious surfaces could reduce groundwater recharge. The project includes BMPs, such as maximizing permeable area, minimizing the use of impervious surfaces (such as decorative concrete in the landscape design and increasing the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales) that promote infiltration of water from the project site and reduce impermeable surfaces on site. Thus, the project would not interfere substantially with groundwater recharge. The Water Supply Assessment (WSA) prepared for the project concludes that there would be sufficient water resources (of which 51% is groundwater, according to the 2012 Water Source Portfolio in the WSA prepared by YVWD) to support the proposed project in addition to existing and projected demands (see discussion under UTIL-1 and UTIL -2, herein).

Additionally, the project will use a piped domestic water system, so it will not have a demonstrable effect on groundwater supplies or quality. Thus, impacts associated with ground water supply and recharge would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Runoff Water

**Impact HYD-4:** **The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

### *Impact Analysis*

A water quality basin would be constructed to the west of Building 1. A rectangular concrete channel would be located north and south of Buildings 1 and 2. Additionally, a grouted riprap berm and a water quality infiltration trench would be located north of Building 2. Riprap is a foundation or sustaining wall of stones or chunks of concrete, which can be used to line channels. Riprap berms would also be located east of Building 2, and a water quality basin is planned west of Building 2.

Additionally, a publicly maintained trapezoidal concrete channel would be located between the building sites and Cherry Valley Boulevard.

Under the proposed post-project conditions, Drainage Area "A" would comprise approximately 917.2 acres, with peak stormwater discharge rates of approximately 729.0 cfs and 1,165.1 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" would comprise approximately 244.2 acres, with peak discharge rates of 344.5 cfs and 537.4 cfs, for 10-year and 100-year storms, respectively (Albert A. Webb Associates 2014b); refer to Exhibit 3.9-3: Proposed Protection Berm Exhibit 3.9-3 through Exhibit 3.9-5. The proposed detention basins will reduce the 10-year and 100-year, 24-hour duration stormwater runoffs to less than existing conditions. The proposed detention basin will include a low-flow channel, with perforated underdrain, sand and gravel layers, weir for 100-year/1-hour overflows, as well as orifices. Furthermore, 2-year, 24-hour flows would be reduced to achieve Hydrological Conditions of Concern requirements, and proposed detention basin orifices would reduce these flows to no more than 10 percent beyond existing conditions.

The proposed project will comply with NPDES requirements and employ source control BMPs to reduce water quality impacts. Construction of the project will comply with SWPPP and WQMP requirements (Appendix G). Thus, any runoff will be treated before it is released into the existing storm drain system.

In summary, the project will not substantially increase the rate or amount of surface runoff or result in flooding; either on-site or off-site, and project runoff will not exceed the capacity of existing or planned stormwater drainage systems. Therefore, impacts are less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Housing Placement: Flood Hazard Area

| | |
|---|---|
| **Impact HYD-5:** | **The project would not place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.** |

### *Impact Analysis*

No housing is proposed as part of the project. The project proposes to construct industrial buildings that are not within a 100-year flood hazard area and will not impede flows as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map (Exhibit 3.9-1). As shown in The Pass Area Plan's Figure 11, Flood Hazards, some portions of the Pass Area, including large areas of Cabazon, are flood-prone. However, the project site is not located in an area of The Pass that is within either a 100-Year or 500-Year Flood Zone (The Pass Area Plan). Thus, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Structures: Flood Hazard Area

**Impact HYD-6: The project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows.**

### *Impact Analysis*

The project is not within a 100-year flood hazard area and will not be placed within an area where structures would impede flows according to the federal Flood Hazard Boundary or the Flood Insurance Rate Map.

The California Department of Water Resources has delineated a major watercourse/floodplain as flowing westerly through the southern portion of the project site. In response to this delineation, Riverside County is a participating community in the National Flood Insurance Program (NFIP), which requires participating agencies to adopt floodplain management ordinances. The intent of the ordinance, Ordinance 458, is to ensure that new construction and/or substantial improvements within mapped floodplains are done in a manner that reduces damage to the public and property. Any development or substantial improvement within a regulatory floodplain may require floodplain review by the County. This includes the submittal of a floodplain application permit form to Riverside County Building and Safety along with corresponding fees and attachments. Project compliance with Ordinance 458 would render any impacts to structures due to a flood hazard area less than significant.

### *Level of Significance Before Mitigation*

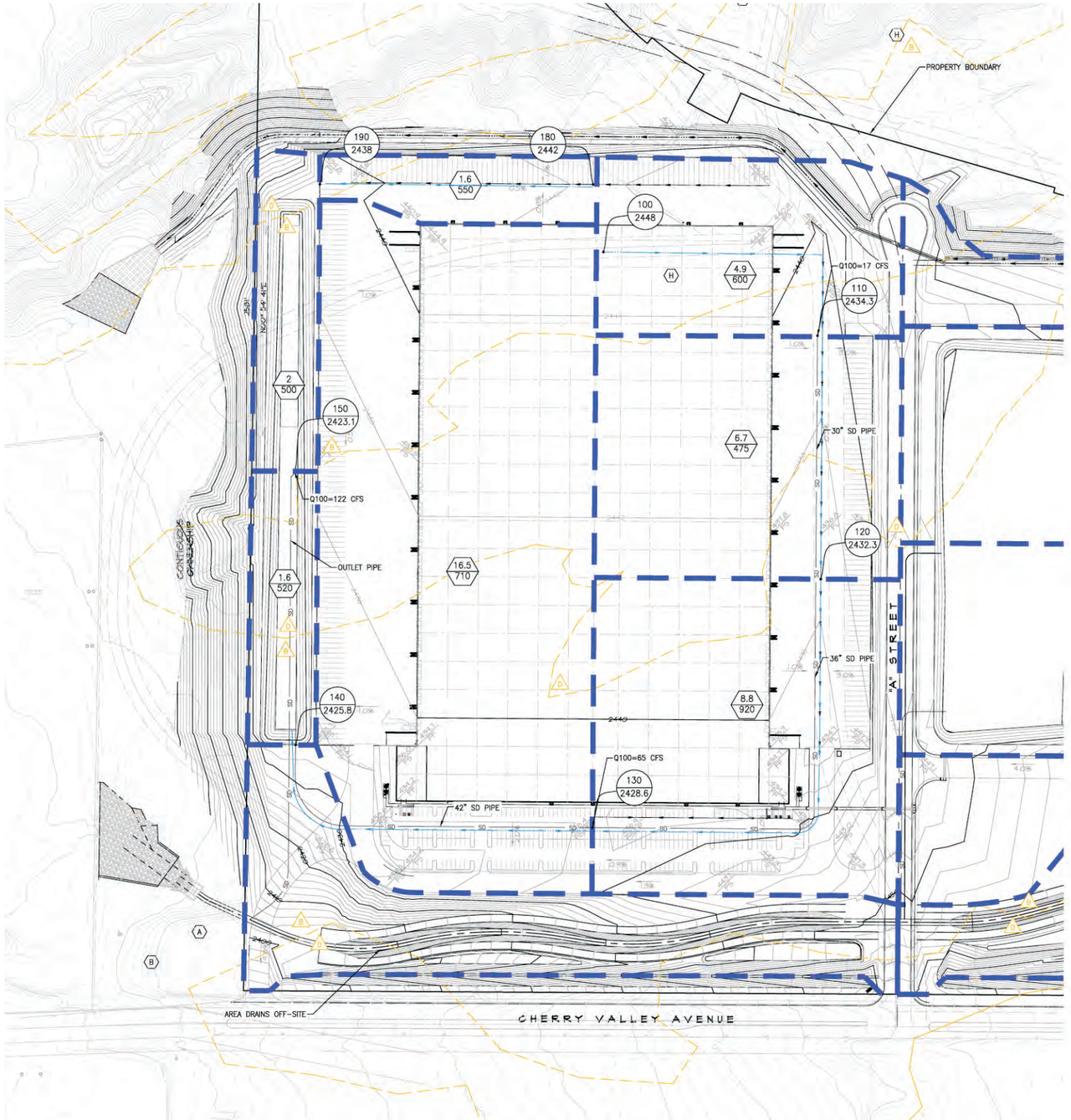
Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.




## LEGEND

- DRAINAGE BOUNDARY
- DRAINAGE PATH
- SOIL TYPE BOUNDARY
- 100 / 2448 — NODE NUMBER / ELEVATION (FT)
- 4.9 / 600 — DRAINAGE SUBAREA (AC) / DRAINAGE LENGTH (FT)

N W E S

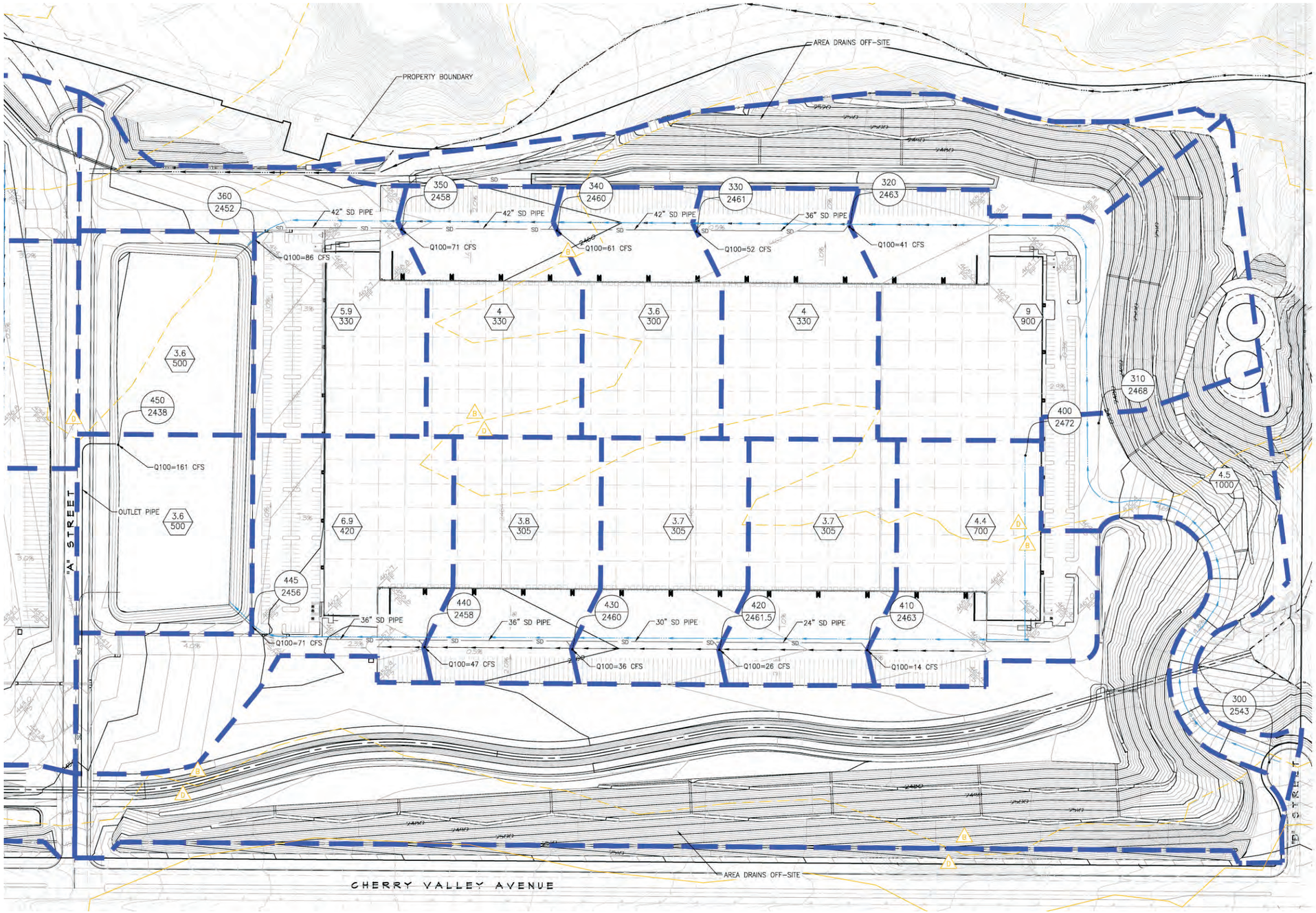
100' 0 100'

Source: Albert A. Webb Associates, October 2014.

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# Exhibit 3.9-4a
# Proposed Drainage Plan

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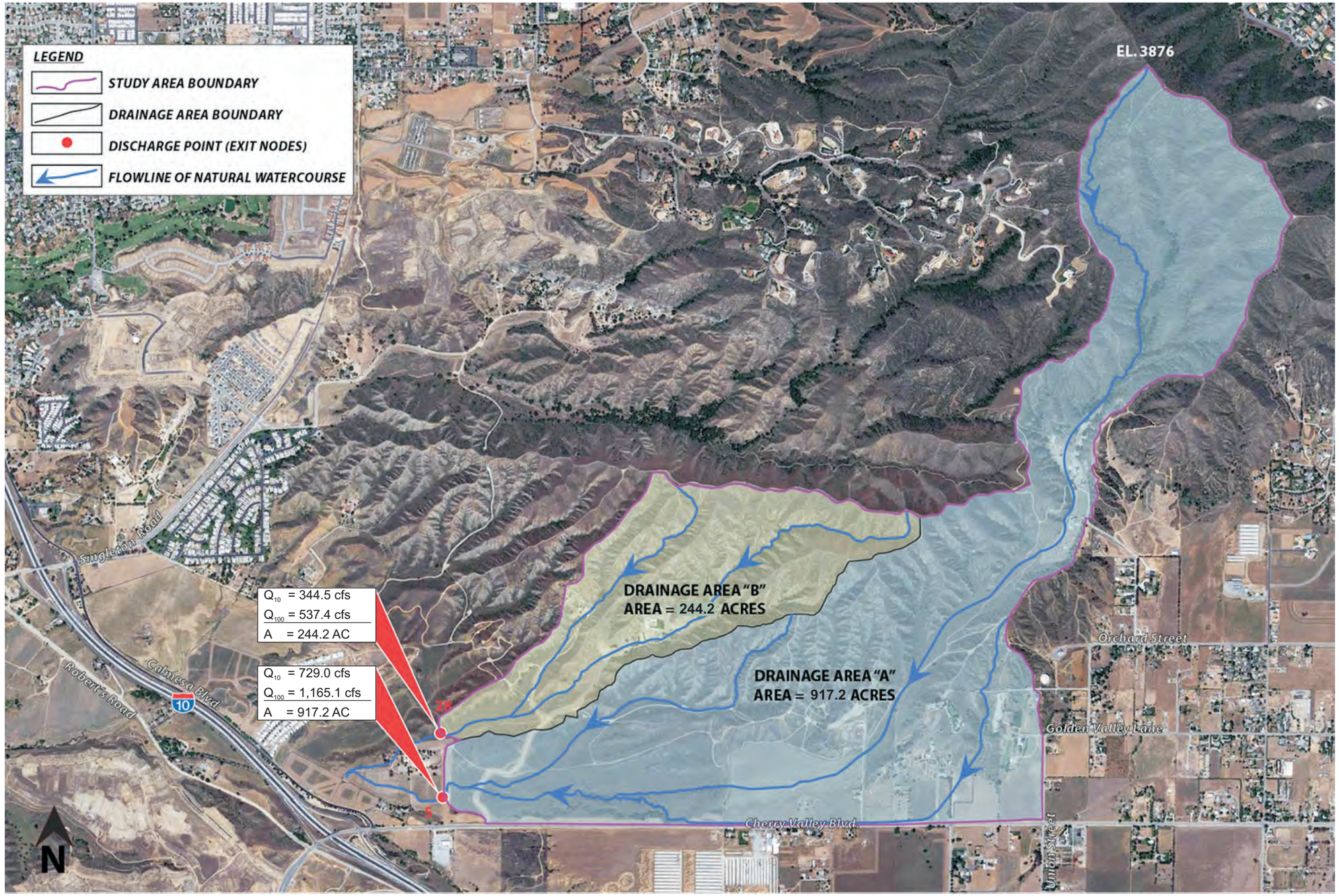



Source: Albert A. Webb Associates, October 2014.

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# Exhibit 3.9-4b
# Proposed Drainage Plan

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Exhibit 3.9-5
Proposed Drainage Area

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## LEGEND

- MAJOR DRAINAGE BOUNDARY
- MINOR DRAINAGE BOUNDARY
- NODE NUMBER
- AREA DESIGNATION / AREA ACREAGE (IN ACRES)
- 10-YEAR PEAK FLOW RATE / TIME OF CONCENTRATION
- 100-YEAR PEAK FLOW RATE / TIME OF CONCENTRATION
- FLOW LINE
- SOIL GROUP BOUNDARY

500 250 0 500 1500

GRAPHIC SCALE 1"=500'

Source: Albert A. Webb Associates, November 2014.

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# Exhibit 3.9-6
# Proposed Condition Hydrology Map

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## Degrade Water Quality

**Impact HYD-7: The project could otherwise substantially degrade water quality.**

### *Impact Analysis*

The project has the potential to degrade local water quality. Development of the project site will introduce a number of urban pollutants into the area, most notably oil, grease, rubber residue, brake shoe dust, and other vehicular fluids and materials. However, the project applicant shall prepare a SWPPP and WQMP that conforms to the SWRCB NPDES permit. The SWPPP shall identify BMPs to prevent construction related pollutants from reaching stormwater and all products of erosion from moving off-site. Mitigation Measure HYD-2 requires that a WQMP be prepared to control post-construction urban runoff from the project. Therefore, impacts to water quality will be less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure HYD-2.

### *Level of Significance After Mitigation*

Less than significant impact.

## Stormwater Treatment Control

**Impact HYD-8: The project would not include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors).**

### *Impact Analysis*

This project is designated as a Priority Project. Therefore, bio-treatment control BMPs are required to remove pollutants typically associated with urban runoff. The Design Capture Volume will be treated by two extended detention basins. In general, each building with associated parking, loading docks, drive aisles, and landscaped areas would drain to its respective extended detention basin. Both basins are located in fill material and treat very large areas, so infiltration and bio-retention were not feasible options for this project. The project is required to mitigate these increased flows (Albert A. Webb Associates 2014a).

Runoff will be dispersed to the extended detention basins, further discussed below. Landscaped areas on the north and south will be self-treating pervious areas that will convey the flows generated by the respective areas directly off-site. Runoff will enter Basin A primarily from the on-site storm drain system. The middle of the basin will be the lowest elevation and slope up to the north and south at 0.5 percent. A low-flow trench and collector trenches will convey the runoff to the bottom stage and outlet structure that will be located in the middle of the basin on the east side. The outlet structure has been designed to allow for treatment of the Design Capture Volume (Vbmp). The

Vbmp depth is 3.4 feet. The outlet structure has also been designed to mitigate the 2-year, 24-hour and 10-year, 24-hour events with orifices and the 100-year event will spill over the top of the outlet structure. The basin depth will be 7.2 feet, including 1 foot of freeboard.

Runoff will enter Basin B primarily from the on-site storm drain systems. The middle of the basin will be the lowest elevation and will slope up to the north and south at 0.5 percent. A low-flow trench and collector trenches will convey the runoff to the bottom stage and outlet structure that will be located in the middle of the basin on the west side. The outlet structure has been designed to allow for treatment of the Design Capture Volume. The Vbmp depth is 1.9 feet. The outlet structure and the 100-year event will spill over the top of the outlet structure. The basin depth will be 4.6 feet, including 1 foot of freeboard.

Additionally, the project proponent shall be responsible for the detention basins as well as the private area landscaping. Landscape maintenance shall include all maintenance and replacement of dead vegetation, erosion rills, proper disposal of green wastes, etc. Irrigation systems shall be tested regularly to ensure that all systems are functioning optimally. Thus, odors will be controlled via removal of dead vegetation and proper disposal of green wastes. Vectors are not anticipated to be an issue because irrigation systems will be tested regularly to ensure optional function, which will reduce pooling of water, thus reducing areas that have the potential to be used by mosquitoes. On-site BMPs will be maintained during operation, resulting in less than significant impacts regarding increased vectors or odors.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure HYD-2.

### *Level of Significance After Mitigation*

Less than significant impact.

## Drainage Pattern

| | |
|---|---|
| **Impact HYD-9:** | **Floodplains: The 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 substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.** |

### *Impact Analysis*

Development of the project will increase runoff from the site by increasing the amount of impervious surfaces (e.g., asphalt, concrete, water tanks, rooftops, etc.) and decreasing the pervious surfaces that could allow infiltration of precipitation. As part of project implementation, grading of land surfaces will occur prior to construction. On-site grading has the potential to alter existing drainage patterns; however, the project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding.

*Hydrologic Conditions of Concern*

Impacts to the hydrologic regime resulting from the project may include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. Under certain circumstances, changes could also result in the reduction in the amount of available sediment for transport; storm flows could fill this sediment carrying capacity by eroding the downstream channel. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to the hydrologic regime of a project site would be considered a hydrologic condition of concern if the change would have a significant impact on downstream natural channels and habitat integrity, alone or as part of a cumulative impact from development in the watershed (Hunsaker 2014).

The project's runoff flow rate, volume, velocity, and duration for the post-development condition will not exceed 110 percent of the pre-development condition for the 2-year, 24-hour and 10-year, 24-hour rainfall events. This condition can be achieved by minimizing impervious area on a site and incorporating other site-design concepts that mimic pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the Co-Permittee.[1]

*Pre-Development Hydrology (On-site)*

As included in the Hydrology Analysis for Tentative Parcel Map 36564 (Appendix G) prepared for the project, there are two drainage areas in the existing condition: Drainage Area "A" and "B." Drainage Area "A" comprises approximately 903.3 acres, with peak stormwater discharge rates of approximately 739.7 cfs and 1171.4 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" comprises approximately 258.1 acres, with peak discharge rates of 359.4 cfs and 563.2 cfs, for 10-year and 100-year storms, respectively.

*Post-Development Hydrology (On-site)*

The project would not result in an increase in erosion due to water either on-site or off-site. The proposed drainage system includes:

- Open channels designed to intercept and convey off-site flows through the project site without commingling them with flows generated from the proposed developed area.
- Infiltration BMPs (basins and trenches) sized to filter first flush flows (water quality flows) generated in the proposed development area.
- Storm drain facilities that will collect and route on-site runoff through detention basins that are sized to limit 10-year and 100-year storm discharge from the site to be equal or less than flows under existing conditions.
- Detention basins that will incorporate hydromodification requirements by limiting the increase in 2-year storm flow caused by the proposed development to less than 10 percent beyond existing conditions.

[1] A Co-Permittee means any operator of a regulated small municipal separate storm sewer system that applies jointly with one or more applicants for coverage under a municipal stormwater permit. In this context it refers to the City of Calimesa and County of Riverside.

As discussed, under the proposed post-project conditions, Drainage Area "A" would comprise approximately 917.2 acres, with peak stormwater discharge rates of approximately 729.0 cfs and 1,165.1 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" would comprise approximately 244.2 acres, with peak discharge rates of 344.5 cfs and 537.4 cfs, for 10-year and 100-year storms, respectively (Albert A. Webb Associates 2014b).

The proposed detention basins will reduce the 10-year and 100-year, 24-hour duration stormwater runoffs to less than existing conditions. The proposed detention basin will include a low-flow channel, and basin function as a flow-by detention basin for low-flow conditions. Therefore, implementation of the project would not increase the amount or rate of surface runoff in a manner that could produce flooding on- or off-site.

*Source Control Best Management Practices*

Below is a list of Source Control BMPs (permanent structural and operational) that will be included in the project:

**Operational Source Control BMPs**

1. Trash, sediment, and debris removal
2. Education for Property Owner, Operators, Tenants, Occupants, or Employees
3. Maintain landscaping using minimum or no pesticides
4. Activity Restrictions
5. Irrigation System and Landscape Maintenance
6. Common Area Litter Control
7. Street Sweeping Public Streets and Parking Lots
8. Drainage Facility Inspection and Maintenance

**Permanent Structural Source Control BMPs**

1. Storm Drain System Stenciling and Signage
2. Inspection and maintenance of on-site drainage structures
3. Landscape and Irrigation System Design
4. Rooftop areas
5. Pesticide use
6. Floor drains
7. Fueling Areas
8. Air/Water Supply Area Drainage
9. Loading Docks
10. Maintenance Bays
11. Vehicle and Equipment Wash Areas
12. Outdoor Material Storage Areas

As described above, both site design and source control BMPs will be used to reduce runoff and improve water quality. Thus, with implementation of the above described BMPs, impacts from flooding are anticipated to be less than significant.

There are no streams or rivers on-site that would be impacted by the project, but direct impacts to USACE jurisdictional areas would result from development of the project. Impacts to USACE jurisdictional areas total 0.46 acre, all comprised of ephemeral drainages.

Direct impacts to CDFW jurisdictional areas would also result from development of the project. Areas under CDFW jurisdiction exist in the same areas as those that are USACE jurisdictional, but they are slightly wider. Approximately 1.37 acres of the CDFW drainages are ephemeral, along with 0.04 acre of disturbed wetland. Although project construction could alter the existing drainage pattern (including these ephemeral drainages and disturbed wetland), it would not result in an increase in the amount or rate of runoff that could result in flooding on or off-site with implementation of Mitigation Measure HYD-2, which requires preparation of a WQMP and a SWPPP. Channels, basins and trenches, storm drain facilities, and detention basins that will be part of the post-development drainage system will reduce stormwater runoff to less than existing conditions.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure HYD-2.

### *Level of Significance After Mitigation*

Less than significant impact.

## Absorption Rate/Surface Runoff Rate and Amount

**Impact HYD-10: Floodplains: The project would not change absorption rates or the rate and amount of surface runoff.**

### *Impact Analysis*

The proposed drainage system includes storm drainpipe system, grass channels, and detention basins. The off-site stormwater is designed to be collected and conveyed through the proposed storm drain facilities. Based on the WQMP prepared for the project, the off-site flows will not exceed existing flows. As discussed, Drainage Area "A" comprises approximately 903.3 acres, with peak stormwater discharge rates of approximately 739.7 cfs and 1171.4 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" comprises approximately 258.1 acres, with peak discharge rates of 359.4 cfs and 563.2 cfs, for 10-year and 100-year storms, respectively.

The flow rate in the proposed condition does not exceed the existing condition because of the proposed drainage improvements. Thus, the project will have a less than significant impact regarding changes in the amount of surface runoff.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure HYD-2.

### *Level of Significance After Mitigation*

Less than significant impact.

## Dam Inundation Area

**Impact HYD-11: Floodplains: The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).**

### *Impact Analysis*

Although the project site has been identified outside of the FEMA 0.2 percent annual chance floodplain, the California Department of Water Resources has delineated a major watercourse/floodplain as flowing westerly through the southern portion of the project site. In response to this delineation, Riverside County is a participating community in the NFIP, which requires participating agencies to adopt floodplain management ordinances. The intent of the County's Ordinance 458, is to ensure that new construction and/or substantial improvements within mapped floodplains is done so in a manner that reduces damage to the public and property. Any development or substantial improvement within a regulatory floodplain may require floodplain review by the County. This includes the submittal of a floodplain application permit form to Riverside County Building and Safety along with corresponding fees and attachments.

Ordinance 458 requires the review of permit applications, including a determination of whether proposed building sites will be reasonably safe from flooding and that new structures or construction shall be designed or modified to adequately prevent floatation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads.

Whenever an application for a permit involves land that lies within special flood hazard area, the Floodplain Administrator shall determine if the permit would allow the location of any structure, new construction, or substantial improvement. Each application filed with the Floodplain Administrator must include the method by which the applicant proposes to comply with requirements of the ordinance, including proposed elevations of any structures or fills, flood proofing, erosion protection, flow-through area, any proposals to modify existing flow of stormwaters and any other relevant information. All application plans must be prepared and certified by a California registered civil engineer. Within 30 days of receipt, the Riverside County Flood Control and Water Conservation District (RCFC&WCD) or Coachella Valley Water District (CVWD) shall determine if any further information is required in order to process the application. Within 30 days after determining that all required information has been received, the RCFC&WCD or CVWD shall issue an approval with conditions or modifications, or deny the proposed plan. Proposed developments located within special flood hazard areas shall be required to meet construction standards as outlined in Ordinance 458. For example, new structures, construction, and substantial improvements to existing structures are to be constructed with flood-resistant material. Service facilities and utilities are required to be designed or located to prevent water from entering

or accumulating within the components during flooded conditions. Whenever a watercourse or mapped floodplain is to be altered or relocated, the flood carrying capacity of the altered or relocated portion of the watercourse or mapped floodplain must be maintained. Prior to grading and inspection for occupancy, a Letter of Map Revision issued by FEMA for areas shown as floodplain on the effective Flood Insurance Rate Map is required.

Thus, project compliance with Ordinance 458 would render any flooding impacts less than significant.

Additionally, the nearest dam (Perris Dam) is approximately 10 miles southwest of the project site. Because of the dam's location, there is no risk associated with dam failure. There are no levees located anywhere in the project vicinity. Therefore, impacts due to flooding from failure of a dam or levee will be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Water Body

| | |
|---|---|
| **Impact HYD-12:** | **The project would not result in changes in the amount of surface water in any water body.** |

### *Impact Analysis*

Long-term operations of the project would increase the potential of stormwater runoff transporting contaminants from roadway surfaces, parking lots, roofs and other exposed structural and landscape surfaces into the storm drain system. Runoff from the site is conveyed in a southwesterly direction to an existing storm drain. Project runoff flows discharge to the west and the southwest project boundary and sheet flow to the west, southwest approximately 2.7 miles via existing storm drain improvements to San Timoteo Creek Channel, thence northwesterly approximately 15 miles to its confluence with the Santa Ana River. Thus, development of the project could change the amount of surface water in the San Timoteo Creek Channel and the Santa Ana River. However, the increase in amount of surface water in these water bodies in anticipated to be less than significant, as described below.

The project would not result in an increase in water erosion either on-site or off-site. The drainage system includes open channels designed to intercept and convey bulked off-site flows through the project site without commingling them with flows generated from the proposed developed area; Infiltration BMPs (basins and trenches) sized to infiltrate the first flush flows (water quality flows) generated in the proposed development area; storm drain facilities that will collect and route on-site runoff through a detention basin that is sized to limit 10-year storm discharge from the site to be equal or less than flows under existing conditions; and detention basins that will incorporate

hydromodification requirements by limiting the increase in 2-year storm flow caused by the proposed development to less than 10 percent beyond existing conditions.

Under the proposed project conditions, Drainage Area "A" would comprise approximately 917.2 acres, with peak stormwater discharge rates of approximately 729.0 cfs and 1,165.1 cfs, for 10-year and 100-year storms, respectively. Drainage Area "B" would comprise approximately 244.2 acres, with peak discharge rates of 344.5 cfs and 537.4 cfs, for 10-year and 100-year storms, respectively (Exhibit 3.9-3a through Exhibit 3.9-4). The proposed detention basin with a flow-thru detention will reduce the 10-year and 100-year, 24-hour duration stormwater runoffs to be less than existing conditions. The proposed detention basins will include a low-flow channel that functions as a flow-by detention basin for low-flow conditions. Thus, the project will have a less than significant impact regarding changes in the amount of surface water in San Timoteo Creek Channel and the Santa Ana River.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

# 3.10 - Land Use and Planning

This section describes existing land uses, applicable land use plans, policies or regulations, and any potential conflicts that may arise through project implementation. This section also describes the proposed project's consistency with Southern California Association of Governments (SCAG) regional growth policies. Descriptions and analysis in this section are derived from field observation, review of pertinent planning documents including the County of Riverside General Plan, and from project information contained in Appendix A, Notice of Preparation (NOP) and Scoping Meeting Documents.

## 3.10.1 - Existing Conditions

### Land Use

#### *Project Site*

The proposed project is located within the Gateway area of the unincorporated community of Cherry Valley, which is a rural and equestrian community with small orchards, mobile homes, and single-family residences. It is within western Riverside County, along the north side of Cherry Valley Boulevard, east of the Interstate 10 Freeway (I-10 Freeway), between the cities of Calimesa and Beaumont.

The proposed project site has regional access via Cherry Valley Boulevard, to the I-10 Freeway, and local access via Cherry Valley Boulevard, Brookside Avenue, and Beaumont Avenue. Most of the land immediately adjacent to the project site is undeveloped, although residential development is planned for areas immediately adjacent to the project site, and residential and commercial development has already occurred in areas in the project vicinity to the south, southwest, and west.

#### *Surrounding Area*

The existing residential lots in the surrounding area are typically 1 acre or larger. The Community Development Foundation Component of the Riverside County General Plan, which encompasses the project site and much of the unincorporated area in the vicinity of the project site, allows a minimum lot size of one-half acre. Concentrations of commercial and large lot residential uses are scattered throughout the community, and are especially focused along Beaumont Avenue near the center of the Cherry Valley Community.

There are several proposed and approved projects in the surrounding area near the proposed project that consist of single family residential developments that could be characterized as urban and suburban densities. Exhibit 3.10-1 shows the location of cumulative projects in the vicinity of the project site, indexed by project number and cross-referenced in Table 3.10-2 below. The following three projects are in the immediate vicinity of the proposed project:

1. Holbert Ranch (Tentative Tract Map 30545), Single Family Residential-131 dwelling units. This project is located adjacent to the northern boundary of the proposed project site (Index Number 3).
2. Sunny-Cal Specific Plan, Single Family Residential-497 dwelling units. This project is located south of the proposed project site, across Cherry Valley Boulevard (Index Number 20).

3. Tract No. 31966, Single Family Residential-60 dwelling units. This project is located southeast of the proposed project and east of the Sunny-Cal Specific Plan (Index Number 2).

## General Plan Land Use Designations and Zoning Classifications

### *Project Site*

The General Plan Land Use designation for the project site consists of Rural Mountainous (RM) within the northern portion of the project site and Very Low Density Residential (VLDR) within the southern portion of the project site. According to the Land Use Element of the County of Riverside General Plan, the Very Low Density Residential land use designation provides for the development of detached single-family residential dwelling units and ancillary structures. The Rural Mountainous land use designation allows single-family residential uses, limited animal-keeping and agricultural uses, with a maximum residential density of one dwelling unit per 10 acres.

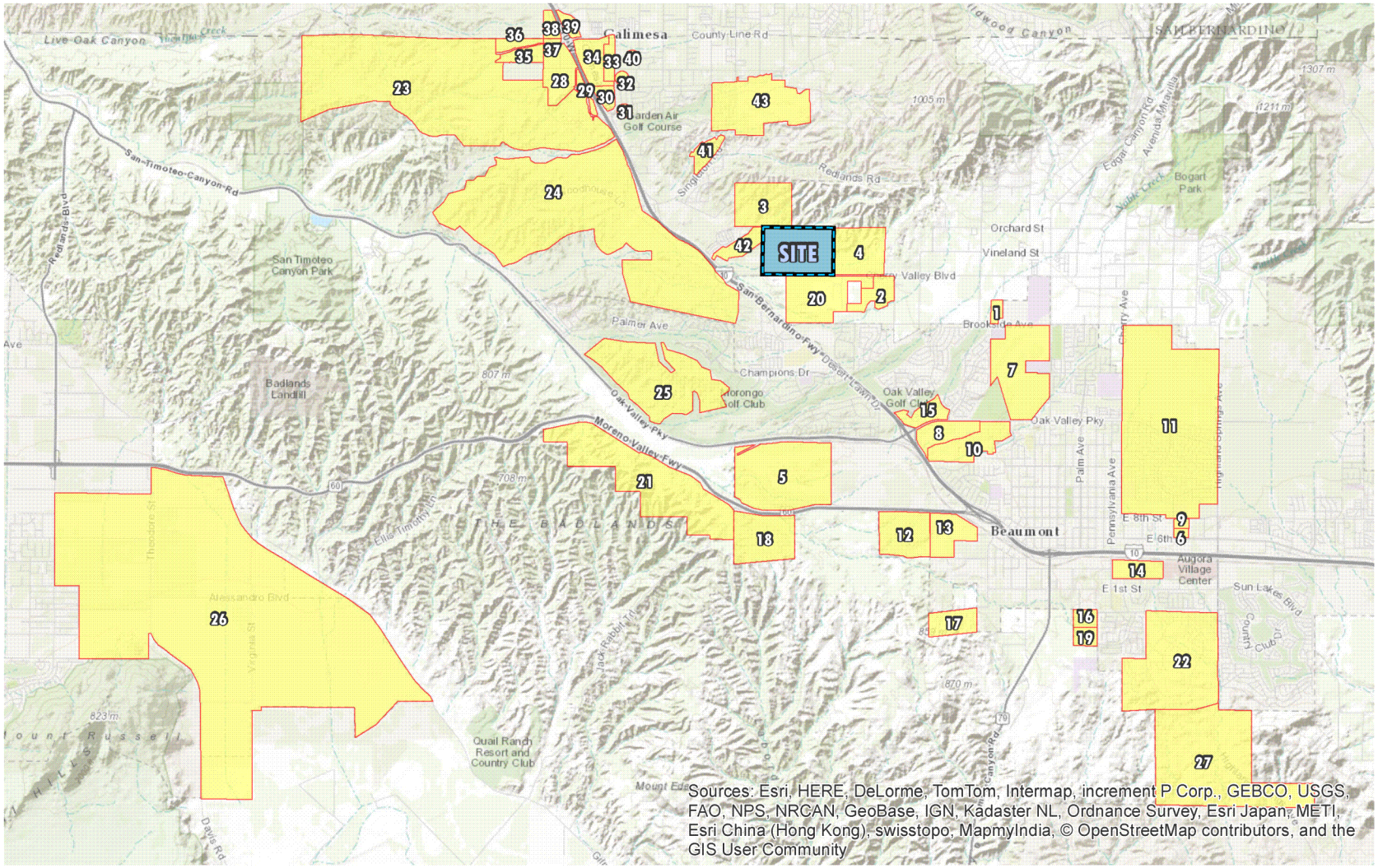
The site is zoned Controlled Development Area (W-2), which typically allows for one-family dwellings, light agriculture, aviaries, apiaries, grazing of farm animals, and animal husbandry. Guest ranches, educational institutions, country clubs, churches, and meat cutting/packaging plants without slaughtering are permitted with approval of a Plot Plan. Airports, cemeteries, hunting clubs, lumber mills, trail bike parks, rodeo arenas, commercial stables, menageries, and animal hospitals are permitted with approval of a Conditional Use Permit.[1]

The project site is located within The Pass Area Plan (PAP), which is a component of the County of Riverside General Plan that provides area-specific policies and requirements to address local conditions and issues. The PAP encompasses the cities of Banning, Beaumont and Calimesa, as well as several unincorporated communities within Riverside County, including Cherry Valley. Within the PAP, individual, unincorporated communities are identified as "policy areas." According to the PAP, a policy area is a portion of an Area Plan that contains special or unique characteristics that merit detailed attention and focused policies.

The project site is located within the Cherry Valley Policy Area (CVPA). However, although the boundaries of the CVPA encompass the project site and the entire Cherry Valley area, it applies only to properties within the Rural Community Foundation Component, and is therefore inapplicable to the project site (Riverside 2003a).

In addition, the project site is located within the Cherry Valley Gateway Policy Area, which is located on the western edge of the CVPA and, as the name implies, serves as a gateway to Cherry Valley. The intent of the Cherry Valley Gateway Policy Area is to maintain the predominantly rural community nature of this area, while allowing existing uses that are of a higher density to remain legal conforming uses.

[1] Website: http://www.tlma.co.riverside.ca.us/planning/content/zoning/ordnance/ord348_zones.html#w2.




Source: Urban Crossroads.

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# Exhibit 3.10-1
# Cumulative Projects

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The project includes a General Plan Amendment to change the land use designation from Rural Mountainous (RM) and Very Low Density Residential (VLDR) to Rural Mountainous (RM), Open Space Recreation (OS-R), Public Facility (PF), and Light Industrial (LI). The project applicant is also requesting a Change of Zone from Controlled Development Area (W-2) to Industrial Park (I-P). The PF portion of the site would remain zoned W2. Exhibit 3.10-2 shows the County of Riverside land use designation for the project site, as well as the County and the City of Calimesa general plan land use designations surrounding the project site, and Exhibit 3.10-3 shows existing zoning. Exhibits 3.10-4 and 3.10-5 show proposed land use and zoning, respectively.

### *Surrounding Areas*

The areas surrounding the project site are also located within the PAP. Adjacent areas are generally vacant, and include the land use designations contained in Table 3.10-1.

**Table 3.10-1: Surrounding Land Use Designations**

| Surrounding Area | Relationship to Project Site | Land Use Designation |
|---|---|---|
| City of Calimesa[1] | Northwest | Residential Rural (0–2 du/ac) and Residential Low Medium (4–7 du/ac) |
| The Pass Area Plan/Cherry Valley[2] | North | Rural Mountainous (RM) |
| The Pass Area Plan/Cherry Valley[2] | Southwest | Commercial Retail (CR) |
| The Pass Area Plan/Cherry Valley[2] | South | This is the Sunny-Cal Egg Ranch Project, which is an approved 571-unit 324-acre project that is pending annexation to the City of Beaumont.[3] |
| The Pass Area Plan/Cherry Valley[2] | East | Rural Mountainous (RM) and Rural Community—Very Low Density Residential (RC-VLDR) |
| City of Calimesa[1] | West | Commercial Retail (CR) and Residential Low Medium (4–7 du/ac) |

Notes:
[1] City of Calimesa General Plan Land Use Map, August 23, 2010.
[2] Riverside County Land Information System, 2013.
[3] City of Beaumont, 2013.
du/ac = dwelling units per acre
Source: MBA, 2013.

Exhibit 3.10-1 shows the location of the cumulative projects listed in Table 3.10-2.

**Table 3.10-2: Cumulative Projects**

| No. | Project Name | Land Use | Quantity[1,2] |
|---|---|---|---|
| 1 | CUP 03629 | Mini-warehouse | 90 TSF |
| 2 | TR 31966 | Single-family Residential | 60 DU |

## Table 3.10-2 (cont.): Cumulative Projects

| No. | Project Name | Land Use | Quantity[1,2] |
|---|---|---|---|
| 3 | TTM 30543 Holbert Ranch | Single-family Residential | 131 DU |
| 4 | Borstein Property | Single-family Residential | 209 DU |
| 5 | Heartland[3] | Single-family Residential | 988 DU |
| | | Commercial Retail | 126 TSF |
| 6 | Tuscany Townhomes | Condos/Townhomes | 188 DU |
| 7 | Noble Creek Vistas | Single-family Residential | 648 DU |
| 8 | Oak Valley Village (Mountain Bridge) | Commercial Retail | 441.709 TSF |
| 9 | Beaumont Commons | Single-family Residential | 120 DU |
| | American Villas | Single-family Residential | 36 DU |
| | 8th Street Condos | Condos/Townhomes | 16 DU |
| | Pennsylvania Avenue Apartments | Apartments | 8 DU |
| 10 | Kirkwood Ranch | Single-family Residential | 403 DU |
| 11 | Sundance | Single-family Residential | 4716 DU |
| | | Commercial Retail | 163.35 TSF |
| 12 | Rolling Hills Ranch Industrial Prologis[4] | High-Cube Warehouse | 1200 TSF |
| 13 | Dowling Orchard Business Park[4] | High-Cube Warehouse | 548.82 TSF |
| 14 | Farmer Boys | Commercial Retail | 6.752 TSF |
| | Ramona Tire/Firestone | Commercial Retail | 4.792 TSF |
| 15 | Oak Valley Senior Center | Senior Attached Housing | 372 DU |
| 16 | Aspen Creek (TT 31426) | Single-family Residential | 106 DU |
| 17 | Jerome Taurek (Tract No. 31162) | Single-family Residential | 244 DU |
| 18 | Hidden Canyon Industrial | High-Cube Warehouse | 2890.00 TSF |
| 19 | Pacific Scene (Tract No. 32850) | Single-family Residential | 95 DU |
| 20 | Sunny-Cal Specific Plan | Single-family Residential | 497 DU |
| 21 | Jack Rabbit Trail | Single-family Residential | 2000 DU |
| | | Commercial Retail | 49.005 TSF |
| 22 | Four Seasons (Tract No. 31462) | Single-family Residential | 2041 DU |
| | | Commercial | 95.832 TSF |

## Table 3.10-2 (cont.): Cumulative Projects

| No. | Project Name | Land Use | Quantity[1,2] |
|---|---|---|---|
| 23 | TTM 33931 Fiesta Oak Valley/Mesa Verde Estates | Single-family Residential<br>Condos/Townhomes<br>Active Park<br>Elementary School<br>Commercial Retail | 3535 DU<br>453 DU<br>48 AC<br>1200 ST<br>200 TSF |
| 24 | Summerwind Ranch | Single-family Residential<br>Middle School<br>Elementary School<br>Commercial Retail<br>Business Park | 3683 DU<br>900 ST<br>1200 ST<br>1000 TSF<br>1579 TSF |
| 25 | Sun Cal/Various Builders | Single-family Residential<br>Commercial Retail | 2366 DU<br>505.296 TSF |
| 26 | World Logistics Center | High-Cube Warehouse | 21450 TSF |
| 27 | Potrero Creek Estates | Single-family Residential | 700 DU |
| 28 | TAZ-28 | Single-family Detached | 193 DU |
| | | General Office Building | 182.342 TSF |
| | | Shopping Center | 130.244 TSF |
| 29 | TAZ-29 | Business Park | 59.512 TSF |
| | | Shopping Center | 49.876 TSF |
| | | General Light Industrial | 26.737 TSF |
| | | General Office Building | 69.827 TSF |
| 30 | TAZ-30 | General Office Building | 2.363 TSF |
| | | Shopping Center | 1.699 TSF |
| 31 | TAZ-31 | Shopping Center | 62.019 TSF |
| | | General Office Building | 86.826 TSF |
| 32 | TAZ-32 | Single-family Detached | 94 DU |
| 33 | TAZ-33 | Shopping Center<br>General Office Building<br>General Light Industrial<br>Business Park<br>Apartment | 6.861 TSF<br>9.605 TSF<br>35.109 TSF<br>78.147<br>41 DU |
| 34 | TAZ-34 | Shopping Center<br>General Office Building | 54.613 TSF<br>76.459 TSF |
| 35 | TAZ-35 | Single-family Detached | 28 DU |
| 36 | TAZ-36 | Single-family Detached | 17 DU |
| 37 | TAZ-37 | Shopping Center | 11.87 TSF |
| | | General Office Building | 16.618 TSF |
| | | Single-family Detached | 6 DU |

**Table 3.10-2 (cont.): Cumulative Projects**

| No. | Project Name | Land Use | Quantity[1,2] |
|---|---|---|---|
| 38 | TAZ-38 | Shopping Center | 69.478 TSF |
| | | General Office Building | 97.269 TSF |
| 39 | TAZ-39 | Shopping Center | 103.023 TSF |
| | | General Office Building | 42.46 TSF |
| 40 | TAZ-40 | Single-family Detached | 478 DU |
| 41 | Singleton Heights (Mastercraft) TR 26811 | Single-family Detached | 268 DU |
| 42 | Sunset Ranch (Osborne/Dunham) TR 31450 | Single-family Detached | 231 DU |
| 43 | JP Ranch | Single-family Detached<br>Commercial Retail | 689 DU<br>72.7 TSF |

Notes:
[1] TSF= Thousand Square Feet DU= Dwelling Unit ST= Students
[2] Commercial/Industrial Square Footage calculated based on Floor Area Ratio of 0.25.
[3] General Plan Land Use obtained from Heartland Tentative Tract Map 27971 TIA, October 3, 2011 by Urban Crossroads.
[4] Land Use and Quantity obtained from Potrero Boulevard Interchange, Phase 1 Focused Traffic Analysis, September 26, 2011 by Urban Crossroads.
[5] Phase 1 Kohl's completed. Commercial square footage obtained from City's website: http://www.ci.beaumont.ca.us /DocumentCenter/Home/View/118).
Source: San Gorgonio Crossing (Parcel Map No. 36093) Traffic Impact Analysis, Urban Crossroads, November 5, 2015.

## 3.10.2 - Regulatory Setting

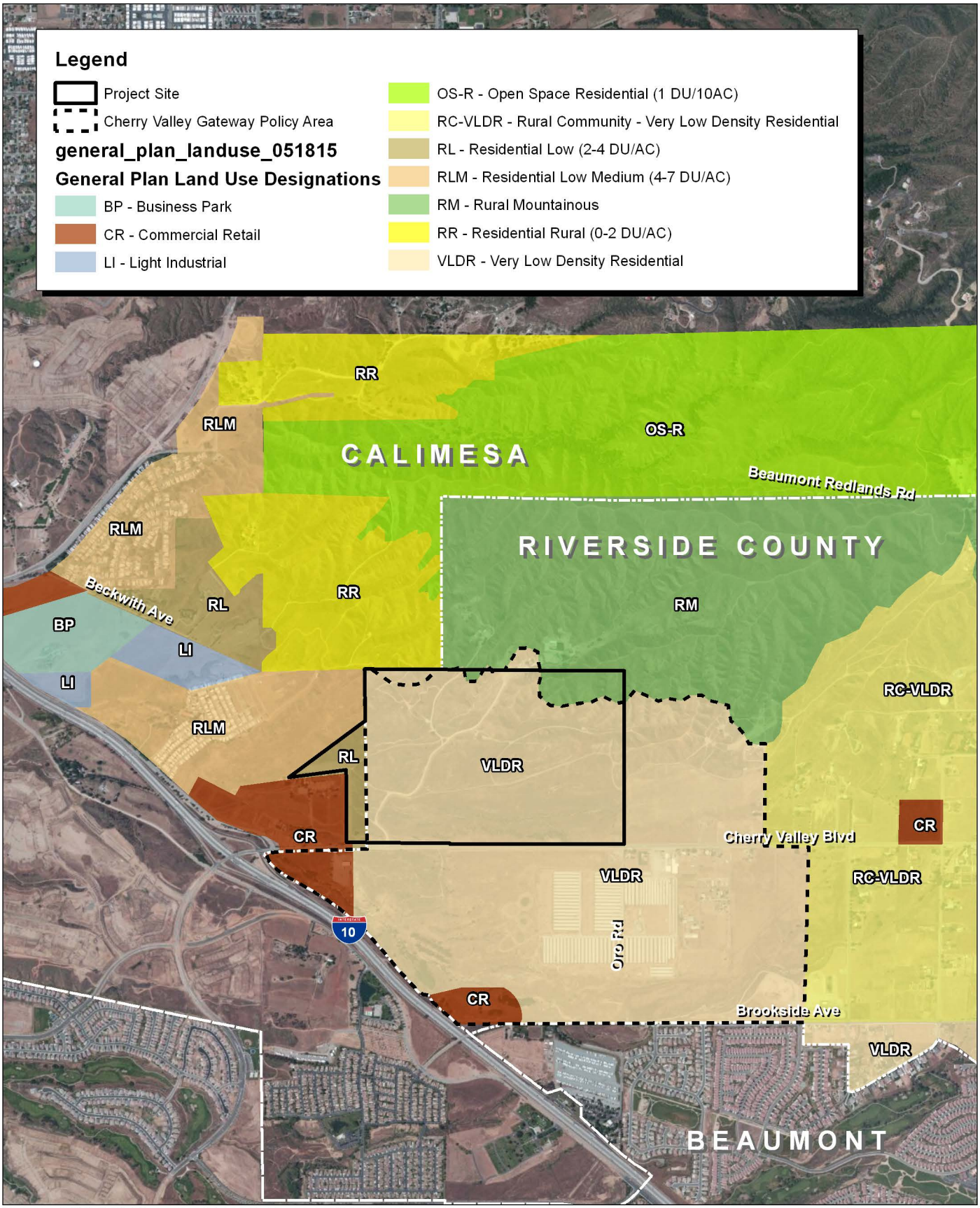
### Regional Regulations

#### *Southern California Association of Governments (SCAG)*

SCAG is the nation's largest metropolitan planning organization, representing six counties, 191 cities, and over 18 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California. Over the past 40 years, SCAG has evolved as the largest of nearly 700 councils of government in the United States, functioning as the Metropolitan Planning Organization for the following six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated Metropolitan Planning Organization, SCAG is mandated by federal and state law to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the state level (SCAG 2013).

### Regional Comprehensive Plan and Guide

The proposed project is located within the County of Riverside, and is located in the middle of a six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties.



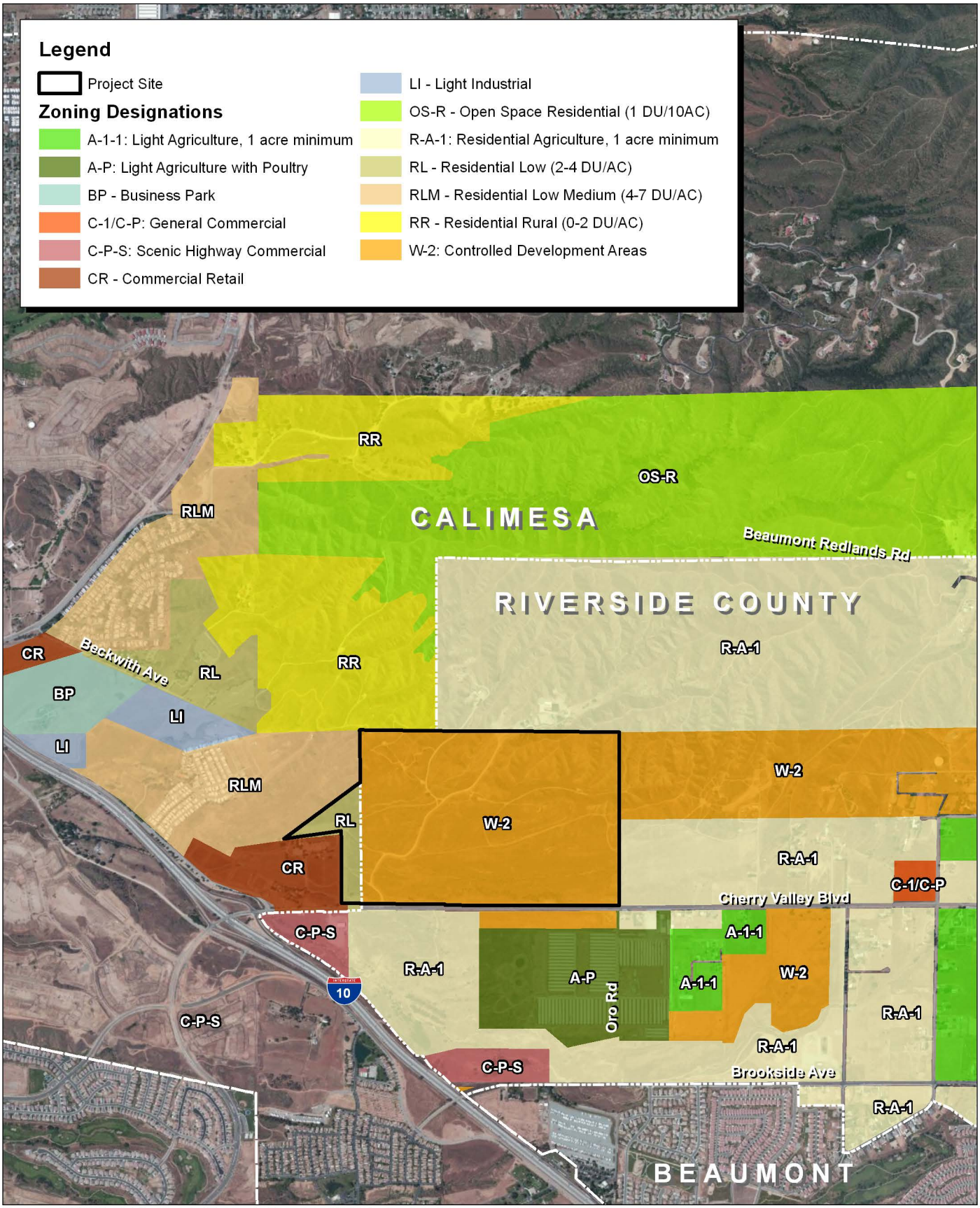

Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 3.10-2
# Surrounding Existing Land Use Designations

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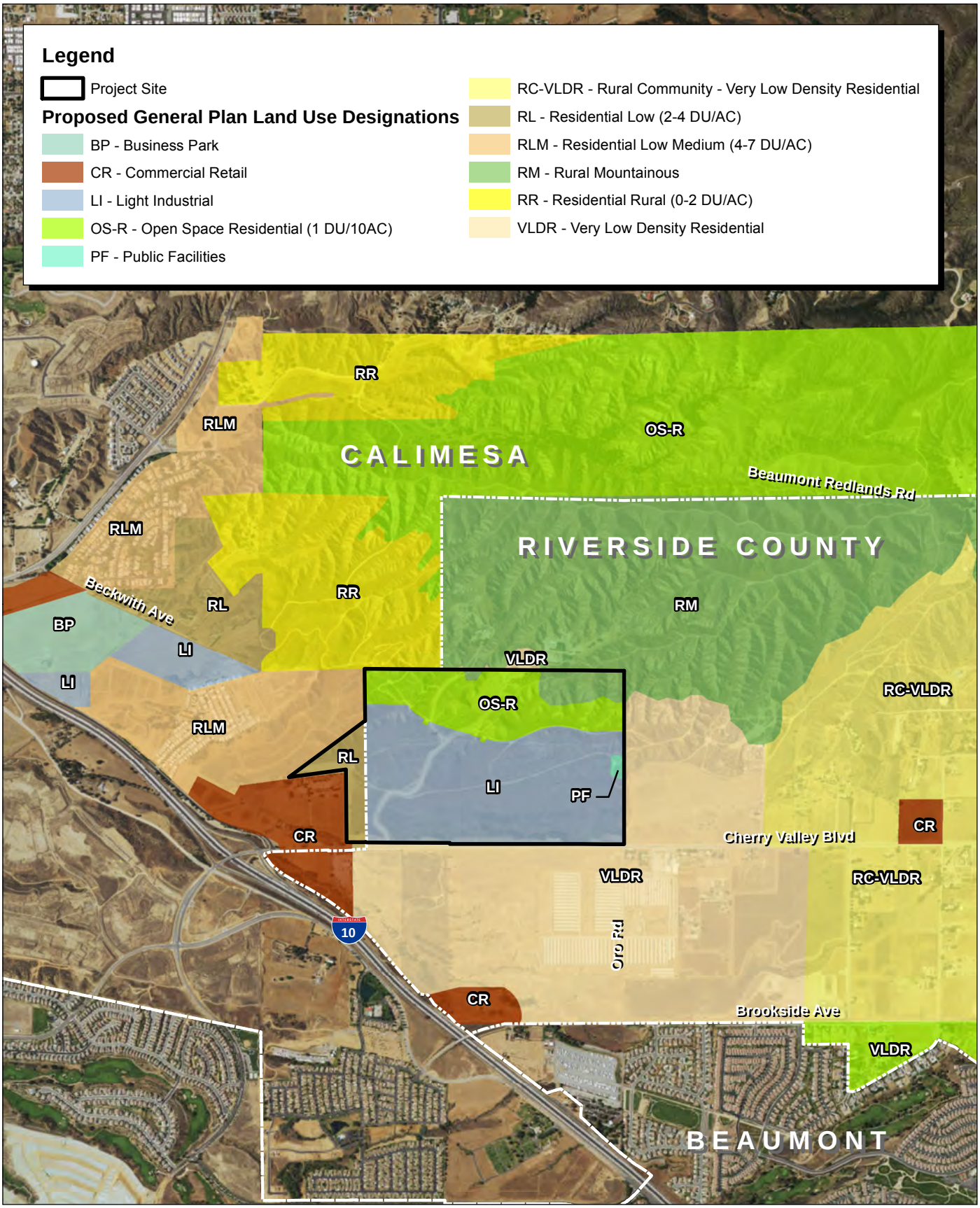

Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 3.10-3
# Surrounding Existing Zoning Designations

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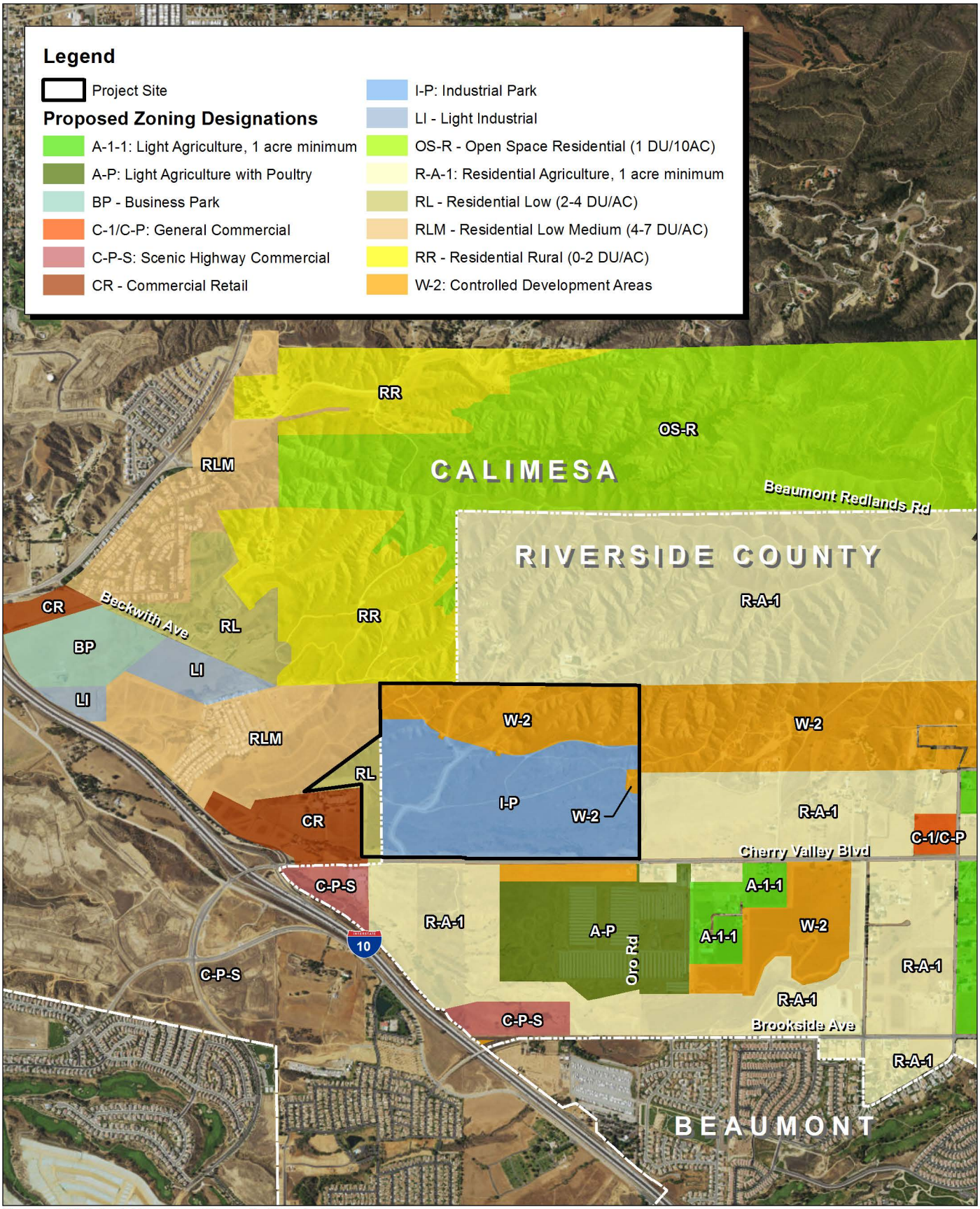

Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 3.10-4
# Proposed
# Land Use Designations

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Source: ESRI Aerial Imagery. Riversdie County GIS Data.

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# Exhibit 3.10-5
## Proposed Zoning Designations

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SCAG has developed a Regional Comprehensive Plan and Guide (RCPG) to help coordinate transportation and infrastructure, open space and environmental planning with population, housing, and employment growth within the multicounty region. The RCPG, adopted in 1995, contains policies addressing planning priorities for the region adopted by the SCAG governing board, the Regional Council. Some of these are core policies that implement state or federal mandates, while most of the policies are ancillary or "advisory-only" guidance for local jurisdictions and public agencies.

SCAG's RCPG includes a package of policies related to growth and development that seek to coordinate infrastructure with projected population and housing growth. In general, SCAG policies encourage job and housing opportunities to be balanced at the county or Regional Statistical Area level (both much larger than the project level). SCAG policies also encourage job growth to be concentrated near transit services and transit nodes, and existing freeways, HOV lanes, and toll roads. Given the expansive scope of and general nature of the RCPG, not all of these policies apply to every project.

This project is a project of region-wide significance according to SCAG Intergovernmental Review (IGR) criteria[2] and CEQA Guidelines (Section 15206). The project is a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons; occupying more than 40 acres of land; or encompassing more than 650,000 square feet of floor area. Therefore, this EIR is required to address the proposed project's consistency with the RCPG.

### *SCAG Compass Blueprint*

The Compass Blueprint Growth Vision is a response, supported by a regional consensus, to the land use and transportation challenges facing Southern California now and in the coming years.

The Growth Vision is driven by four key principles (SCAG 2013):

- **Mobility**—Getting where we want to go
- **Livability**—Creating positive communities
- **Prosperity**—Long-term health for the region
- **Sustainability**—Promoting efficient use of natural resources

### *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy*

On April 4, 2012, SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region (RTPSCS 2013). The RTP is a long-range transportation plan that is developed and updated by SCAG every 4 years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

[2] Website: http://scag.ca.gov/igr/clist.htm. Accessed March 13, 2013.

## Local Regulations

### *County of Riverside General Plan*

Pursuant to the Land Use Element of the County of Riverside General Plan, industrial development creates economic growth by providing jobs for local and area-wide residents, providing growth opportunities for new and existing businesses, and facilitating a tax base from which public services are provided. Riverside County's goal is to provide attractive work environments that fit with the character of each community, and that are well served by convenient and adequate access to multi-modal transportation options that bring jobs and housing in closer proximity to one another.

The proposed project would re-designate that portion of the project site to be developed from Very Low Density Residential (VLDR) to Light Industrial (LI). The Light Industrial land use designation allows for a wide variety of industrial and related uses, including assembly and light manufacturing, repair and other service facilities, warehousing, distribution centers, and supporting retail uses. Building intensity ranges from 0.25 to 0.60 floor area ratios (FAR). The northern portion of the site currently designated RM will remain RM. The northern portion of the project site that is currently VLDR will be re-designated as Open Space-Recreation, (OS-R), which will allow for continued public access to, and use of, the informal trails in the vicinity (via a trail easement). Additionally, the portion of the site for the two YVWD water tanks would be re-designated to Public Facility (PF).

Applicable general plan land use policies are listed and evaluated for project consistency under Impact LUP-6.

### *The Pass Area Plan*

As discussed in Section 3.10.1, the project site lies within the PAP, which is a component of the County of Riverside General Plan that provides area-specific policies and requirements to address local conditions and issues. In addition, the project site is located within the Cherry Valley Policy Area (CVPA) and the Cherry Valley Gateway Policy Area, which consist of approximately 714 acres of land located on the western edge of the CVPA. The Cherry Valley Gateway Policy Area overlaps with the CVPA, and, as the name implies, serves as a gateway to Cherry Valley. There are only two policies that are relevant to the Cherry Valley Gateway Policy Area. These policies are listed and evaluated for project consistency under Impact LUP-6.

### *The County of Riverside Zoning Ordinance*

The project also includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P). The tank area of the site would remain W-2. The purpose of this zone change is to be consistent with the proposed General Plan Amendment.

According to the Riverside County Zoning Ordinance, industrial parks are permitted through the approval of a Plot Plan; consequently, the following requirements will apply to the proposed project:

*Article X, I-P Zone (Industrial Park)*

- **Section 10.2. Planned Industrial Developments.** Planned industrial developments are permitted, provided a land division has been approved pursuant to the provisions of Ordinance No. 460.

- **Section 10.3. Industrial Park Plot Plan.** Applications for an industrial park plot plan shall be made pursuant to the provisions of Section 18.30 of this ordinance. In addition to the requirements of Section 18.30, the application shall contain:
  - a. A description of the proposed industrial operation in sufficient detail to fully describe the nature and extent of the proposed use.
  - b. Plans or reports describing proposed methods for handling traffic, noise, glare, odor, vibration, hazardous gases, liquids and other materials.
  - c. Plans or reports showing proposed method for treatment and disposal of sewage and industrial and toxic waste materials.
  - d. An architectural perspective of all buildings and grounds showing the relationship of the proposed development to adjacent properties.

### *Multiple Species Habitat Conservation Plan (MSHCP)*

The MSHCP is a comprehensive multi-jurisdictional effort that includes Riverside County and 14 cities in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system. Most importantly, the MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Game (CDFG). The MSHCP was adopted on June 17, 2003 by the Riverside County Board of Supervisors (MSHCP Consistency Analysis 2012). The project site is subject to the MSHCP, but it is not located within an MSHCP criteria cell for any sensitive species.

### *Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities*

The Western Riverside Council of Governments (WRCOG) published this document in 2005 to promote and assist planning departments, developers, property owners, elected officials, community organizations, and the public as a tool to potentially help address some of the complicated choices associated with permitting warehouse/distribution facilities and understanding the options available when addressing environmental issues. In addition, these guidelines are designed to help minimize the impacts of diesel particulate matter (PM) from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the subregion. The goals from the Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities are listed below:

- **Goal 1:** Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse distribution center.
- **Goal 2:** Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods.
- **Goal 3:** Eliminate trucks from using residential areas and repairing vehicles on the streets.
- **Goal 4:** Reduce and/or eliminate diesel idling within the warehouse/distribution center.
- **Goal 5:** Establish a diesel minimization plan for on- and off-road diesel mobile sources to be implemented with new projects.
- **Goal 6:** Establish an education program to inform truck drivers of the health effects of diesel particulate and the importance of reducing their idling time.

- **Goal 7:** Establish a public outreach program and conduct periodic community meetings to address issues from neighbors.

In addition, for each of the stated goals, the guidelines identify several recommendations with respect to the siting, design, and operation of warehouse distribution centers. Although the *Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities* was never adopted by the County Board of Supervisors, the relevance of these recommendations to this project are discussed under Impact LUP-6.

## 3.10.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to land use and planning are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Result in a substantial alteration of the present or planned land use of an area?

b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?

c) Be consistent with the site's existing or proposed zoning?

d) Be compatible with existing surrounding zoning?

e) Be compatible with existing and planned surrounding land uses?

f) Be consistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan)?

g) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?

An additional threshold recommended by SCAG is also analyzed: whether the project would conflict with regional growth policies established by SCAG as they relate to population, housing, and employment in the project area.

## 3.10.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project, and provides mitigation measures where necessary.

The potential for land use impacts through site reconnaissance and review of applicable land use policy documents is also evaluated. FirstCarbon Solutions personnel performed site reconnaissance on the project site and surrounding land uses on various dates in 2012. Photographs were taken of the project site and surrounding land uses to document existing conditions. The County of Riverside General Plan 2030, the zoning ordinance, and applicable community plan policies and provisions that pertain to the proposed project were also reviewed.

## Substantial Alteration

| | |
|---|---|
| **Impact LUP-1:** | **The project would not result in a substantial alteration of the present or planned land use of an area.** |

### *Impact Analysis*

*Present Land Use*

The project site is currently vacant. Several dirt roads and informal trails cross the project site, and physical access to a few homes to the north are provided through the site by dirt roads. Grazing and past agricultural activities have disturbed much of the site, which is grazed periodically by sheep and goats.

The area to the northeast, north, and northwest of the site primarily consists of rolling hills with a few scattered rural residences. Most of the surrounding area is currently in a predominantly undeveloped state. A mobile-home park (Rancho Calimesa) is located approximately 0.26 mile west of the site, off Calimesa Boulevard. The I-10 Freeway is located approximately 0.35 mile southwest of the project site. Land to the south consists of scattered vacant parcels, a truck services business, and the inactive Sunny-Cal Egg Ranch (planned for future development). East of the project site is a mix of properties used for agriculture purposes and large-lot, rural single-family development.

Additional uses in the vicinity of the project site include a residential neighborhood east of the I-10 Freeway, directly south of Brookside Avenue, and north of the Oak Valley Golf Club. In addition, the PGA Golf Course and several developing residential neighborhoods, as well as the approved Oak Valley Specific Plan (approximately 4,000 residential units), are located across the I-10 Freeway, to the west.

*Proposed Land Use*

The project proposes to construct two industrial buildings totaling approximately 1,823,760 square feet of industrial land use. Therefore, with respect to present land use, development of the project site would represent a substantial alteration from its present condition. However, this alteration does not represent a significant adverse impact with respect to present land uses on the project site and adjoining areas. Potential adverse impacts of the project that could affect land use compatibility with adjoining areas—including aesthetics, agricultural resources, noise, hazards, population and housing, local traffic, and local air quality impacts—have been evaluated in the respective sections of this Draft EIR and have been found to be less than significant, or less than significant with mitigation.

The project proposes a General Plan Amendment to change the land use designation from Rural Mountainous (RM) and Very Low Density Residential (VLDR) to Rural Mountainous (RM), Open Space-Recreation (OS-R), Light Industrial (LI), and Public Facility (PF). However, the proposed project is within the Community Development Foundation Component of the General Plan, which allows for land designation amendments such as those being proposed by this project, and the General Plan Amendment being sought for the project does not propose to change the Community Development Foundation Component. In addition, of the five foundation components within the Riverside County General Plan (Community Development, Rural Community, Rural, Agriculture, and Open Space), the

Community Development foundation component is the only one that includes "urban" land uses (industrial and business park uses) such as those being proposed as part of the project.

The proposed project is located in the PAP. The project falls within both the Cherry Valley Policy and Cherry Valley Gateway Policy Areas. As discussed above, although the boundaries of the Cherry Valley Policy Area encompass the project site, it applies only to properties within the Rural Community Foundation Component, and is therefore inapplicable to the project site (Riverside 2003a The Pass Area Plan).

As noted, though, the proposed General Plan Amendment would not require an amendment to the General Plan Community Development Foundation Component. This reflects the fact that the Gateway Policy Area, in which the project site is located, is distinct from the Cherry Valley community area, located to the east of the project site, because the hills located to the east of the project site provide a visual and physical community separator from Cherry Valley proper. The Gateway Policy Area is also distinct in that, unlike Cherry Valley proper to the east, it is largely undeveloped, although there are several proposed and approved development projects within the Gateway Policy Area.

In addition, to a large degree the Gateway Policy Area orients to the west, including direct regional access from the Cherry Valley Boulevard/I-10 Freeway interchange, as well the burgeoning cities of Calimesa and Beaumont to the west and south. Therefore, development of the project at this location, which has direct regional access to the I-10 Freeway, would represent a logical extension of the pattern of development that is already emerging in the Gateway Policy Area. In fact, the Gateway Policy Area is already in the process of transitioning to the types of land uses found to the west. For example, the Sunny-Cal Egg Ranch project, which includes up to 597 residential lots immediately to the south of the project site has been approved. Additionally, the City of Calimesa General Plan designates land adjacent to the area west of the project site as "Commercial Retail," and this area is zoned by the City of Calimesa as "Commercial Regional." In addition, the unincorporated area at the southeast corner of the I-10 Freeway and Cherry Valley Boulevard located directly west of the proposed project is zoned Scenic Highway Commercial (CPS). There are several other projects in Cherry Valley and the cities of Beaumont and Calimesa in the vicinity of the proposed project, as depicted by Exhibit 3.10-1. These include some industrial projects (Rolling Hills Ranch Industrial Prologis and the Dowling Orchard Business Park).

Because of the evolving nature of the Gateway Policy Area, the General Plan acknowledges the potential for higher intensity uses for undeveloped parcels by stating explicitly that "[h]igher densities may be allowed through a general plan amendment . . ." This evolution can be seen in the history of higher-intensity uses located on and around the project site, and in the various higher-intensity developments proposed for neighboring parcels. For example, the now-defunct Sunny-Cal Chicken Ranch immediately south of the site was a major industrial chicken ranch, which included 400 chicken houses with the capacity to process 500 cases of eggs per hour. Additionally, the nearby truck repair business, Luther's Truck and Equipment, has been operating for nearly two decades and employs a staff of 10 to 19 persons. Thus, the Gateway Policy Area has historically accommodated a variety of industrial and commercial uses.

Therefore, the proposed project is not anticipated to result in substantial alteration of the present or planned land use of the area.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Affect Land Use

| | |
|---|---|
| **Impact LUP-2:** | **The project would not affect land use within a city sphere of influence and/or within adjacent city or county boundaries.** |

### *Impact Analysis*

The proposed project is not located within the sphere of influence of either the City of Calimesa or the City of Beaumont. The area to the northwest of the site, in the City of Calimesa, primarily consists of rolling hills with a few scattered homes. Most of the area is currently undeveloped and in a natural vegetative state. Land directly south of the project site (south of Cherry Valley Boulevard) is County unincorporated territory; however, south of Cherry Valley is the City of Beaumont, with a few vacant parcels and new single-family subdivisions. East of the project site is a sparsely developed mix of properties used for agriculture purposes and large lot residences in an unincorporated area of Riverside County. Two parcels of the project property (Assessor's Parcel Numbers [APN]s 413-270-012 and 413-270-013) are located within the City of Calimesa, although no habitable structures would be located in this area, and the proposed use would be compatible with planned land uses in the City. Therefore, impacts to land use within a city's sphere of influence or an adjacent city's boundaries would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Proposed or Existing Zoning

**Impact LUP-3: The project would be consistent with the site's existing or proposed zoning.**

### *Impact Analysis*

The project includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P), to be consistent with the General Plan Amendment. The YVWD tank area would remain W-2. The project will be consistent with the uses permitted within the I-P and W-2 zones.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Compatibility with Existing Surrounding Zoning

**Impact LUP-4: The project would be compatible with existing surrounding zoning.**

### *Impact Analysis*

The project includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P), to be consistent with the General Plan Amendment. The tank area designated W-2 would remain W-2.

The zoning of the land surrounding the project site is as follows:

- North (unincorporated County area): Residential Agriculture, one acre minimum lot size (R-A-1) and Controlled Development (W-2).
- East and South: R-A-1 and W-2.
- West (City of Calimesa): Residential Low (2–4 dwellings per acre) and Residential Low Medium (4–7 dwellings per acre).

The portion of the project site in Calimesa is under the control of the applicant, and would only contain drainage/water quality facilities, which would essentially preclude the future development of this area for residential or other types of uses. Further to the west, the area north of Cherry Valley Boulevard and the area south of Cherry Valley Boulevard within County unincorporated territory are designated for regional commercial uses, which would be compatible with the industrial uses being proposed for the project site.

Further north along the west boundary of the project site, adjoining area within the City of Calimesa is zoned/designated Residential Low Medium. The area within the City of Calimesa that lies to the north and northwest of the project site is zoned/designated Rural Residential (RR) (0–2 dwellings per

acre). Both of these areas would abut portions of the project site that will remain undeveloped open space, and, therefore, would be compatible with the adjacent zoning.

With respect to the areas to the east and south of the project site, potential adverse impacts of the project that could affect land use compatibility with adjoining areas, including aesthetics; agricultural resources; noise; hazards; population and housing; and local air quality impacts, have been evaluated in these respective sections of this EIR and either been found to be less than significant, or will be mitigated to the extent feasible. The design and development of the project site with the uses proposed will therefore be compatible with the existing land uses or future land uses allowed under existing zoning in the areas to the east or south.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Compatibility with Surrounding Land Use

**Impact LUP-5: The project would be compatible with existing and planned surrounding land uses.**

### *Impact Analysis*

The project will be compatible with the several uses and planned developments to be located on the properties immediately surrounding the project site, including the Sunny-Cal Egg Ranch project to the south, the residential projects planned adjacent to the project site to the east and southeast, the regional commercial uses planned to the west, and the rural/open space area to the north. The following sections explain how the project will be compatible with these developments and land uses.

The currently undeveloped land located south of Cherry Valley Boulevard and north of Brookside Avenue, which previously housed a commercial-scale egg farm, is currently approved for the development of a dense suburban residential housing project. As outlined in the Sunny-Cal developer's tentative tract map application to the City of Beaumont, the Sunny-Cal project would include the development of 497 homes with an average lot size of 14,000 square feet. The proposed development is suburban in nature and is closer in proximity to Cherry Valley than the project site.

As proposed, the Sunny-Cal project will include a substantial "buffer" to help reduce the risks of unwanted impacts to its residents. These buffers include (i) providing substantially larger lot sizes along Cherry Valley Boulevard (minimum lot sizes of 20,000 square feet); (ii) including a 10-foot-high landscaped berm to be located on the south side of Cherry Valley Boulevard; (iii) orienting homes away from the north side of Cherry Valley Boulevard, (iv) including a minimum 50-foot-wide landscaped buffer, and (v) adding a 5-foot wall atop the landscaped berm to help further screen and reduce impacts between the Sunny-Cal property and all uses to its north, including the project site.

Like the approved Sunny-Cal development, the project includes extensive measures to buffer potential impacts to and from nearby residents, including providing robust landscaping between the project buildings and Cherry Valley Boulevard. The location, configuration and design of the project will allow it to blend into the existing landscape, despite the large size of the proposed buildings. The two buildings would be set back approximately 375 to 575 feet from Cherry Valley Boulevard, approximately 300 feet from the east project boundary, and approximately 400 feet from the west project boundary, allowing for generous buffers with extensive landscaping, a berm, a meandering equestrian and pedestrian trail, and a 5-foot wide meandering sidewalk, separated by a three-railed fence. Given the number of buffering features proposed by both the Sunny-Cal project and the San Gorgonio Crossings Project, no building or structure between the two projects is expected to be closer than 600 feet in distance, providing substantial open space between the two projects, and thereby ensuring minimal impacts between the two projects.

Building 1 would be located approximately 29.8 feet above the centerline of Cherry Valley Boulevard, and Building 2 would be located approximately 48.3 feet below the centerline of Cherry Valley Boulevard. Although the project's buildings rise 41 feet in height, neither of the project buildings would be visible from motorists or pedestrians traveling along Cherry Valley Boulevard, as their line of sight would be directed above the building. A berm, water tower, barn, and landscaping would further screen views of the buildings. The project site would not be visible from the residents located north of the site. Refer to Exhibits 3.1-4a and 3.1-4b in Section 3.1, Aesthetics for line of sight simulations. Also refer to Exhibits 3.1-3 and 3.1-3a through 3.1-3f in Section 3.1, Aesthetics for Visual Simulations. The proposed buildings would not break the ridgeline silhouette of the hills behind them to the north. All of these factors, combined with the proposed tree planting and other landscape and screening elements, will make the project visually unobtrusive and in accordance with the existing visual characteristics of the surrounding areas. Refer to Section 3.1, Aesthetics for additional, detailed information regarding the visual characteristics of the project.

The property located to the east of the project, adjacent to Sunny-Cal and within unincorporated Riverside County, is proposed to be developed as a 209-unit, medium density, single-family home detached residential community. This development is located approximately 552 feet east from, and 64 to 104 feet above grade of, the closest project building (Building 2).

Further, the easterly side of Building 2 has been specifically designed so as not to include any bay doors or loading areas. As a result, this area of the project site will not create significant impacts on the easterly residential uses in terms of truck activity, noise, odors, visual impacts, or up-lighting. Additionally, the area between Building 2 and the eastern property boundary will primarily include employee parking, employee car circulation, a generously landscaped slope and two 1-million-gallon water tanks, which are all lower intensity uses commonly found near residential uses.

Similar to the Sunny-Cal development, the substantial distance and extensive buffering between the proposed residential development and the project buildings ensures that any impacts between the two uses will be minimal.

Immediately west of the project site is a large (mostly) undeveloped property zoned by the City of Calimesa as "Commercial Regional," which allows for developments with FAR up to 0.75:1. As specified by the City of Calimesa's General Plan, Commercial Regional properties allow for the

development of commercial uses "that will cater to a wide market, including a full range of retail shops and services within a shopping center environment." Such a development is thoughtfully located near a major transportation thoroughfare (i.e., along the I-10 Freeway) to ensure efficient and adequate access, and to assist in attracting persons and visitors from 5 to 50 miles of the site. Located about 500 feet to the west of Building 1, this Regional Commercial development is both distant and screened from the project to provide a buffer between the two properties. These buffering features include a three railed equestrian fence, pedestrian/equestrian trails, flood control facilities, and a generously landscaped slope/berm topped by a 14-foot block sound wall.

Compatibility with the rural/open space area to the north is discussed further under Impact LUP-6, below.

As discussed under Impact LUP-4, the various factors that could result in land use incompatibility (noise, aesthetics, etc.) have been determined to be less than significant, or less than significant with the imposition of mitigation. Specifically, compliance with various mitigation measures and regulatory requirements will further reduce the project's impact on the surrounding uses. These measures include (i) enforcement of strict truck idling time limits; (ii) requirements that all fleet vehicles accessing the site during operation must have cleaner burning (year 2010 or newer) engines; (iii) participation in Riverside County's Rideshare Program; (iv) amenities to encourage alternative transportation options (e.g. electric vehicle charging stations, bike storage and shower/changing facilities, and preferred parking for low-emitting vehicles); and (v) strict noise reduction procedures and regulation specifically designed to reduce impacts on neighboring properties during construction. Based on the Traffic Impact Analysis prepared for the project (see Appendix I), 100 percent of the truck traffic and 80 percent of passenger car traffic generated by the project would access the site from the west along Cherry Valley Boulevard. This underscores the importance of the project's connection and proximity to the I-10 Freeway, versus using roadways in the community of Cherry Valley to the east.

Refer to these respective sections of this Draft EIR for more detailed discussion about the project's compatibility with existing and planned surrounding land uses with regard to these impact areas.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Consistency with General Plan

**Impact LUP-6: The project would be consistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan).**

### *Impact Analysis*

Areas located directly west of the project site are designated within the City of Calimesa General Plan as Residential Low (2–4 dwelling units per acre), Residential Low Medium Rural (4 to 7 dwelling units per acre), and Commercial Regional (FAR 0.75:1). Separate approval is required from the City of Calimesa for off-site drainage and flood improvements. Upon approval, these proposed improvements would be considered consistent with the City's land use plans. Areas northwest of the project site along the I-10 Freeway include areas designated Light Industrial and Business Park, with the nearest Light Industrial-designated land located in the City of Calimesa, approximately 0.40 mile northwest of the project site. Residential uses are proposed to the immediate south (Sunny-Cal Specific Plan) and north (Holbert Ranch) of the project site within the unincorporated community of Cherry Valley. Thus, the surrounding area is experiencing development along the I-10 Freeway. Construction of the project would be consistent with the designated industrial designations within the City of Calimesa and Beaumont. Construction of the project near the I-10 Freeway would also provide a strategic destination for the movement of goods within the region. Introduction of the proposed project would be located within an established rural residential community. The project design will include roadway improvements extending northerly through the site to the existing residential units. In addition, the northerly portion of the site will remain open space, providing a buffer between the existing residential units to the north and the two industrial buildings.

Moreover, the project will develop 1,823,760 square feet of industrial type uses that will be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Certification. LEED is an internationally recognized certification system that measures how well a building or community performs across all the metrics that matter most: energy savings, water efficiency, carbon dioxide emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. The project will comply with applicable requirements of LEED, and will therefore result in reduced project emissions, which is consistent with the County of Riverside General Plan.

Table 3.10-3 contains policies from the land use element of the County of Riverside General Plan and an analysis of the proposed project's consistency with those policies.

## Table 3.10-3: Proposed Project Consistency with County of Riverside General Plan Land Use Policies

| Preceding Discussion | General Plan Policy | Project Consistency |
|---|---|---|
| **The following policies apply to Industrial and Business Park Area Plan designated properties:** | | |
| — | **LU 24.1** Accommodate the continuation of existing and development of new industrial, manufacturing, research and development, and professional offices in areas appropriately designated by General Plan and area plan land use maps. | **The proposed project would conform to this policy,** with approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications. |
| Industrial land aids in creating economic growth by providing jobs for local and area-wide residents, providing growth opportunities for new and existing businesses, and facilitating a tax base upon which public services can be provided. The goal of Riverside County is to provide attractive work environments that fit with the character of each community and are well served by convenient and adequate accessibility to multi-modal transportation options that bring jobs and housing in closer proximity to one another. Stimulation of clusters of similar industrial business will facilitate competitive advantage in the market place. | **LU 24.2** Control heavy truck and vehicular access to minimize potential impacts on adjacent properties. | **The proposed project conforms to this policy.** The project proposes on-site circulation with multiple sites for ingress/egress from Cherry Valley Boulevard and adequate emergency access. The project site has direct access to Cherry Valley Boulevard and the I-10 Freeway in order to accommodate the truck traffic that would be associated with this project. |
| Industrial/Business Park land uses within the Community Development category are divided into three area plan land use designations: Business Park, Light Industrial, and Heavy Industrial. | **LU 24.3** Protect industrial lands from encroachment of incompatible or sensitive uses, such as residential or schools that could be impacted by industrial activity. | **The proposed project conforms to this policy.** This policy applies to the County of Riverside regarding encroachment of incompatible or sensitive land uses on to industrial land. The EIR has evaluated the project's potential impacts on the existing and potential future residential uses adjoining the site and has determined that the project's impacts on these areas would be less than significant. |

## Table 3.10-3 (cont.): Proposed Project Consistency with County of Riverside General Plan Land Use Policies

| Category | General Plan Policy | Project Consistency |
|---|---|---|
| Light Industrial (LI)—The Light Industrial land use designation allows for a wide variety of industrial and related uses, including assembly and light manufacturing, repair and other service facilities, warehousing, distribution centers, and supporting retail uses. Building intensity ranges from 0.25 to 0.6 FAR.<br><br>Heavy Industrial (HI)—The Heavy Industrial land use designation allows for intense industrial activities that may have significant impacts (noise, glare, odors) on surrounding uses. Building intensity ranges from 0.15 to 0.5 FAR.<br><br>Business Park (BP)—The Business Park land use designation allows for employee-intensive uses, including research and development, technology centers, corporate and support office uses, "clean" industry and supporting retail uses. Building intensity ranges from 0.25 to 0.6 floor area ratio (FAR). | **LU 24.4** Concentrate industrial and business park uses in proximity to transportation facilities and utilities, and along transit corridors. | **The proposed project conforms to this policy.**<br>The proposed project is located along Cherry Valley Boulevard, less than a mile east of the I-10 Freeway and Cherry Valley Boulevard interchange, which is a transportation corridor. |
| | **LU 24.5** Allow for the inclusion of day-care, public meeting rooms, and other community-oriented facilities in industrial districts. | **The proposed project conforms to this policy.** Although the Applicant's current development proposal does not include such uses, the proposed zoning (Industrial Park) allows day-care facilities and other community-oriented facilities such as post offices, fire stations and police stations as permitted uses. Separate entitlements would be required for such uses. |
| | **LU 24.6** Control the development of industrial uses that use, store, produce, or transport toxins, generate unacceptable levels of noise or air pollution, or result in other impacts. | **The proposed project conforms to this policy.** It is not anticipated that any of the uses contemplated by the project will involve the storage, production or transport of toxins or generate unacceptable levels of noise or air pollution. Feasible mitigation measures will be incorporated into the project to reduce any environmental impacts to the extent feasible. |
| | **LU 24.7** Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use. | **The proposed project conforms to this policy.** Adequate circulation and sewer facilities will be available for the proposed project. A Water Supply Assessment has been prepared for the project, which addresses sewer demands of the project. The project proposes on-site circulation with multiple sites for ingress/egress and adequate emergency access. |
| | **LU 24.8** Require that industrial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area. | **The proposed project conforms to this policy.** The proposed project has been designed to integrate into the surrounding topography, and the proposed project buildings are |

## Table 3.10-3 (cont.): Proposed Project Consistency with County of Riverside General Plan Land Use Policies

| Category | General Plan Policy | Project Consistency |
|---|---|---|
| | | proposed to be set back from Cherry Valley Boulevard. A large area of the site (approximately 84.8 acres) would remain open space, preserving the character of the area and act as a buffer for future residential uses. |
| **The following policies apply to land use compatibility:** | | |
| One of the primary purposes of land use planning is to minimize the impacts certain uses have on adjacent areas. This has been traditionally accomplished by providing separation between sensitive uses and uses whose by-products may include noise, excessive traffic, odors, dust, or vibrations. For instance, a number of uses, including agriculture, industrial, commercial, landfills, mining operations, and transportation facilities, can have potentially adverse effects upon residential neighborhoods, sensitive habitat areas and schools. However, in order to achieve a more compact development pattern, improved accessibility between places of employment and residence, and improved access to transit as described in the RCIP Vision, a strict reliance on physical separations is not practical. Instead, the County must require construction techniques and enforce use regulations (e.g., restrictions on hours of operations) to help mitigate these impacts and achieve these aspects of the Vision. Compatibility is also associated with character. That is, the | **LU 6.1** Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts. | **The proposed project conforms to this policy.** If the proposed General Plan Amendment and Zone Change are approved, the proposed project would be developed in accordance with the General Plan. |
| | **LU 6.3** Consider the positive characteristics and unique features of the project site and surrounding community during the design and development process. | **The proposed project conforms to this policy**. The proposed project has been designed to integrate into the surrounding topography and the proposed project buildings are proposed to be set back from Cherry Valley Boulevard. A large area of the site (approximately 84.8 acres) would remain open space, helping preserve the character of the area and act as a buffer for future residential uses. |
| | **LU 6.4** Retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic. | **The proposed project conforms to this policy.** The proposed project would retain much of the site in open space and would not impact public open space areas. The potential impacts identified by this policy, including noise, air quality, light and glare, and traffic impacts have all been addressed in other sections of this Draft EIR and either been determined to be less than significant, or will be mitigated to the extent feasible. |
| | **LU 6.5** Require buffering to the extent possible between urban uses and adjacent rural/equestrian oriented land uses. | **The proposed project conforms to this policy.** The proposed project provides a buffer of water quality basins to the west, south, and east between the proposed industrial buildings on site and the land uses that surround the project site. Additionally, there is open space north |

**Table 3.10-3 (cont.): Proposed Project Consistency with County of Riverside General Plan Land Use Policies**

| Category | General Plan Policy | Project Consistency |
|---|---|---|
| character of an area is often viewed in terms of the relationships between, and treatment of, the built and natural environment. The design of structures and their relationship to the surrounding natural and/or urban character plays a key role in creating the character or identity of a place. The intent of these policies is to provide guidance regarding compatibility, including reducing negative impacts on adjacent uses and the sensitive siting and design of uses. | | of the project site, which separates it from land uses to the north. Approximately 84.8 acres of this open space area will be retained, which will help to preserve the character of the area and act as a buffer for future residential uses. |
| | **LU 6.6** Require buffering between urban uses and adjacent rural/equestrian oriented land uses. | **The proposed project conforms to this policy.** The proposed project incorporates water quality basins to the west, south, and east, which serves as a buffer between the proposed industrial buildings on site and the land uses that surround the project site. Additionally, there is open space north of the project site, which separates it from land uses to the north. Approximately 84.8 acres of this open space area will be retained, which will help to preserve the character of the area and act as a buffer for future residential uses. |
| | **LU 6.7** Buffer and/or maintain a natural edge for proposed development directly adjacent to national forests. | **This policy does not apply to the proposed project.** The proposed project is not located adjacent to a national forest. |
| Source: FirstCarbon Solutions, 2013. | | |

*Cherry Valley Gateway Policy Area*

The provisions of the Cherry Valley Gateway Policy Area, a predominantly undeveloped area, focus on aspects of the rural community of Cherry Valley and acknowledge that the Gateway area provides for a transition to the community of Cherry Valley proper. However, the policies in the Cherry Valley Gateway Policy Area are silent with respect to non-residential uses. The text of the Cherry Valley Gateway Policy Area is set forth below in its entirety:

> The Cherry Valley Gateway Policy Area is located at the westerly edge of the community of Cherry Valley in an area that is presently largely agricultural or undeveloped. The policy area shall be developed as a gateway to Cherry Valley, and it shall be developed to evoke the rural character of that area. The policy area shall also serve as a community separator between Beaumont and Calimesa. To accomplish these two goals, it is envisioned that clustering and buffering will be utilized in order to preserve open space and maintain the rural character of the area.

Higher densities may be allowed through a general plan amendment provided such development meets the goals of the policy area.

Policies:

- **PAP 4.1:** Clustering of dwelling units and lots is encouraged in order to preserve open space areas.
- **PAP 4.2:** Provision shall be made for establishment of a visible "entrance" feature for Cherry Valley within this area that evokes the rural identity of the community.

Thus, the CVGPA provides only two actual "policies": to preserve open space and to provide an "entrance" feature that evokes the rural identity of the community. Nevertheless, the preamble to the two policies contains other aspirational language about the overall goals of the CVGPA, including to function as a gateway to Cherry Valley, to evoke the rural character of the area, and to serve as a community separate between the communities of Beaumont and Calimesa. The project does not propose to develop residential dwelling units; however, the development envelope of the project has been designed to preserve 84.5 acres in the northerly part of the project site as natural open space. Although the Cherry Valley Gateway Policy Area is silent as to non-residential development, the project meets the goals and policies of the Cherry Valley Gateway Policy Area in the following ways:

1. Preserving Rural Character
   Approximately 84.8 acres of the project site, primarily running along the northern property line (in the rural mountainous and open space zone areas), will be preserved as natural open space, protecting habitat and ridge-line equestrian trails running through the site. The clustering of the development footprint will help preserve the rural character of the area, and will provide a substantial buffer for any future developments to the north.

   The project will preserve community uses and access to an informal equestrian and pedestrian trail network running throughout the undeveloped northern section of the site. The project will also be set back from the street and landscaped in such a manner as to be visually unobtrusive, thereby espousing the rural character of the surrounding environment consistent with the Cherry Valley Gateway Policy Area.

   Specifically, the two project buildings will be located up to 48.3 feet below grade, and will rise only 41 feet in height, ensuring an unobstructed view towards the foothills located north of the project site. Additionally, the project's setback from the mountain ridge and the street will also protect the scenic values of the ridgeline and the landscape, providing continued natural visual relief to the nearby communities. Project buildings would be set back approximately 300 to 575 feet from Cherry Valley Boulevard; approximately 300 feet from the east project boundary; and approximately 400 feet from the west project boundary; allowing for generous buffers with extensive landscaping, a berm, a meandering equestrian and pedestrian trail, and a three-railed fence. (See Exhibits 3.1-4a to 3. 1-4e for line of sight simulations, and Exhibits 3.1-2a to 3.1-2d for architectural elevations.)

   Additionally, the project's architecture is purposefully and thoughtfully designed to evoke a rural character, with earth-tone colors and ranch-inspired architectural features. Landscape architecture features will further soften the project's impact by shielding the site with

meandering ranch-inspired fencing, shrubs and trees along the site's western, southern, and eastern elevations and a decorative barn and water tower in recognition of the area's long history of agricultural and equestrian uses. The decorative barn and water tower features would not be functional, but they would screen views of the project site and provide a focal point to viewers along local roadways, while maintaining and enhancing the rural character of the area (see Exhibit 3.1-2a-Exhibit 3.1-2d). In addition, the barn will serve as a shade structure and trail head for the equestrian and recreation trails. Combined with the project's overall rural theme featuring western and agricultural architectural elements, these two monuments serve as a visible focal point and welcoming gateway to the Cherry Valley community.

The project would feature on-site trails that connect with existing trails in the northern portion of the site to contribute to the development of the City of Calimesa's trail system. A trailhead would also be constructed in the southwest corner of the site near the water tower and barn, which ties into the trails. The trail along the western margin of the project site would consist of decomposed granite to accommodate hikers and equestrians, and would connect to the existing trails in the northern portion of the project site. As a result, the project will help enhance the County's Conservation and Open Space Resource System Vision (County of Riverside General Plan, Updated 2008, Chapter 2: Vision, V-18-19), which seeks to preserve a multi-purpose open space system for habitat protection and recreational purposes. The extensive landscaping will soften the project's look and minimize the visual appearance of the buildings. Specifically, the project will feature extensive native and drought tolerant landscaping, including shrubs and trees along the project site's western, southern, and eastern elevations. The landscaping is designed with pockets, rolling terrain, and irregularity to mimic the site's natural setting.

2. Community Separator

   The Cherry Valley Gateway Policy Area was established to serve as a buffer between the communities of Beaumont and Calimesa, and to plan for the development of clustered dwelling units as compared to the neighboring Cherry Valley Policy Area. The large size of the project site furthers this goal by allowing for vast amounts of open space. The site is approximately 229 acres; 84.8 of those acres (36 percent of the site) will remain undeveloped with approximately 70.14 of those acres to be dedicated as open space recreation. The open space area would serve as a community separator.

   The importance of the project site as a community separator is especially pronounced given the recent annexation of the Sunny-Cal site (discussed above) into the City of Beaumont. In addition to preserving the natural setting and unobstructed views, the large size of the project site preserves the area's function as a community separator between the cities of Calimesa and Beaumont. Thus, the project site, with its large open spaces and visual buffering, serves as a transition between the hard borders of the two cities' districts terminating at the proposed regional commercial center to the west in Calimesa, and the Sunny-Cal development to the south in Beaumont.

   The location, configuration and design of the project will allow the project to blend into the existing landscape despite the large size of the proposed buildings, helping to advance the

vision and goals of the Cherry Valley Gateway Policy Area. The natural setting and unobstructed views allow the project site to serve as a community separator between the cities of Calimesa and Beaumont and as a scenic gateway or "approach" to the Cherry Valley community. Additionally, foothills on the northerly portion of the site and the San Bernardino Mountains serve as a natural south west to north east divide between Calimesa and Beaumont. The proposed dedication of open space would further enhance this already existing natural constraint and separator. As discussed above, the project buildings will be set below grade and will be largely obscured by landscaping, so as not to be visible from Cherry Valley Boulevard.

3. Clustering
   The Gateway Policy Area encourages clustering of structures as a means of preserving open space and maintaining the rural character of the area. The project plans to cluster Buildings 1 and 2 as close as reasonably possible to increase the space that will serve as the project's natural buffer. Additionally, the 84.8-acres north of the project's buildings that will remain undeveloped will serve as a buffer between the project and the scattered, low-density housing in the hills, while also preserving the view of neighboring developments and travelers along Cherry Valley Boulevard of the ridgeline looking north.

4. Visible Entrance
   The project's architecture, buffer, and landscaping features discussed above help to ensure Cherry Valley Boulevard continues to function as a community separator between Calimesa and Beaumont, and as a scenic gateway or "approach" to the Cherry Valley community.

In summary, the project will help advance the vision of the Cherry Valley Gateway Policy Area, preserve open space, and evoke the rural character of the area by ensuring that buildings are clustered, set back, buffered and generously landscaped. The project will also further the goals of the Cherry Valley Gateway Policy Area by preserving the natural setting, serving as a buffer and separator between the communities of Calimesa and Beaumont and a "visible entrance" to the Cherry Valley Community, providing architecture that is rural in character and nature, and maintaining existing views of nearby undeveloped area and hillsides. As discussed, the project would also provide a Barn and Water Tower structure in the southwest corner of the site. Combined with the project's overall rural theme featuring western and agricultural architectural elements, these two monuments serve as a visible focal point and visible entrance to the Cherry Valley community.

The project will help advance the vision of the Cherry Valley Gateway Policy Area by evoking the rural character and history of the area through contextually appropriate architecture and gateway features, by preserving open space, and by providing generously landscaped buffers and clustering of the buildings. Further, by maintaining the natural setting on this large site, the project will advance the goal of the Cherry Valley Gateway Policy Area to be separator between the communities of Calimesa and Beaumont, maintaining existing views of nearby undeveloped area and hillsides.

*Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities*

The following policies are within the Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities:

- **Goal 1:** Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse distribution center.
  *Recommended Guidelines*
  - Create buffer zone of at least 300 meters (roughly 1,000 feet, can be office space, employee parking, greenbelt) between warehouse/distribution center and sensitive receptors (housing, schools, daycare centers, playground, hospitals, youth centers, elderly care facilities, etc.);
  - Site design shall allow for trucks to check-in within facility area to prevent queuing of trucks outside of facility;
  - Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points;
  - Design warehouse/distribution center so that interior vehicular circulation shall be located away from residential uses or any other sensitive receptors.

  **Analysis:** The project is in accordance with this goal and the recommended guidelines. The loading docks for Building 2 of the project are located roughly 500 feet from the south edge of the right-of-way for Cherry Valley Boulevard. In order to more precisely evaluate the potential health effects of the proposed uses and associated diesel emissions, a formal Health Risk Assessment was performed in accordance with South Coast Air Quality Management District (SCAQMD's) requirements and standards, and it was determined that the project's potential health risk impacts to residential uses was well below SCAQMD's significance threshold. (See Draft EIR Section 3.3, Air Quality; specifically, the discussion under Impact AQ-4, Sensitive Receptors). In addition, the project site has been designed to provide adequate truck stacking space to prevent trucks from queuing on Cherry Valley Boulevard.

- **Goal 2:** Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods.
  *Recommended Guidelines*
  - Require warehouse/distribution centers to clearly specify on the facility site plan primary entrance and exit points;
  - Require warehouse/distribution centers to establish specific truck routes and post signage between the warehouse/distribution center and the freeway and/or primary access arterial that achieves the objective. The jurisdiction may not have an established truck route, but may take the opportunity to consider the development of one;
  - Provide food options, fueling, truck repair and or convenience store on-site or within the warehouse/distribution center complex;
  - Require warehouse/distribution centers to provide signage or flyers identifying where food, lodging, and entertainment can be found, when it is not available on site;

  **Analysis:** The project is in accordance with this goal and the recommended guidelines. The site plan specifies primary and secondary vehicle access points. The only major road available for connection to the I-10 Freeway is Cherry Valley Boulevard. Trucks would turn westerly

onto Cherry Valley Boulevard as the most direct means of access to the I-10 Freeway, and there would be no need or reason for trucks to traverse residential neighborhoods. Moreover, the project site is located directly east and southeast of designated commercial areas within the City of Calimesa. Mitigation Measure AQ-7 provides for access signage.

- **Goal 3:** Eliminate trucks from using residential areas and repairing vehicles on the streets.
  *Recommended Guidelines*
  - Allow homeowners in the trucking business to acquire permits to park vehicles on property, residential areas or streets; (Note: Some jurisdictions already restrict parking of oversized vehicles on residential streets regardless of ownership.)
  - Establish overnight parking within the warehouse/distribution center;
  - Allow warehouse/distribution facilities to establish an area within the facility for repairs.

  **Analysis:** The project is in accordance with this goal and the recommended guidelines. Vehicle and equipment maintenance is an allowed use under the Industrial Park Zone, and may be performed on the property, including routine vehicle maintenance, and maintenance and repair of equipment and machinery for operations. It is anticipated that businesses occupying the proposed building would operate on a 24-hour basis, and could therefore accommodate overnight parking.

- **Goal 4:** Reduce and/or eliminate diesel idling within the warehouse/distribution center.
  *Recommended Guidelines*
  - Require the installation of electric hook-ups to eliminate idling of main and auxiliary engines during loading and unloading, and when trucks are not in use.
  - Train warehouse managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks within the facility.
  - Require signage that informs truck drivers of the California Air Resources Board (CARB) regulations (which include anti-idling regulations).
  - Post signs requesting that truck drivers turn off engines when not in use.
  - Restrict idling within the facility to less than ten (10) minutes.

  **Analysis:** The proposed project will provide electric hook-ups. Under the air quality mitigation measures for the proposed project, all contractors will be required to turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling to no more than 5 minutes in any one hour. Therefore, the proposed project is consistent with Goal 4 above. In addition, current CARB requirements restrict truck idling to less than 5 minutes. Mitigation Measure AQ-7 requires signage associated with CARB regulations.

- **Goal 5:** Establish a diesel minimization plan for on- and off-road diesel mobile sources to be implemented with new projects.
  *Recommended Guidelines*
  - Encourage warehouse/distribution center fleet owners to replace their existing diesel fleets with new model vehicles and/or cleaner technologies, such as electric or compressed natural gas;
  - Require all warehouse/distribution centers to operate the cleanest vehicles available;

- Provide incentives for warehouses/distribution centers and corporations which partner with trucking companies that operate the cleanest vehicles available;
- Encourage the installation of clean fuel fueling stations at facilities.

**Analysis:** ARB's Proposed State Strategy includes short- and mid-term control measures aimed at reducing emissions from sources that are primarily under state jurisdiction, including on-road and off-road mobile sources, and consumer products. These measures are required in order to achieve the remaining emission reductions necessary for $PM_{2.5}$ attainment. ARB's strategy includes measures such as improvements to California's Smog Check Program, expanded passenger vehicle retirement, cleaner in-use heavy-duty trucks, reductions from port related sources, cleaner off-road equipment, evaporative and exhaust strategies, pesticide strategies, etc. When these measures are implemented by the ARB, the project would be required to follow them.

- **Goal 6:** Establish an education program to inform truck drivers of the health effects of diesel particulate and the importance of reducing their idling time.
  *Recommended Guidelines*
  - Provide warehouse/distribution center owners/managers with informational flyers and pamphlets for truck drivers about the health effects of diesel particulates and the importance of being a good neighbor. The following information should include:
    - Health effects of diesel particulates;
    - Benefits of minimizing idling time;
    - ARB idling regulations;
    - Importance of not parking in residential areas.

  **Analysis:** Under the Greenhouse Gas mitigation measures prepared for the proposed project, the project shall be required to post signs informing truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas.

- **Goal 7:** Establish a public outreach program and conduct periodic community meetings to address issues from neighbors.
  *Recommended Guidelines*
  - Encourage facility owners/management to conduct periodic community meetings inviting neighbors, community groups, and other organizations;
  - Encourage facility owners/management to have site visits with neighbors and members of the community to view measures that the facility has taken to reduce/and or eliminate diesel particulate emissions;
  - Encourage facility owners/management to coordinate an outreach program that will educate the public and encourage discussion relating to the potential for cumulative impacts from a new warehouse/distribution center.
  - Provide facility owners/management with the necessary resources and encourage the utilization of those resources such as, the California Air Resources Board (ARB) and the South Coast Air Quality Management District regarding information about the types and amounts of air pollution emitted in an area, regional air quality concentrations, and health risks estimates for specific sources;

- Require the posting of signs outside of the facility providing a phone number that neighbors can call if there is an air quality issue.

**Analysis:** An Air Quality and Greenhouse Gas Analysis Report (which includes a health risk assessment) was prepared for the proposed project (see Section 3-3, Air Quality and Section 3-7 Greenhouse Gases) of this Draft EIR. The technical studies analyzed the project's consistency with SCAQMD and ARB's policies and guidelines, and recommendation mitigation measures where appropriate. The project's adherence to these mitigation measures will reduce impacts from diesel particulate emissions to the extent feasible. Additionally, the project will be consistent with County of Riverside signage standards. Therefore, the proposed project is consistent with the recommended strategies.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Established Community

| | |
|---|---|
| **Impact LUP-7:** | **The project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community).** |

### *Impact Analysis*

The project site is surrounded by lands under the jurisdictions of Calimesa, Beaumont, and Riverside County. Properties to the north and west are within the City of Calimesa and have land use designations that include: RR "Residential Rural," to the north of the project site, and RLM "Residential Low/Medium," RL "Residential Low" and CR "Commercial Regional." To the south and east within Riverside County, the land uses include "VLDR—Very Low Density Residential (Community Development Foundation)," "VLDR-RC—Very Low Density Residential-Rural Community Foundation" (with 1 DU/AC in both Foundations), and "Rural Mountainous" (1 DU/10 AC), as well as some land that is designated "CR—Commercial Retail."

The City of Calimesa designates a small portion of the project area to the west as RL, which would remain RL. The County of Riverside General Plan designates the proposed project site as Rural Mountainous (RM), Very Low Density Residential (VLDR).The County's Zoning Ordinance designates the site as (W-2), Controlled Development Area. The current land use and zoning designation for the project site do not allow industrial uses on the site, so implementation of the proposed project would not be consistent with existing permitted land uses on site. However, as a part of the entitlement process, a General Plan Amendment from VLDR to Light Industrial (LI,) Open Space Recreation (OS-R), and Public Facility (PF), and a zone change from W-2 to Industrial Park (I-P) have been submitted to the County. The area proposed for PF would also retain its existing zoning of W-2.

The land designated RM will remain RM. The General Plan Amendment and zone change requests encompass the southern portion of the site, south of the hillside areas that will include the two industrial buildings and site improvements. The northern portion of the project site that is currently VLDR will be re-designated Open Space-Recreation, (OS-R) north of the developable area within the project limits. The OS-R designation would occupy approximately 70.18 acres and be retained as open space, thereby precluding future residential development. An additional 14.62 acres would be left undisturbed under the RM designation.

A portion of land (APNs 413-270-012 and 413-270-013) will be used for an earthen trail along the western side of the project that will lead to existing trail features in the northern portion of the project site. This land is located in the City of Calimesa. The General Plan Land Use Map for the City of Calimesa designates this land as Residential Low (RL), which allows for 2–4 dwelling units per acre. The area in which the earthen trail would be placed for the proposed project is vacant and undeveloped.

The surrounding areas contain a variety of land uses, including residences to the north, east, and west of the project site (although not immediately adjacent to the project site). Access to these residences will be improved with construction of the main entrance drive into the project between the two industrial buildings that will extend northerly to the residences. Additionally, an easement is proposed in the northwest corner of the site that would provide additional access to residents to the north. Furthermore, the existing neighborhoods in the surrounding project area are physically separated from each other at present by distance, vacant lands, topography, and major roads. Therefore, the proposed project would not divide any established community.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Consistency with SCAG Regional Growth Policies

| | |
|---|---|
| **Impact LUP-8:** | **The project would not conflict with regional growth policies established by the Southern California Association of Governments (SCAG) as they relate to population, housing, and employment in the Project area.**<br>**[CEQA Threshold recommended by SCAG]** |

### *Impact Analysis*

*Consistency with the SCAG Regional Comprehensive Plan and Guide*

A consistency analysis comparing the project with the SCAG Regional Comprehensive Plan's (RCP) Goals and Policies is provided in Table 3.10-4. As outlined within Table 3.10-4, the project would not

conflict with any applicable 2008 RCP policy. Therefore, impacts to the RCP would be less than significant.

**Table 3.10-4: SCAG 2008 Regional Comprehensive Plan Consistency Analysis**

| RCPG Policy | Project Consistency Analysis |
|---|---|
| **Open Space and Habitat Chapter** | |
| **OSN-4**<br>SCAG should support policies and actions that preserve natural areas, specifically those areas identified in local, state, and federal plans. | **Consistent—**The northern portion of the site contains steep slopes and native vegetation. However, development on the site is proposed away from the hillside areas, preserving natural open space. Therefore, the project will preserve natural areas on the project site. |
| **OSN-5**<br>SCAG should support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals. | **Consistent—**The project's impacts on biological resources, hydrology, and forest land resources are analyzed Section 3.4, Biological Resources, Section 3.9, Hydrology and Water Quality, and Section 3.2, Agriculture and Forestry Resources, and are determined to be less than significant with mitigation. |
| **OSN-6**<br>SCAG should encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites. | **Consistent—**Mitigation measures included in Section 3.5, Cultural Resources identify specific procedures that would be implemented if unknown buried prehistoric, archaeological, or historic resources are unearthed during construction of the project. |
| **OSC-8**<br>Local governments should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities. | **Consistent—**The project is strategically proposed along the I-10 Freeway, a major east-west transportation corridor through southern California. Located along this corridor, the project will reduce vehicular miles traveled on local roadways that would otherwise occur if located further away from a major freeway. |
| **OSC-12**<br>Developers and local governments should promote water-efficient land use and development. | **Consistent—**At a minimum, the project would comply with all state and local building codes designed to promote water efficiency. Landscaping plans would incorporate drought-tolerant plants and design. In addition, the on-site system of detention/water quality basins and swales will provide for some water recharge. |
| **OSA-7**<br>Local governments should avoid the premature conversion of farmlands by promoting infill development and the continuation of agricultural uses until urban development is imminent; if development of agricultural lands is necessary, growth should be directed to those lands on which the continued viability of agricultural production has been compromised by surrounding urban development or the loss of local markets. | **Consistent—**The project site is not designated agricultural land, nor is it currently being used for agricultural production. Therefore, the project will not promote the conversion of farmland. |

## Table 3.10-4 (cont.): SCAG 2008 Regional Comprehensive Plan (RCP) Consistency Analysis

| RCPG Policy | Project Consistency Analysis |
|---|---|
| **OSA-2S**<br>SCAG should work with the state to ensure that changes in the Williamson Act will not result in the loss of preserved farmlands. | **Consistent—**Neither the project site nor any adjacent parcels are under a Williamson Act contract. |
| **Water Chapter** | |
| **WA-11**<br>Developers and local governments should encourage urban development and land uses to make greater use of existing and upgraded facilities prior to incurring new infrastructure costs. | **Consistent**—The proposed project will use the existing conveyance, treatment, and storage systems to the extent possible. In addition, the proposed project will provide two 1-million-gallon storage reservoirs, one for potable water and one for recycled water. |
| **WA-12**<br>Developers and local governments should reduce exterior uses of water in public areas, and should promote reduced use in private homes and businesses, by shifting to drought-tolerant native landscape plants (xeriscaping), using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. | **Consistent**—The project would comply with all state and local building codes designed to promote water efficiency. Landscaping plans would incorporate drought-tolerant plants and design. |
| **WA-23**<br>Local governments should encourage Low Impact Development and natural spaces that reduce, treat, infiltrate, and manage runoff flows caused by storms and impervious surfaces. | **Consistent**—The project would include five detention basins in the southern portion of the project site. Additionally, approximately 84.8 acres of the northern portion of the project site would remain pervious, undeveloped area. The combination of the detention basins and the pervious surfaces would help reduce, treat, infiltrate, and manage surface runoff generate by storm events and the project's impervious structures and paved areas. |
| **WA-24**<br>Local governments should prevent development in flood hazard areas lacking appropriate protections, especially in alluvial fan areas. | **Consistent**—The project proposes to construct an industrial project that is not within a 100-year flood hazard area and will not impede flows as mapped on a federal Flood Hazard Boundary, the Flood Insurance Rate Map. |
| **WA-27**<br>Developers and local governments should maximize pervious surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation. | **Consistent**—Following the completion of construction of the project, approximately 84.8 acres of the northern portion of the project site would remain undeveloped with pervious, undeveloped areas, which would help protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. |

## Table 3.10-4 (cont.): SCAG 2008 Regional Comprehensive Plan (RCP) Consistency Analysis

| RCPG Policy | Project Consistency Analysis |
|---|---|
| **Energy Chapter** | |
| **EN-11**<br>Developers and local governments should submit projected electricity and natural gas demand calculations to the local electricity or natural gas provider, for any project anticipated to require substantial utility consumption. Any infrastructure improvements necessary for project construction should be completed according to the specifications of the energy provider. | **Consistent**—Correspondence with utility providers that serve the project site, including Southern California Edison and The Gas Company, confirmed that existing infrastructure or previously planned improvements would be adequate to serve the energy demands of the project. Any infrastructure improvements deemed necessary for the project would be developed according to energy provider specifications and/or state and local regulations. |
| **EN-10S**<br>Local governments should employ land use planning measures, such as zoning, to improve jobs/housing balance and creating communities where people live closer to work, and bike, walk, and take transit as a substitute for personal auto travel. | **Consistent**—Development of the project would generally coincide with development of other residential and commercial uses in the project area. The project and its estimated 475 temporary construction jobs and 817 on-site full time equivalent new jobs (including direct, indirect, and induced jobs) would help balance the housing-job ratio and reduce commute distances, allowing local employees to commute via public transit or other forms of alternative transportation. |
| **Air Quality Chapter** | |
| **AQ-7**<br>Local governments should develop policies that discourage the location of sensitive receptors that expose humans to adverse air quality impacts such as amending General Plans, zoning ordinances, business licensing, and related land use permitting processes to minimize human health impacts from exposure of sensitive receptors to local sources of air pollution. | **Consistent**—The potential for the exposure of current and future residences and other sensitive receptors to pollutants was evaluated in Section 3.3, Air Quality of this Draft EIR, and was determined to fall below SCAQMD standards associated with health risk. Therefore, project impact with respect to sensitive receptors would be less than significant. |
| Source: MBA, 2013. | |

*Consistency with the SCAG Regional Transportation Plan/Sustainable Communities Strategy*

The 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations.[3]

A consistency analysis comparing the project with the SCAG Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) Goals is provided in Table 3.10-5.

[3] Source: SCAG NOP Comment letter, January 30, 2014.

## Table 3.10-5: SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis

| RTP/SCS Goals | Project Consistency Analysis |
|---|---|
| **RTP/SCS G1**<br>Align the plan investments and policies with improving regional economic development and competitiveness. | **Consistent—**The project consists of 1,823,760 square feet of warehouse/industrial uses that will generate jobs and tax revenue for the City and its residents. The project and its estimated 817 new full-time-equivalent jobs (permanent) would help balance the residential, commercial, and industrial uses in the region. |
| **RTP/SCS G2**<br>Maximize mobility and accessibility for all people and goods in the region. | **Consistent—**The project would include two warehouse/ industrial buildings totaling approximately 1,823,760 square feet of building area that will facilitate efficient regional goods movement by concentrating such goods along the I-10 Freeway, a major travel corridor. |
| **RTP/SCS G3**<br>Ensure travel safety and reliability for all people and goods in the region. | **Consistent—**The project has direct access to the I-10 Freeway via Cherry Valley Boulevard, a major thoroughfare. In addition, the project location allows access to the site without traversing residential areas, thus avoiding conflict with pedestrians. Section 3.16 Transportation and Traffic of this Draft EIR analyzes traffic and safety issues in relation to the proposed project. |
| **RTP/SCS G4**<br>Preserve and ensure a sustainable regional transportation system. | **Consistent—**The proposed project would make various improvements to Cherry Valley Boulevard, and would make financial contributions to the regional and local transportation system through payment of DIF and TUMF fees, as well as fair share contributions to such improvements. Combined, these actions will sustain and improve the regional and local transportation system. |
| **RTP/SCS G5**<br>Maximize the productivity of our transportation system. | **Consistent—**The project will utilize existing roadway infrastructure, and its proximity to the I-10 Freeway will maximize the productivity of the current transportation system. In addition, development impact fees would be assessed during the project's development process, which would offset any fiscal burden with respect to capital improvements resulting from development of the project, thereby contributing to the future, continued productivity of the local transportation system. |
| **RTP/SCS G6**<br>Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking). | **Consistent—**The project site is generally located in a developed area. No sensitive receptors, including schools or extensive residential uses, are located in the immediate project area or would be impacted by the proposed project. In addition, an Air Quality and Greenhouse Gas Emissions report has been prepared for the project, and is included in Appendix B of this Draft EIR. This report analyzes the air pollutant and greenhouse gas emissions that would be generated by the project, and recommends mitigation that would reduce air quality and greenhouse gas emissions impacts. Refer to Section 3.3, Air Quality for a discussion of air quality impacts and Section 3.7 Greenhouse Gases for a discussion of greenhouse gas impacts. |

**Table 3.10-5 (cont.): SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis**

| RTP/SCS Goals | Project Consistency Analysis |
|---|---|
| **RTP/SCS G7**<br>Actively encourage and create incentives for energy efficiency, where possible. | **Consistent—**Correspondence with utility providers that serve the project site, including Southern California Edison and The Gas Company, confirmed that existing infrastructure or previously planned improvements would be adequate to serve the energy demands of the project. Any infrastructure improvements deemed necessary for the project would be developed according to energy provider specifications and/or state and local regulations. In addition, the project would be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Certification, resulting in additional energy savings. |
| **RTP/SCS G8**<br>Encourage land use and growth patterns that facilitate transit and non-motorized transportation. | **Consistent—**Development of the project would generally coincide with residential and commercial uses in the project area. The Pass Area currently experiences a jobs/housing imbalance, with more housing available than jobs. This requires many local residents to commute greater distances to jobs outside of the Pass Area. The project and its estimated 475 temporary construction jobs and 817 on-site full time equivalent new jobs (permanent) would help balance the housing-job ratio and reduce commute distances, allowing local employees to commute via local public transit or other forms of alternative transportation that may not be feasible for greater commute distances. |
| **RTP/SCS G9**<br>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies. | **Consistent—**This strategy is not directly relevant to the project, as it would be implemented by local governments and other transportation agencies. The project would not be responsible for these monitoring or planning activities. However, the project would not conflict with or impede attainment of this strategy. |
| Source: FirstCarbon Solutions, 2013. | |

The RTP/SCS strategies (Tables 4.3 through Table 4.7) of the RTP/SCS were reviewed and determined not to be applicable to the proposed project, as they are higher-level strategies, to be implemented by parties such as SCAG, State, Local Jurisdictions and other parties. As such, they are not applicable to the proposed project. Additionally, the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures were reviewed for guidance, but were determined to not apply to the proposed project, due to the project's consistency with the above RTP/SCS goals. Project-specific mitigation measures have been developed to reduce potential impacts to a less than significant level and therefore, example mitigation measures from Appendix G of the SCAG 2012 RTP/SCS Final Program EIR have not been implemented for the proposed project.

Based on the preceding consistency analysis, the proposed project would not conflict with any applicable land use plan, policy, or regulations of any agency with jurisdiction over the project. In addition, the project would not conflict with any applicable regional transportation plan, policy, or regulations of any agency with jurisdiction over the project. Ultimately, the proposed project would include two (2) industrial buildings that are proposed to be designed as eligible for LEED Certification and will total approximately 1,823,760 square feet of industrial/warehouse and general light industrial uses. Consequently, the project's industrial/warehouse and general light industrial uses would maximize mobility and accessibility for all people and goods in the region. Therefore, the project is not inconsistent with RTP/SCS Goals, and will therefore have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

# 3.11 - Mineral Resources

This section evaluates the impacts of the proposed project on mineral resources. The following sources were used in the evaluation of mineral resources:

- County of Riverside, County of Riverside General Plan, 2008.
- County of Riverside, County of Riverside General Plan (Update), 2014.
- HELIX Environmental Planning, Inc. 2014. San Gorgonio Crossings Project/TSG-13, Biological Technical Report. November 11, 2015.
- County of Riverside General Plan Figure OS-5 "Mineral Resources Area" Riverside County Integrated Project (RCIP) Figure MS-5 "Mineral Resources Area," RC/GIS.

## 3.11.1 - Existing Conditions

As discussed in the County of Riverside General Plan, classification of land within California takes place according to a priority list that was established by the State Mining and Geology Board (SMGB) in 1982, or when the SMGB is petitioned to classify a specific area. The SMGB established Mineral Resources Zones (MRZ) to designate lands that contain mineral deposits. The State of California has also designated Aggregate Mineral Resource areas within the County. Based on a review of the Multipurpose Open Space Element of the County of Riverside General Plan, the proposed project site is designated MRZ-3, which are areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit in these areas is undetermined. The area surrounding the project site is also classified as MRZ-3.

The County of Riverside General Plan does not identify any significant mineral resources on the project site or in the project vicinity, as the project site and surrounding area does not have an MRZ-2a or MRZ-2b designation. These designations indicate areas where the available geologic information indicates that there are significant mineral deposits or that there is a likelihood of significant mineral deposits.

The southern and central portions of the property consist of a broad, sloping grassland with steep ridges and canyons occurring on the northern half of the site. Elevations on-site range from approximately 2,400 to 2,690 feet above mean sea level. As discussed in the 2015 San Gorgonio Crossings Biological Technical Report, prepared by HELIX Environmental Planning, Inc. in November 2014, overall, site drainage is to the west and southwest. Soils on-site are primarily Hanford coarse sandy loam and terrace escarpments with Gorgonio gravelly loamy fine sand, Greenfield sandy loam, Hanford cobbly coarse sandy loam, and Ramona sandy loam (HELIX 2015).

## 3.11.2 - Regulatory Setting

### State Regulations

#### *Surface Mining and Reclamation Act (SMARA)*

The Surface Mining and Reclamation Act of 1975, referred to as SMARA, was enacted by the California Legislature to address the need for a continuing supply of mineral resources, and to

prevent or minimize the negative impacts of surface mining to public health, property and the environment. The Department of Conservation's Office of Mine Reclamation and the SMGB jointly ensure proper administration of the Surface Mining and Reclamation Act's requirements. The SMGB promulgates regulations to clarify and interpret the Act's provisions, and serves as a policy/appeals board. The Office of Mine Reclamation provides an ongoing technical assistance program for lead agencies and operators, maintains a database of mine locations and operational information statewide, and is responsible for compliance related matters (Department of Conservation 2007).

The California Geological Survey has produced a report and a series of Mineral Land Classification Maps for the area that designate MRZs as follows:

**MRZ-1** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

**MRZ-2** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

**MRZ-3** Areas containing mineral deposits, the significance of which cannot be evaluated from available data.

**MRZ-4** Areas where available information is inadequate for assignment to any other MRZ zone.

## Local Regulations

### *County of Riverside General Plan*

Mineral extraction is an important component of Riverside County's economy. The Multipurpose Open Space Element of the County of Riverside General Plan Element states that the County has extensive deposits of clay, limestone, iron, sand, and aggregates.

The non-renewable resources discussed in this element are mineral resources and energy resources. The Mineral Resources section of this element addresses those resources that are classified under the State Mining and Reclamation Act of 1975 (SMARA).

In addition to agricultural production, mineral extraction is an important component of Riverside County's economy. The County has extensive deposits of clay, limestone, iron, sand, and aggregates. Classification of land within California takes place according to a priority list that was established by the SMGB in 1982, or when the SMGB is petitioned to classify a specific area. The SMGB has also established MRZs to designate lands that contain mineral deposits. The State of California has also designated Aggregate Mineral Resource areas within the County.

The Multipurpose Open Space Element of the County's General Plan identifies the classifications to define MRZs are as follows:

**MRZ-1** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.

**MRZ-2a** Areas where the available geologic information indicates that there are significant mineral deposits.

**MRZ-2b** Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.

**MRZ-3** Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.

**MRZ-4** Areas where there is not enough information available to determine the presence or absence of mineral deposits

## 3.11.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to mineral resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?

d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?

## 3.11.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### Loss of Known Mineral Resource

| | |
|---|---|
| **Impact MIN-1:** | **The project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State.** |

#### *Impact Analysis*

The project site does not contain any known mineral resources. The County of Riverside 2008 General Plan's Multipurpose Open Space Element (Figure OS-5) identifies most of western Riverside County, where there are no known mineral resources, as being within MRZ-3. Areas with this designation are described as areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined. The County of Riverside General Plan provides no specific policies regarding property identified as "MRZ-3" and does not designate the project site for mineral resource-related uses (for example, MRZ-2b, which comprises areas where the available geologic information indicates that there is a likelihood of significant mineral deposits). There is no indication that the project site contains any mineral

resources that would be of value to the region or residents of the State. Therefore, impacts are considered less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Loss of Mineral Resource Recovery Site

| | |
|---|---|
| **Impact MIN-2:** | **The project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.** |

### *Impact Analysis*

Based on analysis contained in Impact MIN-1, there are no known aggregate resources within the surrounding region, nor is the project area designated as a resource recovery site. Furthermore, there is no evidence that the proposed project site or project area contain significant resources, which is demonstrated by its MRZ-3a classification in the 2008 County of Riverside General Plan. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Incompatible Land Use

| | |
|---|---|
| **Impact MIN-3:** | **Land Use: The project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine.** |

### *Impact Analysis*

The proposed project site is not located adjacent to a state-classified or designated area or existing surface mine. The land adjacent to the project site to the north, south, east and west does not have an Open Space-Mineral Resource (OS-MIN) land use designation, which allows for mineral extraction and processing facilities. Further, in no way will either the construction or operation of the proposed project impact any ongoing mining operations. Thus, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Abandoned Quarries or Mines

**Impact MIN-4: The project would not expose people or property to hazards from proposed, existing or abandoned quarries or mines.**

### *Impact Analysis*

The project does not propose any quarries or mines on-site. There are no existing quarries or mines on-site that were identified in any of the technical reports prepared for the project site. Additionally, the County of Riverside does not designate the site as having mineral resources in either the General Plan land use or zoning designations for the project site. The project site does not have an Open Space-Mineral Resource (OS-MIN) land use designation, which allows for mineral extraction and processing facilities. Thus, the proposed project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

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# 3.12 - Noise

This section describes the existing noise conditions and potential noise impacts of the project on the site and the surrounding area. The analysis in this section is based on the Noise Impact Analysis prepared by FirstCarbon Solutions (FCS) (Appendix H).

## 3.12.1 - Existing Conditions

### Characteristics of Noise

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear.

Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

#### *Noise Descriptors*

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level ($L_{eq}$) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the $L_{eq}$ and community noise equivalent level (CNEL) or the day-night average level ($L_{dn}$) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly $L_{eq}$ for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). $L_{dn}$ is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and $L_{dn}$ are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level ($L_{max}$), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by $L_{max}$ for short-term noise impacts. $L_{max}$ reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

### *Noise Propagation*

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance (dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions.

### *Traffic Noise*

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is “barely perceptible”; for reference a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

### *Stationary Noise*

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, the County considers the use of these vehicles to be a stationary noise source when operated on private

property such as at a truck terminal or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, dense landscaping, or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation, or with provision of intervening structures, barriers or topography.

Construction activities are a common source of stationary noise. Construction-period noise levels are higher than background ambient noise levels but eventually cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site, and therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table 3.12-1 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

**Table 3.12-1: Typical Construction Equipment Maximum Noise Levels, $L_{max}$**

| Type of Equipment | Impact Device? (Yes/No) | Specification Maximum Sound Levels for Analysis (dBA at 50 feet) |
|---|---|---|
| Impact Pile Driver | Yes | 95 |
| Auger Drill Rig | No | 85 |
| Vibratory Pile Driver | No | 95 |
| Jackhammers | Yes | 85 |
| Pneumatic Tools | No | 85 |
| Pumps | No | 77 |
| Scrapers | No | 85 |
| Cranes | No | 85 |
| Portable Generators | No | 82 |
| Rollers | No | 85 |
| Dozers | No | 85 |
| Tractors | No | 84 |
| Front-End Loaders | No | 80 |
| Backhoe | No | 80 |
| Excavators | No | 85 |
| Graders | No | 85 |
| Air Compressors | No | 80 |

**Table 3.12-1 (cont.): Typical Construction Equipment Maximum Noise Levels, $L_{max}$**

| Type of Equipment | Impact Device? (Yes/No) | Specification Maximum Sound Levels for Analysis (dBA at 50 feet) |
|---|---|---|
| Dump Truck | No | 84 |
| Concrete Mixer Truck | No | 85 |
| Pickup Truck | No | 55 |
| Source: FHWA 2006. Highway Construction Noise Handbook, August. | | |

### *Characteristics of Vibration*

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically only cause a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room, and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (RMS) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 micro inch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB."

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as root mean square (rms) velocity in units of decibels of 1 micro-inch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). Typical vibration source levels from construction equipment are shown in Table 3.12-2.

**Table 3.12-2: Vibration Levels of Construction Equipment**

| Construction Equipment | PPV at 25 Feet (inches/second) | RMS Velocity in Decibels (VdB) at 25 Feet |
|---|---|---|
| Water Trucks | 0.001 | 57 |
| Scraper | 0.002 | 58 |
| Bulldozer—small | 0.003 | 58 |
| Jackhammer | 0.035 | 79 |
| Concrete Mixer | 0.046 | 81 |
| Concrete Pump | 0.046 | 81 |
| Paver | 0.046 | 81 |
| Pickup Truck | 0.046 | 81 |
| Auger Drill Rig | 0.051 | 82 |
| Backhoe | 0.051 | 82 |
| Crane (Mobile) | 0.051 | 82 |
| Excavator | 0.051 | 82 |
| Grader | 0.051 | 82 |
| Loader | 0.051 | 82 |
| Loaded Trucks | 0.076 | 86 |
| Bulldozer—Large | 0.089 | 87 |
| Caisson drilling | 0.089 | 87 |
| Vibratory Roller (small) | 0.101 | 88 |
| Compactor | 0.138 | 90 |
| Clam shovel drop | 0.202 | 94 |
| Vibratory Roller (large) | 0.210 | 94 |
| Pile Driver (impact-typical) | 0.644 | 104 |
| Pile Driver (impact-upper range) | 1.518 | 112 |

Note:
Source: Compilation of scientific and academic literature, generated by FTA and FHWA.

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- Vibration source: Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- Vibration path: Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- Vibration receiver: Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface, and can result in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests. The vibration level (PPV) at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

$PPV_{ref}$ = reference measurement at 25 feet from vibration source
D = distance from equipment to the receptor
n = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual (2006), an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.

## Existing Ambient Noise Levels

To understand the current ambient noise environment in the project vicinity, five noise measurements were taken on the project site and in the general project vicinity. These measurements provide a baseline for any potential noise impacts that may be created by development of the proposed project. Refer to Exhibit 3.12-1 for noise measurement locations.

Field monitoring was conducted on May 30, 2013 between 10:30 a.m. and 11:45 a.m. The field survey noted that noise within the project area is generally characterized by highway and roadway

traffic noise, light aircraft and birds. At the start of the noise monitoring, the sky was clear with calm wind conditions ranging between 0 and 3 miles per hour (mph). Noise measurement locations are shown in Exhibit 3.12-1. The results of the noise level measurements are provided in Table 3.12-3.

**Table 3.12-3: Existing Noise Level Measurements**

| Site ID # | Description | $L_{eq}$ | $L_{min}$ | $L_{max}$ |
|---|---|---|---|---|
| 1 | Northwest of the site, east end of Calimesa Mobile Home Ranch | 51.6 | 48.0 | 55.6 |
| 2 | West of the site, near single-family homes | 68.2 | 52.9 | 83.7 |
| 3 | North of the site, near single-family homes | 46.3 | 41.4 | 51.8 |
| 4 | Near northwest corner of site | 50.6 | 46.8 | 55.2 |
| 5 | Southeast of the site, near single-family homes | 68.8 | 43.1 | 85.4 |

Note:
The Site ID corresponds to locations shown in Exhibit 3.12-1.
Source: FirstCarbon Solutions 2013.

## Existing Traffic Noise Levels

Existing traffic noise levels along selected roadway segments in the project vicinity were modeled using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). Site-specific information is entered, such as roadway traffic volumes, roadway active width, source-to-receiver distances, travel speed, noise source and receiver heights, and the percentages of automobiles, medium trucks, and heavy trucks that the traffic is made up of throughout the day, amongst other variables. The modeled average daily traffic (ADT) volumes were obtained by multiplying the PM peak-hour intersection traffic volumes from the project-specific traffic study by a factor of ten (Urban Crossroads, 2014). The model inputs and outputs, including the 60 dBA, 65 dBA, and 70 dBA CNEL traffic noise contour distances, are provided in Appendix H of this report. A summary of the modeling results is shown in Table 3.12-4.

The modeling results show that traffic noise levels range up to 67 dBA CNEL at the southern limits of the project site adjacent to Cherry Valley Boulevard. According to the County's land use compatibility guidelines, environments with noise levels of up to 70 dBA CNEL are considered "normally acceptable" for new office, business, and commercial land use development. For industrial, manufacturing, utilities, and agriculture land uses, environments with noise levels of up to 75 dBA CNEL are considered "normally acceptable."

**Table 3.12-4: Existing Traffic Noise Levels**

| Roadway Segment | ADT | Center-line to 70 CNEL (feet) | Center-line to 65 CNEL (feet) | Center-line to 60 CNEL (feet) | CNEL (dBA) 50 feet from Centerline of Outermost Lane |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Calimesa Boulevard to Driveway 1 | 6,200 | < 50 | 76 | 163 | 67.0 |

**Table 3.12-4 (cont.): Existing Traffic Noise Levels**

| Roadway Segment | ADT | Center-line to 70 CNEL (feet) | Center-line to 65 CNEL (feet) | Center-line to 60 CNEL (feet) | CNEL (dBA) 50 feet from Centerline of Outermost Lane |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Driveway 1 to Street 2 | 6,200 | < 50 | 76 | 163 | 67.0 |
| Cherry Valley Boulevard–Street 2 to Driveway 3 | 6,200 | < 50 | 76 | 163 | 67.0 |
| Cherry Valley Boulevard–Driveway 3 to Union Street | 6,200 | < 50 | 76 | 163 | 67.0 |
| Cherry Valley Boulevard–Union Street to Nancy Street | 5,000 | < 50 | < 50 | 101 | 63.9 |
| Cherry Valley Boulevard–Nancy Street to Beaumont Avenue | 4,600 | < 50 | < 50 | 96 | 63.5 |
| Union Street–South of Cherry Valley Boulevard | 300 | < 50 | < 50 | < 50 | 51.7 |
| Nancy Street–South of Cherry Valley Boulevard | 1,400 | < 50 | < 50 | < 50 | 58.3 |
| I-10–north of Cherry Valley Boulevard interchange | 6,800 | 79 | 151 | 315 | 68.7 |
| I-10–south of Cherry Valley Boulevard interchange | 5,900 | 74 | 138 | 287 | 68.1 |
| Note:<br>ADT = Average Daily Traffic<br>Source: FirstCarbon Solutions 2014. | | | | | |

### Ambient Vibration Levels

Aside from seismic events, the greatest regular source of groundborne vibration at the project site and in the immediate vicinity is from heavy-duty vehicular travel on local roadways. Large trucks traveling at 55 miles per hour on a smooth roadway surface can generate groundborne vibration velocity levels of approximately 75 VdB at 25 feet, and these levels could reach up to 80 VdB where trucks and buses pass over bumps in the road. In terms of PPV levels, a heavy-duty vehicle traveling at 55 miles per hour on a smooth roadway surface can result in a vibration level of approximately 0.041 inches per second at 25 feet.

## 3.12.2 - Regulatory Setting

### Federal Regulations

In 1972, the federal government passed the Noise Control Act of 1972 to serve the three purposes listed below:

- Promulgate noise emission standards for interstate commerce.
- Assist state and local abatement efforts.
- Promote noise education and research.




Source: ESRI Aerial Imagery.

FirstCarbon® SOLUTIONS

1,000 500 0 1,000 Feet

# Exhibit 3.12-1
# Noise Measurement Locations

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The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees.

Among the agencies now regulating noise are: the Occupational Safety and Health Administration (OSHA), which limits noise exposure of workers to 90 dB $L_{eq}$ or less for 8 continuous hours or 105 dB $L_{eq}$ or less for 1 continuous hour; the Department of Transportation (DOT), which assumed a significant role in noise control through its various operating agencies; and the Federal Aviation Administration (FAA), which regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the federal Urban Mass Transit Administration, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or, alternately that developments are planned and constructed in such a manner that minimize potential noise impacts.

Since the federal government has preempted the setting of standards for noise levels that may be emitted by transportation sources, the County of Riverside is restricted to regulating noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The Federal Transit Administration (FTA) has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document (FTA 2006). The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 3.12-5.

**Table 3.12-5: Federal Transit Administration Construction Vibration Impact Criteria**

| Building Category | PPV (in/sec) | Approximate VdB |
|---|---|---|
| I. Reinforced-Concrete, Steel or Timber (no plaster) | 0.5 | 102 |
| II. Engineered Concrete and Masonry (no plaster) | 0.3 | 98 |
| III. Non Engineer Timber and Masonry Buildings | 0.2 | 94 |
| IV. Buildings Extremely Susceptible to Vibration Damage | 0.12 | 90 |
| Source: Federal Transit Administration 2006. Transit Noise and Vibration Impact Assessment. | | |

## State Regulations

Established in 1973, the California Department of Health Services Office of Noise Control was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to delineate compatibility of sensitive uses with various incremental levels of noise (California Department of Health, Office of Noise Control 1976).

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL as measured from within the structure's interior. When such structures are located within a 60-dBA CNEL (or greater) exterior noise contour associated with a traffic noise along a roadway, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise/land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The County of Riverside and City of Calimesa use a version of these guidelines to evaluate potential noise/land use impacts.

The proposed project is also subject to review under the State of California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines provides impact thresholds for potential noise and vibration impacts. The County of Riverside had developed its own CEQA thresholds, which are listed in the Thresholds of Significance section below.

## Local Regulations

### *Noise Regulations*

Riverside County and the City of Calimesa are the local agencies responsible for adopting and implementing policies as they relate to noise levels and the project's effect on surrounding land uses. Limits for construction noise and stationary noise sources are set forth in the Riverside County Code and the City of Calimesa Municipal Code. Further, goals, objectives, and policies intended to guide land use planning decisions as they relate to noise and vibration are provided in the noise elements of the County of Riverside General Plan and the City of Calimesa General Plan. Noise level limits and planning guidelines applicable to the proposed project are presented below.

*Riverside County Development Code*

The generation of noise from one property to another is regulated in Riverside County by Ordinance 847, which establishes noise level limits based on land use categories. Private construction projects located within one-quarter of a mile from an inhabited dwelling are exempt from these noise level limits, provided that construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September; or between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.

If project construction occurs outside of these hours, construction activities will need to comply with the noise level limits that apply to the adjacent occupied properties. In this case, the project site is surrounded by properties designated for very low-density residential development to the north, east, and south, which lie within the County of Riverside. Similarly, properties to the west, which lie

within the City of Calimesa, are also designated for low density residential. For receiving residential land uses, noise level limits for activities occurring outside of the above listed hours must not exceed 55 dBA $L_{max}$ between the hours of 6:00 p.m. and 10:00 p.m. The project is also prohibited from causing noise levels at receiving residential land uses that exceed 45 dBA $L_{max}$ between the hours of 10:00 p.m. and 6:00 a.m. during the months of June through September, and between of 10:00 p.m. and 7:00 a.m. between the months of October through May.

Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., is also exempt from Ordinance 847 provided such maintenance occurs between the hours of 7 a.m. and 8 p.m. Heating and air conditioning equipment and safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare are also exempt from the ordinance.

*County of Riverside General Plan Noise Element*

The County of Riverside General Plan Noise Element identifies noise impact criteria depending on the noise source. Impact criteria that apply to the proposed project include criteria for transportation noise impacts to noise sensitive land uses (e.g., an airport, freeway or arterial traffic noise in residential areas); and criteria that apply to stationary noise impacts to sensitive land uses (e.g. stationary noise impacting neighboring communities). The County of Riverside has also adopted noise criteria for land use planning purposes, as shown in Table 3.12-6. These criteria set outdoor noise level standards that are acceptable, conditionally acceptable, and unacceptable for a variety of land uses. Transportation related noise as measured inside residential dwellings should not exceed 45 $L_{dn}$ (or CNEL); and exterior noise levels due to transportation noise at a residential parcel should not exceed 65 $L_{dn}$ (or CNEL). Noise levels for industrial land uses are considered acceptable up to 75 dBA CNEL, and are considered conditionally acceptable up to 80 dBA CNEL. The Environmental Impact Report prepared for the County of Riverside General Plan utilizes “an increase in long-term ambient noise by 5 dBA CNEL or more” to determine if the project would result in a substantial increase in long-term ambient noise levels. The County does not identify a threshold for temporary increases in noise.

The EIR prepared for the County of Riverside General Plan (2008) does indicate however, that construction noise has the potential to significantly impact off-site sensitive receptors, and that compliance with the County's noise ordinance construction hours would be required to reduce construction-related noise impacts to a less than significant level.

*Noise Compatibility*

The Noise Element of the General Plan is closely related to the Land Use Element because of the effects that noise has on sensitive land uses. Noise producing land uses must be compatible with adjacent land uses in order for the Land Use Plan to be successful. Land uses that emit noise are measured in A weighted decibels (dBA) or Community Noise Equivalent Level (CNEL). If existing land uses emit noise above a certain level, they are not compatible with one another, and therefore noise attenuation devices must be used to mitigate the noise to acceptable levels indoors and outdoors. In cases of new development, the placement of noise-sensitive land uses is integral to a successful community. Areas around airports may have different or more restrictive noise standards. The

following policies protect noise-sensitive land uses from noise emitted by outside sources, and prevent new projects from generating adverse noise levels on adjacent properties.

The below County of Riverside General Plan policies pertain to noise:

- **N 1.1:** Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

  The proposed project complies with this policy because it has been designed to site the proposed industrial buildings on site away from noise sensitive land uses by utilizing setbacks and placing the buildings towards the middle of the site, away from the eastern, northern, and western project boundaries.

According to the State of California Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures.

Areas around airports may have different noise standards than those cited above. Each Area Plan affected by a public-use airport includes one or more Airport Influence Areas, one for each airport. The applicable noise compatibility criteria are fully set forth in the area plan's Appendix L and summarized in the Policy Area section of the affected Area Plan.

- **N 1.4:** Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

  The proposed project complies with this policy because a project-specific noise impact analysis has been prepared for the project.

- **N 1.5:** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

  The proposed project complies with this policy because the project-specific noise impact analysis that has been prepared for the project includes mitigation measures to reduce potential noise impacts.

- **N 1.6:** Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise sensitive uses.

  The proposed project complies with this policy because the project-specific noise impact analysis that has been prepared for the project includes mitigation measures to reduce potential noise impacts.

*Stationary Noise Sources*

Noise levels at properties that contain a "habitable dwelling, hospital, school, library, or nursing home," must not exceed the following worst-case noise levels:

- 45 dBA $L_{eq}$ (10 minute), between the hours of 10:00 p.m. and 7:00 a.m. (nighttime standard)
- 65 dBA $L_{eq}$ (10 minute), between the hours of 7:00 a.m. and 10:00 p.m. (daytime standard)

**Table 3.12-6: State of California Community Noise Exposure (dBA CNEL or $L_{dn}$)**

| Land Use Category | 55 | 60 | 65 | 70 | 75 | 80 |
|---|---|---|---|---|---|---|
| Residential—Low-Density Single-Family, Duplex, and Mobile Homes | | | | | | |
| Residential—Multi-Family | | | | | | |
| Transient Lodging—Hotels, Motels | | | | | | |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | |
| Auditoriums, Concert Halls, Amphitheaters | | | | | | |
| Sports Arenas, Outdoor Spectator Sports | | | | | | |
| Playgrounds, Neighborhood Parks | | | | | | |

**Table 3.12 6 (cont.): State of California Community Noise Exposure (dBA CNEL or $L_{dn}$)**

| Land Use Category | 55 | 60 | 65 | 70 | 75 | 80 |
|---|---|---|---|---|---|---|
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | |
| Office Buildings, Businesses, Commercial and Professional | | | | | | |
| Industrial, Manufacturing, Utilities, Agriculture | | | | | | |

Source: Governor's Office of Planning and Research. 2003. State of California General Plan Guidelines, Appendix C, Guidelines for the Preparation and Content of the Noise Element of the General Plan. October 2003.

Key:

| | |
|---|---|
| | Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. |
| | Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy. |
| | Normally Unacceptable: New construction and development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded. |
| | Clearly Unacceptable: New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable. |

### *City of Calimesa Ordinance*

Section 8.15.040 of the City of Calimesa Municipal Ordinance sets noise level limits for the emission of noise from one property to another. These limits vary depending on the zoning of the source property as well as the zoning of the affected properties. The area within the City of Calimesa that lies to the north and northwest of the project site is zoned/designated as Rural Residential (RR). The adjacent properties west of the site and land northwest of the site are located within the jurisdiction of the City of Calimesa and are zoned Commercial Regional (CR) and Residential Low Medium (RLM) respectively. The noise level limits for each zoning district are presented in Table 3.12-7.

**Table 3.12-7: City of Calimesa One-Hour Average Sound Level Limit**

| Zone | Applicable Limit One-Hour Average Sound Level (In dBA) | |
|---|---|---|
| R-1, R-T, R-2, R-R and S-P regulations with a density of five dwelling units or less per acre | 7:00 a.m. to 10:00 p.m. | 50 |
| | 10:00 p.m. to 7:00 a.m. | 40 |
| R-3, S-P, and PRD regulations with a density of six or more dwelling units per acre | 7:00 a.m. to 7:00 p.m. | 55 |
| | 7:00 p.m. to 10:00 p.m. | 50 |
| | 10:00 p.m. to 7:00 a.m. | 45 |
| C-P-S, C-P, C-O<br>*Commercial Regional (CR) would fall into this zone* | 7:00 a.m. to 7:00 p.m. | 60 |
| | 7:00 p.m. to 10:00 p.m. | 55 |
| | 10:00 p.m. to 7:00 a.m. | 55 |
| M<br>*Light Industrial would fall into this zone* | 7:00 a.m. to 10:00 p.m. | 70 |
| | 10:00 p.m. to 7:00 a.m. | 50 |
| Source: Zones identified in italic: City of Calimesa 2010. Updated City of Calimesa Land Use and Zoning Map. August. City of Calimesa Municipal Ordinance Section 8.15.040. | | |

Calimesa Ordinance 8.15.040(c) clarifies that when the source property and the receiver property are located in two different zoning districts, the noise level limit is equal to the arithmetic mean of the two standards. Therefore, the applicable noise level limit for project noise projected to land uses within the RLM zone in the city is 45 dBA $L_{eq}$ between the hours of 10:00 p.m. and 7:00 a.m. and 60 dBA $L_{eq}$ between the hours of 7:00 a.m. and 10:00 p.m. The applicable noise level limit for project noise projected to adjacent land within the CR zone in the city is 52.5 dBA $L_{eq}$ between the hours of 7:00 p.m. and 7:00 a.m. and 65 dBA $L_{eq}$ between the hours of 7:00 a.m. and 7:00 p.m.

In order to reduce construction noise impacts, the City of Calimesa has adopted an ordinance that sets forth restrictions that apply to construction activities. With the exception of emergency work, Section 8.15.080 of the Ordinance prohibits any person, including the city, to operate any single or a combination of powered construction equipment at any construction site before 7:00 a.m. or after 7:00 p.m. It is also unlawful for any person, including the city, to operate any single or a combination of powered construction equipment at any construction site before 10:00 a.m. or after 5:00 p.m. on Saturdays and Sundays, January 1st, the last Monday in May, known as "Memorial Day," July 4th, the first Monday in September, Thanksgiving Day, and December 25th. When January 1st, July 4th, or December 25th fall on a Sunday, operation any single or a combination of powered construction equipment at any construction site before 10:00 a.m. or after 5:00 p.m. on the following Monday is also prohibited.

Further, no such equipment, or a combination of equipment regardless, of age or date of acquisition, shall be operated so as to cause noise at a level in excess of 75 dBA for more than eight hours during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes. These sound levels shall be corrected for time duration as shown in Table 3.12-8.

**Table 3.12-8: City of Calimesa Construction Noise Level Limits**

| Total Duration in 24 Hours | Decibel Level Allowance | Total Decibel Level |
|---|---|---|
| Up to 15 minutes | +15 | 90 |
| Up to 30 minutes | +12 | 87 |
| Up to 1 hour | +9 | 84 |
| Up to 2 hours | +6 | 81 |
| Up to 4 hours | +3 | 78 |
| Up to 8 hours | 0 | 75 |

### *City of Calimesa General Plan Noise Element*

The City of Calimesa General Plan Noise Element refers to noise/land use compatibility guidelines presented in the State Office of Noise Control "Guidelines for the Preparation and Content of Noise Elements of the General Plans." In reference to potential transportation noise impacts to the proposed project, these guidelines state that noise levels for industrial land uses are normally acceptable up to 75 dBA CNEL/$L_{dn}$ and conditionally acceptable up to 80 dBA CNEL/$L_{dn}$.

Single family and mobile homes are considered to be normally acceptable in environments with noise levels of up to 60 dBA CNEL/$L_{dn}$ and conditionally acceptable in environments with noise levels of up to 70 dBA CNEL/$L_{dn}$. Projects proposed in environments with noise levels that are considered "conditionally acceptable" must have a detailed analysis of the noise reduction requirements and include the necessary insulation features in the project design. Conventional construction, but with closed window and fresh air supply systems or air conditioning, normally suffice.

The City of Calimesa has not established a threshold for what is considered to be a "substantial increase." Therefore, the County of Riverside's threshold will be used for the purposes of this analysis.

### *Vibration Regulations*

The County of Riverside, the City of Calimesa, and the State of California have not adopted criteria or regulations for groundborne vibration or groundborne noise.

## 3.12.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to noise are significant environmental effects, the following questions are analyzed and evaluated.

a) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?

b) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

c) For a project within the vicinity of a railroad, would the project expose people residing or working in the project area to excessive noise levels?

d) For a project within the vicinity of a highway, would the project expose people residing or working in the project area to excessive noise levels?

e) Would the project expose people residing or working in the project area to excessive noise levels from other noise sources?

f) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

g) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

h) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

i) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

## 3.12.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### Airport Land Use Plan

| | |
|---|---|
| **Impact NOI-1:** | **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels.** |

#### *Impact Analysis*

The nearest airport from the project is the Banning Municipal Airport, located approximately 9.6 miles southeast of the project site. Additionally, the Redlands Municipal Airport is located approximately 9.7 miles northwest of the project site (Google Earth). As adopted by the Riverside County Airport Land Use Commission (ALUC), the Riverside County Airport Land Use Compatibility Plan Policy Document establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County. As shown in this document, the project site is not within a compatibility zone for the Banning Municipal Airport (ALUC 2004). Furthermore, according the Riverside County TLMA Geographic Information System, the proposed project is not located in an airport influence area or an airport compatibility zone. Therefore, the proposed project does not include any inhabitable structures that would expose people residing or working in the project area to excessive noise levels.

#### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Private Airstrip

| | |
|---|---|
| **Impact NOI-2:** | **For a project within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels.** |

### *Impact Analysis*

There are no private airstrips or helipads in the vicinity of the project site (AirNav.com, Google Earth). The nearest heliport to the project site is Riverside County Regional Medical Center Heliport, located approximately 10.5 miles southwest of the project site. Therefore, the project will not expose people residing or working in the project area to excessive noise levels.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Railroad Noise

| | |
|---|---|
| **Impact NOI-3:** | **For a project within the vicinity of a railroad, the project would not expose people residing or working in the project area to excessive noise levels railroad noise.** |

### *Impact Analysis*

The proposed project is not located in the vicinity of a railroad, as the nearest railroad to the project site is located approximately 2.5 miles to the southwest of the project site, across hilly terrain. Thus, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with railroad noise.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Highway Noise

| | |
|---|---|
| **Impact NOI-4:** | **For a project within the vicinity of a highway, the project would not expose people residing or working in the project area to excessive noise levels.** |

### *Impact Analysis*

According to the County's land use compatibility guidelines, environments with noise levels of up to 70 dBA are considered "normally acceptable" for new office, business, and commercial land use development. For industrial, manufacturing, and agricultural land uses, environments with noise levels of up to 75 dBA CNEL are considered "conditionally acceptable." The proposed project is located approximately 0.3 mile east of the Interstate (I) 10 Freeway. Regional access to the project site will be provided by the I-10 Freeway via Cherry Valley Boulevard and local access to the project site will be provided along Cherry Valley Boulevard via two driveways and one proposed public street. The highest traffic noise levels would occur under future plus project conditions. Future noise levels associated with future (2035) plus project traffic volumes (Urban Crossroads 2014) along Cherry Valley Boulevard were modeled, and are not expected to exceed 73.2 dBA CNEL at a distance of 50 feet from the from the centerline of the nearest travel lane of Cherry Valley Boulevard (see Table 3.12-11 below). At the nearest façade of the proposed warehouse buildings, located approximately 465 feet from the centerline of Cherry Valley Boulevard, these traffic noise levels attenuate to below 57 dBA CNEL.

No buildings or active outdoor use areas are proposed within 42 feet of the ROW of Cherry Valley Boulevard. Thus, the noise levels from the I-10 Freeway, which is located over 1,000 feet west of the project site, would not expose persons working in the project area to excessive noise levels and therefore, impacts in this regard would be less than significant. Noise levels generated by project-related traffic and stationary noise sources are also addressed in Impact NOI-6 and are found to be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Other Noise

| | |
|---|---|
| **Impact NOI-5:** | **The project would not expose people residing or working in the project area to excessive noise levels from other noise sources.** |

### *Impact Analysis*

Because of the location of the project in a predominantly rural area, there are no land uses in the vicinity of the project site (such as refineries, landfills) or other similar land uses that could generate excessive noise levels. Thus, impacts in this regard are anticipated to be less than significant. Refer

to the discussion under Impact NOI-4 regarding noise related to the project's location approximately 0.3 mile east of the I-10 Freeway. Further, noise levels generated by project-related traffic and stationary noise sources were addressed under Impact NOI-6 and NOI-8.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Permanent Ambient Noise Levels

| | |
|---|---|
| **Impact NOI-6:** | **The project would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.** |

### *Impact Analysis*

A significant impact would occur if the project would result in a substantial increase in traffic noise levels compared to noise levels existing without the project. The Environmental Impact Report prepared for the County of Riverside General Plan utilizes "an increase in long-term ambient noise by 5 dBA or more" to determine if the project would result in a substantial increase in long-term ambient noise levels.

*Traffic Noise Impacts*

Regional access to the project site will be provided by the I-10 Freeway via Cherry Valley Boulevard. Local access to the project site will be provided along Cherry Valley Boulevard via two driveways and one proposed public street. The public street will allow full access, and the driveways will allow right-in/right-out access only. There are single-family residential properties along Cherry Valley Boulevard, Nancy Street, and Union Street that may be affected by project-generated traffic noise.

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. Traffic data used in the model was obtained from the traffic impact analysis prepared by Urban Crossroads (2014). The resultant noise levels were weighed and summed over a 24-hour period in order to determine the CNEL values. The modeled average daily traffic (ADT) volumes were obtained by multiplying the p.m. peak hour intersection traffic volumes by a factor of ten. As a worst-case analysis, future roadway widening that would occur with implementation of the project was assumed for both without project and with project future conditions. The traffic noise modeling input and output files are included in Appendix H of this EIR. Table 3.12-9, Table 3.12-10, and Table 3.12-11 summarize the traffic noise modeling results for existing, cumulative (year 2017), and horizon (year 2035) traffic conditions, without and with the project.

## Table 3.12-9: Existing without- and with-Project Modeled Roadway Noise Levels

| Roadway Segment | Existing No Project ADT | Existing No Project (dBA) CNEL | Existing + Project ADT | Existing + Project (dBA) CNEL | Increase over Existing No Project (dBA) |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Calimesa Boulevard to Driveway 1 | 6,200 | 67.0 | 9,300 | 67.7 | 0.7 |
| Cherry Valley Boulevard–Driveway 1 to Street 2 | 6,200 | 67.0 | 8,900 | 67.5 | 0.5 |
| Cherry Valley Boulevard–Street 2 to Driveway 3 | 6,200 | 67.0 | 6,600 | 66.2 | -0.8 |
| Cherry Valley Boulevard–Driveway 3 to Union Street | 6,200 | 67.0 | 6,500 | 66.1 | -0.9 |
| Cherry Valley Boulevard–Union Street to Nancy Street | 5,000 | 63.9 | 5,200 | 64.0 | 0.1 |
| Cherry Valley Boulevard–Nancy Street to Beaumont Avenue | 4,600 | 63.5 | 4,800 | 63.7 | 0.2 |
| Union Street–South of Cherry Valley Boulevard | 300 | 51.7 | 400 | 52.9 | 1.2 |
| Nancy Street–South of Cherry Valley Boulevard | 1,400 | 58.3 | 1,400 | 58.3 | 0.0 |
| I-10–north of Cherry Valley Boulevard interchange | 6,800 | 68.7 | 6,900 | 68.8 | 0.1 |
| I-10–south of Cherry Valley Boulevard interchange | 5,900 | 68.1 | 6,000 | 68.2 | 0.1 |

Note:
CNEL (dBA) as measured at 50 feet from the centerline of the outermost travel lane.
Source: FCS 2014.

## Table 3.12-10: Cumulative (Year 2017) Modeled Roadway Noise Levels

| Roadway Segment | Cumulative (2017) No Project ADT | Cumulative (2017) No Project (dBA) CNEL | Cumulative (2017) + Project ADT | Cumulative (2017) + Project (dBA) CNEL | Increase over Cumulative (2017) No Project (dBA) |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Calimesa Boulevard to Driveway 1 | 12,800 | 69.1 | 15,800 | 70.0 | 0.9 |
| Cherry Valley Boulevard–Driveway 1 to Street 2 | 12,800 | 69.1 | 15,400 | 69.9 | 0.8 |
| Cherry Valley Boulevard–Street 2 to Driveway 3 | 12,100 | 68.8 | 12,400 | 68.9 | 0.1 |
| Cherry Valley Boulevard–Driveway 3 to Union Street | 12,000 | 68.8 | 12,300 | 68.9 | 0.1 |
| Cherry Valley Boulevard–Union Street to Nancy Street | 7,300 | 65.5 | 7,500 | 65.6 | 0.1 |

## Table 3.12-10 (cont.): Cumulative (Year 2017) Modeled Roadway Noise Levels

| Roadway Segment | Cumulative (2017) No Project ADT | Cumulative (2017) No Project (dBA) CNEL | Cumulative (2017) + Project ADT | Cumulative (2017) + Project (dBA) CNEL | Increase over Cumulative (2017) No Project (dBA) |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Nancy Street to Beaumont Avenue | 6,200 | 64.8 | 6,400 | 64.9 | 0.1 |
| Union Street–South of Cherry Valley Boulevard | 800 | 55.9 | 900 | 56.4 | 0.5 |
| Nancy Street–South of Cherry Valley Boulevard | 800 | 55.9 | 800 | 55.9 | 0.0 |
| I-10–north of Cherry Valley Boulevard interchange | 8,600 | 69.7 | 8,700 | 69.8 | 0.1 |
| I-10–south of Cherry Valley Boulevard interchange | 7,100 | 68.9 | 7,200 | 69.0 | 0.1 |

Note:
CNEL (dBA) as measured at 50 feet from the centerline of the outermost travel lane.
Source: FCS 2014.

## Table 3.12-11: Horizon (Year 2035) Modeled Roadway Noise Levels

| Roadway Segment | Horizon (2035) No Project ADT | Horizon (2035) No Project (dBA) CNEL | Horizon (2035) + Project ADT | Horizon (2035) + Project (dBA) CNEL | Increase over Horizon (2035) No Project (dBA) |
|---|---|---|---|---|---|
| Cherry Valley Boulevard–Calimesa Boulevard to Driveway 1 | 27,200 | 72.4 | 30,200 | 72.8 | 0.4 |
| Cherry Valley Boulevard–Driveway 1 to Street 2 | 27,200 | 72.4 | 29,800 | 72.8 | 0.4 |
| Cherry Valley Boulevard–Street 2 to Driveway 3 | 32,700 | 73.2 | 33,000 | 73.2 | 0.0 |
| Cherry Valley Boulevard–Driveway 3 to Union Street | 32,700 | 73.2 | 33,000 | 73.2 | 0.0 |
| Cherry Valley Boulevard–Union Street to Nancy Street | 21,700 | 69.2 | 21,900 | 69.2 | 0.0 |
| Cherry Valley Boulevard–Nancy Street to Beaumont Avenue | 21,800 | 69.2 | 22,000 | 69.2 | 0.0 |
| Union Street–South of Cherry Valley Boulevard | 3,400 | 62.2 | 3,400 | 62.2 | 0.0 |
| Nancy Street–South of Cherry Valley Boulevard | 3,400 | 62.2 | 3,400 | 62.2 | 0.0 |

**Table 3.12-11 (cont.): Horizon (Year 2035) Modeled Roadway Noise Levels**

| Roadway Segment | Horizon (2035) No Project ADT | Horizon (2035) No Project (dBA) CNEL | Horizon (2035) + Project ADT | Horizon (2035) + Project (dBA) CNEL | Increase over Horizon (2035) No Project (dBA) |
|---|---|---|---|---|---|
| I-10–north of Cherry Valley Boulevard interchange | 20,800 | 73.6 | 20,900 | 73.6 | 0.0 |
| I-10–south of Cherry Valley Boulevard interchange | 19,100 | 73.2 | 19,200 | 73.2 | 0.0 |

Note:
CNEL (dBA) as measured at 50 feet from the centerline of the outermost travel lane.
Source: FirstCarbon Solutions 2014.

Modeling results also show that project generated vehicle noise on area-wide roadways would result in a maximum increase of up to 0.9 dBA in traffic noise levels with implementation of the project, compared to traffic noise levels existing without the project. This increase would occur under Cumulative (year 2017) plus Project traffic conditions. The County of Riverside considers a permanent increase of 5 dBA or greater to be a substantial increase. Therefore, an increase of 0.9 dBA is not considered substantial, and project-generated traffic noise would result in a less than significant impact on off-site sensitive receptors along area-wide roadways.

It should be noted that two roadway segments under Existing plus Project conditions (as shown in Table 3.12-9) would experience an apparent decrease in traffic noise levels as measured at 50 feet from the centerline of the outermost travel lane. However, this apparent reduction only occurs because the existing plus project conditions assumes implementation of planned roadway improvements that would widen the portion of Cherry Valley Boulevard that is adjacent to the project site to a four-lane roadway. This improvement essentially moves traffic further away from the outermost travel lane, thus "reducing" the traffic noise levels measured at that distance. However, this reduction would not be distinguishable compared to existing conditions, and should therefore be assumed to be equivalent to no increase.

Thus, the project would have a less than significant impact regarding substantial permanent increases in ambient noise levels from project-related mobile noise sources.

## Temporary Ambient Noise Levels

**Impact NOI-7:** **The project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

### *Impact Analysis*

The Noise Impact Analysis prepared for the proposed project analyzes potential noise impacts from project construction. Project construction activities have the potential to cause short-term noise

impacts to the rural single-family homes in the project area. Construction noise may also be audible at the Rancho Calimesa Mobile Home Ranch, located west of the project site near the I-10 freeway.

Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work. Typical noise sources and noise levels associated with construction activities are shown in Table 3.12-1, above.

Both mobile and stationary construction equipment will be used on the site. Mobile equipment (e.g., loaders, graders, dozers) moves around a construction site performing tasks in a recurring manner. Stationary equipment (e.g., air compressor, generator, concrete saw) operates in a given location for an extended period of time to perform continuous or periodic operations.

The initial phase of project construction would involve mass grading, which would be followed by fine grading, trenching, and paving activities. Construction of the proposed buildings would include building construction, architectural coatings application, and paving associated with buildings. The mass grading phase is widely recognized to be the loudest part of construction. Construction equipment that will be used during the mass grading phase will include scrapers, loaders backhoes, excavators, dozers, and trucks. Operational characteristics of this equipment when associated with mass grading are typified by short periods of full power operation followed by extended periods of operation at lower power, idling, or powered-off conditions. A typical cycle for these machines includes between 1 and 2 minutes of full power operation followed by 3 to 4 minutes of lower power. Blasting and the use of pile drivers are not anticipated.

A worst-case construction noise level was calculated using the Federal Highway Administration's (FHWA) Road Construction Noise Model (RCNM). RCNM uses standard noise emission levels for many different types of equipment and includes utilization percentage, impact, and shielding parameters. The modeled scenario assumed the simultaneous use of some of the loudest types of heavy construction equipment, including two graders, one dozer, and one scraper at reasonably expected distance from each other. A 40 percent usage factor was assumed for each piece of equipment. Modeling output and modeling parameters and output are provided in Appendix B, Air Quality and Greenhouse Gases (Construction Noise Modeling Sheets).

As shown in Table 3.12-12 below, project construction activities would result in temporary increases in ambient noise levels at nearby sensitive receptors. These are worst-case noise levels that can be expected to lower at sensitive receptors as construction moves away from the property line. It should be noted that a ridgeline breaks the line of sight between the project site and the Calimesa Mobile Home Ranch. Combined with the distance between the noise sources on the project site and the sensitive receptor, the break in the line of sight afforded by the ridgeline would result in a 10-dBA deduction from construction noise calculations. Similarly, existing hills and ridgelines block the line of site from the homes north of the project site to the project, thus a deduction of 10 dBA was taken into account. Potentially affected Sensitive Receptor locations are shown in Exhibit 3.12-2.

**Table 3.12-12: Comparison of Existing Ambient and Construction Noise Levels**

| Sensitive Receptor[1] | Location Distance/Direction from Site | Ambient Noise Level dBA $L_{max}/L_{eq}$ | Construction Noise Level dBA $L_{max}/L_{eq}$ | Temporary Increase due to Construction Noise dBA $L_{max}/L_{eq}$ |
|---|---|---|---|---|
| East end of Mobile Home Ranch | City of Calimesa -1500 feet northwest of nearest construction footprint | 56/52 (NM1) | 46[2]/47[2] | 0/0 |
| Single family home | City of Calimesa—850 feet west of nearest construction footprint | 84/68 (NM2) | 60/62 | 0/0 |
| Single family home | County of Riverside—1200 feet north of nearest construction footprint | 52/46 (NM3) | 47[2]/49 | 0/3 |
| Single family home | 800 feet north of a proposed detention basin | 52/46 (NM3) | 45[2]/47 | 0/1 |
| Single family home | City of Calimesa -670 feet west of nearest construction footprint | 55/51 (NM4) | 63/64 | 8/13 |
| Single family homes | County of Riverside—110 feet to the southeast of nearest project driveway construction area | 85/69 (NM5) | 78/78 | 0/9 |

Notes:
NM = Noise Measurement Location
[1] Affected Sensitive Receptor locations are shown in Exhibit 3.12-2.
[2] An extra 10 dB was deducted because of intervening topography.
Source: FirstCarbon Solutions 2015.

If construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, or between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May, it is exempt from the County of Riverside Noise Ordinance. Section 8.15.080 of the City of Calimesa Municipal Ordinance prohibits construction noise before 7:00 a.m. or after 7:00 p.m. Mondays through Fridays, and before 10:00 a.m. or after 5:00 p.m. on Saturdays and Sundays, on holidays, and on the Monday following each holiday which falls on a Sunday. The City of Calimesa has also established noise level limits for construction activities (Table 3.12-8). In this case, the applicable threshold is 75 dBA $L_{eq}$ (8-hour).

As shown in Table 3.12-12 above, the worst-case construction noise level expected at the City of Calimesa home located adjacent to the western project boundary is 64 dBA $L_{eq}$ for the loudest hourly average noise level. Such construction noise levels would not occur for eight continuous hours, because equipment would not remain operating all day at full power at the nearest construction limits. In addition, construction activities would not occur continuously along the nearest project property line but would move around the project site. The modeled operational usage factor for the type of equipment that would operate nearest the single-family home southeast of the project site is

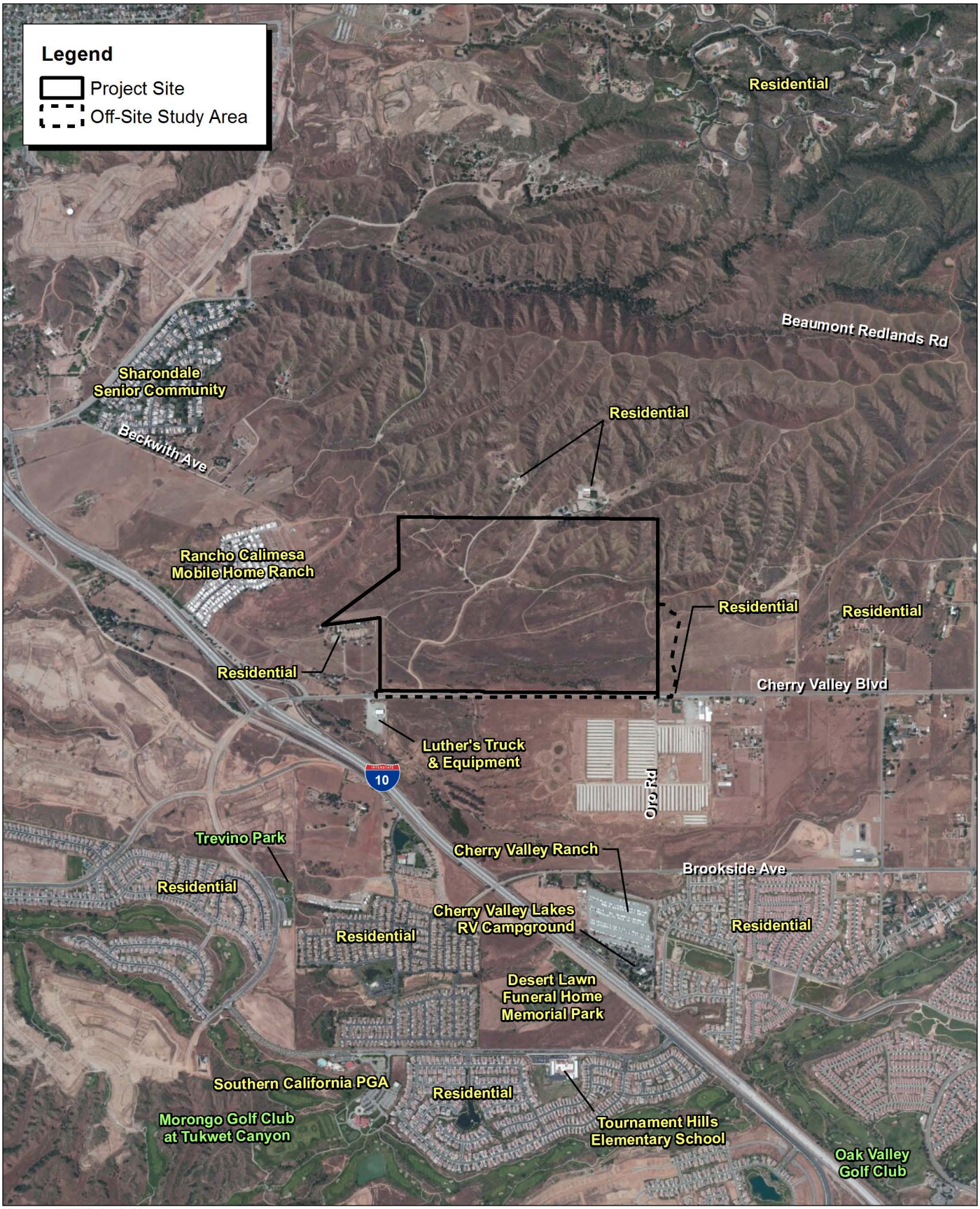
40 percent. Therefore, based on this operational usage factor averaged with the measured background ambient noise levels of 51 dBA $L_{eq}$ at this location, the resulting 8-hour average construction activity noise level is expected to be approximately 57 dBA $L_{eq}$. This worst-case 8-hour average noise level is well below the City's noise level threshold of 75 dBA $L_{eq}$ (8-hour) for construction activities.

As previously noted, the County of Riverside does not have an absolute noise level threshold for construction activities, but rather exempts construction noise from the noise ordinance standards provided such activities occur within the stated permissible hours of construction. However, in order to provide an equivalent (conservative) evaluation of construction noise impacts on all sensitive receptors in the project vicinity, this analysis also applies the City of Calimesa threshold of 75 dBA $L_{eq}$ (8-hour) standard to the modeled receptor locations within the County of Riverside. As shown in Table 3.12-12, the worst-case modeled construction noise levels could range up to 78 dBA $L_{eq}$ (loudest hourly average) at the nearest single-family residence located southeast of the project site within the County of Riverside. However, similar to the discussion above, such construction noise levels would not occur for 8 continuous hours, because equipment would not remain operating all day at full power at the nearest construction limits. In addition, construction activities would not occur continuously along the nearest project property line but would move around the project site. The modeled operational usage factor for the type of equipment that would operate nearest the single-family home southeast of the project site is 40 percent. Therefore, based on this operational usage factor averaged with the measured background ambient noise levels of 69 dBA $L_{eq}$ at this location, the resulting 8-hour average construction activity noise level is expected to be approximately 73 dBA $L_{eq}$. This worst-case 8-hour average noise level is below the City's noise level threshold of 75 dBA $L_{eq}$ (8-hour) for construction activities.

As shown in Table 3.12-12, construction activities would result in a potential maximum increase of up to approximately 13 dBA in the hourly average ambient noise levels at the home within the City of Calimesa immediately west of the site, when multiple pieces of heavy construction equipment operate simultaneously near the westernmost portion of the project site. Similarly, the closest home located southeast of the project site could experience a maximum increase of up to approximately 9 dBA in the hourly average noise levels when multiple pieces of heavy construction equipment operate simultaneously at the nearest project construction limits. As shown in the discussion above, this would be the worst-case hourly average noise levels. However, by restricting construction activities to the County's permissible hours of construction and by implementing best practices, these construction noise levels, when averaged over a 24-hour period with existing background noise levels, would be expected to be reduced so as not to result in a substantial increase (increase of 5 dBA CNEL or greater) in the ambient noise levels at any sensitive receptor in the project vicinity. Therefore, to reduce this potential impact, the following mitigation measures would be implemented.

### *Level of Significance Before Mitigation*

Potentially significant impact due to temporary substantial increase in construction noise levels.




Source: ESRI Aerial Imagery.

FirstCarbon® SOLUTIONS

2,000 1,000 0 2,000 Feet

# Exhibit 3.12-2
# Sensitive Receptor Locations

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### *Mitigation Measures*

The following mitigation measures would reduce construction noise impacts to less than significant.

**MM NOI-7a** During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. This would result in an estimated 5 dBA reduction (perceived as half as loud) in equipment operational noise levels compared to operations without such devices.

**MM NOI-7b** Whenever feasible, the construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. This would result in an estimated 5 dBA reduction (perceived as half as loud) in operational noise levels compared to operations with noise emitted toward a receptor.

**MM NOI-7c** The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.

**MM NOI-7d** All on-site producing construction activities ( including haul truck deliveries) shall be restricted to the hours from 7:00 a.m. to 7:00 p.m. Mondays through Fridays, and 10:00 a.m. to 5:00 p.m. on Saturdays and Sundays, on holidays, and on the Monday following each holiday that falls on a Sunday. To the extent feasible, haul routes should not pass sensitive land uses or residential dwellings.

**MM NOI-7e** For the duration of construction activities, the construction manager shall serve as the disturbance coordinator, should noise levels become disruptive to local residents. The disturbance coordinator would determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. The construction manager shall conspicuously post a telephone number for the disturbance coordinator at all entrances to the construction site.

### *Level of Significance After Mitigation*

Less than significant impact. As addressed above, while the County of Riverside does not define what is considered to be a substantial temporary increase in ambient noise levels, the County does recognize that compliance with the County's noise ordinance is required to reduce construction-related noise impacts to a less than significant level (County of Riverside 2003). As stated above, CEQA Guidelines clarify that ". . . a change in the environment is not a significant effect if the change complies with the standard . . ." Thus, implementation of Mitigation Measures NOI-7a through NOI-7e would ensure compliance with County standards, including construction hours restrictions, which have been established by the County in an effort to reduce the potential impact from construction noise on nearby sensitive receptors to acceptable levels of significance. Further, the implementation of Mitigation Measures NOI-7a through NOI-7e would also ensure that a variety of feasible measures are incorporated during project construction to further reduce construction noise

to acceptable levels, and would reduce construction noise levels to not result in a substantial increase in ambient noise levels at off-site sensitive land uses.

## Noise Levels in Excess of Standards

**Impact NOI-8: The project could expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

### *Impact Analysis*

Potential construction and operational noise impacts are discussed in terms of County of Riverside and City of Calimesa standards, below. Long-term (operational) noise impacts from the proposed project's mobile noise sources (such as vehicles/trucks) and stationary noise sources (which would emanate from the project site) are also discussed in this section. A significant impact would occur if the project would be exposed to noise levels above the City's "normally compatible" standard of 60 dBA CNEL for new residential land use development, or if the project would result in exceedance of the following noise level limits at properties in the City zoned CR: 52.5 dBA $L_{eq}$ between the hours of 7:00 p.m. and 7:00 a.m. and 65 dBA $L_{eq}$ between the hours of 7:00 a.m. and 7:00 p.m.

*Construction Noise Impacts*

As previously discussed in Impact NOI-7, if construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, or between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May, it is exempt from the County of Riverside Noise Ordinance. Section 8.15.080 of the City of Calimesa Municipal Ordinance prohibits construction noise before 7:00 a.m. or after 7:00 p.m. Mondays through Fridays and before 10:00 a.m. or after 5:00 p.m. on Saturdays and Sundays, on holidays, and on the Monday following each holiday that falls on a Sunday. The City of Calimesa has also established noise level limits for construction activities (see 3.12-7). In this case, the applicable threshold is 75 dBA $L_{eq}$ (8-hour).

As shown in Table 3.12-12, the worst-case construction noise level expected at the City of Calimesa home located adjacent to the western project boundary is 64 dBA $L_{eq}$. This worst-case noise level is below the City's noise level limit for construction activities and can be expected to lower as construction moves away from the property line. In addition, such construction noise levels are unlikely to continue for eight continuous hours, because equipment would not remain operating all day at the nearest construction limits.

Thus, the project is not anticipated to exceed applicable construction noise standards. However, substantial temporary increases related to construction noise impacts are discussed in Impact NOI-7, and include Mitigation Measures NOI-7a through NOI-7e to be incorporated to reduce temporary noise increases from construction activities to less than significant.

*Traffic Noise Impacts*

Thus, the project is not anticipated to exceed noise standards. However, to ensure that construction noise standards are not exceeded, Mitigation Measures NOI-7a through NOI-7e shall be incorporated.

*Operation*

As previously discussed, according to the County's land use compatibility guidelines, environments with noise levels of up to 70 dBA CNEL are considered "normally acceptable" for new office, business, and commercial land use development. For industrial, manufacturing, utilities, and agriculture land uses, environments with noise levels of up to 75 dBA CNEL are considered "conditionally acceptable."

The highest traffic noise levels on segments of Cherry Valley Boulevard adjacent to the project site would occur under horizon (year 2035) traffic conditions with implementation of the project. Based on the traffic noise modeling results shown in Table 3.12-11, the project site would be exposed to traffic noise levels ranging up to approximately 73.2 dBA CNEL at 50 feet from the centerline of the nearest travel lane of Cherry Valley Boulevard, under Horizon (year 2035) plus Project traffic conditions. At the nearest façade of the proposed warehouse buildings, located approximately 465 feet from the centerline of Cherry Valley Boulevard, these traffic noise levels would attenuate to below 57 dBA CNEL.

Therefore, the proposed light industrial use is compatible with the noise land use compatibility standard of 75 dBA CNEL for new industrial land use development, and traffic noise levels would result in a less than significant impact on the proposed land use.

*Parking Lot Noise/Truck Loading and Unloading*

Potential long-term on-site stationary noise impacts would be associated with operations at the proposed light industrial and warehouse land uses. The proposed project would generate noise from truck delivery, loading/unloading activities at the loading areas, and other noise-producing activities at the parking lot such as customers conversing, doors slamming, engine startup, and slow-moving vehicles. These activities are potential point sources of noise that could affect noise-sensitive receptors near the loading areas and parking lots, including single-family residences located to the west, north, east, and southeast; refer to Exhibit 3.12-2, which shows noise-sensitive receptors in the project vicinity. Of these noise sources, noise from truck delivery loading/unloading would result in the highest noise levels at off-site sensitive receptors.

Representative parking activities, such as vehicles cruising at slow speeds, door slamming, cars starting, would generate approximately 60 dBA to 70 dBA $L_{max}$ at 50 feet. Conversation between two persons at a distance of 4 to 5 feet apart would generate a noise level of 60 dBA $L_{eq}$ at 5 feet, or approximately 40 dBA $L_{eq}$ as measured at 50 feet.

The highest stationary source noise levels would be generated by truck delivery, loading/unloading activities at the loading areas of the proposed warehouse facility. Typical noise levels from larger delivery truck loading and unloading activities can range from 75 dBA to 85 dBA $L_{max}$ as measured at 50 feet. The typical truck unloading process takes an average of 15 to 20 minutes, typically generating noise levels of up to 60.4 dBA $L_{eq}$ at a distance of 50 feet.

Loading and unloading areas associated with the project face the northern, western, and southern project property lines. The closest residential land use to the west of the project site is located approximately 870 feet from the closest project truck bays and loading areas. At this distance, activity at

the project's western truck bays of multiple trucks loading/unloading simultaneously could result in intermittent noise levels of up to 60 dBA $L_{max}$ and a combined hourly average noise level of 58 dBA $L_{eq10}$.

The closest residence to the project's south facing loading area is located approximately 1,000 feet to the southeast across Cherry Valley Boulevard. At this distance, activity at the project's southern truck bays of multiple trucks loading/unloading simultaneously could result in intermittent noise levels of up to 59 dBA $L_{max}$ and a combined hourly average noise level of 52 dBA $L_{eq10}$.

Project operational noise associated with loading, loading and other parking lot noises would not be audible at the Rancho Calimesa Mobile Home Ranch or at the homes located north and east of the project site due to distance from the site and intervening topography. Noise associated with loading/unloading activities would potentially affect the residences located west and southeast of the project site. Project operational noise that can be expected at these residences are summarized in Table 3.12-13.

**Table 3.12-13: Comparison of Existing Ambient and Maximum Operational Noise Levels**

| Sensitive Receptor | Ambient Noise Level (dBA $L_{eq}$) | Operational Noise Level at Residential Façade | |
|---|---|---|---|
| | | dBA $L_{max}$ | dBA $L_{eq}$ |
| Residential Property west of project site | 52 (NM4) | 60 | 58 |
| Residential Property southeast of project site | 69 (NM5) | 59 | 52 |

The existing residence adjacent to and to the west of the project site is located within the City of Calimesa and zoned Commercial Regional (CR). As discussed previously, the applicable noise level limits for project operational noise projected to property in the City zoned CR is 52.5 dBA $L_{eq}$ between the hours of 7:00 p.m. and 7:00 a.m. and 65 dBA $L_{eq}$ between the hours of 7:00 a.m. and 7:00 p.m. As shown in Table 3.12-13, projected operational noise levels could range up to 58 dBA $L_{eq}$ when multiple truck loading/unloading operations occur simultaneously at the nearest loading areas of the project site. These operations could, therefore, exceed the City's nighttime operational noise level standard unless mitigation is incorporated. Inclusion of loading bay doors equipped with sealed gaskets would be expected to reduce loading/unloading maximum operational noise levels by at least 15 dBA. This would effectively reduce loading/unloading operational noise levels to below a combined hourly average noise level of 43 dBA $L_{eq}$, meeting the City of Calimesa's nighttime operational noise standard of 52.5 dBA $L_{eq}$. With implementation of this measure, loading/unloading operational noise impacts would be reduced to less than significant.

The County of Riverside prohibits noise levels from exceeding 45 dBA $L_{eq10}$, between the hours of 10:00 p.m. and 7:00 a.m. (nighttime standard) and from exceeding 65 dBA $L_{eq10}$ between the hours of 7:00 a.m. and 10:00 p.m. (daytime standard) at residential properties. These standards apply to operational noise projected to the homes located southeast of the site. These operations could, therefore, exceed the County's nighttime operational noise level standard unless mitigation is incorporated. Inclusion of loading bay doors equipped with sealed gaskets would be expected to reduce loading/unloading maximum operational noise levels by at least 15 dBA. This would

effectively reduce loading/unloading operational noise levels to below a combined hourly average noise level of 37 dBA $L_{eq10}$, meeting the County of Riverside's nighttime operational noise standard of 45 dBA $L_{eq10}$. With implementation of this measure, loading/unloading operational noise impacts would be reduced to less than significant.

*Heating, Ventilating, and Air Conditioning Equipment Noise*

The proposed project would have rooftop heating, ventilating, and air conditioning (HVAC) equipment. Although no final design is available at this time for the type and location of the rooftop mechanical units, based on noise measurements conducted at a similar use, rooftop HVAC units generate noise levels of approximately 62 dBA at 50 feet, and the roof edge (parapet) creates a noise barrier that reduces noise levels from rooftop HVAC units by an additional 3 to 5 dBA or more from ground floor receptors. The closest sensitive receptor to the west of the project site is the residence located approximately 880 feet from the nearest proposed building façade, and an estimated 900 feet from the nearest possible location for proposed rooftop HVAC units. At this distance, operational noise levels of the proposed HVAC units would attenuate to below 37 dBA $L_{eq}$. This is below the existing measured ambient noise level in the vicinity of this receptor, and well below both the daytime and nighttime operational noise standards of the City of Calimesa and County of Riverside.

Therefore, noise from operation of proposed rooftop HVAC units would not result in violations of County of Riverside Code or City of Calimesa Municipal Ordinance, and would result in a less than significant impact.

### *Level of Significance Before Mitigation*

Potentially significant impact due to loading/unloading operational noise levels exceeding local nighttime operational noise level standards. The following mitigation measures are recommended to reduce loading/unloading operational noise impacts.

### *Mitigation Measures*

**MM NOI-8a** All project loading bays shall be equipped with sealed gasket bay doors. The project applicant shall ensure that these sealed gasket bay doors are used for all nighttime loading/unloading operations. Inclusion of loading bay doors equipped with sealed gaskets would be expected to reduce loading/unloading maximum operational noise levels by at least 15 dBA. This would effectively reduce loading/unloading operational noise levels to below a combined hourly average noise level of 37 dBA $L_{eq10}$, meeting the County of Riverside's nighttime operational noise standard of 45 dBA $L_{eq10}$.

### *Level of Significance After Mitigation*

Less than significant impact with mitigation incorporated.

## Groundborne Vibration

**Impact NOI-9: The project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**

### *Impact Analysis*

This section analyzes both groundborne vibration and operational vibration. The County of Riverside, the City of Calimesa, and the State of California have not adopted criteria or regulations for groundborne vibration or groundborne noise. Therefore, for purposes of this analysis, the annoyance and damage criteria of the FTA are utilized.

*Construction Vibration Impacts*

The Federal Transit Administration (FTA) has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document (FTA 2006). The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 3.12-5, above.

Table 3.12-2 shows the PPV of some common construction equipment and haul trucks (loaded trucks). The most vibration-causing piece of equipment that will likely be used on-site is the large vibratory roller. Because of the proximity of the homes located adjacent to the site to the west and southeast of the project site, construction activities may result in ground borne vibration that is annoying, but is not expected to result in building damage, pursuant to FTA damage criteria. The nearest residences are located approximately 110 feet from the construction area footprint. At this distance, operation of even the heaviest equipment that would be operating on the project site would result in maximum groundborne vibration levels of up to 0.023 PPV. This is well below the FTA's damage threshold criteria of 0.12 PPV for even the most fragile structures.

Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB. Residences are included under Land Use Category 2 (as defined by FTA) and infrequent vibration events are considered acceptable up to 80 VdB at the receiving use. Large vibratory rollers used during construction would be expected to generate 94 VdB within 25 feet of the equipment. The nearest residences are located approximately 110 feet from the construction area footprint where the heaviest construction equipment would potentially operate. At this distance vibration levels could range up to approximately 74 VdB. These levels are below the FTA's 80 VdB threshold that is considered to be acceptable for infrequent events. Furthermore, any annoyance would only occur during site grading and preparation activities, and would therefore be intermittent and temporary in nature. Therefore, construction activities would not result in exposure of persons to or generation of excessive groundborne vibration levels.

*Operational Vibration Impacts*

Based on the data shown in Table 3.12-2, loaded trucks are not anticipated to exceed 0.076 in/sec peak particle velocity (PPV) or 86 VdB at 25 feet. These vibration levels are below the normal perception level and well below the possible FTA damage criteria thresholds. In addition, all off-site structures are located more than 25 feet from proposed project travel ways. Therefore, project

operational vibration levels would not exceed groundborne noise or groundborne vibration thresholds presented above. Impacts associated with operational vibration would be considered less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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# 3.13 - Population and Housing

This section addresses potential impacts to population and housing, resulting from the project. The purpose of this section is to evaluate current housing needs, growth projections, and project characteristics as a basis for evaluating potential impacts of the project, and to identify any measures necessary to mitigate potential impacts to population and housing. Information and analysis in this section is supported by an economic study: Gross Fiscal Impact and Economic Benefit Analysis (Kosmont 2015), hereafter, the Kosmont Study. Additionally, a previous study, the Economic Impact of the Gateway Distribution Center also provides substantial background data for the area (Economics 2014). The studies are included in Appendix J.

## 3.13.1 - Existing Conditions

The project site is currently undeveloped and unpopulated. A mobile-home park is located approximately 0.26 mile west of the site, off Calimesa Boulevard. The I-10 Freeway is located approximately 0.35 mile southwest of the project site. Land to the south consists of scattered vacant parcels and the Sunny Cal Egg Ranch, which is no longer in operation. The Sunny Cal Egg Ranch site has been approved as a planned community development that would comprise approximately 560 residential units at buildout. East of the project site is a mix of properties used for agriculture purposes and large-lot, rural single-family development.

Additional uses in the vicinity of the project site include a residential neighborhood east of the I-10 Freeway, directly south of Brookside Avenue, and north of the Oak Valley Golf Club. In addition, the PGA Golf Course and several developing residential neighborhoods, as well as the approved Oak Valley Specific Plan (approximately 4,000 residential units), are located across the I-10 Freeway, to the west.

A few residences are located north of the project site. The roadway providing primary access to the project site would also provide access to four existing single-family residences located approximately 290 to 700 feet north of the project site. The project does not propose development of any housing units.

### Population

The population of unincorporated areas of Riverside County in 2014 was 363, 590, based on Department of Finance (DOF) information. The DOF estimates that the population decreased approximately 19.5 percent from 2011 to 2014 (451,722 in 2011 to 363,590 in 2014). The population increased at a rate of approximately 1.8 percent from 2013 to 2014. Table 3.13-1 provides additional historical information for both the Unincorporated Areas and the County as a whole.

**Table 3.13-1: Department of Finance Population Estimates 2011 to 2013**

| Unincorporated Areas of Riverside County | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Population | 451,722 | 357,699 | 358,827 | 363,590 |
| Housing Units | 159,658 | 133,550 | 133,395 | 134,466 |

**Table 3.13-1 (cont.): Department of Finance Population Estimates 2011 to 2013**

| Unincorporated Areas of Riverside County | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Average Household Size | 3.27 | 3.15 | 3.16 | 3.18 |
| **Riverside County (All)** | **2011** | **2012** | **2013** | **2014** |
| Population | 2,205,731 | 2,234,193 | 2,255,059 | 2,279,967 |
| Housing Units | 804,913 | 807,970 | 812,234 | 817,008 |
| Average Household Size | 3.15 | 3.17 | 3.19 | 3.21 |
| Source: Department of Finance, 2014. | | | | |

SCAG predicts that the population of unincorporated Riverside County will grow from 43,500 in 2020 to 58,100 in 2035, which is an approximate 34 percent increase over a period of 15 years. Table 3.13-2 provides information for Unincorporated Areas of Riverside County and the region.

**Table 3.13-2: SCAG Population, Housing, and Employment Forecasts**

| Adopted Unincorporated Riverside County Forecasts | Year 2020 | Year 2035 |
|---|---|---|
| Population | 43,500 | 58,100 |
| Households | 15,400 | 20,900 |
| Employment | 5,100 | 6,900 |
| **Adopted SCAG Region Wide Forecasts** | **Year 2020** | **Year 2035** |
| Population | 19,663,000 | 22,091,000 |
| Households | 6,458,000 | 7,325,000 |
| Employment | 8,414,000 | 9,441,000 |
| Source:<br>SCAG NOP Comment Letter 2014; Appendix A. | | |

## Housing

According to Table 3.13-1, there are 134,466 household units within the unincorporated areas of Riverside County for year 2014, with an average of 3.18 persons per household. Approximately 70 percent of the housing in this region is single-family housing (DOF 2014).

In addition, according to Table 3.13-2, SCAG forecasts an increase of 5,500 households to occur within unincorporated Riverside County from 2020 to 2035 (15,400 to 20,900 households).

### Employment

According to Table 3.13-2, SCAG forecasts an increase of 1,800 jobs to occur within unincorporated Riverside County from 2020 to 2035 (5,100 to 6,900 jobs).

## 3.13.2 - Regulatory Setting

### Southern California Association of Governments

SCAG is the regional governing body for the majority of the Southern California region, including the counties of Orange, Los Angeles, San Bernardino, Riverside, and Imperial. Regional associations of governments were created by the State to guide land use decisions that overlap multiple local jurisdictions and to provide policy guidance in the region. SCAG is Southern California's forum for addressing regional issues concerning transportation, the economy, community development, and the environment. As a Metropolitan Planning Organization (MPO), SCAG's main responsibilities under State and federal law are completing the Regional Transportation Plan (RTP) and the Regional Housing Needs Assessment (RHNA). The RHNA is not applicable because the project does not propose development of housing. The RTP involves preparation of long-range transportation plans and development and adoption of transportation improvement programs that allocate State and federal funds for highway, transit, and other surface transportation projects. While SCAG does not have formal regulatory authority and therefore cannot directly implement land use decisions, SCAG guides land use planning for the Southern California region through intergovernmental coordination and consensus building. As a result, the San Gorgonio Crossing project must be evaluated for consistency with the regional policies contained within the SCAG Regional Comprehensive Plan and Guide. SCAG serves as the regional clearinghouse for projects requiring environmental documentation under State and federal law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

#### *SCAG 2008 Regional Comprehensive Plan*

The 2008 SCAG Regional Comprehensive Plan (RCP) presents the region's forecasts and policies for dealing with anticipated growth including population, housing, and employment throughout Southern California. Growth projections contained in the RCP are based on a compilation of county and local projections. RCP forecasts are used as the basis for formulation of regional plans dealing with regional air quality, housing, transportation/circulation, and other infrastructure issues.

#### *SCAG 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy*

The Regional Transportation Plan (RTP) is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

#### *SCAG Compass Blueprint Vision Growth Plan*

The fundamental goal of Compass Blueprint Vision Growth Plan is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class. Thus,

decisions regarding growth, transportation, land use, and economic development should be made to promote and sustain the region's mobility, livability, and prosperity for future generations. Regional Growth principles provide a framework for local and regional decisions that include a specific set of strategies intended to achieve the goals that follow.

*Principle 1: Improve Mobility*

- Encourage transportation investments and land use decisions that are mutually supportive.
- Locate new housing near existing jobs and new jobs near existing housing.
- Encourage transit-oriented development.
- Promote a variety of travel choices.

*Principle 2: Foster Livability*

- Promote infill development and redevelopment to revitalize existing communities.
- Promote development that provides a mix of uses.
- Promote "people-scaled" walkable communities.
- Support the preservation of stable, single-family neighborhoods.

*Principle 3: Enable Prosperity*

- Provide a variety of housing types to support all income levels.
- Support education opportunities that promote balanced growth.
- Ensure environmental justice.
- Support fiscal policies that encourage balanced growth.

*Principle 4: Promote Sustainability*

- Preserve rural, agricultural, recreational, and environmentally sensitive areas.
- Focus development in urban centers and existing cities.
- Use resources efficiently, eliminate pollution, and reduce waste.
- Utilize "green" development strategies.

The Compass Blueprint Vision Growth Plan designates selected jurisdictions in key growth areas within the region to develop tools to implement the four principles. The Compass Blueprint Vision Growth Plan is based upon making incremental changes in 2 percent of the land area within the region to promote mobility, livability, prosperity, and sustainability. Compass Blueprint Plan opportunity areas have been established throughout the region.

## 3.13.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to population and housing are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

d) Affect a County Redevelopment Project Area?

e) Cumulatively exceed official regional or local population projections?

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

## 3.13.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Housing Displacement/Replacement Housing

| | |
|---|---|
| **Impact POP-1:** | **The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.** |

#### *Impact Analysis*

Existing housing near the project site consists of a few residences north and west of the project site. A mobile-home park is located approximately 0.26 mile west of the site, off Calimesa Boulevard. East of the project site is a mix of properties used for agriculture purposes and large-lot, rural single-family development.

The project would not result in the displacement of housing because no housing exists on the project site. Additionally, the project would not restrict access for local residents, as the project includes the construction of a public right-of-way ("A Street") that would allow existing residents north of the site to access their homes. Thus, housing north of the site would not be impacted.

Therefore, the project would result in no impact on existing housing.

#### *Level of Significance Before Mitigation*

No impact.

#### *Mitigation Measures*

No mitigation measures are required.

#### *Level of Significance After Mitigation*

No impact.

## Additional Housing

**Impact POP-2:** **The project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income.**

### *Impact Analysis*

During the construction phase, the project is estimated to create approximately 577 jobs in Riverside County, including direct, indirect, and induced jobs (Kosmont 2015). The City of Calimesa would capture approximately 18 of these construction jobs. These jobs would be temporary in nature, and primarily filled by local residents; thus, the project construction phase would not create a demand for any additional housing.

The Fiscal and Economic Benefits Study estimated the potential range of direct, indirect, and induced (permanent) jobs that would be created by the operation of the project during operation (Kosmont 2015). Job estimates are based on project square footage, local comparable industry employee-per-square-foot assumptions, and fiscal analysis in the aforementioned 2015 Kosmont Report prepared for this project. As shown in Table 3.13-3, the project would create a substantial number of direct, permanent jobs, as well as additional indirect and induced jobs.

**Table 3.13-3: Estimate of Direct, Indirect, and Induced Jobs (Permanent)**

| Jurisdiction | Direct | Indirect | Induced | Total |
|---|---|---|---|---|
| City of Calimesa | — | — | — | 23 |
| Countywide | 518 | 116 | 115 | 748[1] |
| *County Total* | 518 | 116 | 115 | 748 |

Note:
[1] Includes the estimated City of Calimesa Capture.
Source: Kosmont 2015.

The job creation estimates within Table 3.13-3 are based on employee-per-square-foot assumptions. Further detail relating to the employment estimates is located in the Fiscal Impact and Economic Benefit Analysis prepared for the project, included as Appendix J to this Draft EIR (Kosmont 2015).

Thus, the creation of approximately 748 new jobs (including 507 permanent on-site, full-time-equivalent (FTE) jobs, and 241 off-site indirect and induced jobs) is not anticipated to have a significant impact regarding a demand for additional housing, particularly affordable housing. Furthermore, most of the new jobs would be filled by local residents, due to the current economic climate of the region. According to the Economic Impact report, the Pass Area had an 11.5 percent unemployment rate in 2013, down from 17.6 percent in 2010 (Economics 2014). Additionally, the Pass Area's jobs to housing ratio is approximately 0.598, which reflects the availability of local jobs for each occupied home in a community. The Pass Area is far below the 1.102 ratio for the Inland Empire or the 1.168 ratio for all of the Southern California. Thus, any local housing needs would be met by existing housing stock (Economics 2014).

Therefore, it is anticipated that a large portion of the permanent jobs created would be filled by persons already living in the project area, and housing would be sufficient. Thus, a less than significant impact to housing demand is anticipated.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Displace People

| | |
|---|---|
| **Impact POP-3:** | **The project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.** |

### *Impact Analysis*

As described above, there are no residences on-site, and access to adjacent homes would not be impacted by the project. Additionally, no one lives on the project site. Thus, development of the project would not displace anyone. Therefore, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Redevelopment Project Area

| | |
|---|---|
| **Impact POP-4:** | **The project would not affect a County Redevelopment project Area.** |

### *Impact Analysis*

As identified in the County of Riverside Transportation Land Management Agency (TLMA) website, the project is not located in a Redevelopment Area. Accordingly, the project would not impact any County Redevelopment project area. Additionally, planned operations from the site will not cause off-site impacts to any Redevelopment Areas. Therefore, the project would have no impact.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Exceed Population Projections

| | |
|---|---|
| **Impact POP-5:** | **The project would not cumulatively exceed official regional or local population projections.** |

### *Impact Analysis*

Although the project would generate additional employment, potential direct or indirect impacts would be less than significant. Since existing and planned residential development included in the County of Riverside General Plan would be capable of accommodating growth from the project, no cumulative impacts are expected with respect to potential population increases that may result from the employment generated by the project. Furthermore, the population growth from the project's employees would be below the 2020 and 2035 SCAG projections for unincorporated Riverside County of 43,500 and 58,100 respectively (SCAG 2014). Potential impacts would not be deemed cumulatively considerable, and therefore, would be less than significant.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Population Growth

| | |
|---|---|
| **Impact POP-6:** | **The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).** |

### *Impact Analysis*

The project proposes the construction of two industrial buildings, totaling approximately 1.8 million square feet of industrial floor area. The project would generate approximately 518 full-time direct equivalent employees, 116 indirect employees, 115 induced employees for a total of 748 permanent, full-time employees. Construction would also generate approximately 577 short-term employees (direct, indirect, and induced). Most of the new jobs would be filled by local residents, due to the current economic climate of the region. As previously discussed in Impact POP-1, the Pass Area had an 11.5 percent unemployment rate in 2013.

Thus, during full operation of the project, the total number of employees is not anticipated to induce a substantial addition of development or population growth. Furthermore, the infrastructure constructed by the project would mainly serve the project's needs and would not induce population growth. Impacts related to population growth are therefore less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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# 3.14 - Public Services

This section describes the existing public services setting and potential effects from project implementation on the site and its surrounding area. The information contained in this section was collected from local public agencies and County departments. Other relevant public service data was assembled through official websites, email, and correspondence. Additionally, information in this section is also based on the Economics & Politics, Inc. January 2014 Economic Impact of Gateway Distribution Center analysis and the Kosmont Companies, 2015 Fiscal Impact Analysis and Economic Benefit Analysis prepared for the project. The correspondence, and Fiscal and Economic Analyses are included as Appendix J of this Draft EIR.

## 3.14.1 - Existing Conditions

### Fire Services

To understand the existing fire protection services setting in the project area and whether implementation of the project could potentially impact existing fire protection facilities in the area, Ben Johnson, Planning and Development Supervisor with the California Department of Forestry and Fire Protection (CAL FIRE) was contacted via email on June 11, 2013.

Fire prevention, fire protection, and emergency medical assistance is provided by the Riverside County Fire Department (RCFD). In addition to providing fire protection services to unincorporated areas, the RCFD provides fire protection services to 16 cities on a contractual basis.

Fire response for the County is part of a mutual aid program with all of the cities in the County. Upon receipt of the call for services, RCFD will dispatch the closest resources in the area to respond to the call. The ECC is a combined county, state, and local agency dispatch center, which is responsible for alerting and handling incidents over a 7,200-square-mile area (Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume I). The cities immediately adjacent to Riverside County contract for emergency services with the RCFD and are part of RCFD's Cooperative Regional Integrated Fire Protection System. Other jurisdictions typically participate through mutual or automatic aid agreements with CAL FIRE and RCFD (Johnson pers. comm.).

The majority of Riverside County fire stations have a minimum of three career firefighters on duty at all times; typically, an officer, a paramedic, and a firefighter. Station 21 has two career firefighters on duty at all times, and no paramedics. Volunteer firefighters may augment the career firefighters.

According to the RCFD Strategic Plan Addendum, the County is divided into four land use designation Areas for fire protection purposes: (1) Urban; (2) Suburban; (3) Rural; and (4) Outlying.

According to the RCFD Strategic Plan, each land use designation is broken into individual categories relating to fire control goals: (1) Fire station location; (2) Suppression initiated; (3) Full assignment in operation; and (4) Initial attack fire control. There are minute values assigned to each land use designator. The values are currently in place through adoption; however, there have been internal adjustments based on new information, operational needs and technologies. While the adopted Fire

Protection Master Plan created standardized guidelines for response and station locations, the information was largely based on available documents and references from the 1980s and prior. Current technology, equipment and dispatch policies have advanced and created the ability to extend spatial distance between facilities (RCFD Strategic Plan 2009). Based on the Addendum to the Strategic Plan and confirmation by RCFD, the project area would be considered to be within the suburban category. Suburban is described as medium- to medium-high density residential, light industrial and/or light commercial. As a light industrial use, the project would align with the aforementioned characterization.

There are several County fire stations within 5 miles of the general project area. Station 21 (906 Park Avenue, Calimesa, California, 92320) is located approximately 2.65 miles northwest of the project site. This station is staffed with two professional firefighters who are both trained for basic life support, and equipped with one engine. No other specialized equipment is present at Station 21. This station's total response time of 7 minutes and 5 seconds is well within the response time standard for a "rural" land use as defined by RCFD in its Strategic Master Plan and correspondence with RCFD (Lawe pers. comm.). However, as previously discussed, the project area would fall within the suburban category. "Suburban" area response time goals are 6 minutes 30 seconds (Lawe pers. comm.).

Station 22 (10055 Avenida Miravilla in Cherry Valley, California, 92223) is located approximately 2.75 miles northeast of the project site and has a total response time of 7 minutes and 43 seconds. This station has one paramedic assessment engine (RCFD 2003d). The City of Beaumont fire station (Fire Station 20) (1550 East 6th Street, Beaumont, California, 92223) is equipped with one paramedic assessment engine, two engines, and one dozer. This station is located approximately 4.7 miles southeast of the project site. Another City of Beaumont fire station, Fire Station 66, located at 628 Maple Street is equipped with one paramedic assessment engine, and has a total response time of 8 minutes and 22 seconds. This fire station is located approximately 3.7 miles southeast of the project site.

With the exception of Station 21, all stations are equipped with a minimum of one engine and three professional firefighters, at least one of whom is an advanced life support paramedic. Within the RCFD, the nearest ladder truck is located at Station 2 (Sunnymead) at 24935 Hemlock, Moreno Valley, California, 92557. This station would have a total response time of 21 minutes and 50 seconds (Lawe pers. comm.). A ladder truck is also located at the Morongo Reservation Station (as part of Morongo Band of Mission Indians Fire Department) at 11581 Potrero Road, Banning, California, 92220 (Johnson pers. comm.).

## Sheriff Services

To understand the existing law enforcement services setting in the project area and whether implementation of the project could potentially impact existing law enforcement facilities in the area, Don Fortney, Administrative Sergeant with the Riverside County Sheriff's Department's Cabazon station was contacted via email on June 25, 2013.

The Riverside Sheriff's Department is the second largest Sheriff's Office in California, managing five correctional facilities, Coroner-Public Administrator duties, and providing court services (Riverside

County 2013b). As shown on the Sheriff Department's website, the project is within one of the communities served by the Cabazon Sheriff's Station, which serves the following communities: Cabazon, Calimesa, Cherry Valley, Morongo Indian Reservation, Poppet Flats, San Gorgonio San Timeteo Canyon, Twin Pines, and Whitewater. The Cabazon Sheriff Station is located at 50290 Main Street in Cabazon, approximately 14.1 miles southeast of the project site. The Cabazon station would provide first-response service within the project area. The project would fall into the patrol area recognized as Zone-l, Beat 42, of the Cabazon Sheriffs Station's jurisdiction. Approximate response times for patrol units to emergency calls throughout the project area are:

- Priority 1 Calls—8.43 minutes
- Priority 2 Call—16.35 minutes
- Priority 3 Calls—28.01 minutes
- Priority 4 Calls—35.07 minutes (Fortney, pers comm.)

Below is a description of the number and types of vehicles and special equipment available at the Cabazon station. The Cabazon Sheriff's Station maintains a fleet of patrol vehicles (black and white emergency rated sedans) and 4-wheel drive (black and white patrol vehicles). The vehicle fleet is sufficient to maintain proper levels of service in reference to fielding patrol deputies. The Cabazon Sheriff's Station currently has three K-9 handlers assigned to the station that may be used during their specified duty hours or on a call-out, emergency need(s) basis. Specialty equipment such as helicopters are available through the County during their specified duty hours or on a call-out, emergency need(s) basis. Historically, the Cabazon Sheriff's Station has used mutual assistance on an emergency need(s) basis from outlying agencies including but not limited to:

1. Other outlying Riverside County Sheriff's Department patrol stations
2. San Bernardino County Sheriff's Department
3. California Department of Forestry
4. Banning Police Department
5. Beaumont Police Department
6. California Highway Patrol
7. Calimesa Police Department (Contract City, staffed by personnel from the Cabazon Sheriff's Station)

Table 3.14-1 outlines the closest County of Riverside Sheriff stations to the project site.

**Table 3.14-1: Sheriff Station Statistics**

| Sheriff Station | Address | Miles from Project Site |
|---|---|---|
| San Jacinto Police Department | 160 W. 6th Street.<br>San Jacinto, CA 92583 | 13.5 |
| Moreno Valley Police Dept. | 22850 Calle San Juan De Los Lagos<br>Moreno Valley, CA 92553 | 14.0 |

**Table 3.14-1 (cont.): Sheriff Station Statistics**

| Sheriff Station | Address | Miles from Project Site |
|---|---|---|
| Cabazon Station | 50290 Main Street<br>Cabazon, CA 92230 | 14.1 |
| Source: Personal Communication, Don Fortney, Administrative Sergeant with the Riverside County Sheriff's Department's Cabazon station. Email. June 25, 2013. | | |

## School Services

The Beaumont Unified School District (BUSD) provides school facilities for the project area, including the unincorporated area of Cherry Valley and the City of Beaumont. The School District operates six elementary schools (K-6), two middle schools (7-8), two high schools (9-12)—one of which is a continuation high school—and one adult school (BUSD 2013c). The project site is within the attendance boundary Brookside Elementary School, Mountain View Middle School, and Beaumont High School (BUSD 2013a). Table 3.14-2 identifies each school location, grades served, and enrollment figures.

**Table 3.14-2: Beaumont Unified School District Local School Facilities**

| School | Grades | Current Enrollment (2012-2013 School Year) | Address |
|---|---|---|---|
| **Elementary Schools** | | | |
| Anna M. Hause Elementary | K-6 | 776 | 1015 Carnation Lane<br>Beaumont, CA 92223 |
| Tournament Hills Elementary | K-5 | 724 | 36611 Champions Drive<br>Beaumont, CA 92223 |
| Palm Elementary | K-5 | 636 | 751 N. Palm Avenue<br>Beaumont, CA 92223 |
| Sundance Elementary | K-5 | 750 | 1520 E. 8th Street<br>Beaumont, CA 92223 |
| Three Rings Ranch Elementary | K-5 | 646 | 1040 Claiborne<br>Beaumont, CA 92223 |
| Brookside Elementary | K-5 | 603* | 38755 Brookside Avenue<br>Beaumont, CA 92223 |
| **Middle Schools** | | | |
| Mt. View Middle School | 6-8 | 956* | 200 Cougar Way<br>Beaumont, CA 92223 |
| San Gorgonio Middle School | 6 | 1,043 | 1591 Cherry Avenue<br>Beaumont, CA 92223 |

## Table 3.14-2(cont.): Beaumont Unified School District Local School Facilities

| School | Grades | Current Enrollment (2012-2013 School Year) | Address |
|---|---|---|---|
| **High Schools** | | | |
| Beaumont High School | 9-12 | 2,369* | 39139 Cherry Valley Boulevard<br>Beaumont, CA 92223 |
| **Alternative Education Facilities** | | | |
| Wellwood Resource Center Special Education Center | K-5 | N/A | 715 Wellwood Avenue<br>Beaumont, CA 92223 |
| San Andreas High School | 5-12 | 152 | 3232 Pacific Street<br>Highland, CA 92346 |
| Glen View (Continuation) High School | 9-12 | 101 | 902 E. Ninth Street<br>Beaumont, CA 92223 |
| Laura May Stewart Performance School Home Education Community Day Center/Wellwood Resource Center Special Education Center | N/A | N/A | 715 Wellwood Avenue<br>Beaumont, CA 92223 |
| Beaumont Adult School | N/A | N/A | 1575 Cherry Avenue<br>Beaumont, CA 92223 |
| Beaumont Adult School | N/A | N/A | 1575 Cherry Avenue<br>Beaumont, CA 92223 |

Notes:
N/A= not available
* February 4, 2014 NOP comment letter from the Beaumont Unified School District
Sources:
Website: http://dq.cde.ca.gov/dataquest/SearchName.asp?rbTimeFrame=oneyear&rYear=2012-13&cName=Beau&Topic=Enrollment&Level=District&submit1=Submit. Accessed April 24, 2013.
Website: http://www.beaumont-ca.schoolloop.com/cms/page_view?d=x&piid=&vpid=1251955385310. Accessed April 17, 2013.
Website: http://www.beaumont-ca.schoolloop.com/. Accessed April 17, 2013
FirstCarbon Solutions, 2013.

The project is within the attendance boundaries of the following schools:

## Table 3.14-3: Impacted School Sites

| Name of School | Design Capacity | Current Enrollment* | Planned Expansion |
|---|---|---|---|
| Brookside Elementary School | 930 | 603 | None |
| Mountain View Middle School | 1,350 | 956 | None |
| Beaumont High School | 3,660 | 2,369 | None |

Note:
* February 4, 2014 NOP comment letter from the Beaumont Unified School District
Source: June 5, 2013 Letter from the Beaumont Unified School District in response to an Information Request Letter sent for the project (Grundman, pers. comm.)

### Library Services

The Riverside County Library System is comprised of 35 branch libraries and two bookmobiles serving a population of more than 2 million residents. Library management offices are located at 5840 Mission Boulevard in Riverside. For over 85 years, Riverside County contracted with the City of Riverside for Library services. The library system was administered by a city-appointed Board of Library Trustees comprised entirely of City of Riverside residents. However, in 1990, due to fiscal changes, LSSI (a private firm) was selected to operate the County Library System. Riverside became the first public library system in the nation to outsource its library operations to a private firm[1].

## 3.14.2 - Regulatory Setting

### State Regulations

#### *California Building Standards Code*

The 2010 California Building Standards Code (CBC), contained in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the 2012 International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in multi-family buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

#### *California Fire Code*

The California Fire Code, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The California Fire Code regulates building standards set forth in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection. The California Fire Code is updated and published every 3 years by the California Building Standards Commission.

#### *Quimby Act*

The Quimby Act sets a standard park space to population ratio of up to 3 acres of park space per 1,000 persons. Cities with a ratio of higher than three acres per 1,000 persons can set a standard of up to 5 acres per 1,000 persons for new development. The calculation of a City's park space to population ratio is based on a comparison of the population count of the last federal Census to the amount of City-owned parkland. A 1982 amendment (Assembly Bill 1600) requires agencies to clearly show a reasonable relationship between the public need for a recreation facility or parkland and the type of development project on which the fee is imposed.

[1] http://www.lssi.com/communities/riverside-county-ca/Accessed May 6, 2014.

### *Senate Bill 50*

Senate Bill 50 (funded by Proposition 1A, approved in 1998) limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development, and provides instead for a standardized developer fee. SB 50 generally provides for a 50/50 state and local school facilities funding match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether state funding is available, whether the school district is eligible for state funding, and whether the school district meets certain additional criteria involving bonding capacity, year-round school, and the percentage of moveable classrooms in use.

### *California Government Code, Section 65995(b) and Education Code, Section 17620*

SB 50 amended Section 65995 of the California Government Code, which contains limitations on Section 17620 of the Education Code, the statute that authorizes school districts to assess development fees within school district boundaries. Section 65995(b)(3) of the Government Code requires the maximum square footage assessment for development to be increased every two years, according to inflation adjustments. On January 22, 2014, the State Allocation Board approved an inflationary increase applicable to "Level 1" developer fees to $3.36 per square foot for residential development and $0.54 for commercial development. The increases take effect immediately, and constitute a 4.93 percent change over the previously authorized amounts of $3.20 for residential development and $0.51 for commercial (State Allocation Board 2014). School districts may levy higher fees if they apply to the SAB and meet certain conditions.

### *Mitigation Fee Act*

Enacted as Assembly Bill 1600 on January 1, 1989, the Mitigation Fee Act (California Government Code 66000-66008) requires a local agency that is establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose and proposed use of the fee. The agency also must demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development project on which it is to be levied.

## Local Regulations

### *Fire Services*

The RCFD is the Operational Area Coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The RCFD also has several automatic aid agreements with other city jurisdictions as well as the adjacent National Forests. The County of Riverside contracts with the State of California for fire protection. Public Resources Code (PRC) 4142 affords legal authority for the California Department of Forestry and Fire Protection (CAL FIRE) to enter into agreements with local government entities to provide fire protection services with the approval of the Department of General Services. By virtue of this authority, CAL FIRE administers the RCFD (RCFD About Us 2003).

CAL FIRE's Fire Hazard Severity Zones in the State Responsibility Area (SRA) Map shows that the project site is located in a high fire hazard severity zone within a State Responsibility Area (CAL FIRE 2012). However, the area is not listed as a Very High Fire Hazard Severity Zone for Local Response Areas by CAL FIRE (Johnson, pers. comm.).

Fire policies and regulations governing the unincorporated areas of Riverside County include Riverside County Ordinance No. 787, Riverside County Fire Protection Master Plan, California Public Resources Code No. 4290, the Uniform Fire Code, and the Uniform Building Code.

Riverside County Ordinance No. 787 (as amended through 787.7)[2] is based on the California Building Code, and outlines fire protection standards for the safety, health, and welfare of the citizens of the County. Items regulated by Ordinance No. 787 include, but are not limited to storage of hazardous materials, water supply, and brush clearance.

### *Fire Mitigation Fee*

The fire mitigation fee was authorized by the Riverside County Board of Supervisors to fund the acquisition of land, buildings, furnishings, and apparatus necessary to mitigate fire risks. The mitigation fee requirement is identified during the land development review process by RCFD Emergency Services Engineering and Planning Staff located at TLMA Permit Assistance Centers. Current fee amounts are $400 per single-family dwelling unit and $0.25 per square foot for all other types of developments. The fee typically is due prior to the recordation of land divisions; however, there are provisions for deferral of the fee to the building permit stage. Payment of the fee is made to Fire Department staff located at the TLMA Permit Assistance Centers.

According to the County of Riverside website (County of Riverside Planning Department 2013), in addition to the application fees for Planning approvals and Building Permits, a property owner or developer may be required to pay other types of development fees. These may include developer mitigation fees and/or fire mitigation fees as described above.

### *Sheriff Services*

Riverside County Sheriff's Department has established the following criteria for its staffing requirements in unincorporated areas of the County (Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume I):

- One sworn officer per 1,000 population
- One supervisor and one support staff employee per seven officers
- One patrol vehicle per three sworn officers
- One school resource officer per school

### *County of Riverside General Plan*

The Land Use Element of the Riverside County General Plan establishes the following policies regarding public services.

*Fiscal Impacts*

The County's focus will be on resources providing child care and recreation services to the school-age and teen population. It will develop and implement a plan to expand services to more residents, in cooperation with other community agencies, and will ensure quality programming by providing facilities and working conditions that retain staff. The County will support the provision of child care

[2] Website: www.rivcocob.org/ords/700/787.pdf. Accessed November 13, 2015.

and early education services for infants and preschoolers by other agencies. Riverside County is expected to double its population by the year 2020. Not only does this growth place an additional burden on existing services, infrastructure, and facilities, but there is an ongoing need to address deteriorating facilities and infrastructure.

One of the challenges associated with this population increase will be to ensure that new growth pays for its share of public services and infrastructure, and that existing residents are not burdened with the costs of that new growth. In addition, the intent is to enhance the County's long-term financial solvency.

To achieve these goals, constant diligence is necessary to monitor the level of existing services, such as police and fire, the operation and maintenance of various facilities, and staffing levels, so that the County can respond to potential changes. The County recognizes that not every project can have a positive fiscal impact (e.g. low income housing, transit facility), but that overall the County must achieve a fiscal balance.

*Land Use Element*

**Policies**

- **LU 9.1:** Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.

The proposed project complies with this policy because all applicable public facilities fees will be paid for the proposed project.

- **LU 9.2:** Require a fiscal impact analysis for specific plans and major development proposals so as not to have a negative fiscal impact on the County.

The proposed project complies with this policy because a fiscal impact and economic benefit analysis has been prepared by Kosmont Companies for the proposed project (see Appendix J).

## 3.14.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to public services are significant environmental effects, the following questions are analyzed and evaluated.

> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
>
> a) Fire services?
> b) Sheriff services?
> c) Schools?
> d) Libraries?
> e) Health services?

## 3.14.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Fire Services

| | |
|---|---|
| **Impact PS-1:** | **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 fire services.** |

#### *Impact Analysis*

The County of Riverside General Plan requires new development within the County to follow specific policies to reduce impacts to fire services, which are listed previously in this section under the heading, "County of Riverside General Plan." Based on recent correspondence with Fire Captain Bill Lawe, the project would require a first alarm assignment of five engines and one truck company. According to the provided statistics, none of the engines/truck(s) required would be able to reach the site in under 6 minutes and 30 seconds, and would therefore not meet the suburban response time goal. This existing response time deficit would exist even without development of the project. Thus, the project would potentially contribute to existing cumulative impacts to response times within the area (see Section 4, Cumulative Impacts).

The project will further impact RCFD's ability to provide an acceptable level of emergency services, which will be most effectively addressed through the Applicant's required participation in the County's development impact fee program. Participation in development impact fees typically provides the flexibility necessary to RCFD to determine what capital expenditures/assets (e.g., new station, engine, equipment, etc.) are best suited to maintain acceptable service (Johnson, pers. comm.). The current County development impact fees (DIF) rates for Fire Protection Facilities within the Pass Area Plan are $1,779 per acre of industrial development (County of Riverside 2015). Based on the project's planned 1,823,760 square feet, the project would be assessed approximately $291,743 in development impact fees[3]. Payment of these fees is mandatory and is therefore not included as mitigation.

The Riverside County Fire Department has developed a methodology to determine the location of future fire stations. Attachment F of the adopted Riverside County Fire Department Strategic Plan (November 2009) indicates that the Strategic Planning Bureau was formed in 2007. The Strategic Planning Bureau reviews guidelines utilized to evaluate response and station placement related to speed, intersections, traffic, time of day, etc. This analysis is used as a fire station needs assessment tool. The information is used to determine threshold values for square footage of commercial/ industrial and residential units allowed prior to a facility requirement. These thresholds are applied through the planning process for predetermined locations within planning area zoning layers. It is

[3] 1,779 per acre x 164 applicable acres (Parcel 1, Parcel 2, Cherry Valley, Storm Drain and Grading, and overall backbone acreage included) = $291,743 (County of Riverside 2015). Final (total) fees will be determined by the County of Riverside and are subject to change.

recommended that this planned methodology continue to be used in order to establish appropriate facility placement concurrent with the adopted Strategic Plan response criteria.

Based on the adopted Riverside County Fire Protection Master Plan, one new fire station and/or engine company is recommended for every 2,000 new dwelling units and/or 3.5 million square feet of commercial/industrial occupancy. The project's square footage would not meet this threshold, and therefore would not trigger the need to create new or physically altered fire protection facilities, based on County standards.

The project will be developed in conformance with all applicable RCFD and building code standards to meet fire flow/pressure requirements and emergency access requirements. The two buildings would include internal sprinkler systems. The project is anticipated to generate an incremental increase for fire and emergency service. However, any project impacts that could contribute to the existing need for improvements to fire and emergency services would be alleviated through the project's fair-share contribution of development impact fees and mitigation fees. The Applicant would be required to pay such fees prior to the issuance of occupancy permits.

There are several County fire stations within 5 miles of the general project area. Located approximately 2.65 miles from the project site, Station 21 (Calimesa) at 906 Park Avenue, Calimesa, California, 92320 is the nearest station with a total response time of 7 minutes and 5 seconds (7:05), and therefore does not meeting the response time standard for a "suburban" land use as defined by RCFD. Station 2/Truck 2 in Moreno Valley would have a response time of 21 minutes and 50 seconds, which would not meet the response time standard for a "suburban" land use. The project will be designed to meet safety equipment standards, adequate emergency access, fire hydrants, water flows in compliance with the RCFD, and the payment of all applicable development impact fees. The project will be required to pay its "fair share" contribution into the County's development impact fee program. As discussed, Applicant contributions would include $291,743 in DIF with additional Fire Mitigation Fees set at $0.25 per square foot of non-residential (single-family) development. Thus, Fire Mitigation Fees are estimated at approximately $455,940,[4] but would ultimately be finalized during the land development review process by RCFD Emergency Services Engineering and Planning Staff located at TLMA Permit Assistance Centers. Total project fees related to fire protection and related infrastructure would be approximately $747,683.[5] The Applicant would be required to submit payment of such fees prior to issuance of occupancy permits.

Furthermore, the project would indirectly contribute the RCFD's ability to improve response times by contributing to the County's DIF and Transportation Uniform Mitigation Fee (TUMF) fee programs and by constructing interim improvements at the Cherry Valley Boulevard/I-10 Freeway interchange. Such program contributions and improvements would aid in reducing existing traffic impacts. Therefore, impacts to fire services are considered less than significant and no mitigation is required.

### *Level of Significance Before Mitigation*

Less than significant impact.

[4] This is an estimate based on available data, subject to change.
[5] This is an estimate based on available data, subject to change.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Sheriff Services

| | |
|---|---|
| **Impact PS-2:** | **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 sheriff services.** |

### *Impact Analysis*

For worst-case analysis purposes, the project is anticipated to operate 24 hours a day, 7 days a week. Based on a project-specific economic study, the project is estimated to create approximately 577 new jobs during construction, and approximately 748 jobs during operation (Kosmont 2015). For further information on employment estimate assumptions, see discussion in Section 3.13, Population and Housing, or the economic reports in this Draft EIR's Appendix J. During some of the construction period, construction fencing will be placed along the perimeter of the property, and full time security personnel will monitor the site and its contents.

The completed project will include permanent fencing, and all of the truck parking areas will be gated. During ongoing operations, the center and its occupants may choose to use in-house or third-party security personnel to monitor the perimeter and interior of the grounds. Security cameras, alarms and other systems may be implemented.

In addition, the deployment of high security check-in and checkout procedures may be used to ensure the security of the goods kept within the center. Those procedures may include screening, metal detectors and or inspections of personnel and or visitors.

The Riverside County Sheriff's Department (RCSD) provides law enforcement services. To maintain adequate funding for law enforcement facilities, the County has implemented the Development Impact Fee Program. This fee can be used to pay for one-time capital improvements, such as the purchase of land and equipment or the construction of new facilities. The project will be required to pay the established development mitigation fee prior to issuance of a certificate of occupancy for the proposed project buildings.

Industrial uses typically do not generate a substantial number of law enforcement service calls, compared with residential or commercial uses. Based on the industrial nature of the project and the security measures described above, the project is not anticipated to impact service ratios or response times such that additional RCSD facilities would need to be constructed. RCSD was provided with a copy of the January 6, 2014 Notice of Preparation and did not indicate any concerns with respect to increased service calls, service call response times, or the need to construct additional RCSD facilities as a result of the proposed project.

The County of Riverside requires the project to pay Development Impact Fees that will be used to obtain additional staffing and/or equipment in order to offset any of the potential increases in enforcement service calls. The current County DIF rate for Criminal Justice Public Facilities is $1,925 per acre of industrial development. Thus, the project would be required to pay approximately $315,686 to offset incremental impacts to police protection services.[6] Payment of these fees is mandatory and is therefore not included as mitigation.

The project will not require new construction or physical alteration of existing law enforcement facilities, and impacts to Sheriff services are anticipated to be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Schools

| | |
|---|---|
| **Impact PS-3:** | **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 schools.** |

### *Impact Analysis*

The project does not propose land uses that would directly generate new student enrollment at existing schools. However, the project could indirectly add students by creating new employment opportunities that may entice new residents to move into the area. Based on a project-specific economic study, the project is estimated to create approximately 577 temporary jobs and 748 permanent full-time equivalent jobs[7] once operational (Kosmont 2015). However, it is anticipated that the vast majority of the new positions will be filled from existing residents in the area, as opposed to creating positions that require a specific skill-set that necessitates the hiring of individuals from outside the region. According to the Economic Impact report, the Pass Area had an 11.5 percent unemployment rate in 2013, down from 17.6 percent in 2010 (Economics 2014). For further information on employment estimate assumptions, see discussion in Section 3.13, Population and Housing, and the economic reports in Appendix J.

At present, there is capacity for additional schools at the BUSD's facilities; however, the BUSD anticipates that this capacity will be insufficient to accommodate expected student growth over the next several years. The pace of home construction in the BUSD is expected to increase significantly,

[6] $1,925 per acre x 164 applicable acres (Parcel 1, Parcel 2, Cherry Valley, Storm Drain and Grading, and overall backbone acreage included) = $315,686. Final/total fees will be determined by the County of Riverside and are subject to change.

[7] Includes off-site indirect and induced jobs.

as several projects are in the preliminary and active planning stages and are awaiting approval to begin construction. No homes are proposed as part of the project, and as detailed below, school impact fees will be paid by the project to offset potential impacts. Further, as addressed above, it is anticipated that the vast majority of the new positions will be filled from existing residents in the area. Thus, it is not expected that a substantial quantity of new school-aged children will relocate within the BUSD boundary as a result of the project, as a majority of future employees will already reside within the area and will not have to relocate.

As discussed, the project site falls within the boundaries of the BUSD. The BUSD currently imposes fees of $0.54 per square foot for commercial/industrial projects. (Beaumont Unified School District Developer Impact Fees 2013). Additionally, SB 50 mandates that school-related impacts are covered by lawful payment of required school impact fees. Based on the project's planned 1,823,760 square feet, the project would be assessed approximately $984,830 in school impact fees (1,823,760 square feet multiplied by $0.54 per square foot of commercial square footage).[8] The project will be required to pay these fees, which shall serve to reduce any impacts to school facilities to less than significant. Payment of these fees is mandatory and therefore is not included as mitigation.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Libraries

| | |
|---|---|
| **Impact PS-4:** | **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 libraries.** |

### *Impact Analysis*

It is anticipated that the vast majority of the new positions will be filled from existing residents in the area. Thus, it is not expected that a substantial quantity of people will relocate within the County Library system's service area as a result of the project, as a majority of future employees will already reside within the area and will not have to relocate. Furthermore, employees of the project would not be expected to utilize library services during working hours. Based on the current ratio of residents to library facilities, the project's modest increase in new residential population will represent only a nominal shift in square foot of library space per capita in the County. Therefore, the project is anticipated to have a less than significant impact in regards to library services.

[8] Confirmed by Lisa Tarrats, Facilities Coordinator. Final fees are subject to change.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Health Services

| | |
|---|---|
| **Impact PS-5:** | **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 health services.** |

### *Impact Analysis*

There are approximately 18 hospitals[9] in the overall County area. As previously addressed, it is anticipated that the vast majority of the new positions will be filled from existing residents in the area. Thus, it is not expected that a substantial quantity of people will relocate within these hospitals' general service area as a result of the project, as a majority of future employees will already reside within the area and will not have to relocate. Based on the current ratio of residents to hospitals, the project's modest increase in new residential population will represent only a nominal shift in hospital facilities per capita in the County. Therefore, the project is anticipated to have a less than significant impact with regard to health services.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

[9] Page S-39 of the County of Riverside General Plan Safety Element.

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# 3.15 - Recreation

This section describes the existing setting for recreation and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Multipurpose Open Space Element of the 2014 County of Riverside General Plan, and figures from the County's 2008 General Plan.

## 3.15.1 - Existing Conditions

### Riverside County Regional Parks

Riverside County includes a wide range of open space, parks, and recreational areas, including Joshua Tree National Park and major state parks such as Anza-Borrego, the Salton Sea State Recreation Area, and Chino Hills State Park. County parks also serve residents and visitors in the western portion of the County, as well as in the desert, mountain, and Colorado River regions. Riverside County maintains 35 regional parks, encompassing roughly 23,317 acres. Local parks are under the jurisdiction of County Recreation and Park Districts and serve the following areas: the Beaumont- Cherry Valley area; the Coachella Valley area; the Jurupa area; the Valleywide area incorporating the San Jacinto Valley, the Winchester area, the Menifee Valley, and the Anza Valley (Multipurpose Open Space Element of the 2014 County of Riverside General Plan).

### Recreational Facilities in the Project Vicinity

The unincorporated community of Cherry Valley is located in the north-central portion of The Pass between the cities of Calimesa and Banning. The unincorporated community of Cherry Valley contains Edgar Canyon Nature Park and Bogart Park. The City of Beaumont contains six parks and two golf courses that are within 1 to 22 miles of the project area, including the Beaumont Sports Park, Stewart Park, Noble Creek Regional Park, Three Rings Ranch Community Park, Rangel Park, and Mountain View Park. Table 3.15-1 lists the park and recreational facilities located near the project site. The closest park to the project area is Noble Creek Park, which is located on Oak Valley Parkway, west of Beaumont Avenue, approximately 2.2 miles southeast of the project site. In addition, a small natural park (Edgar Canyon Nature Park) is approximately 2.4 miles east of the project site, located northeast of the intersection of Cherry Valley Boulevard and Beaumont Avenue. Additionally, there are a number of golf courses in the immediate area, including Oak Valley Southern California Professional Golfers Association (SCPGA), nearby in Beaumont, and the Calimesa Golf Course a few miles northwest of the project site, in Calimesa.

**Table 3.15-1: Nearby Park/Recreational Facilities**

| Park Name | Cross Streets | Amenities | Approximate Distance from the Project Site |
|---|---|---|---|
| San Bernardino National Forest[12] | Not Applicable | 22 campgrounds, 133 day hiking areas, 37 backpacking areas, 22 mountain biking areas, fishing areas (lakes, ponds, rivers, and streams), learning center, 18 picnicking areas, five horse camping areas, 38 horse riding areas, skiing/snowboarding areas | 12.27 miles northeast |

## Table 3.15-1 (cont.): Nearby Park/Recreational Facilities

| Park Name | Cross Streets | Amenities | Approximate Distance from the Project Site |
|---|---|---|---|
| **Public Parks/Recreational Facilities—Cherry Valley** | | | |
| Edgar Canyon Nature Park[13] | Vineland Street and Ave Miravilla | Open space | 2.4 miles east |
| Bogart Park[1] | Winesap Avenue and International Park Road | • 26 tent and RV camp sites<br>• Fishing pond<br>• Picnic areas<br>• Biking trails<br>• Equestrian trails<br>• Running trails<br>• Hiking trails | 3.7 miles northeast |
| Highland Springs Resort Golf Course[11] | Overland Trail and Frontier Trail | Swimming pool, restaurant, meeting rooms, non-smoking rooms, high-speed internet, hot tub/jacuzzi, resort, convention center | 4.66 miles east |
| **Public Parks - City of Calimesa** | | | |
| Calimesa Golf Course[10] | Slack Place and 3rd Street | 1 golf course, putting green, chipping area, practice bunker, food & beverage available, pull carts, rental clubs, driving range | 1.93 miles northwest |
| **Public Parks—City of Beaumont** | | | |
| Morongo Golf Club at Tuckwet Canyon[2] | Champions Drive and Cherry Valley Boulevard | 2 golf courses, clubhouse with food and beverage services, practice facilities (double-end driving range, two large putting greens, and two chipping greens) | 1.52 miles southwest |
| Oak Valley SCPGA[9] | Oak Valley Village Center and Golf Club Drive | • 1 golf course<br>• Practice facilities<br>• Clubhouse<br>• Restaurants<br>• Golf Shop | 2.12 miles southeast |
| Beaumont Sports Park[5,8] | Brookside Avenue and Beaumont Avenue | Running track, venue for organized sports and special sports events (basketball, baseball, softball) | 2.97 miles southeast |
| Stewart Park[5] | 9th Street and Orange Avenue | • 11-acre park<br>• Pavilion<br>• Restrooms<br>• Baseball diamond<br>• Basketball courts<br>• Playground<br>• Skateboard park | 3.93 miles southeast |

**Table 3.15-1 (cont.): Nearby Park/Recreational Facilities**

| Park Name | Cross Streets | Amenities | Approximate Distance from the Project Site |
|---|---|---|---|
| Noble Creek Regional Park[7] | Near Oak Valley Parkway and Beaumont Avenue | Noble Creek Community Center | 2.2 miles southeast |
| Three Rings Ranch Community Park[6] | Brookside Lane and Claiborne Avenue | Tot lot with benches an picnic benches | 3.25 miles southeast |
| Rangel Park[5] | 4th Street and B Street | • Valdivia Field<br>• Baseball fields<br>• Lighted field<br>• Tot area | 3.94 miles southeast |
| Mountain View Park[4] | Wiehe Avenue and Gardena Avenue | Tot lot and two basketball half-courts | 22 miles west |
| **Institutional Facilities[3]** | | | |
| Beaumont High School[14] | Cherry Valley Boulevard and Beaumont Avenue | Tennis courts, fields, basketball courts and track | 2.2 miles southwest |

Notes:
1 Website: http://www.rivcoparks.org/parks/bogart/bogart-park/. Accessed March 13, 2013.
2 Website: http://www.tukwetcanyon.com/. Accessed March 7, 2013
3 These amenities are intended for use primarily by the high school. Some amenities such as the fields and track may be available to the public when school is not in session and on the weekends.
4 Website: http://www.riversideca.gov/park_rec/amenities.asp. Accessed March 13, 2013.
5 Website: http://www.ci.beaumont.ca.us/index.aspx?nid=33 Accessed March 13, 2013.
6 Website: http://www.ci.beaumont.ca.us/index.aspx?nid=33. Accessed March 13, 2013.
7 Website: http://www.bcvparks.com/facilities.php. Accessed March 13, 2013.
8 Website: http://www.ci.beaumont.ca.us/index.aspx?nid=186. Accessed March 13, 2013.
9 Website: http://www.scpgagolf.com/facilities-overview/. Accessed March 13, 2013.
10 Website: http://www.golfnow.com/course-directory/california-golf-courses/calimesa-golf-courses/calimesa-country-club. Accessed March 13, 2013.
11 Website: http://www.hsresort.com. Accessed March 13, 2013.
12 Website: http://www.fs.usda.gov/sbnf. Accessed March 13, 2013.
13 Website: http://www.walkscore.com/place/edgar-canyon-nature-park-cherry-valley. Accessed March 13, 2013.
14 Website: http://beaumonths-beaumont-ca.schoolloop.com/. Accessed March 13, 2013
Source: FCS, 2013.

## 3.15.2 - Regulatory Setting

### State Regulations

#### *Quimby Act*

Section 66477 of the California Government Code, also known as the Quimby Act, was enacted in an effort to promote the availability of park and open space areas in California. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land, or the payment of fees for park and/or recreational facilities in lieu thereof, or both, by developers of residential subdivisions as a condition to the approval of a tentative map or parcel map. The Quimby Act permits the County to require parkland dedications not to exceed three acres of parkland per 1,000 persons residing within a subdivision, and/or in-lieu fee payments for residential development

projects. However, if the amount of existing neighborhood and community park space within the local jurisdiction exceeds that limit, the required dedication ratio cannot exceed five acres of parkland per 1,000 persons.

### Local Regulations

#### *Riverside County Ordinance*

Under Riverside County Ordinance 460.139, Section 10.35, Riverside County has adopted provisions implementing the Quimby Act by establishing a requirement for dedication of three acres of parkland per 1,000 population, or payment of a fee in lieu of such dedication. The fee or land dedications may only be used to provide neighborhood and community parks that serve the proposed development.

## 3.15.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether environmental impacts to recreation are significant, the following questions are analyzed and evaluated:

a) Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

c) Is the project located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?

d) Would the project impact recreational trails?

## 3.15.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

### Recreational Facilities

| | |
|---|---|
| **Impact REC-1:** | **The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.** |

#### *Impact Analysis*

There are ample park facilities in the vicinity of the project site, as described in the paragraph below; therefore, the project would not include any recreational facilities. Because no parks or parkland are proposed as part of the project, it is not anticipated that the project would result in substantial adverse physical impacts associated with the development of new park facilities. There are ample park facilities in the vicinity of the project site, as described in the paragraph below.

The closest park to the project area is Noble Creek Park, which is located on Oak Valley Parkway, west of Beaumont Avenue, approximately 2.2 miles southeast of the project site. There is also a small natural park (Edgar Canyon Nature Park), approximately 2.4 miles east of the project site, located northeast of the intersection of Cherry Valley Boulevard and Beaumont Avenue.

Based on the project-specific economic studies, the project is estimated to create approximately 577 jobs in Riverside County during the construction phase (Kosmont 2015), and 748 new permanent jobs (direct, indirect, induced) once in operation (Kosmont 2015). For further information on employment estimate assumptions, see discussion in Section 3.13, Population and Housing, and the economic reports in Appendix J.

There is a potential for the project to draw new residents in the project area because of the new employment opportunities. Although the exact number of new residents is speculative, the increase is not expected to substantially increase demands on existing neighborhood or regional parks or other recreational facilities, because it is not anticipated that a substantial number of new residents would be drawn to the project area for the new jobs. Further, since most positions would be filled by employees already living within the local region, it is assumed that these employees would already be utilizing local recreational opportunities and parks. Employees of the project would not be expected to utilize recreational facilities during the workday. Therefore, the project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Recreational Facilities Physical Effect

| | |
|---|---|
| **Impact REC-2:** | **The project would not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.** |

### *Impact Analysis*

As shown in The Pass Area Plan Figure 8, Trails and Bikeway System, there are no county trails or other recreational facilities located on the project site.

Currently, the closest recreational resources to the project site are the athletic fields at Beaumont High School located approximately 2 miles east. Residents in the project area use parks, recreational facilities, and programs provided by the County of Riverside and surrounding communities, including Beaumont and Calimesa. Refer to Table 3.15-1, Nearby Park/Recreational Facilities, which lists the parks and recreational facilities near the project site.

To understand the existing regional recreational setting in the project area and whether implementation of the project could potentially impact existing regional recreational facilities in the area, Marc Brewer, Senior Park Planner with the Riverside County Park and Open Space District was contacted via email on June 14, 2013. Mr. Brewer confirmed that the Riverside County Regional Park and Open-Space District does not expect a significant use impact from the project on the area's recreational facilities (Brewer, pers, comm.).

Furthermore, the project would feature on-site trails that connect with existing trails in the northern portion of the site, to contribute to the development of the City of Calimesa's trail system. Easements for these trails would be donated/dedicated to a responsible entity to be determined prior to project approval. A 12-foot-wide decomposed granite trail section would be constructed along the project frontage on the northern side of Cherry Valley Boulevard in accordance with County Standard 405, to accommodate pedestrians and equestrians. A trailhead would also be constructed in the southwest corner of the site, near the decorative water tower and barn features. Another decomposed granite trail would be provided along the western margin of the project site to accommodate hikers and equestrians, and would connect to the existing trails in the northern portion of the project site.

Development of trail access is not anticipated to have a significant impact on the environment, due to the limited nature of the improvements. The project would not otherwise include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Thus, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Community Service Area

| | |
|---|---|
| **Impact REC-3:** | **The project is not located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).** |

### *Impact Analysis*

To understand the existing local recreational setting in the project area including local park districts and whether implementation of the project could potentially impact existing local recreation facilities in the area, FirstCarbon Solutions contacted Diane Gonzalez, Activities Specialist with the Beaumont-Cherry Valley Recreation and Park District, via email on May 21, 2013.

The project is located within the unincorporated community of Cherry Valley within Riverside County. According to the County's Geographical Information System (GIS) information for the project site, the project is located within a CSA for lighting only, and the project does not lie within a

CSA for recreation. The Beaumont-Cherry Valley Recreation and Park District operates within the Cherry Valley/Beaumont area. The District does not have a Community Parks and Recreation Plan (Gonzalez, pers. comm.). Thus, the project will have a less than significant impact regarding a CSA for recreation, or a recreation and park district with a Community Parks and Recreation Plan.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Recreational Trails

**Impact REC-4: The project would not impact recreational trails.**

### *Impact Analysis*

As shown in The Pass Area Plan, Figure 8, Trails and Bikeway System, there are no county trails located on the project site. However, the City of Calimesa has a Proposed Multi-Use Trail System that includes several trailheads and trails categorized as "Unknown" within the project site. Once developed as described under Impact REC-2, above, the Multi-Use Trail System will offer a variety of recreational options. The trails will be designed to incorporate the existing historic trails while preserving sensitive open space using linear strips of open space, public easements, and floodplains. Various types of trails will be provided for walkers, joggers, bicyclists, and equestrians.

Currently, the project site contains some informal trails that traverse the project site. The project would feature on-site trails that connect with existing trails in the northern portion of the site to contribute to the development of the City of Calimesa's trail system, as described under Impact REC-2, above (Exhibit 3.15-1).

In addition, the employees associated with the project are not anticipated to have a significant impact on recreational trails, because the project is not expected to significantly increase the local population, and employees would not be expected to utilize these trails during the workday.

Thus, the project would have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

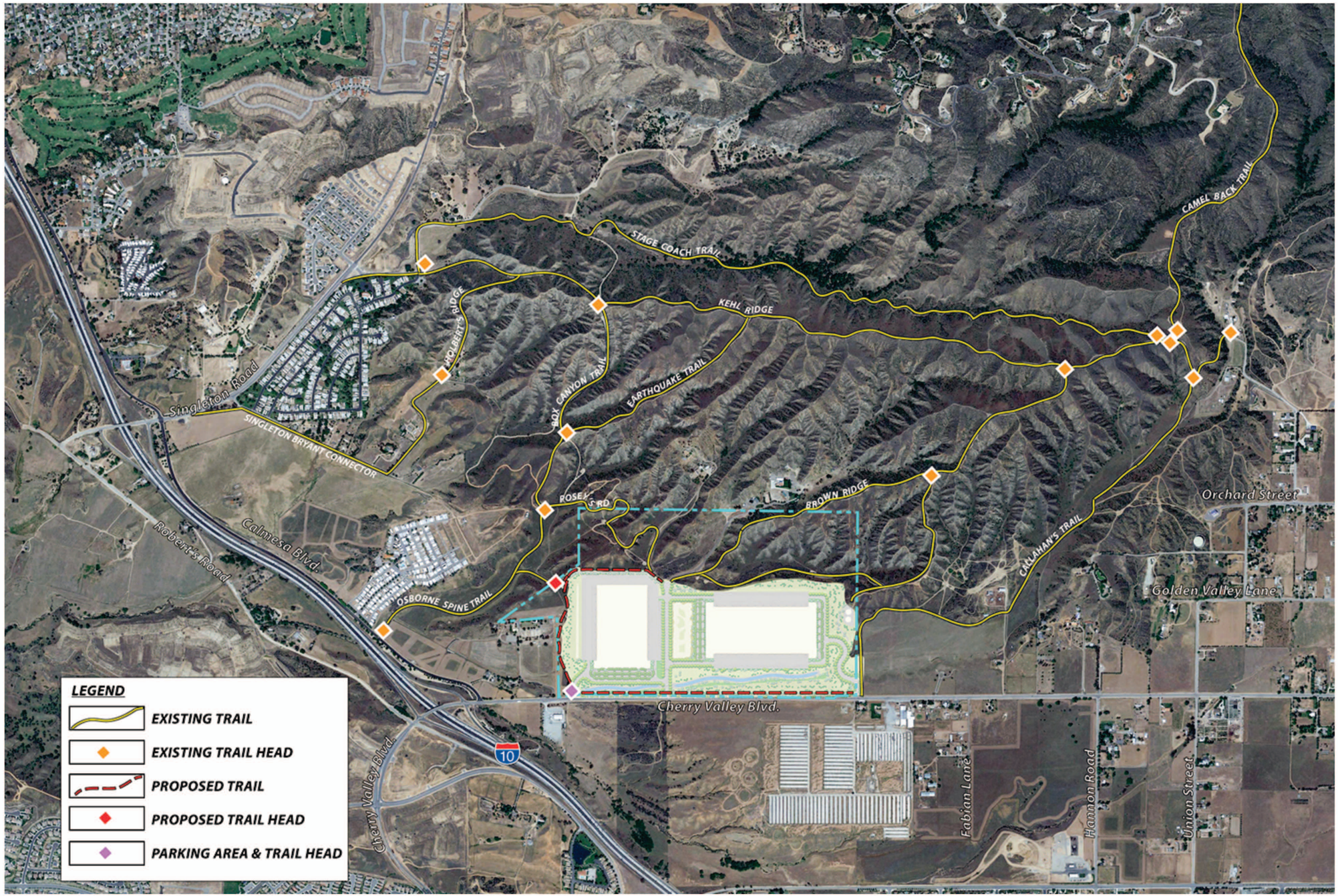
### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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Source: HPA Architecture, 2015.

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# Exhibit 3.15-1
# Proposed Trails

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# 3.16 - Transportation and Traffic

This section describes the existing transportation and traffic conditions and potential effects from project implementation on surrounding roads and intersections. Descriptions and analysis in this section are based on information contained in the Traffic Impact Analysis dated July 29, 2016; the San Gorgonio Crossing Supplemental Traffic Analysis dated April 2, 2015; the San Gorgonio Crossing Traffic Impact Analysis—Supplemental Expanded Freeway Segment Analysis dated November 5, 2014; and the San Gorgonio Crossing Supplemental Traffic Analysis dated June 9, 2016, prepared by Urban Crossroads, included in this Draft EIR as Appendix I ("Traffic Study").

## 3.16.1 - Existing Conditions

### Project Study Area

The project site is located along the north side of Cherry Valley Boulevard and east of the Interstate 10 Freeway (I-10), between the cities of Calimesa and Beaumont, within the unincorporated community of Cherry Valley in the County of Riverside, California. The project site has regional access via Cherry Valley Boulevard to the I-10 Freeway, and local access via Cherry Valley Boulevard, Brookside Avenue, and Oak Valley Parkway. Most of the land around the project site is vacant and in unincorporated areas of Riverside County. In addition, the City of Beaumont is located south of the project site, the City of Calimesa is located directly west and northwest of the site, and the City of Yucaipa is located approximately two miles north of the site.

#### *Intersections Analyzed*

Pursuant to the approved Traffic Study Scoping Agreement and discussion with the County of Riverside staff, the study area includes 10 existing and future intersections. Of these 10 intersections, the existing study area circulation network includes six intersection analysis locations shown in Table 3.16-1 and Exhibit 3.16-1. One intersection (Roberts Road and Cherry Valley Boulevard), would be built as part of the County of Riverside's anticipated growth[1] and is therefore considered within the Horizon Year (2035) analysis. The other three intersections in the study area are future project access points that do not exist currently. Exhibit 3.16-1 illustrates the study area intersections located near the project and identifies the number of through-traffic lanes for existing roadways and intersection traffic controls.

**Table 3.16-1: Intersection Analysis Locations**

| ID | Intersection Location | Jurisdiction |
|---|---|---|
| 1 | I-10 Freeway Eastbound Ramps/Cherry Valley Boulevard | Caltrans |
| 2 | I-10 Freeway Westbound Ramps/Cherry Valley Boulevard | Caltrans |
| 3 | Calimesa Boulevard/Cherry Valley Boulevard | Riverside County, Calimesa |
| 4 | Driveway 1/Cherry Valley Boulevard–Future Intersection (right-in/right-out) | Riverside County |

[1] The County has requested that this future intersection be analyzed under 2035 conditions. These improvements are included within General Plan Amendment #PM36564/PP25337 (FTA 2008-24).

**Table 3.16-1 (cont.): Intersection Analysis Locations**

| ID | Intersection Location | Jurisdiction |
|---|---|---|
| 5 | Street 2/Cherry Valley Boulevard–Future Intersection | Riverside County |
| 6 | Driveway 3/Cherry Valley Boulevard–Future Intersection (right-in/right-out) | Riverside County |
| 7 | Union Street/Cherry Valley Boulevard | Riverside County |
| 8 | Nancy Avenue/Cherry Valley Boulevard | Riverside County |
| 9 | Beaumont Avenue/Cherry Valley Boulevard | Riverside County |
| 10 | Roberts Road/Cherry Valley Boulevard | Riverside County |
| Source: Urban Crossroads, 2014. | | |

The potential impact study area and intersections to be evaluated was defined in coordination with the County of Riverside staff and in conformance with the requirements of the County's Traffic Impact Assessment preparation guidelines. Based on these guidelines, the minimum area to be studied shall include any intersection of "Collector" or higher classification streets, at which the project will add 50 or more peak-hour trips. The "50 peak hour trip" criterion used by the County of Riverside and the City of Calimesa is consistent with the methodology employed by other jurisdictions throughout Southern California, and generally represents a threshold of trips at which an intersection would have the potential to be significantly impacted. Although each intersection may have unique operating characteristics, this traffic engineering rule-of-thumb is a widely used tool for estimating a potential area of impact (i.e., study area).

### *Freeway Mainline Segments*

Consistent with Caltrans traffic study guidelines, the freeway mainline analysis locations includes those freeway segments where the project is anticipated to contribute 50 or more peak-hour trips. The study area freeway mainline analysis locations include a total of 56 segments, consisting of 34 I-10 Freeway mainline segments, and 22 SR-60 segments as shown on Table 3.16-2. Because the proposed project is not anticipated to contribute 50 or more peak-hour trips west of the I-215 Freeway on either the I-10 or SR-60 freeways, or east of the SR-60 and I-10 Freeway interchange, these segments are not required to be included within this analysis by Caltrans. (See November 5, 2014 Supplemental Expanded Freeway Segment Analysis, included in this Draft EIR as Appendix I.3).

**Table 3.16-2: Freeway Mainline Analysis Locations**

| ID | Freeway | Direction | Segment |
|---|---|---|---|
| 1 | I-10 | Westbound | I-215 Freeway to Waterman Av. |
| 2 | I-10 | Westbound | Waterman Av. to Tippecanoe Av. |
| 3 | I-10 | Westbound | Tippecanoe Av. to Mountain View Av. |
| 4 | I-10 | Westbound | Mountain View Av. to California St. |

## Table 3.16-2 (cont.): Freeway Mainline Analysis Locations

| ID | Freeway | Direction | Segment |
|---|---|---|---|
| 5 | I-10 | Westbound | California St. to Alabama St. |
| 6 | I-10 | Westbound | Alabama St. to Orange St. |
| 7 | I-10 | Westbound | Orange St. Cypress Av. |
| 8 | I-10 | Westbound | Cypress Av. to Ford St. |
| 9 | I-10 | Westbound | Ford St. to Wabash Av. |
| 10 | I-10 | Westbound | Wabash Av. to Yucaipa Bl. |
| 11 | I-10 | Westbound | Yucaipa Bl. to Live Oak Canyon Rd. |
| 12 | I-10 | Westbound | Live Oak Canyon Rd. to W. County Line Rd. |
| 13 | I-10 | Westbound | W. County Line Rd. to Calimesa Bl. |
| 14 | I-10 | Westbound | Calimesa Bl. to Singleton Rd. |
| 15 | I-10 | Westbound | Singleton Rd. to Cherry Valley Bl. |
| 16 | I-10 | Westbound | Cherry Valley Bl. to Oak Valley Pkwy. |
| 17 | I-10 | Westbound | Oak Valley Pkwy. to SR-60 Freeway |
| 18 | I-10 | Eastbound | I-215 Freeway to Waterman Av. |
| 19 | I-10 | Eastbound | Waterman Av. to Tippecanoe Av. |
| 20 | I-10 | Eastbound | Tippecanoe Av. to Mountain View Av. |
| 21 | I-10 | Eastbound | Mountain View Av. to California St. |
| 22 | I-10 | Eastbound | California St. to Alabama St. |
| 23 | I-10 | Eastbound | Alabama St. Orange St. |
| 24 | I-10 | Eastbound | Orange St. to Cypress Av. |
| 25 | I-10 | Eastbound | Cypress Av. to Ford St. |
| 26 | I-10 | Eastbound | Ford St. Wabash Av. |
| 27 | I-10 | Eastbound | Wabash Av. Yucaipa Bl. |
| 28 | I-10 | Eastbound | Yucaipa Bl. Live Oak Canyon Rd. |
| 29 | I-10 | Eastbound | Live Oak Canyon Rd. to W. County Line Rd. |
| 30 | I-10 | Eastbound | W. County Line Rd. to Calimesa Bl. |
| 31 | I-10 | Eastbound | Calimesa Bl. to Singleton Rd. |
| 32 | I-10 | Eastbound | Singleton Rd. Cherry Valley Bl. |
| 33 | I-10 | Eastbound | Cherry Valley Bl. to Oak Valley Pkwy. |
| 34 | I-10 | Eastbound | Oak Valley Pkwy. to SR-60 Freeway |
| 35 | SR-60 | Westbound | I-215 Freeway to Day St. |
| 36 | SR-60 | Westbound | Day St. to Frederick St./Pigeon Pass Rd. |

**Table 3.16-2 (cont.): Freeway Mainline Analysis Locations**

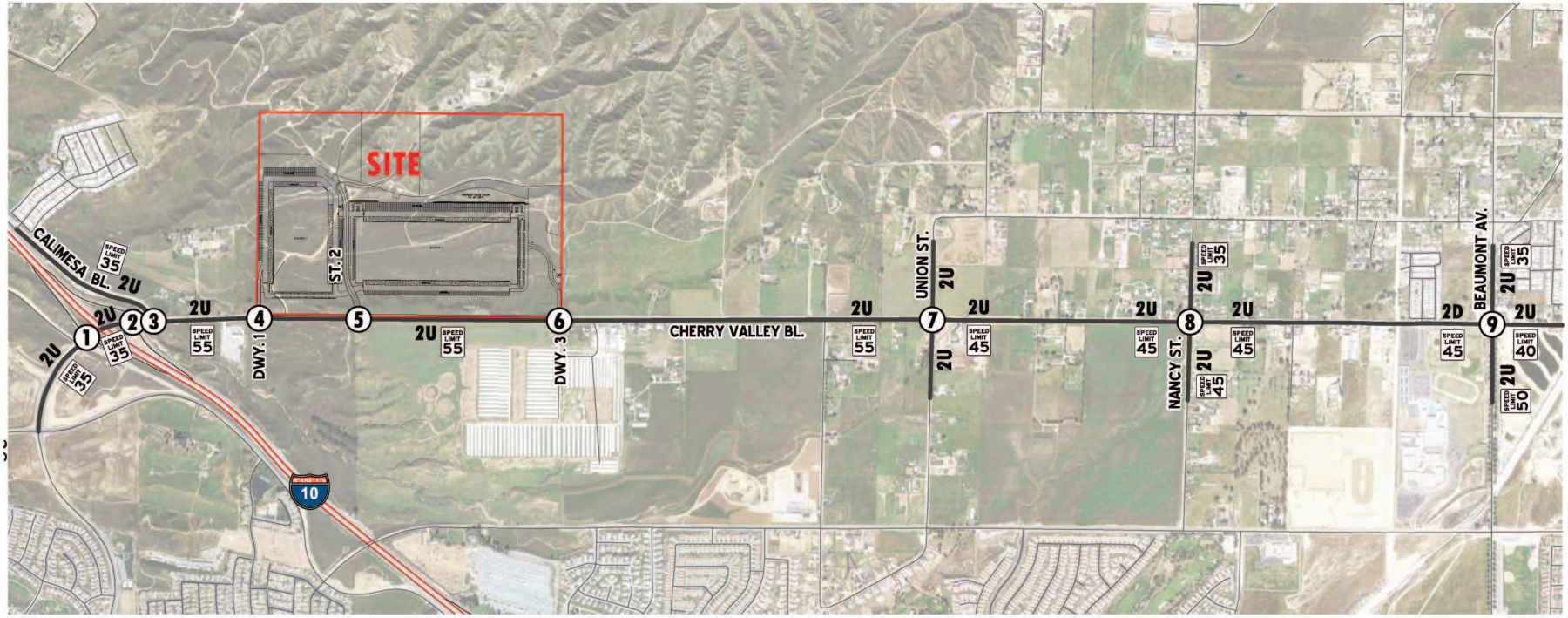
| ID | Freeway | Direction | Segment |
|---|---|---|---|
| 37 | SR-60 | Westbound | Frederick St./Pigeon Pass Rd. to Heacock St. |
| 38 | SR-60 | Westbound | Heacock St. to Perris Bl. |
| 39 | SR-60 | Westbound | Perris Bl. to Nason St. |
| 40 | SR-60 | Westbound | Nason St. to Moreno Beach Dr. |
| 41 | SR-60 | Westbound | Moreno Beach Dr. to Redlands Bl. |
| 42 | SR-60 | Westbound | Redlands Bl. to Theodore St. |
| 43 | SR-60 | Westbound | Theodore St. to Gilman Springs Rd. |
| 44 | SR-60 | Westbound | Gilman Springs Rd. to Jack Rabbit Tr. |
| 45 | SR-60 | Westbound | Jack Rabbit Tr. to I-10 Freeway |
| 46 | SR-60 | Eastbound | I-215 Freeway to Day St. |
| 47 | SR-60 | Eastbound | Day St. Frederick St./Pigeon Pass Rd. |
| 48 | SR-60 | Eastbound | Frederick St./Pigeon Pass Rd. to Heacock St. |
| 49 | SR-60 | Eastbound | Heacock St. to Perris Bl. |
| 50 | SR-60 | Eastbound | Perris Bl. to Nason St. |
| 51 | SR-60 | Eastbound | Nason St. Moreno Beach Dr. |
| 52 | SR-60 | Eastbound | Moreno Beach Dr. to Redlands Bl. |
| 53 | SR-60 | Eastbound | Redlands Bl. to Theodore St. |
| 54 | SR-60 | Eastbound | Theodore St. to Gilman Springs Rd. |
| 55 | SR-60 | Eastbound | Gilman Springs Rd. to Jack Rabbit Tr. |
| 56 | SR-60 | Eastbound | Jack Rabbit Tr. to I-10 Freeway |

### *Freeway Merge/Diverge Ramp Junctions*

The study area freeway merge/diverge ramp junction analysis locations include four (4) I-10 Freeway ramp junctions at Cherry Valley Boulevard for both eastbound and westbound directions of flow as shown on Table 3.16-3.

**Table 3.16-3: Freeway Merge/Diverge Ramp Junction Analysis Locations**

| ID | Freeway Merge/Diverge Ramp Junctions |
|---|---|
| 1 | I-10 Freeway–eastbound, off-ramp at Cherry Valley Boulevard (Diverge) |
| 2 | I-10 Freeway–eastbound, on-ramp at Cherry Valley Boulevard (Merge) |
| 3 | I-10 Freeway–westbound, on-ramp at Cherry Valley Boulevard (Merge) |
| 4 | I-10 Freeway–westbound, off-ramp at Cherry Valley Boulevard (Diverge) |
| Source: Urban Crossroads, 2014 | |




| 1 I-10 EB Ramps & Cherry Valley Bl. | 2 I-10 WB Ramps & Cherry Valley Bl. | 3 Calimesa Bl. & Cherry Valley Bl. | 4 Dwy. 1 & Cherry Valley Bl. | 5 St. 2 & Cherry Valley Bl. | 6 Dwy. 3 & Cherry Valley Bl. | 7 Union St. & Cherry Valley Bl. | 8 Nancy St. & Cherry Valley Bl. | 9 Beaumont Av. & Cherry Valley Bl. |
|---|---|---|---|---|---|---|---|---|
| | | | Intersection Does Not Exist | Intersection Does Not Exist | Intersection Does Not Exist | | | DEF DEF |

**LEGEND:**

- = TRAFFIC SIGNAL
- S = ALL WAY STOP
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- DEF = DEFACTO RIGHT TURN

Source: Urban Crosswords, November 2014.

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# Exhibit 3.16-1
## Existing and Number of Through Lanes and Intersection Controls

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## Existing Study Area Operations

Traffic operations of roadway facilities are described using the term "level of service" (LOS). LOS is described in further detail in the methodology discussion below. Existing average daily traffic (ADT), Existing AM Peak Hour intersection volumes, and Existing PM Peak Hour intersection volumes are provided in Exhibit 3.16-2, Exhibit 3.16-3, and Exhibit 3.16-4.

### *Existing Intersection Operations*

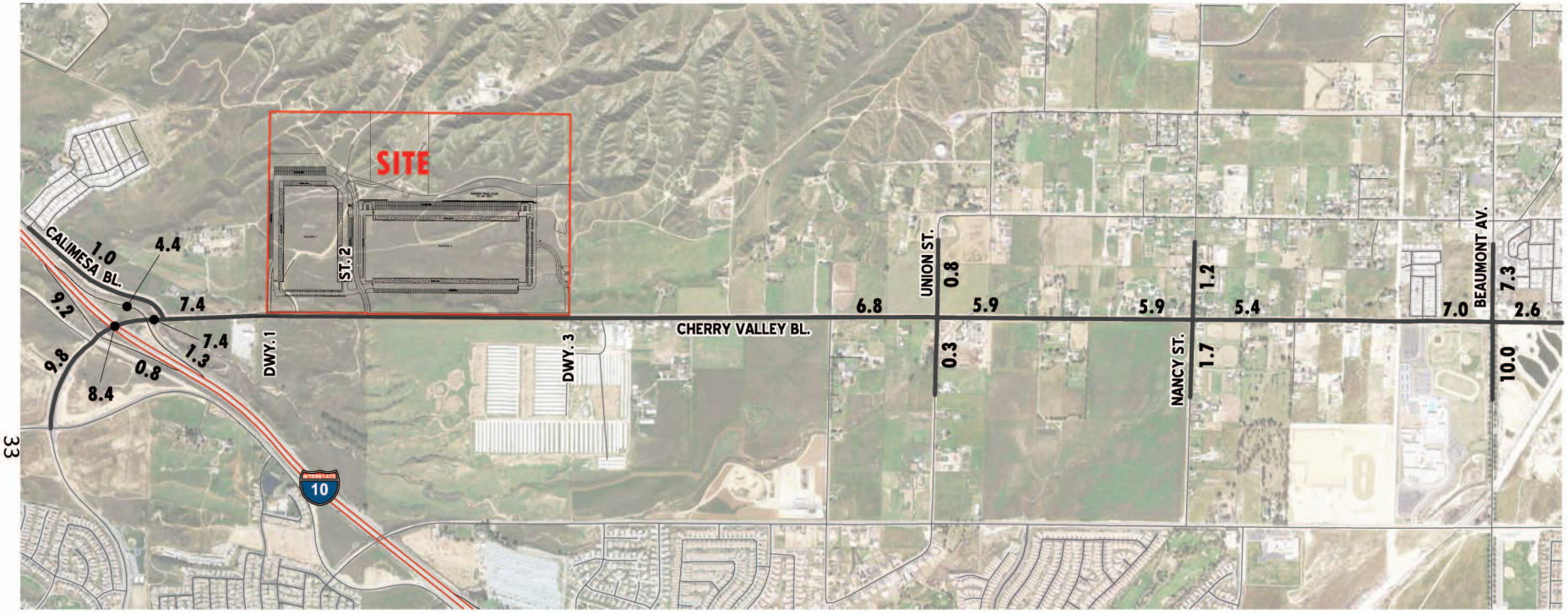
Existing (2014) baseline peak-hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented later in this section under the Methodology heading. The intersection operations analysis results provided on Table 3.16-4 shows that the following intersection analysis locations currently experience unacceptable conditions.

- I-10 Eastbound Ramps/Cherry Valley Boulevard–LOS F PM Peak Hour only.
- I-10 Westbound Ramps/Cherry Valley Boulevard–LOS F AM Peak Hour only.

## Table 3.16-4: Intersection Analysis for Existing (2014) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | I-10 EB Ramps/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 19.3 | **89.9** | C | **F** |
| 2 | I-10 WB Ramps/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100** | 28.8 | **F** | D |
| 3 | Calimesa Boulevard/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.8 | 13.0 | B | B |
| 4 | Driveway 1/Cherry Valley Boulevard | Future Intersection Location | | | | | | | | | | | | | | | | |
| 5 | Street 2/Cherry Valley Boulevard | Future Intersection Location | | | | | | | | | | | | | | | | |
| 6 | Driveway 3/Cherry Valley Boulevard | Future Intersection Location | | | | | | | | | | | | | | | | |
| 7 | Union Street (NS)/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 15.4 | 13.9 | C | B |
| 8 | Nancy Avenue (NS)/Cherry Valley Boulevard | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 12.9 | 10.3 | B | B |
| 9 | Beaumont Avenue/Cherry Valley Boulevard | TS | 1 | 1 | d | 1 | 1 | d | 1 | 1 | 1 | 1 | 1 | 0 | 29.7 | 17.5 | C | B |
| 10 | Roberts Road/Cherry Valley Boulevard | Future Intersection Location | | | | | | | | | | | | | | | | |

Notes:
[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d = *de facto* Right Turn Lane
[2] Based on the 2010 Highway Capacity Manual, overall average intersection delay, and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3] TS = Traffic Signal AWS = All-Way Stop CSS = Cross-street Stop
Source: Urban Crossroads, 2014.




**LEGEND:**

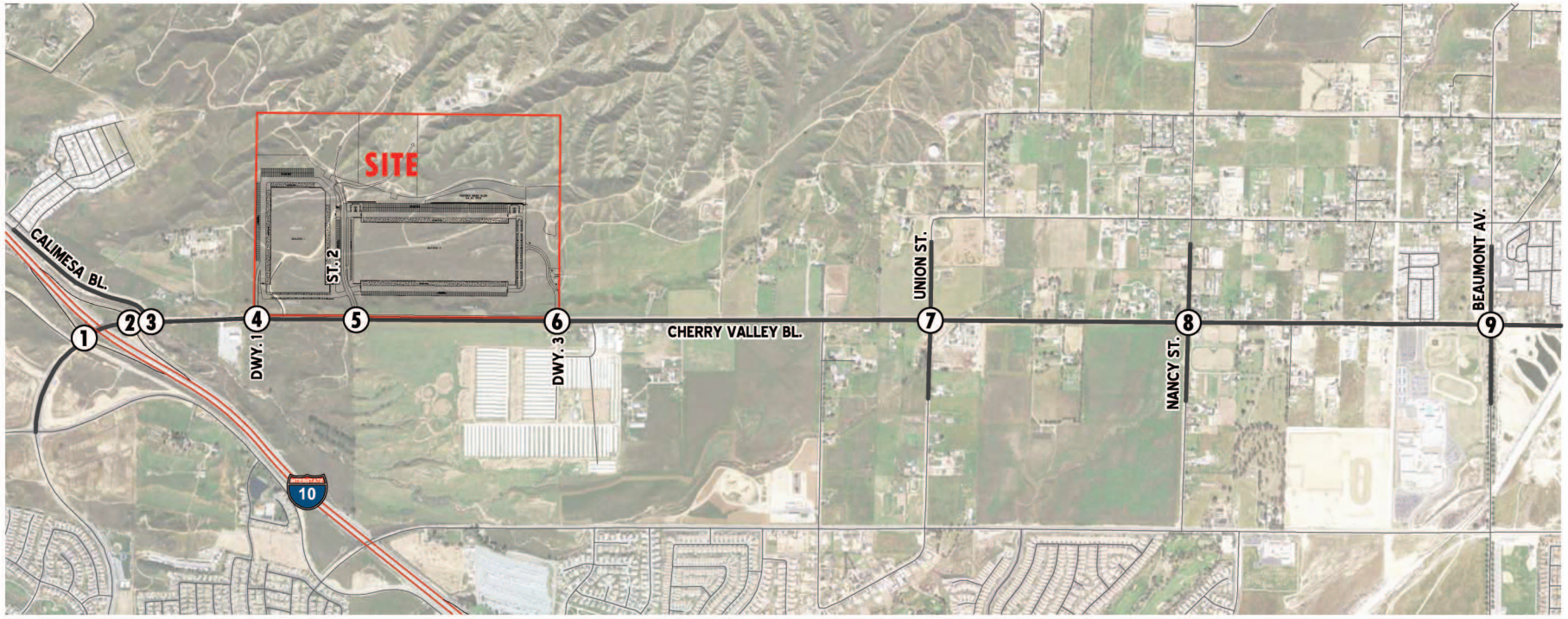
**10.0** = VEHICLES PER DAY (1000'S)

Source: Urban Crossroads, November 2014.

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## Exhibit 3.16-2
## Existing (2014) Average Daily Traffic (ADT)

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| 1 I-10 EB Ramps & Cherry Valley Bl. | 2 I-10 WB Ramps & Cherry Valley Bl. | 3 Calimesa Bl. & Cherry Valley Bl. | 4 Dwy. 1 & Cherry Valley Bl. | 5 St. 2 & Cherry Valley Bl. | 6 Dwy. 3 & Cherry Valley Bl. | 7 Union St. & Cherry Valley Bl. | 8 Nancy St. & Cherry Valley Bl. | 9 Beaumont Av. & Cherry Valley Bl. |
|---|---|---|---|---|---|---|---|---|
| 84 1 117 ← 84 20 | → 378 78 | 19 18 → 10 436 | Intersection Does Not Exist | Intersection Does Not Exist | Intersection Does Not Exist | 68 1 1 ← 1 303 3 | 60 28 14 ← 4 208 47 | 69 181 5 ← 8 236 15 |
| 555 → 67 | 480 → 192 | 17 → 183 | | | | 16 → 167 3 | 12 → 127 35 | 35 → 104 238 |
| | ← 26 0 8 → | | | | | ← 12 0 3 → | ← 34 22 122 → | ← 252 101 4 → |

N

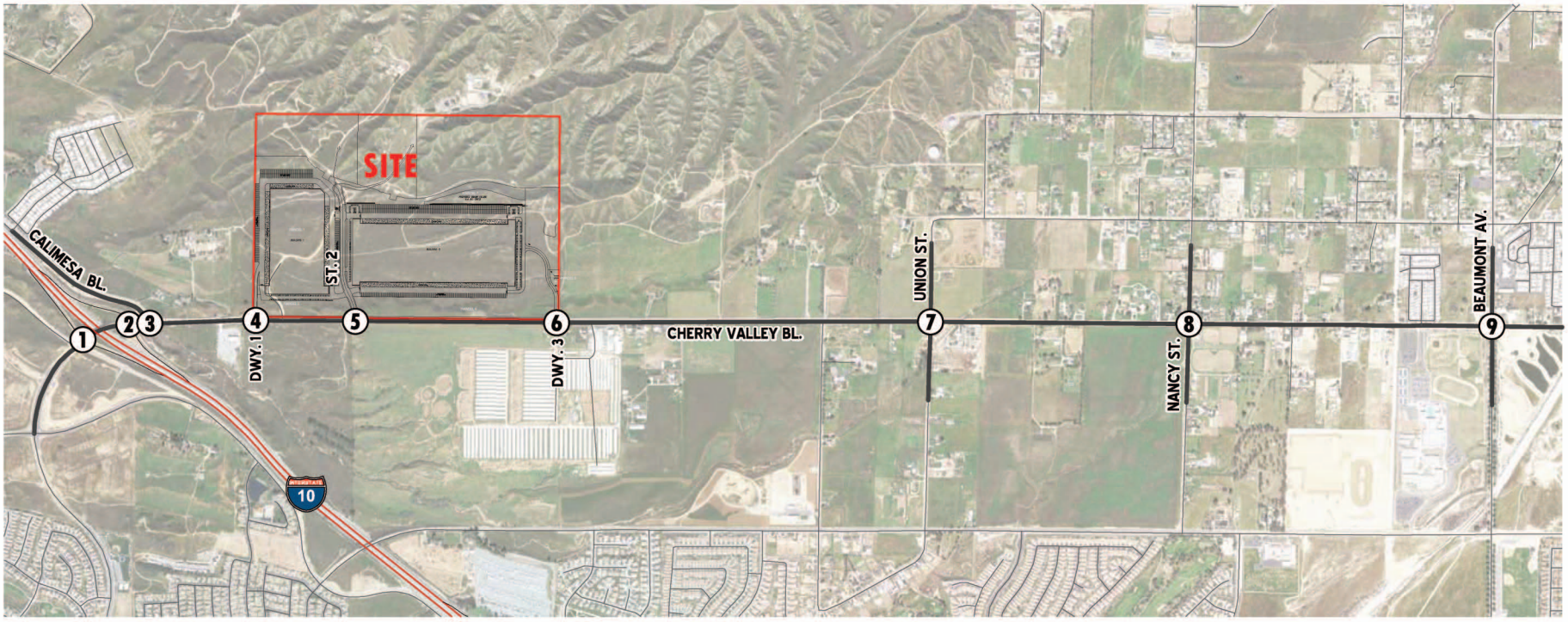
*NOTE: ALL VOLUMES ARE IN P.C.E.*

Source: Urban Crossroads, November 2014.

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# Exhibit 3.16-3
# Existing (2014) AM Peak Hour Intersection Volumes

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| 1 I-10 EB Ramps & Cherry Valley Bl. | 2 I-10 WB Ramps & Cherry Valley Bl. | 3 Calimesa Bl. & Cherry Valley Bl. | 4 Dwy. 1 & Cherry Valley Bl. | 5 St. 2 & Cherry Valley Bl. | 6 Dwy. 3 & Cherry Valley Bl. | 7 Union St. & Cherry Valley Bl. | 8 Nancy St. & Cherry Valley Bl. | 9 Beaumont Av. & Cherry Valley Bl. |
|---|---|---|---|---|---|---|---|---|
| 426 1 341 → 119 ← 13<br>227 → 49 | 171 ← 50<br>193 → 375 82 0 24 | 20 26 → 14 ← 200<br>21 → 378 | Intersection Does Not Exist | Intersection Does Not Exist | Intersection Does Not Exist | 25 0 0 → 0 ← 183 ← 5<br>38 → 303 → 12 9 1 2 | 8 19 9 → 4 ← 157 ← 13<br>36 → 239 → 34 18 26 29 | 37 203 20 → 14 ← 47 ← 7<br>61 → 111 → 186 141 275 20 |

N

*NOTE: ALL VOLUMES ARE IN P.C.E.*

Source: Urban Crossroads, November 2014.

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# Exhibit 3.16-4
# Existing (2014) PM Peak Hour Intersection Volumes

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### *Existing Traffic Signal Warrants Analysis*

Traffic signal warrants for existing traffic conditions are based on existing peak-hour intersection turning volumes. The methodology used to determine whether a traffic signal is warranted is discussed below (see Traffic Signal Warrant Analysis Methodology heading, below). For existing (2014) traffic conditions, the following intersection currently appears to warrant a traffic signal:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard (under Caltrans jurisdiction)

### *Existing Freeway Segment Operations*

The I-10 Freeway and SR-60 Freeway segments analyzed were found to operate at an acceptable LOS (i.e., LOS "D" or better during peak hours, with the exception of the following three segments:

- ID # 2: I-10 Westbound, Waterman Ave. to Tippecanoe Ave., LOS E, AM Peak Hour only
- ID # 3: I-10 Westbound, Tippecanoe Ave. to Mountain View Ave., LOS E, AM Peak Hour only
- ID # 21: I-10 Westbound, Mountain View Ave. to California St., LOS E, AM Peak Hour only

### *Existing Conditions Freeway Merge/Diverge Analysis*

Ramp merge and diverge operations were also evaluated for existing (2014) conditions and the results of this analysis are presented in the table below. As shown in Table 3.16-5, the I-10 Freeway ramp merge and diverge areas at Cherry Valley Boulevard currently operate at LOS C or better during the peak hours under existing (2014) traffic conditions.

**Table 3.16-5: Freeway Ramp Junction Merge/Diverge Analysis for Existing (2014) Conditions**

| I-10 Direction | Mainline Segment | Lanes[1] | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Density[2] | LOS | Density[2] | LOS |
| EB | Off-ramp Cherry Valley Boulevard | 3 | 14.8 | B | 21.8 | C |
| | On-ramp Cherry Valley Boulevard | 3 | 14.0 | B | 16.9 | B |
| WB | Off-ramp Cherry Valley Boulevard | 3 | 26.6 | C | 22.1 | C |
| | On-ramp Cherry Valley Boulevard | 3 | 21.8 | C | 21.1 | C |

Notes:
[1] Number of lanes is in the specified direction and is based on existing conditions. No future improvements are currently planned.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
Source: Urban Crossroads, 2014.

## Methodology

### *Level of Service*

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined, ranging from LOS A, representing completely

free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

### *LOS Criteria*

County of Riverside General Plan Policy C 2.1 states that the County will maintain the following Countywide target LOS: LOS C on all County-maintained roads and conventional State Highways. As an exception, LOS D is allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. Finally, LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. Thus, LOS D is considered acceptable for any study intersection within the County of Riverside.

The intersection of Calimesa Boulevard and Cherry Valley Boulevard is partially within the boundaries of the City of Calimesa. The City of Calimesa General Plan states that arterial roads should carry both local and through traffic and be improved to maintain a Level of Service "C" or better. Thus, LOS C has been considered acceptable at any intersection within the City of Calimesa. LOS D is considered to be the limit of acceptable traffic operations during the peak hour at freeway ramp intersections, basic freeway segments and merge/diverge ramp junctions maintained by Caltrans. Table 3.16-6 shows the LOS criteria for each of the study area intersections.

**Table 3.16-6: Intersection Level of Service Criteria**

| ID | Intersection Location | Jurisdiction | Acceptable LOS |
|---|---|---|---|
| 1 | I-10 Freeway EB Ramps/Cherry Valley Boulevard | Caltrans | D |
| 2 | I-10 Freeway WB Ramps/Cherry Valley Boulevard | Caltrans | D |
| 3 | Calimesa Boulevard/Cherry Valley Boulevard | Riverside County, City of Calimesa | C |
| 4 | Driveway 1/Cherry Valley Boulevard (right-in/right-out) | Riverside County | D |
| 5 | Street 2/Cherry Valley Boulevard | Riverside County | D |
| 6 | Driveway 3/Cherry Valley Boulevard (right-in/right-out) | Riverside County | D |
| 7 | Union Street/Cherry Valley Boulevard | Riverside County | D |
| 8 | Nancy Avenue/Cherry Valley Boulevard | Riverside County | D |
| 9 | Beaumont Avenue/Cherry Valley Boulevard | Riverside County | D |
| 10 | Roberts Road/Cherry Valley Boulevard | Riverside County | D |

Notes:
LOS = Level of Service EB = eastbound WB = westbound
Source: Urban Crossroads, 2014.

## Traffic Analysis Methodology

### *Intersection Capacity Analysis*

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is

typically dependent on the quality of traffic flow at the intersections along a roadway. The Highway Capacity Manual (HCM) (Transportation Research Board 2010) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

The intersection LOS analysis is based on the traffic volumes observed during the peak-hour conditions using traffic count data collected in April 2014, which took place when school was in session and under typical traffic conditions (i.e., no construction detours in effect). The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 a.m. and 9:00 a.m.)
- Weekday PM Peak Hour (peak hour between 4:00 p.m. and 6:00 p.m.)

### *Signalized Intersections*

The County of Riverside requires signalized intersection operations analysis based on the methodology described in Chapter 16 of the HCM. Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 3.16-7.

**Table 3.16-7: Signalized Intersection LOS Thresholds**

| Level of Service | Description | Average Control Delay (Seconds) |
|---|---|---|
| A | Operations with very low delay occurring with favorable progression and/or short cycle length. | 0 to 10.00 |
| B | Operations with low delay occurring with good progression and/or short cycle lengths. | 10.01 to 20.00 |
| C | Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear. | 20.01 to 35.00 |
| D | Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable. | 35.01 to 55.00 |
| E | Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered the limit of acceptable delay. | 55.01 to 80.00 |
| F | Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths. | 80.01 and up |

Notes:
V/C = volume to capacity ratio
Source: HCM 2010, Chapter 18.

### *Unsignalized Intersections*

The County of Riverside requires unsignalized intersection operation analysis based on the methodology provided in Chapters 19, 20, and 32 of the HCM 2010. Intersection LOS rating is based on the weighted average control delay expressed in seconds per vehicle, as shown in Table 3.16-8.

**Table 3.16-8: Unsignalized Intersection LOS Thresholds**

| Level of Service | Description | Average Control Per Vehicle (Seconds) |
|---|---|---|
| A | Little or no delays | 0 to 10.00 |
| B | Short traffic delays | 10.01 to 15.00 |
| C | Average traffic delays | 15.01 to 25.00 |
| D | Long traffic delays | 25.01 to 35.00 |
| E | Very long traffic delays | 35.01 to 50.00 |
| F | Extreme traffic delays with intersection capacity exceeded | > 50.00 |
| Source: HCM 2010, Chapters 19 and 20. | | |

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

### *Traffic Signal Warrant Analysis Methodology*

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This Traffic Study uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), as amended by the MUTCD 2012 California Supplement, for all study area intersections.

Future unsignalized intersections have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT based signal warrant analysis worksheets. Traffic signal warrant analyses were performed for the following unsignalized study area intersections for each analysis scenario:

1. I-10 Freeway Eastbound Ramps/Cherry Valley Boulevard (Jurisdiction: Caltrans)
2. I-10 Freeway Westbound Ramps/Cherry Valley Boulevard (Jurisdiction: Caltrans)
3. Calimesa Boulevard/Cherry Valley Boulevard (Jurisdiction: Calimesa)
5. Street 2/Cherry Valley Boulevard–Future Intersection (Jurisdiction: Riverside County)
7. Union Street/Cherry Valley Boulevard (Jurisdiction: Riverside County)
8. Nancy Avenue/Cherry Valley Boulevard (Jurisdiction: Riverside County)

10. Roberts Road/Cherry Valley Boulevard (Jurisdiction: Riverside County)[2]

A signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. In addition, signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above LOS C, or may operate below LOS C and not meet a signal warrant.

### *Freeway Mainline Segment Analysis*

The freeway system in the study area has been broken into segments defined by the freeway-to-arterial interchange locations. The freeway segments have been evaluated in the Traffic Study, based upon peak-hour directional volumes. The freeway segment analysis is based on the methodology described in Chapter 23 of the HCM and performed using HCS+ software. The performance measure preferred by Caltrans to calculate LOS is density. Density is expressed in terms of passenger cars per mile per lane. Table 3.16-9 illustrates the freeway segment LOS thresholds for each density range used for this analysis.

**Table 3.16-9: Freeway Mainline LOS Thresholds**

| Level of Service | Description | Density Range (pc/mi/ln)[1] |
|---|---|---|
| A | Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed. | 0.0–11.0 |
| B | Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed. | 11.1–18.0 |
| C | Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages. | 18.1–26.0 |
| D | Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions. | 26.1–35.0 |
| E | Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing. | 35.1–45.0 |
| F | Breakdown in vehicle flow. | >45.0 |

Note:
[1] pc/mi/ln = passenger cars per mile per lane.
Source: HCM 2010, Chapter 11.

[2] The Roberts Road/Cherry Valley Boulevard intersection would not be developed until Horizon Year Conditions (2035), and thus is only analyzed under that scenario.

### *Freeway Merge/Diverge Ramp Junction Analysis*

The freeway system in the study area has been broken into segments defined by freeway-to-arterial interchange locations resulting in four (4) existing on- and off-ramp locations. Although the HCM indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis presented in the Traffic Study has been performed at all ramp locations with respect to the nearest on- or off- ramp at each interchange in an effort to be consistent with Caltrans guidance.

The merge/diverge analysis is based on the HCM 2010 Freeway Merge and Diverge Segments analysis method, and performed using HCS2010 software. Table 3.16-10 presents the merge/diverge area level of service thresholds for each density range used for this analysis.

**Table 3.16-10: Freeway Merge/Diverge Ramp Junction LOS Thresholds**

| Level of Service | Density Range (pc/mi/ln)[1] |
|---|---|
| A | ≤10.0 |
| B | 10.0–20.0 |
| C | 20.0–28.0 |
| D | 28.0–35.0 |
| E | >35.0 |
| F | Demand Exceeds Capacity |

Note:
[1] pc/mi/ln = passenger cars per mile per lane.
Source: HCM 2010, Chapter 13.

### *Project Trip Generation*

In order to estimate the traffic characteristics of the project, trip-generation statistics published in the most recent release of the Institute of Transportation Engineers (ITE) Trip Generation (9th Edition 2012) manual for the proposed land use (ITE Land Use Code 152—High-Cube Warehousing) were used. This particular rate was selected based on the project's design and operating characteristics. Trip generation rates for the project are shown in Table 3.16-11 below. Refinements to these raw trip generation estimates have been made to provide a more detailed breakdown of trips by vehicle mix. The project trip generation summary is based on total building area of approximately 1,860,760 square feet, while the project will actually only consist of approximately 1,823,760 square feet; thus, the Traffic Study slightly overestimates the additional traffic that will be attributable to the project, resulting in a more conservative analysis.

In addition, Passenger Car Equivalents (PCE) factors have been applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCE factors have been used due to the expected heavy truck component for the project uses. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and level of service analyses. PCE factors are applied to large truck types such as large 2-axles, 3-axles, 4+-axles. A PCE factor of 1.5 has been applied to large 2-axle trucks, a factor of 2.0 for

3-axle trucks, and a factor of 3.0 for 4+-axle trucks. These PCE factors are consistent with the values recommended by the San Bernardino Associated Governments (SANBAG) and are accepted factors by the County of Riverside. Exhibit 3.16-5 shows the project's passenger car trip distribution, and Exhibit 3.16-6 shows the project's truck trip distribution.

Projected daily and peak-hour trip generation by vehicle type is illustrated in Table 3.16-11. The project is anticipated to generate a net total of approximately 3,126 ADT (4,905 PCE) net trip-ends per day on a typical weekday, with approximately 205 (288 PCE) net AM peak-hour trips, and 223 (335 PCE) net PM peak-hour trips.

**Table 3.16-11: Project Trip Generation Summary**

| Land Use[1] | Units[3] | ITE LU Code | AM Peak Hour | | | PM Peak Hour | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| High-Cube Warehouse[2] | TSF | 152 | 0.076 | 0.034 | 0.110 | 0.037 | 0.083 | 0.120 | 1.680 |
| Passenger Cars | | | 0.055 | 0.025 | 0.080 | 0.025 | 0.055 | 0.080 | 1.040 |
| 2-Axle Trucks (PCE = 1.5) | | | 0.005 | 0.002 | 0.007 | 0.003 | 0.006 | 0.009 | 0.141 |
| 3-Axle Trucks (PCE = 2.0) | | | 0.004 | 0.002 | 0.005 | 0.002 | 0.005 | 0.007 | 0.113 |
| 4-Axle+ Trucks (PCE =3.0) | | | 0.012 | 0.006 | 0.018 | 0.007 | 0.017 | 0.024 | 0.386 |

| Land Use | Quantity | Units[3] | AM Peak Hour | | | PM Peak Hour | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | | In | Out | Total | In | Out | Total | |
| Building 1 | 737,480 | TSF | — | — | — | — | — | — | — |
| Passenger Cars: | | | 41 | 18 | 59 | 18 | 41 | 59 | 767 |
| Truck Trips: | | | 15 | 7 | 22 | 9 | 20 | 29 | 472 |
| 2-axle: | | | 3 | 2 | 5 | 2 | 4 | 6 | 104 |
| 3-axle: | | | 3 | 1 | 4 | 2 | 4 | 5 | 84 |
| 4+-axle: | | | 9 | 4 | 13 | 6 | 12 | 18 | 285 |
| Net Truck Trips[2] | | | 15 | 7 | 22 | 9 | 20 | 29 | 472 |
| ***Building 1 Subtotal*** | | | **56** | **25** | **81** | **27** | **61** | **88** | **1,239** |
| Building 2 | 1,123,280 | TSF | — | — | — | — | — | — | — |
| Passenger Cars: | | | 62 | 28 | 90 | 28 | 62 | 90 | 1,168 |
| Truck Trips: | | | 23 | 10 | 34 | 14 | 31 | 45 | 719 |
| 2-axle: | | | 5 | 2 | 7 | 3 | 7 | 10 | 158 |
| 3-axle: | | | 4 | 2 | 6 | 2 | 5 | 8 | 127 |
| 4+-axle: | | | 14 | 6 | 20 | 8 | 19 | 27 | 434 |
| Net Truck Trips [2] | | | 23 | 10 | 34 | 14 | 31 | 45 | 719 |
| ***Building 2 Subtotal*** | | | 85 | 38 | 124 | 42 | 93 | 135 | 1,887 |

**Table 3.16-11 (cont.): Project Trip Generation Summary**

| Land Use[1] | Units[3] | ITE LU Code | AM Peak Hour | | | PM Peak Hour | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| **San Gorgonio Crossing Passenger Cars** | | | **103** | **46** | **149** | **46** | **103** | **149** | **1,935** |
| **San Gorgonio Crossing Net Truck Trips[4]** | | | **39** | **17** | **56** | **23** | **51** | **74** | **1,191** |
| **San Gorgonio Crossing** | | | **141** | **64** | **205** | **69** | **154** | **223** | **3,126** |

Notes:
[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Ninth Edition (2012).
[2] Vehicle Mix Source: Total truck percentage source from ITE Trip Generation Manual. Truck mix (by axle type) source from SCAQMD.
AM Peak hour = 72.7% passenger cars, 6.01% 2-Axle trucks, 4.83% 3-Axle trucks, 16.46% 4-Axle trucks.
PM Peak hour = 66.7% passenger cars, 7.33% 2-Axle trucks, 5.89% 3-Axle trucks, 20.08% 4-Axle trucks.
[3] TSF = thousand square feet
[4] TOTAL TRIPS = Passenger Cars + Net Truck Trips
Source: Urban Crossroads, 2014.

### *Project Trip Distribution*

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be used by project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the project traffic would distribute. The project trip distribution was developed based on anticipated travel patterns to and from the project site for both passenger cars and truck traffic. Each of these distribution patterns was reviewed and approved by the County of Riverside as part of the traffic study scoping process (see Traffic Study Appendix 1.1). Both the passenger car and truck trip distribution patterns take into consideration the access restrictions at project Driveways 1 and 3.

## 3.16.2 - Regulatory Setting

### State Regulations

The State Department of Transportation (Caltrans) performance standards for all State highway facilities are the transition between LOS C and D. If a State highway facility operates below the transition between LOS C and D, the Caltrans threshold is to maintain the lower level of service. Thus, LOS "D" is considered to be the limit of acceptable traffic operations during the peak hour at freeway ramp intersections, basic freeway segments and merge/diverge ramp junctions maintained by Caltrans.

### Regional Regulations

#### *Transportation Uniform Mitigation Fee (TUMF) Program*

The TUMF program is administered by Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in early 2003 and updated in 2009 to address major changes in right of way acquisition and improvement cost factors. TUMF identifies a network of backbone

and local roadways that are needed to accommodate growth through 2035. This regional program was put into place to ensure that all new development pays its "fair share" for regional facilities and that funding is in place for construction of facilities needed to maintain the requisite level of service and that are critical to mobility in the region. TUMF is a truly regional mitigation fee program, and is imposed and implemented in every jurisdiction in Western Riverside County except the City of Beaumont (where a locally implanted program duplicates the regional program).

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance, and fees are collected at the building or occupancy permit stage.

The current fee for industrial use is $1.73 per square foot, with an adjustment to the baseline square footage for high-cube logistics warehouse buildings. In addition, inflation adjustments are considered on an annual basis. In this way, TUMF fees are adjusted on a regular basis to ensure that the development impact fees collected keep pace with construction and labor costs, etc.

After the TUMF fees are collected, they are placed in a separate interest bearing account pursuant to the requirements of Government Code sections 66000 et seq. The TUMF fees go towards funding specific local and regional projects in the arterial system. Local area projects receive about 48.7 percent of all funds. These local funds are programmed into five localized zones, and fund the construction of eligible localized projects that are prioritized by the affected local jurisdictions within each zone.

The facilities planned through the TUMF program are constructed prior to the time at which the identified facility is expected to deteriorate to an inadequate level of service. WRCOG has a successful record of funding and overseeing the construction of improvements funded through the TUMF program. In total, the TUMF program is anticipated to generate nearly $5 billion in transportation projects for Western Riverside County.

### *Development Impact Fee (DIF) Program*

The study area is located within the County's San Gorgonio Pass Area, and therefore will be subject to County of Riverside Development Impact Fees (DIF), which are in addition to the TUMF fees and only address facilities within county unincorporated areas. The DIF program consists of two separate transportation components: the Roads, Bridges, and Major Improvements component, and the Traffic Signals component.

### *Measure "A" Funds*

In 1988, the voters of Riverside County approved Measure "A," a half-cent sales tax for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. Between 1989 and 2009, the Riverside County Transportation Commission has spent over $1 billion raised by Measure "A" on identified roadway and transportation improvements. Funds are allocated to each of three districts: Western Riverside County, the Coachella Valley, and the Palo Verde area, in proportion to the amount of sales tax generated within each sub-region. In 2002, Measure "A" was extended by Riverside County voters and will continue to fund numerous transportation improvements through the year 2039. Programs like Measure "A" have been adopted in both San Bernardino and Orange Counties.

While Measure "A" is a self-executing sales tax administered by the Riverside County Transportation Commission (as opposed to a fee mitigation program imposed upon individual projects) Measure "A"

is relevant here because the funds raised through Measure "A" have funded, and will continue to fund new transportation facilities in Riverside County. The Riverside County Transportation Commission has successfully implemented numerous projects that have been funded by Measure "A," and Measure "A" will continue to fund additional projects in the future.

### *Fair Share Contribution*

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements, or a combination of these approaches. The Traffic Study provides a list of intersection improvements not included in impact fee programs, which are referred to as "Non-Program Improvements."

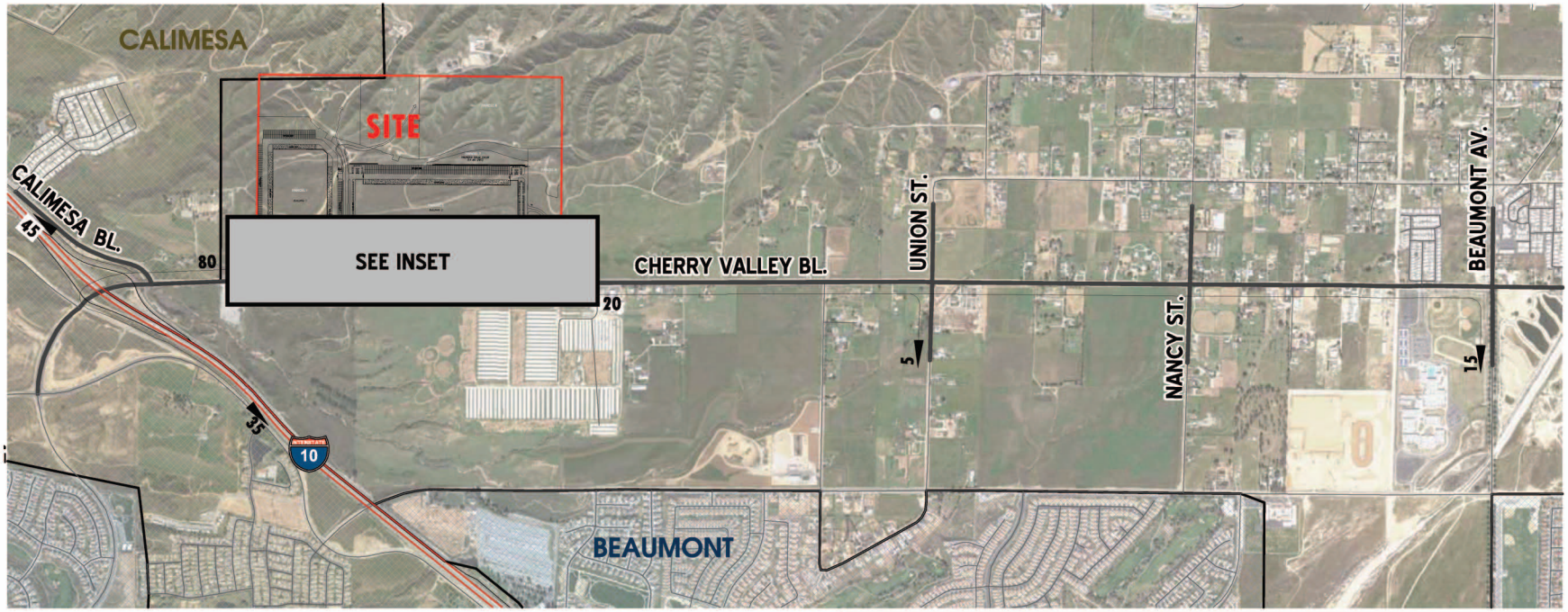
When off-site improvements are identified with a minor share of responsibility assigned to a proposed development project, the approving jurisdiction may elect to collect a fair share contribution, or require the development project to construct the improvements, subject to a fee credit or reimbursement. A project's fair share contribution at an off-site study area intersection is determined based on the ratio of project traffic to new (future) traffic, and new traffic is total future traffic minus existing baseline traffic.

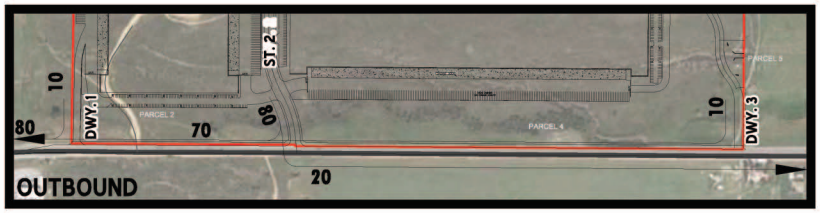
## Local Regulations

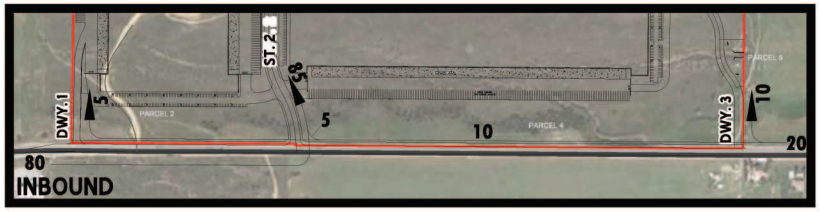
### *Riverside County—Circulation*

According to the County of Riverside General Plan Circulation Element, the County of Riverside contains various transportation options, including automobile, rail and air transportation, a transit oasis system, bicycling, hiking, and walking, which serve as vital inter- and intra-regional linkages for the movement of people and goods. Rapid economic and residential growth both within and outside of the County has far outpaced the ability to provide adequate transportation facilities, resulting in increased roadway congestion and decreased air quality. Future land use arrangements and supporting multi-modal transportation systems will allow employment, service and housing opportunities in close proximity to each other, decrease the need to use the automobile for every trip, reduce roadway congestion, and improve the opportunity to use transportation alternatives safely and effectively. The following policies address land use issues related to circulation. A more detailed discussion and policy direction related to circulation can be found in the Circulation Element of the General Plan.

- **LU 12.1:** Provide land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use in order to minimize congestion and air pollution.
- **LU 12.2:** Locate employment and service uses in areas that are easily accessible to existing or planned transportation facilities.
- **LU 12.3:** Locate transit stations in community centers and at places of public, employment, entertainment, recreation, and residential concentrations.
- **LU 12.4:** Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate.
- **LU 12.5:** Allow traffic-calming elements, such as narrow streets, curb bulbs, textured paving, and landscaping, where appropriate.
- **LU 12.6:** Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use.
- **LU 12.7:** Review projects for consistency with the County's Transportation Demand Ordinance.




**LEGEND:**

10 = PERCENT TO/FROM PROJECT

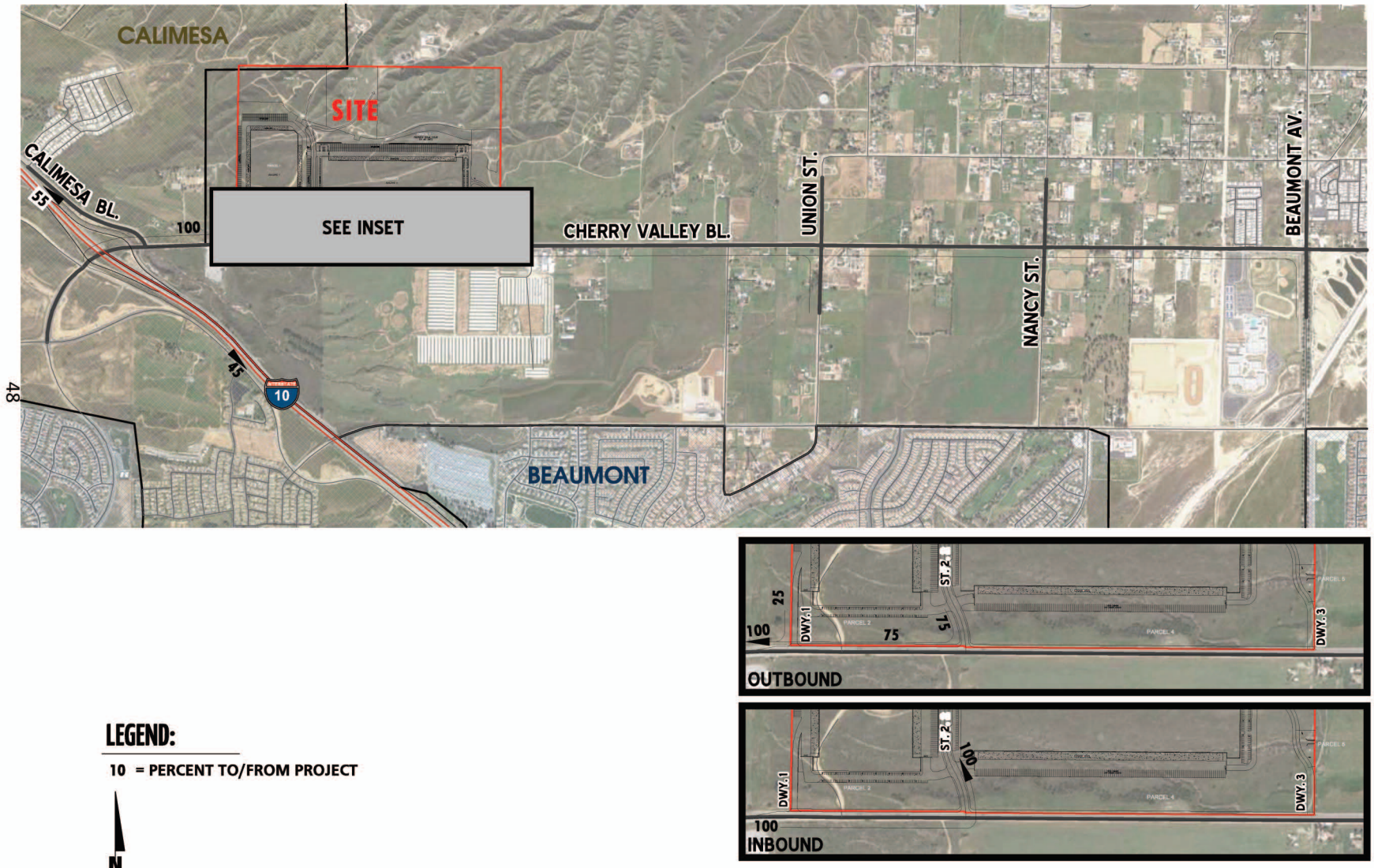
N

Source: Urban Crossroads, November 2014.

FirstCarbon® SOLUTIONS

# Exhibit 3.16-5
# Project (Passenger Car) Trip Distribution

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Source: Urban Crossroads, November 2015.

FirstCarbon® SOLUTIONS

# Exhibit 3.16-6
# Project (Truck) Trip Distribution

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### *The Pass Area Plan*

*Vehicular Circulation System*

According to the Pass Area Plan, the vehicular circulation system in the Pass is anchored by I-10, State Route 60 (SR-60), and SR-79. I-10 connects residents of the Pass with the Los Angeles Basin and the Coachella Valley. SR-60, which provides access to Moreno Valley and the City of Riverside, joins I-10 in Beaumont. SR-79, a designated Scenic Highway, traverses Lambs Canyon and connects to Temecula to the south. A system of major and secondary arterials and collector roads connect with these primary circulation routes to serve local uses.

*Trails and Bikeway System*

According to the Pass Area Plan, the County of Riverside contains bicycle, pedestrian, and multi-purpose trails that traverse urban, rural, and natural areas that accommodate hikers, bicyclists, equestrian users, and others as an integral part of the County's circulation system. These multi-use trails connect the unique communities and activity centers throughout the County, and are an effective alternate mode of transportation. Additionally, the trail system serves as a community amenity by providing recreation and leisure opportunities.

## 3.16.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to transportation and traffic are significant, the following questions are analyzed and evaluated. Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Alter waterborne, rail or air traffic?

e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

f) Cause an effect upon, or a need for new or altered maintenance of roads?

g) Cause an effect upon circulation during the project's construction?

h) Result in inadequate emergency access or access to nearby uses?

i) Conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

j) Impact bike trails?

### Cumulative Impacts

Cumulative traffic impacts are created as a result of a combination of the project, together with other future developments, which contribute to the overall traffic impacts, and may require additional improvements to maintain acceptable LOS with or without the project. A project's contribution to a cumulatively considerable impact can be reduced to "less-than-significant" if the project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured or is outside the control of the lead agency, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

In the event that an intersection is operating at, or is forecast to operate at a deficient LOS, the County's Congestion Management Program (CMP) guidelines have defined a series of steps to be completed to determine a project's contribution to the deficiency of intersections. The steps are as follows:

1. Determine the mitigation measures necessary to achieve an acceptable service level.
2. Calculate the project's share of future peak-hour traffic volume projections.
3. Estimate the cost to implement recommended mitigation measures.
4. Calculate the project's fair-share contribution to mitigate the project's traffic impacts.

## 3.16.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the project, and provides mitigation measures where necessary.

### Traffic Increase

| | |
|---|---|
| **Impact TRAN-1:** | **The project would conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.** |

#### *Impact Analysis*

Traffic analysis was performed for the following scenarios:

- Existing (2014) Conditions, as described in Section 3.16.1, Existing Conditions
- Existing plus Project
- Existing plus Ambient Growth plus Project (2017)
- Existing plus Ambient Growth plus Project plus Cumulative (2017)
- Horizon Year (2035) Without Project
- Horizon Year (2035) With Project

Near-term (2019) conditions and Near-term (2019) conditions plus traffic from the proposed Sunny-Cal development consisting of 497 single-family detached residential dwellings has also been

included. These two additional scenarios were included at the direction of Riverside County staff, and are intended to demonstrate the feasibility of proposed project mitigation that would include construction of interim improvements at both the I-10 Freeway at Cherry Valley Boulevard interchange ramps and the intersection of Calimesa Boulevard and Cherry Valley.

Near-term (2019) conditions included the following traffic volumes:

- Existing (2014) traffic
- Growth of 10% to account for five years of ambient growth
- Project traffic

Near-term (2019) plus Sunny-Cal conditions included the following traffic volumes:

- Existing (2014) traffic
- Growth of 10% to account for five years of ambient growth
- Project traffic
- Sunny-Cal Residential traffic

## Existing Plus Project Traffic Volume Forecasts

This section discusses the traffic forecasts for existing plus project conditions and the resulting intersection and freeway mainline operations. This scenario is presented for informational purposes only as the County of Riverside's currently adopted traffic study guidelines requires project impacts to be identified through the analysis of Existing plus Ambient Growth plus Project traffic conditions.

This scenario includes existing (2014) traffic volumes plus project traffic. Exhibit 5-1 of the Traffic Study shows the ADT volumes that can be expected for Existing plus Project traffic conditions. Existing plus Project AM and PM peak-hour intersection turning movement volumes are shown on Exhibits 5-2 and 5-3 of the Traffic Study, respectively.

*Intersection Operation Analysis*

The Traffic Study evaluated the Existing plus Project peak-hour traffic operations for the study area intersections. The intersection analysis results are summarized in Table 3.16-12. As shown within Table 3.16-12, there are no additional intersections anticipated to operate at an unacceptable LOS under Existing plus Project traffic conditions, beyond those intersections which already operate at an unacceptable LOS under existing (2014) conditions (Section 3.16.1, Existing Conditions).

## Table 3.16-12: Intersection Analysis for Existing Plus Project Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Existing (2014) | | | | Existing Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Delay[2] (secs.) | | LOS | | Delay[2] (secs.) | | LOS | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM | AM | PM | AM | PM |
| 1 | I-10 EB Ramps/ Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 19.3 | **89.9** | C | **F** | **61.5** | **>100.0** | **F** | **F** |
| | -TS &Turn Pockets | TS | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | 0 | ***1*** | 1 | 0 | — | — | — | — | 24.4 | 24.2 | C | D |
| 2 | I-10 WB Ramps/ Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100** | 28.8 | **F** | D | **>100.0** | **50.5** | **F** | F |
| | -TS & Turn Pockets | TS | 0 | 1 | 0 | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | — | — | — | — | 33.6 | 27.3 | C | C |
| 3 | Calimesa Boulevard/ Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.8 | 13.0 | B | B | 17.3 | 18.1 | C | C |
| 4 | Driveway 1/ Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 12.0 | 11.0 | B | B |
| 5 | Street 2/ Cherry Valley Boulevard | ***TS*** | 0 | 0 | 0 | ***1*** | ***1*** | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 10.0 | 8.6 | B | A |
| 6 | Driveway 3/ Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 11.3 | 9.5 | B | A |
| 7 | Union St. (NS)/ Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 15.4 | 13.9 | C | B | 16.5 | 14.4 | C | B |
| 8 | Nancy Avenue (NS)/ Cherry Valley Boulevard | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 12.9 | 10.3 | B | B | 13.6 | 10.6 | B | B |
| 9 | Beaumont Avenue/ Cherry Valley Boulevard | TS | 1 | 1 | d | 1 | 1 | d | 1 | 1 | 1 | 1 | 1 | 0 | 29.7 | 17.5 | C | B | 31.3 | 17.6 | C | B |

Notes:
[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d = *de facto* Right Turn Lane ***1*** = Improvement
[2] Based on the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3] TS = Traffic Signal AWS = All-Way Stop CSS = Cross-street Stop **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
Source: Urban Crossroads, 2014.

### *Existing Plus Project Traffic Signal Warrants Analysis*

Traffic signal warrants for Existing plus Project traffic conditions are based on Existing plus Project ADT volumes. For Existing plus Project conditions, the following intersections appear to warrant a traffic signal, in addition to those intersections identified in Section 3.16.1, Existing Conditions:

2. I-10 Westbound Ramps/Cherry Valley Boulevard (Jurisdiction: Caltrans)
5. Street 2/Cherry Valley Boulevard (Jurisdiction: Riverside County)

*Basic Freeway Segment Analysis*

Mainline segment analysis results for the AM and PM peak hours are summarized on Table 3.16-13. As shown on Table 3.16-13, the freeway segments analyzed are anticipated to operate at acceptable levels of service (i.e., LOS D or better) during the peak hours for Existing plus project traffic conditions, with the exception of Mountain View Avenue to California Street, which will operate at LOS "E" during the AM Peak hour. This segment was previously identified as deficient under existing traffic conditions; therefore, the addition of project traffic is not anticipated to result in any additional freeway segment deficiencies under Existing plus Project conditions.

## Table 3.16-13: Basic Freeway Segment Analysis for Existing Plus Project Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Existing (2014) | | | Existing Plus Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| I-10 Freeway | Westbound | I-215 to Waterman Av. | 4 | AM<br>PM | 7,035<br>6,505 | 32.4<br>28.7 | D<br>D | 7,042<br>6,525 | 32.4<br>28.9 | D<br>D |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 7,844<br>6,057 | **39.3**<br>26.4 | **E**<br>D | 7,851<br>6,077 | **39.4**<br>26.5 | **E**<br>D |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 8,207<br>5,867 | **44.0**<br>25.3 | **E**<br>C | 8,214<br>5,887 | **44.1**<br>25.6 | **E**<br>C |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 3,682<br>6,258 | 15.2<br>27.6 | B<br>D | 3,689<br>6,278 | 15.2<br>27.7 | B<br>D |
| | | California St. to Alabama St. | 5 | AM<br>PM | 6,853<br>3,833 | 23.1<br>12.6 | C<br>B | 6,860<br>3,853 | 23.1<br>12.7 | C<br>B |
| | | Alabama St. Orange St. | 4 | AM<br>PM | 5,759<br>3,070 | 24.6<br>12.6 | C<br>B | 5,765<br>3,091 | 24.6<br>12.8 | C<br>B |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 6,351<br>3,961 | 28.0<br>16.1 | D<br>B | 6,360<br>3,989 | 28.0<br>16.3 | D<br>B |
| | | Cypress Av. Ford St. | 4 | AM<br>PM | 6,351<br>3,961 | 28.0<br>16.1 | D<br>B | 6,360<br>3,989 | 28.0<br>16.3 | D<br>B |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 4,999<br>3,607 | 20.8<br>14.7 | C<br>B | 5,008<br>3,635 | 20.8<br>14.9 | C<br>B |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 5,067<br>4,044 | 21.2<br>17.0 | C<br>B | 5,076<br>4,072 | 21.2<br>17.2 | C<br>B |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 3,908<br>3,172 | 16.4<br>13.3 | B<br>B | 3,917<br>3,200 | 16.4<br>13.5 | B<br>B |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 3,609<br>2,529 | 20.3<br>14.1 | C<br>B | 3,625<br>2,573 | 20.4<br>14.4 | C<br>B |

## Table 3.16-13 (cont.): Basic Freeway Segment Analysis for Existing Plus Project Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Existing (2014) | | | Existing Plus Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| | | W. County Line Rd. to Calimesa Bl. | 3 | AM<br>PM | 3,025<br>2,613 | 16.9<br>14.4 | B<br>B | 3,049<br>2,672 | 17.0<br>14.8 | B<br>B |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 2,769<br>2,758 | 15.5<br>15.2 | B<br>B | 2,796<br>2,827 | 15.6<br>15.7 | B<br>B |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 4,137<br>3,515 | 23.1<br>19.4 | C<br>C | 4,169<br>3,589 | 23.4<br>19.9 | C<br>C |
| | | Cherry Valley Bl. Oak Valley Pkwy | 3 | AM<br>PM | 3,382<br>3,246 | 18.7<br>17.9 | C<br>B | 3,435<br>3,272 | 19.0<br>18.1 | C<br>C |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 4,584<br>2,695 | 26.7<br>14.9 | D<br>B | 4,623<br>2,736 | 27.2<br>15.2 | D<br>B |
| I-10 Freeway | Eastbound | I-215 to Waterman Av. | 5 | AM<br>PM | 6,254<br>7,437 | 20.7<br>25.5 | C<br>C | 6,270<br>7,446 | 20.7<br>25.5 | C<br>C |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 4,994<br>6,146 | 20.6<br>26.6 | C<br>D | 5,010<br>6,155 | 20.7<br>26.6 | C<br>D |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 4,302<br>7,250 | 17.8<br>34.6 | B<br>D | 4,318<br>7,259 | 18.0<br>34.7 | B<br>D |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 8,096<br>5,044 | **42.3**<br>21.1 | **E**<br>C | 8,112<br>5,053 | **42.5**<br>21.1 | **E**<br>C |
| | | California St. to Alabama St. | 4 | AM<br>PM | 3,304<br>6,189 | 13.6<br>27.0 | B<br>D | 3,320<br>6,198 | 13.7<br>27.0 | B<br>D |
| | | Alabama St. to Orange St. | 4 | AM<br>PM | 3,128<br>5,056 | 12.9<br>21.0 | B<br>C | 3,144<br>5,066 | 12.9<br>21.1 | B<br>C |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 6,312<br>4,209 | 27.7<br>17.2 | D<br>B | 6,334<br>4,222 | 27.9<br>17.3 | D<br>B |



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## Table 3.16-13 (cont.): Basic Freeway Segment Analysis for Existing Plus Project Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Existing (2014) | | | Existing Plus Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| | | Cypress Av. Ford St. | 4 | AM<br>PM | 2,597<br>4,824 | 10.7<br>19.8 | A<br>C | 2,618<br>4,837 | 10.8<br>19.9 | A<br>C |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 4,949<br>4,197 | 20.5<br>17.1 | C<br>B | 4,971<br>4,210 | 20.6<br>17.2 | C<br>B |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 4,949<br>4,197 | 20.6<br>17.4 | C<br>B | 4,971<br>4,210 | 20.8<br>17.4 | C<br>B |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 6,449<br>6,818 | 29.4<br>31.3 | D<br>D | 6,471<br>6,830 | 29.5<br>31.4 | D<br>D |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 2,188<br>4,377 | 12.2<br>25.1 | B<br>C | 2,225<br>4,397 | 12.5<br>25.3 | B<br>C |
| | | W. County Line Rd. to Calimesa Bl. | 3 | AM<br>PM | 2,189<br>3,601 | 12.2<br>20.0 | B<br>C | 2,241<br>3,627 | 12.6<br>20.1 | B<br>C |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 2,189<br>3,601 | 12.2<br>20.0 | B<br>C | 2,252<br>3,632 | 12.6<br>20.1 | B<br>C |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 2,195<br>3,248 | 12.2<br>17.7 | B<br>B | 2,263<br>3,281 | 12.5<br>17.8 | B<br>C |
| | | Cherry Valley Bl. Oak Valley Pkwy | 3 | AM<br>PM | 2,026<br>2,591 | 11.2<br>14.3 | B<br>B | 2,050<br>2,651 | 11.3<br>14.7 | B<br>B |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 2,037<br>4,267 | 11.2<br>24.3 | B<br>C | 2,054<br>4,326 | 11.4<br>24.9 | B<br>C |

## Table 3.16-13 (cont.): Basic Freeway Segment Analysis for Existing Plus Project Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Existing (2014) | | | Existing Plus Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| SR-60 Freeway | Westbound | I-215 to Day St. | 2 | AM<br>PM | 2,617<br>2,733 | 21.6<br>22.8 | C<br>C | 2,622<br>2,748 | 21.8<br>23.1 | C<br>C |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 2,839<br>3,098 | 23.8<br>26.7 | C<br>D | 2,844<br>3,113 | 24.0<br>27.0 | C<br>D |
| | | Frederick St. to Heacock St. | 2 | AM<br>PM | 2,271<br>2,509 | 18.5<br>20.6 | C<br>C | 2,276<br>2,524 | 18.7<br>20.9 | C<br>C |
| | | Heacock St. to Perris Bl. | 2 | AM<br>PM | 1,900<br>2,238 | 15.5<br>18.3 | B<br>C | 1,905<br>2,253 | 15.6<br>18.5 | B<br>C |
| | | Perris Bl. to Nason St. | 2 | AM<br>PM | 763<br>882 | 6.2<br>7.2 | A<br>A | 768<br>897 | 6.3<br>7.4 | A<br>A |
| | | Nason St. to Moreno Beach Dr. | 2 | AM<br>PM | 3,194<br>2,907 | 29.0<br>24.6 | D<br>C | 3,199<br>2,922 | 29.0<br>24.9 | D<br>C |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM<br>PM | 1,741<br>2,237 | 14.6<br>18.3 | B<br>C | 1,746<br>2,252 | 14.6<br>18.5 | B<br>C |
| | | Redlands Bl. to Theodore St. | 2 | AM<br>PM | 1,699<br>2,178 | 14.2<br>18.3 | B<br>C | 1,704<br>2,193 | 14.3<br>18.5 | B<br>C |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM<br>PM | 1,309<br>1,847 | 11.0<br>15.3 | A<br>B | 1,314<br>1,842 | 11.0<br>15.5 | B<br>B |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM<br>PM | 1,427<br>1,554 | 12.0<br>13.0 | B<br>B | 1,437<br>1,580 | 12.1<br>13.3 | B<br>B |
| | | Jack Rabbit Tr. to I-10 | 2 | AM<br>PM | 1,276<br>1,843 | 10.7<br>15.5 | A<br>B | 1,286<br>1,869 | 10.8<br>15.7 | A<br>B |



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## Table 3.16-13 (cont.): Basic Freeway Segment Analysis for Existing Plus Project Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Existing (2014) | | | Existing Plus Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| SR-60 Freeway | Eastbound | I-215 to Day St. | 3 | AM<br>PM | 2,994<br>4,857 | 16.3<br>28.4 | B<br>D | 3,006<br>4,864 | 16.4<br>28.6 | B<br>D |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 2,469<br>3,459 | 20.3<br>31.3 | C<br>D | 2,481<br>3,466 | 20.5<br>31.6 | C<br>D |
| | | Frederick St. to Heacock St. | 2 | AM<br>PM | 2,469<br>3,459 | 20.3<br>31.3 | C<br>D | 2,481<br>3,466 | 20.5<br>31.6 | C<br>D |
| | | Heacock St. to Perris Bl. | 2 | AM<br>PM | 1,918<br>2,383 | 15.6<br>19.5 | B<br>C | 1,930<br>2,390 | 15.8<br>19.7 | B<br>C |
| | | Perris Bl. to Nason St. | 2 | AM<br>PM | 735<br>1,005 | 6.0<br>8.2 | A<br>A | 747<br>1,012 | 6.1<br>8.3 | A<br>A |
| | | Nason St. to Moreno Beach Dr. | 2 | AM<br>PM | 1,922<br>2,176 | 16.1<br>17.7 | B<br>B | 1,934<br>2,183 | 16.3<br>17.9 | B<br>B |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM<br>PM | 1,739<br>2,166 | 14.6<br>17.7 | B<br>B | 1,751<br>2,173 | 14.8<br>17.8 | B<br>B |
| | | Redlands Bl. to Theodore St. | 2 | AM<br>PM | 1,708<br>2,210 | 14.3<br>18.6 | B<br>C | 1,720<br>2,217 | 14.5<br>18.6 | B<br>C |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM<br>PM | 1,475<br>1,591 | 12.4<br>13.3 | B<br>B | 1,487<br>1,598 | 12.5<br>13.4 | B<br>B |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM<br>PM | 1,281<br>1,842 | 11.6<br>16.6 | B<br>B | 1,303<br>1,854 | 11.8<br>16.7 | B<br>B |
| | | Jack Rabbit Tr. to I-10 | 2 | AM<br>PM | 1,259<br>1,327 | 11.4<br>12.0 | B<br>B | 1,281<br>1,339 | 11.6<br>12.2 | B<br>B |

[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
Bold = Unacceptable Level of Service

*Freeway Merge/Diverge Analysis*

Ramp merge and diverge operations were also evaluated for Existing plus Project conditions, and are presented in Table 3.16-14. As shown in Table 3.16-14, the I-10 Freeway ramp merge and diverge areas were found to operate at acceptable levels of service (i.e., LOS D or better) during the peak hours under Existing plus Project traffic conditions.

**Table 3.16-14: I-10 Freeway Ramp Junction Merge/Diverge Analysis for Existing Plus Project Conditions**

| I-10 Direction | Ramp or Segment | Lanes on Freeway[1] | Existing (2014) | | | | Existing Plus Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS |
| EB | Off-Ramp at Cherry Valley Boulevard | 3 | 14.8 | B | 21.8 | C | 15.4 | B | 22.1 | C |
| | On-Ramp at Cherry Valley Boulevard | 3 | 14.2 | B | 16.9 | B | 14.2 | B | 17.4 | B |
| WB | On-Ramp at Cherry Valley Boulevard | 3 | 26.6 | C | 22.1 | C | 26.8 | C | 22.8 | C |
| | Off-Ramp at Cherry Valley Boulevard | 3 | 21.8 | C | 21.1 | C | 22.2 | C | 21.3 | C |

Notes:
[1] Number of lanes is in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
Source: Urban Crossroads, 2014.

The intersection of Calimesa Boulevard at Cherry Valley Boulevard is currently operating at an acceptable LOS (i.e., LOS "D" or better), and is anticipated to continue to operate at an acceptable LOS with the addition of ambient growth and Project traffic. However, Calimesa Boulevard is located approximately 150 feet from the intersection of I-10 WB ramps and Cherry Valley Boulevard, which could have potential queueing issues with the installation of traffic signals. The intersection of Calimesa Boulevard is proposed to be realigned approximately 550 feet to the east, which would increase the distance between Calimesa Boulevard and the I-10 WB ramp, and mitigate potential queueing issues for westbound traffic towards the interchange. As shown below in Table 3.16-15, there are no potential queuing issues anticipated during either the AM or PM peak 95$^{th}$ percentile traffic flows for existing plus project conditions, with recommended improvements.

## Table 3.16-15: Peak Hour Queuing Summary with Interim Improvements

| Intersection | Movement | Available Stacking Distance (Feet) | EAP (2017) | | | |
|---|---|---|---|---|---|---|
| | | | 95th Percentile Queue (Feet) | | Acceptable?[1] | |
| | | | AM | PM | AM | PM |
| I-10 EB Ramps/Cherry Valley Bl. | WBL | ***150*** | 89 | 121 | Yes | Yes |
| | WBT | 560 | 40 | 86 | Yes | Yes |
| | SBL/T | 1,145 | 202 | 295 | Yes | Yes |
| | SBR | ***350*** | 74 | 206 | Yes | Yes |
| I-10 WB Ramps/Cherry Valley Bl. | EBL | ***250*** | 245 | 166 | Yes | Yes |
| | EBT | 560 | 141 | 58 | Yes | Yes |
| | NBL/T/R | 1,030 | 106 | 169 | Yes | Yes |
| | WBT | 545 | 101 | 97 | Yes | Yes |
| | WBR | ***375*** | 219 | 92 | Yes | Yes |
| Calmesa Boulevard/Cherry Valley Bl. | EBL | ***300*** | 29 | 29 | Yes | Yes |

Notes:
[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

## Table 3.16-16: Peak Hour Freeway Off-Ramp Queuing Summary for Existing plus Project Conditions

| Intersection | Movement | Available Stacking Distance (Feet) | E+P with Split Phase TS | | | | E+P with TS & Turn Pockets | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 95th Percentile Queue (Feet) | | Acceptable?[1] | | 95th Percentile Queue (Feet) | | Acceptable?[1] | |
| | | | AM | PM | AM | PM | AM | PM | AM | PM |
| I-10 EB Ramps/Cherry Valley Bl. | SBL/TR | 1,145 | 228[2] | 306 | Yes | Yes | 207 | 288 | Yes | Yes |
| I-10 WB Ramps/Cherry Valley Bl. | NBL/T/R | 1,030 | 66 | 88 | Yes | Yes | 60 | 77 | Yes | Yes |

Notes:
[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided to be provided in the transition for turn pockets is reflected in the staking distance shown on this table, where applicable.
[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
TS=Traffic Signal

## 3.16.5 - Opening Year (2017) Traffic Analysis

### Roadway Improvements

This section discusses the methods used to develop existing plus ambient growth plus project 2017 opening year traffic forecasts, and the existing plus ambient growth plus project plus cumulative 2017 traffic forecasts, and the resulting intersection operations.

#### *Existing Plus Ambient Growth Plus Project (2017) Traffic Volume Forecasts*

The existing plus ambient growth plus project (2017) conditions analysis determines the traffic impacts based on a comparison of the existing plus ambient growth plus project traffic conditions to existing (2014) conditions. To account for background traffic growth, an ambient growth factor from existing (2014) conditions of 6.12 percent (2 percent per year over 3 years, compounded annually) is included for existing plus ambient growth plus project (2017) traffic conditions.

The existing plus ambient growth plus project analysis determines whether any significant traffic impacts would occur on the existing roadway system once traffic generated by the project is added to existing plus ambient growth conditions. The weekday ADT volumes that can be expected for existing plus ambient growth plus project (2017) traffic conditions are shown on Exhibit 6-1 of the Traffic Study, and Exhibits 6-2 and 6-3 show the weekday AM and weekday PM peak-hour intersection turning movement volumes for existing plus ambient growth plus project (2017) traffic conditions.

### Intersection Operation Analysis

#### *Existing Plus Ambient Growth Plus Project (2017) Traffic Conditions*

Level of service calculations were conducted for the study intersections to evaluate their operations under existing plus ambient growth plus project (2017) conditions with existing roadway and intersection geometrics. As shown in Table 3.16-17, other than the I-10 EB/WB Ramps/Cherry Valley Boulevard Intersections, there are no additional intersections anticipated to operate at an unacceptable LOS under existing plus ambient growth plus project (2017) traffic conditions, beyond those previously identified for Existing (2014) conditions. It bears noting that the I-10 WB/EB Ramps/Cherry Valley Boulevard Intersections already operate at LOS F during the AM and PM peak hours, respectively.

## Table 3.16-17: Intersection Analysis for Existing Plus Ambient Growth Plus Project (2017) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Existing (2014) | | | | Existing plus Ambient Growth plus Project (2015) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Delay[2] (secs.) | | Level of Service | | Delay[2] (secs.) | | Level of Service | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM | AM | PM | AM | PM |
| 1 | I-10 EB Ramps/ Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 19.3 | **89.9** | C | **F** | **84.6** | **>100.0** | **F** | **F** |
| 2 | I-10 WB Ramps/ Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **100.0** | 28.8 | **F** | D | **>100.0** | **69.8** | **F** | **F** |
| 3 | Calimesa Boulevard/ Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.8 | 13.0 | B | B | 18.3 | 19.1 | C | C |
| 4 | Driveway 1/ Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 12.2 | 11.2 | B | B |
| 5 | Street 2/ Cherry Valley Boulevard | ***TS*** | 0 | 0 | 0 | ***1*** | ***1*** | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 10.1 | 8.6 | B | B |
| 6 | Driveway 3/ Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | | 11.6 | 9.6 | B | A |
| 7 | Union Street (NS)/ Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.91<br>5.4 | 13.9 | C | B | 17.6 | 15.1 | C | C |
| 8 | Nancy Avenue (NS)/ Cherry Valley Boulevard | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 12.9 | 10.3 | B | B | 14.7 | 11.0 | B | B |
| 9 | Beaumont Avenue/ Cherry Valley Boulevard | TS | 1 | 1 | d | 1 | 1 | d | 1 | 1 | 1 | 1 | 1 | 0 | 29.7 | 17.5 | C | B | 34.6 | 18.1 | D | C |

[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d = *de facto* Right Turn Lane ***1*** = Improvement

[2] Based on the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; AWS = All-Way Stop; CSS = Cross-street Stop **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

Source: Urban Crossroads, 2014.

Consistent with Table 3.16-17, the weekday AM and PM peak-hour intersection LOS are summarized in Exhibit 6-7 of the Traffic Study for existing plus ambient growth plus project (2017) traffic conditions. Recommended improvements necessary to bring peak-hour intersection operations within acceptable levels for existing plus ambient growth plus project (2017) traffic conditions are discussed under recommended improvements for existing plus ambient growth plus project (2017) conditions.

### *Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Traffic Conditions*

This scenario includes existing (2014) traffic volumes, an ambient growth factor of 6.12 percent, traffic from pending and approved (but not yet constructed) known development projects in the area, and the addition of project traffic. The ADT volumes which can be expected for existing plus ambient growth plus project plus cumulative (2017) traffic conditions are shown on the Traffic Study's Exhibit 6-4. Exhibits 6-5 and 6-6 of the Traffic Study show the weekday AM and weekend PM peak-hour intersection turning movement volumes for existing plus ambient growth plus project plus cumulative (2017) traffic conditions.

Level of service calculations were conducted for the study intersections to evaluate their operations under Existing plus Ambient Growth plus Project plus Cumulative (2017) conditions with existing roadway and intersection geometrics. As shown in Table 3.16-18, the following intersections are anticipated to operate at unacceptable LOS under existing plus ambient growth plus project plus cumulative (2017) traffic conditions without improvements, due to the addition of cumulative traffic.

1. I-10 EB Ramps/Cherry Valley Boulevard
2. I-10 WB Ramps/Cherry Valley Boulevard
3. Calimesa Boulevard/Cherry Valley Boulevard

## Table 3.16-18: Intersection Analysis for Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | EAPC (2017) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Delay[2] (secs.) | | Level of Service | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | I-10 EB Ramps/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| 2 | I-10 WB Ramps/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| 3 | Calimesa Boulevard/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100** | **>100** | F | **F** |
| 4 | Driveway 1/Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | 16.4 | 14.5 | C | B |
| 5 | Street 2/Cherry Valley Boulevard | ***TS*** | 0 | 0 | 0 | ***1*** | ***1*** | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | 23.9 | 11.5 | C | B |
| 6 | Driveway 3/Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | 1 | 0 | 0 | 1 | 0 | 14.6 | 11.5 | B | B |
| 7 | Union St. (NS)/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 25.0 | 22.2 | D | C |
| 8 | Nancy Av. (NS)/Cherry Valley Boulevard | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 20.2 | 13.7 | C | B |
| 9 | Beaumont Ave./Cherry Valley Boulevard | TS | 1 | 1 | d | 1 | 1 | D | 1 | 1 | 1 | 1 | 1 | 0 | 42.6 | 22.7 | D | C |

Notes:

[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d = *de facto* Right Turn Lane ***1*** = Improvement

[2] Based on the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; AWS = All-Way Stop; CSS = Cross-street Stop **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

Source: Urban Crossroads, 2014.



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Consistent with Table 3.16-18, the weekday AM and PM peak-hour intersection LOS are summarized on Exhibit 6-8 of the Traffic Study for existing plus ambient growth plus project plus cumulative (2017) traffic conditions.

### *Basic Freeway Segment Analysis*

Existing plus ambient growth plus project plus cumulative (2017) peak-hour mainline directional volumes are provided at Table 4 of the Supplemental Expanded Freeway Segment Analysis. Segment analysis results for the AM and PM peak hours are summarized in Table 3.16-19.

## Table 3.16-19: Basic Freeway Segment Analysis for Opening Year Cumulative (2017) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| I-10 Freeway | Westbound | I-215 to Waterman Av. | 4 | AM<br>PM | 7,410<br>7,029 | **35.3**<br>32.3 | **E**<br>D | 7,417<br>7,049 | **35.4**<br>32.5 | **E**<br>D |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 8,230<br>6,636 | **43.3**<br>30.0 | E<br>D | 8,237<br>6,656 | **43.4**<br>30.1 | **E**<br>D |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 8,492<br>6,306 | **48.1**<br>27.9 | **F**<br>D | 8,499<br>6,326 | **48.2**<br>28.0 | **F**<br>D |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 4,281<br>6,569 | 17.5<br>29.6 | B<br>D | 4,288<br>6,589 | 17.6<br>29.9 | B<br>D |
| | | California St. to Alabama St. | 5 | AM<br>PM | 7,366<br>4,345 | 25.3<br>14.2 | C<br>B | 7,373<br>4,365 | 25.3<br>14.4 | C<br>B |
| | | Alabama St. to Orange St. | 4 | AM<br>PM | 6,280<br>3,330 | 27.5<br>13.7 | D<br>B | 6,287<br>3,350 | 27.6<br>13.8 | D<br>B |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 6,932<br>4,227 | 31.9<br>17.2 | D<br>B | 6,941<br>4,255 | 31.9<br>17.4 | D<br>B |
| | | Cypress Av. to Ford St. | 4 | AM<br>PM | 6,565<br>4,330 | 29.3<br>17.6 | D<br>B | 6,574<br>4,358 | 29.4<br>17.8 | D<br>B |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 5,384<br>3,913 | 22.6<br>15.9 | C<br>B | 5,393<br>3,941 | 22.7<br>16.1 | C<br>B |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 5,457<br>4,387 | 23.1<br>18.4 | C<br>C | 5,466<br>4,415 | 23.2<br>18.5 | C<br>C |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 4,209<br>3,441 | 17.6<br>14.4 | B<br>B | 4,218<br>3,469 | 17.7<br>14.5 | B<br>B |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 4,045<br>2,737 | 23.0<br>15.3 | C<br>B | 4,061<br>2,781 | 23.2<br>15.5 | C<br>B |

## Table 3.16-19 (cont.): Basic Freeway Segment Analysis for Opening Year Cumulative (2017) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| | | W. County Line Rd to Calimesa Bl. | 3 | AM<br>PM | 3,552<br>3,068 | 19.9<br>16.9 | C<br>B | 3,575<br>3,127 | 20.0<br>17.2 | C<br>B |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 3,250<br>3,238 | 18.1<br>17.8 | C<br>B | 3,278<br>3,307 | 18.3<br>18.2 | C<br>C |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 4,856<br>4,269 | 28.6<br>24.1 | D<br>C | 4,886<br>4,343 | 28.8<br>24.6 | D<br>C |
| | | Cherry Valley Bl. to Oak Valley Pkwy. | 3 | AM<br>PM | 4,038<br>3,833 | 22.7<br>21.3 | C<br>C | 4,092<br>3,872 | 23.1<br>21.7 | C<br>C |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 4,938<br>3,185 | 29.7<br>17.5 | D<br>B | 4,976<br>3,227 | 30.2<br>17.8 | D<br>B |
| I-10 Freeway | Eastbound | I-215 to Waterman Av. | 5 | AM<br>PM | 6,728<br>7,841 | 22.5<br>27.3 | C<br>D | 6,744<br>7,850 | 22.5<br>27.3 | C<br>D |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 5,486<br>6,681 | 23.0<br>29.9 | C<br>D | 5,502<br>6,690 | 23.1<br>30.0 | C<br>D |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 4,751<br>7,625 | 19.7<br>37.9 | C<br>E | 4,767<br>7,634 | 19.8<br>38.0 | C<br>E |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 8,341<br>5,591 | 45.6<br>23.8 | F<br>C | 8,357<br>5,600 | 45.8<br>23.9 | F<br>C |
| | | California St. to Alabama St. | 4 | AM<br>PM | 3,716<br>6,779 | 15.2<br>30.8 | B<br>D | 3,732<br>6,788 | 15.4<br>30.8 | B<br>D |
| | | Alabama St. to Orange St. | 4 | AM<br>PM | 3,507<br>5,684 | 14.4<br>24.0 | B<br>C | 3,523<br>5,693 | 14.5<br>24.1 | B<br>C |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 6,503<br>4,785 | 28.9<br>19.6 | D<br>C | 6,524<br>4,798 | 29.3<br>19.7 | D<br>C |



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## Table 3.16-19 (cont.): Basic Freeway Segment Analysis for Opening Year Cumulative (2017) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| | | Cypress Av. to Ford St. | 4 | AM<br>PM | 2,841<br>5,274 | 11.7<br>21.8 | B<br>C | 2,862<br>5,287 | 11.8<br>21.9 | B<br>C |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 5,415<br>4,588 | 22.8<br>18.7 | C<br>C | 5,436<br>4,601 | 22.9<br>18.8 | C<br>C |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 5,415<br>4,588 | 22.9<br>19.0 | C<br>C | 5,436<br>4,601 | 23.0<br>19.1 | C<br>C |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 7,057<br>7,024 | 33.8<br>32.8 | D<br>D | 7,078<br>7,037 | 34.0<br>33.2 | D<br>D |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 2,568<br>4,773 | 14.3<br>28.2 | B<br>D | 2,605<br>4,793 | 14.6<br>28.4 | B<br>D |
| | | W. County Line Rd to Calimesa Bl. | 3 | AM<br>PM | 2,569<br>4,227 | 14.3<br>23.9 | B<br>C | 2,621<br>4,253 | 14.7<br>24.1 | B<br>C |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 2,569<br>4,227 | 14.3<br>23.9 | B<br>C | 2,632<br>4,258 | 14.7<br>24.1 | B<br>C |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 2,576<br>4,274 | 14.1<br>23.7 | B<br>C | 2,644<br>4,307 | 14.6<br>24.0 | B<br>C |
| | | Cherry Valley Bl. to Oak Valley Pkwy. | 3 | AM<br>PM | 2,361<br>3,204 | 13.0<br>17.5 | B<br>B | 2,385<br>3,264 | 13.1<br>17.9 | B<br>B |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 2,397<br>4,665 | 13.2<br>27.3 | B<br>D | 2,414<br>4,724 | 13.3<br>28.0 | B<br>D |
| | | I-215 to Day St. | 2 | AM<br>PM | 3,017<br>2,866 | 25.8<br>23.1 | C<br>C | 3,022<br>2,881 | 25.8<br>23.4 | C<br>C |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 3,103<br>3,192 | 26.7<br>28.0 | D<br>D | 3,108<br>3,207 | 26.8<br>28.2 | D<br>D |

## Table 3.16-19 (cont.): Basic Freeway Segment Analysis for Opening Year Cumulative (2017) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| SR-60 Freeway | Westbound | Frederick St. to Heacock St. | 2 | AM<br>PM | 2,423<br>2,692 | 19.9<br>22.4 | C<br>C | 2,428<br>2,707 | 20.0<br>22.6 | C<br>C |
| | | Heacock St. to Perris Bl. | 2 | AM<br>PM | 2,081<br>2,407 | 17.0<br>19.7 | B<br>C | 2,086<br>2,422 | 17.0<br>20.0 | B<br>C |
| | | Perris Bl. to Nason St. | 2 | AM<br>PM | 945<br>1,057 | 7.7<br>8.6 | A<br>A | 950<br>1,072 | 7.7<br>8.8 | A<br>A |
| | | Nason St. to Moreno Beach Dr. | 2 | AM<br>PM | 3,291<br>2,995 | 30.3<br>25.7 | D<br>C | 3,296<br>3,010 | 30.6<br>25.8 | D<br>C |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM<br>PM | 1,903<br>2,334 | 16.0<br>19.2 | B<br>C | 1,908<br>2,349 | 16.0<br>19.3 | B<br>C |
| | | Redlands Bl. to Theodore St. | 2 | AM<br>PM | 1,939<br>2,356 | 16.2<br>19.9 | B<br>C | 1,944<br>2,371 | 16.2<br>20.0 | B<br>C |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM<br>PM | 1,434<br>1,882 | 12.0<br>15.8 | B<br>B | 1,439<br>1,897 | 12.1<br>16.0 | B<br>B |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM<br>PM | 1,619<br>1,679 | 13.5<br>14.1 | B<br>B | 1,629<br>1,705 | 13.6<br>14.3 | B<br>B |
| | | Jack Rabbit Tr. to I-10 | 2 | AM<br>PM | 1,493<br>1,957 | 12.5<br>16.4 | B<br>B | 1,503<br>1,983 | 12.5<br>16.7 | B<br>B |
| SR-60 Freeway | Eastbound | I-215 to Day St. | 3 | AM<br>PM | 3,085<br>5,004 | 16.8<br>29.8 | B<br>D | 3,097<br>5,011 | 16.9<br>29.9 | B<br>D |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 2,544<br>3,564 | 21.1<br>33.1 | C<br>D | 2,556<br>3,571 | 21.2<br>33.2 | C<br>D |
| | | Frederick St. to Heacock St. | 2 | AM<br>PM | 2,606<br>3,564 | 21.7<br>33.1 | C<br>D | 2,618<br>3,571 | 21.8<br>33.2 | C<br>D |



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## Table 3.16-19 (cont.): Basic Freeway Segment Analysis for Opening Year Cumulative (2017) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume | Density[2] | LOS | Volume | Density[2] | LOS |
| | | Heacock St. to Perris Bl. | 2 | AM<br>PM | 2,093<br>2,586 | 17.1<br>21.4 | B<br>C | 2,105<br>2,593 | 17.2<br>21.5 | B<br>C |
| | | Perris Bl. to Nason St. | 2 | AM<br>PM | 907<br>1,205 | 7.4<br>9.8 | A<br>A | 919<br>1,212 | 7.5<br>9.9 | A<br>A |
| | | Nason St. to Moreno Beach Dr. | 2 | AM<br>PM | 1,980<br>2,242 | 16.6<br>18.4 | B<br>C | 1,992<br>2,249 | 16.8<br>18.5 | B<br>C |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM<br>PM | 1,872<br>2,294 | 15.7<br>18.8 | B<br>C | 1,884<br>2,301 | 15.8<br>18.9 | B<br>C |
| | | Redlands Bl. to Theodore St. | 2 | AM<br>PM | 1,903<br>2,429 | 15.9<br>20.4 | B<br>C | 1,915<br>2,436 | 16.1<br>20.6 | B<br>C |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM<br>PM | 1,524<br>1,722 | 12.8<br>14.4 | B<br>B | 1,536<br>1,729 | 12.9<br>14.5 | B<br>B |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM<br>PM | 1,394<br>2,098 | 12.6<br>18.9 | B<br>C | 1,416<br>2,110 | 12.8<br>19.0 | B<br>C |
| | | Jack Rabbit Tr. to I-10 | 2 | AM<br>PM | 1,380<br>1,602 | 12.5<br>14.3 | B<br>B | 1,402<br>1,614 | 12.7<br>14.5 | B<br>B |

[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
BOLD = Unacceptable Level of Service

As shown on Table 3.16-19, the study area mainline segments are anticipated to operate at acceptable service levels for existing plus ambient growth plus project plus cumulative (2017) traffic conditions (i.e., LOS D or better) under Without and With Project conditions, with the exception of the following five segments:

| ID | Freeway | Direction | Segment | Level of Service |
|---|---|---|---|---|
| 1 | I-10 | Westbound | I-215 Freeway to Waterman Av. | Los "E" AM peak hour only |
| 2 | I-10 | Westbound | Waterman Av. to Tippecanoe Av. | Los "E" AM peak hour only |
| 3 | I-10 | Westbound | Tippecanoe Av. to Mountain View Av. | Los "F" AM peak hour only |
| 20 | I-10 | Eastbound | Tippecanoe Av. to Mountain View Av. | Los "E" PM peak hour only |
| 21 | I-10 | Eastbound | Mountain View Av. to California St. | Los "F" AM peak hour only |

Because all of the segments were identified as deficient without the project, the project is not anticipated to result in any additional deficiencies. Thus, the project's contribution would not be considered cumulatively considerable.

### *Freeway Merge/Diverge Analysis*

Ramp merge and diverge operations have been evaluated for existing plus ambient growth plus project (2017) and existing plus ambient growth plus project plus cumulative (2017) traffic conditions at the I-10/Cherry Valley Boulevard interchange, as shown in Table 3.16-20, below.

## Table 3.16-20: I-10 Freeway Ramp Junction Merge/Diverge Analysis for Opening Year (2017) Conditions

| I-10 Direction | Ramp or Segment | Lanes on Freeway[1] | Existing plus Ambient Growth Plus Project (2017) | | | | Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS |
| EB | Off-Ramp at Cherry Valley Boulevard | 3 | 16.3 | B | 23.2 | C | 18.0 | B | 28.3 | D |
| | On-Ramp at Cherry Valley Boulevard | 3 | 14.8 | B | 18.3 | B | 16.2 | B | 20.7 | C |
| WB | On-Ramp at Cherry Valley Boulevard | 3 | 28.3 | D | 24.0 | C | 32.8 | D | 27.6 | C |
| | Off-Ramp at Cherry Valley Boulevard | 3 | 23.3 | C | 22.4 | C | 25.0 | C | 24.6 | C |

Notes:
[1] Number of lanes is in the specified direction and is based on existing conditions. No future improvements are currently planned.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
Source: Urban Crossroads, 2014.

As shown on Table 3.16-20, all the freeway ramp junctions are anticipated to operate at LOS D or better for both existing plus ambient growth plus project (2017) and existing plus ambient growth plus project plus cumulative (2017) traffic conditions.

### Freeway Off-Ramp Queuing

Consistent with Caltrans requirements, the progression of vehicles has been assessed to determine potential queuing impacts at the freeway ramp intersections on the off-ramps at Cherry Valley Boulevard. The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential impacts/needs of the intersections with traffic added from the project. (See Traffic Study Sections 2.4 and 2.5 for additional detail). The progression analysis was performed for the off-ramps at the I-10 Freeway at Cherry Valley Boulevard interchange to assess peak-hour vehicle queues that may potentially impact the freeway mainline if spillback were to occur. Progression analysis findings are presented in Table 3.16-24 for the existing plus ambient growth plus project (2017) and existing plus ambient growth plus project plus cumulative (2017) traffic conditions, with recommended improvements.

As shown on Table 3.16-24, there are no potential queuing issues anticipated during either the AM or PM peak 95$^{th}$ percentile traffic flows for existing plus ambient growth plus project (2017) or existing plus ambient growth plus project plus cumulative (2017) traffic conditions, with recommended improvements.

### Internal Circulation and Queuing on Cherry Valley Boulevard

All truck traffic is expected to come from the I-10, to the west of the project. Trucks would access the project through a left turn at the fully signalized intersection of Cherry Valley Boulevard and "A" Street. Trucks and delivery vehicles would call, radio or drive up to the various gates to check in. In addition to the total 1,237 parking spaces that will be included as part of the project, both project buildings would be designed to accommodate cross-dock usage, with 136 dock doors for Building 1 and 170 dock doors for Building 2. Depending on the operation, other truck traffic might need to wait outside of gates but within private Street A within the project site. Analysis by Urban Crossroads indicates that as many as 32 to 42 trucks could queue along the private road.

There is potential for buildings to be divided for multiple tenants use, but the division of buildings would only occur internally. Exterior circulation and access points would remain unchanged with the center signalized intersection remaining as the entrance. Signage that is consistent with the signage that exists today on Cherry Valley Boulevard, would prevent trucks from parking or queuing on public streets.

### Interim Improvements at I-10 Freeway Ramps at Cherry Valley Boulevard and Calimesa Boulevard and Cherry Valley Boulevard Intersections

While ultimate improvement plans have not yet been finalized for the I-10 interchange at Cherry Valley Boulevard, a roundabout concept is being proposed by the City of Calimesa. As timing of future improvements to the interchange are uncertain, the project applicant proposes, and mitigation measures TRANS-1a and 1b require, payment of the project's fair share toward the construction of the interchange improvements or, if a fair share contribution program has not been established, construction of the following interim improvements at the I-10 at Cherry Valley interchange to mitigate project impacts:

- Install traffic signals at I-10 eastbound and westbound ramp intersections at Cherry Valley Boulevard;
- Restripe to provide eastbound and westbound left turn pockets within the existing width of the Cherry Valley Boulevard bridge;
- Add a southbound right turn lane on the off ramp at the intersection of I-10 EB ramps at Cherry Valley Boulevard;
- Add a westbound right turn lane at the intersection of I-10 WB ramps at Cherry Valley Boulevard;
- Realign Calimesa Boulevard approximately 550 feet east of I-10 westbound ramps at Cherry Valley Boulevard intersection; and
- Add an eastbound left turn lane at the intersection of Calimesa Boulevard at Cherry Valley Boulevard.

(See Exhibits 3.16-7 and 3.16-8, respectively). As shown in Table 3.16-15, the new traffic signals and other improvements described above would significantly increase the capacity of the I-10 at Cherry Valley interchange ramp intersections such that even with the addition of project traffic, delay and level of service will be improved to better than current conditions.

The Roberts Road/Cherry Valley Boulevard intersection located to the immediate west of the I-10 WB ramps is currently controlled by an all-way stop. The southern leg of the intersection was closed to traffic during field review conducted in December 2015. Roberts Road is proposed to be realigned further west from its current location on Cherry Valley Boulevard. With the installation of the traffic signal at I-10 WB ramps/Cherry Valley Boulevard, the all-way stop at Roberts Road/Cherry Valley Boulevard intersection must be converted to a cross-street stop until the ultimate realignment of Roberts Road. This intersection is anticipated to operate under acceptable LOS (LOS "D" or better) under EAP (2017), near-term (2019) and near-term (2019) plus Sunny Cal traffic conditions with a cross-street stop control.

### *Near-Term (2019) Traffic Conditions*

Near-term (2019) conditions and Near-term (2019) conditions plus traffic from the proposed Sunny-Cal development consisting of 497 single-family detached residential dwellings has also been included. These two additional scenarios were included at the direction of Riverside County staff, and are intended to demonstrate the feasibility of proposed project mitigation that would include construction of interim improvements at both the I-10 Freeway at Cherry Valley Boulevard interchange ramps and the intersection of Calimesa Boulevard and Cherry Valley.

The intersection analysis results for these three intersections are summarized in Table 3.16-21, which indicates that the I-10 Freeway at Cherry Valley Boulevard intersections are anticipated to operate at acceptable LOS (LOS "D" or better) under near-term (2019) conditions, with installation of traffic signals. The intersection of Calimesa Boulevard at Cherry Valley Boulevard is anticipated to operate at acceptable LOS D or better with realignment of Calimesa Boulevard and a cross-street stop control.

## Table 3.16-21: EAP (2017) and Near-Term (2019) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | **I-10 EB Ramps/Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 19.3 | **89.9** | C | **F** |
| | EAP (2017) With Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | 0 | ***1*** | 1 | 0 | 25.4 | 24.1 | C | C |
| | Near Term (2019) with Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | 0 | ***1*** | 1 | 0 | 25.4 | 24.4 | C | C |
| 2 | **I-10 WB Ramps/Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | 28.8 | **F** | D |
| | EAP (2017) With Improvements | ***TS*** | 0 | 1 | 0 | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | 28.6 | 18.2 | C | B |
| | Near Term (2019) with Improvements | ***TS*** | 0 | 1 | 0 | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | 29.5 | 18.4 | C | B |
| 3 | **Calimesa Bl./Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.8 | 13.0 | B | B |
| | EAP (2017) With Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | 14.6 | 14.5 | B | B |
| | Near Term (2019) with Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | 14.9 | 14.7 | B | B |

Notes:

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; ***1*** = Improvement

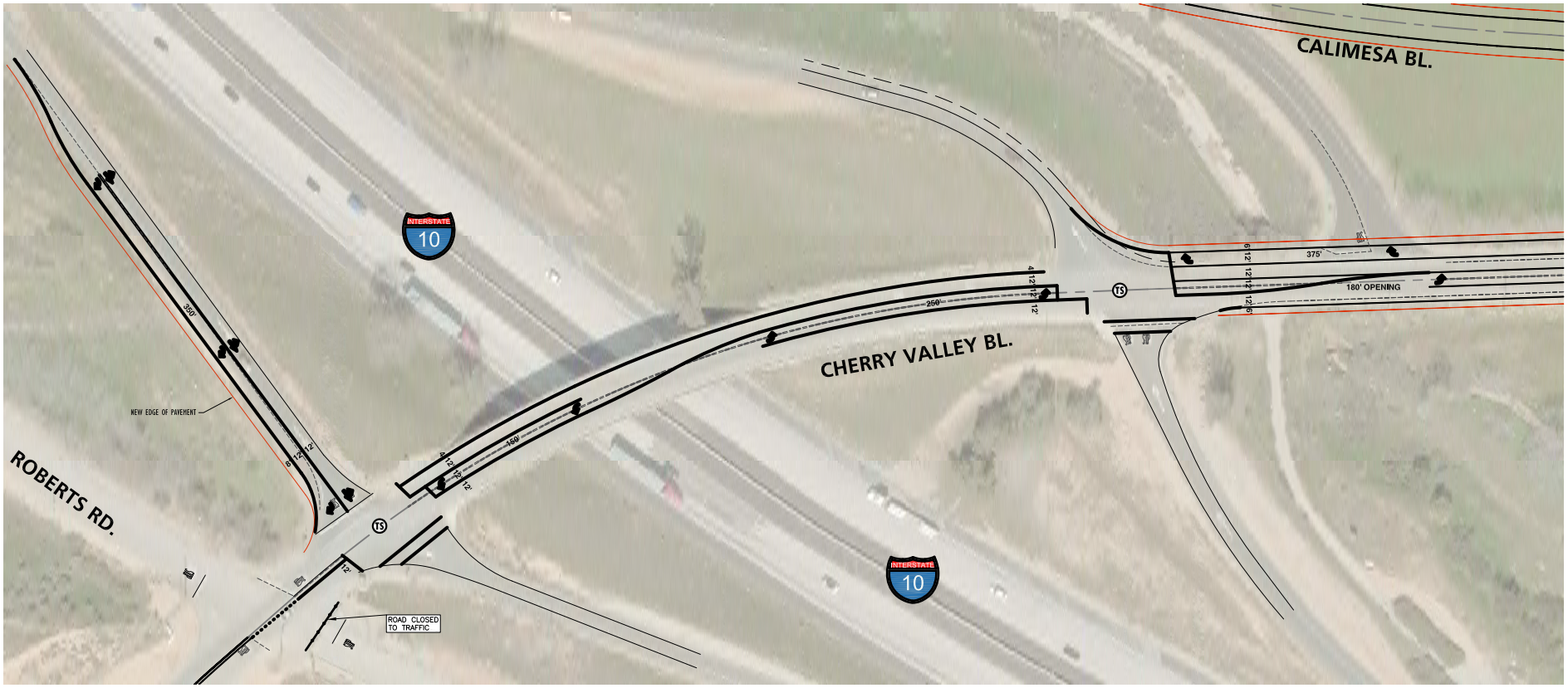
[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The intersections have been analyzed using the Synchro software.

[3] CSS = Cross-street Stop; TS = Traffic Signal

[4] With the proposed widening of Cherry Valley Boulevard to provide the eastbound left turn lane, it is anticipated that storage for up to two vehicles will be available in the painted median. Two-stage gap acceptance with up to 2 vehicles in median storage assumed for SBL turns from Calimesa Blvd.

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

Source: Urban Crossroads, 2016.

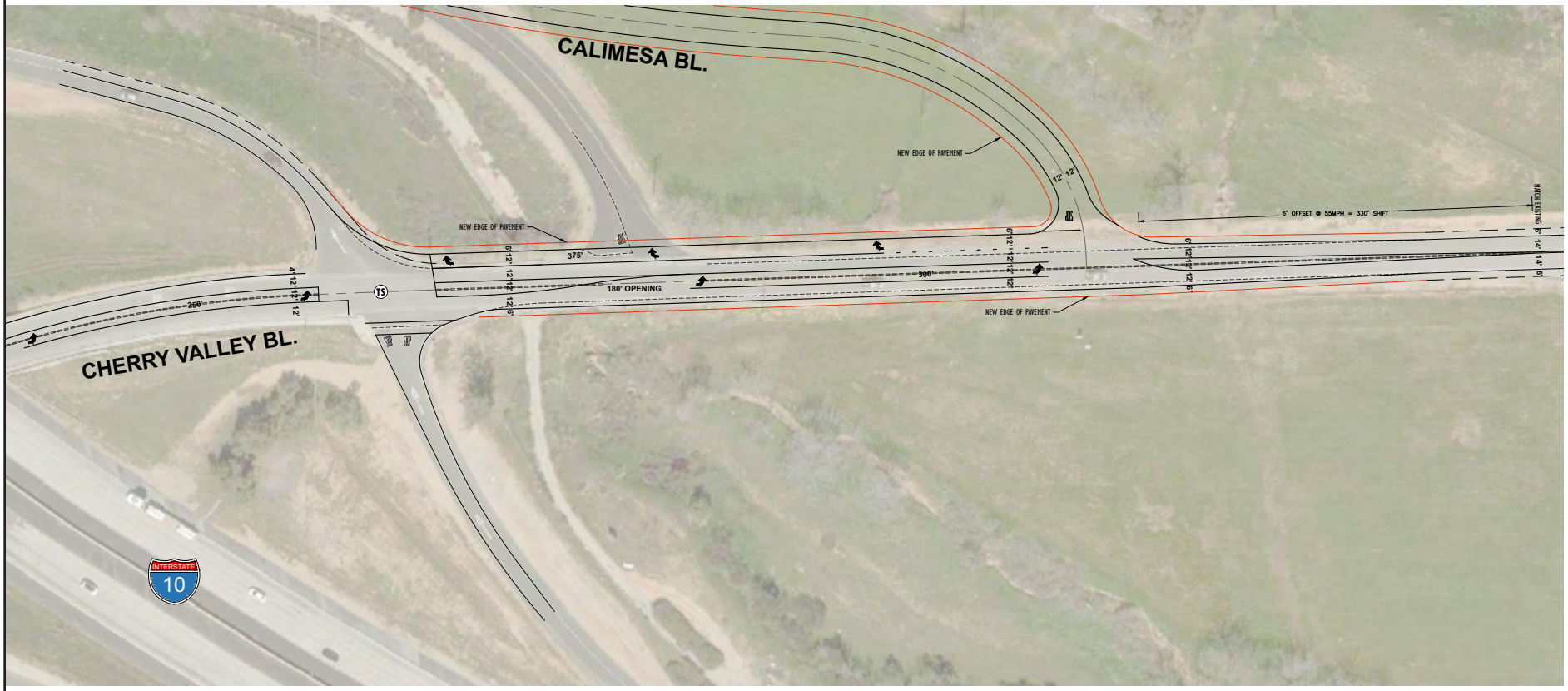



Source: Urban Crossroads, June 2016.

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# Exhibit 3.16-7
# Cherry Valley Boulevard and I-10 Ramps Concept Striping with Protected Left Turn Phasing

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Source: Urban Crossroads, June 2016.

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# Exhibit 3.16-8
# Realigned Calimesa Boulevard and Cherry Valley Boulevard Concept

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*Near Term (2019) Plus Sunny Cal Development Traffic Conditions*

Near-term (2019) Plus Sunny Cal traffic conditions were evaluated for the I-10 Freeway at Cherry Valley Boulevard intersections and the Calimesa Boulevard and Cherry Valley Boulevard intersections only. The intersection analysis results for these three intersections are summarized in Table 3.16-22, which indicates that the I-10 Freeway at Cherry Valley Boulevard intersections are anticipated to operate at acceptable LOS (LOS "D" or better) under near-term (2019) Plus Sunny Cal traffic conditions, with installation of traffic signals and other improvements as set forth in TRANS-1a. The intersection of Calimesa Boulevard at Cherry Valley Boulevard is currently operating at an acceptable LOS and is anticipated to operate at acceptable LOS D or better with the addition of ambient growth and project traffic. However, Calimesa Boulevard is located approximately 150-feet from the intersection of I-10 WB ramps and Cherry Valley Boulevard, which could result in potential queuing issues with the installation of traffic signals. As such, the realignment of Calimesa Boulevard 550-feet to the east with existing cross-street stop control is proposed in order to increase the distance between Calimesa Boulevard and the I-10 WB ramp, which would mitigate potential queuing issues for westbound traffic towards the interchange as set forth in TRANS-1b. Nonetheless, although mitigation would reduce impacts to less than significant levels, the County and the Applicant cannot control the timing or implementation of these improvements.

*Freeway Off-Ramp Queuing*

The available stacking length and the 95$^{th}$ percentile queues for both Near-Term (2019) and Near Term (2019) Plus Sunny Cal Development Conditions are summarized in Table 3.16-23 below for the three intersections analyzed under the 2019 scenarios. As shown, 95$^{th}$ percentile queues can be accommodated within available stacking distance under Near-Term (2019) and Near Term (2019) Plus Sunny Cal Development Conditions with completion of the recommended improvements.

## Table 3.16-22: Near-Term (2019) Plus Sunny-Cal Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | **I-10 EB Ramps/Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 19.3 | **89.9** | C | **F** |
| | Near Term (2019) plus Sunny-Cal with Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | **1** | 0 | 1 | 0 | **1** | 1 | 0 | 25.9 | 28.7 | C | C |
| 2 | **I-10 WB Ramps/Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | 28.8 | **F** | D |
| | Near Term (2019) plus Sunny-Cal with Improvements | ***TS*** | 0 | 1 | 0 | 0 | 0 | 0 | **1** | 1 | 0 | 0 | 1 | 0 | 37.8 | 20.1 | D | C |
| 3 | **Calimesa Bl./Cherry Valley Bl.** | | | | | | | | | | | | | | | | | |
| | Existing | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13.8 | 13.0 | B | B |
| | Near Term (2019) plus Sunny-Cal with Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | **1** | 1 | 0 | 0 | 1 | 0 | 17.9 | 19.2 | C | C |

Notes:

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; ***1*** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The intersections have been analyzed using the Synchro software.

[3] CSS = Cross-street Stop; TS = Traffic Signal

[4] With the proposed widening of Cherry Valley Boulevard to provide the eastbound left turn lane, it is anticipated that storage for up to two vehicles will be available in the painted median. Two-stage gap acceptance with up to 2 vehicles in median storage assumed for SBL turns from Calimesa Blvd.

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

Source: Urban Crossroads, 2016.

## Table 3.16-23: Off-Ramp Queuing Analysis for Near-Term Conditions, With Improvements

| Intersection | Movement | Available Stacking Distance (Feet) | EAP (2017) | | | | Near Term (2019) | | | | Near Term (2019) plus Sunny-Cal | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 95th Percentile Queue (Feet) | | Acceptable?[1] | | 95th Percentile Queue (Feet) | | Acceptable?[1] | | 95th Percentile Queue (Feet) | | Acceptable?[1] | |
| | | | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| I-10 EB Ramps/Cherry Valley Bl. | WBL | ***150*** | 89 | 121 | Yes | Yes | 84 | 133 | Yes | Yes | 121 | 153 | Yes | Yes[2] |
| | WBT | 560 | 40 | 86 | Yes | Yes | 40 | 87 | Yes | Yes | 35 | 103 | Yes | Yes |
| | SBL/T | 1,145 | 202 | 295 | Yes | Yes | 200 | 296 | Yes | Yes | 242 | 513 | Yes | Yes |
| | SBR | ***350*** | 74 | 206 | Yes | Yes | 83 | 227 | Yes | Yes | 89 | 309 | Yes | Yes |
| I-10 WB Ramps/Cherry Valley Bl. | EBL | ***250*** | 245 | 166 | Yes | Yes | 252 | 177 | Yes[2] | Yes | 221 | 169 | Yes | Yes |
| | EBT | 560 | 141 | 58 | Yes | Yes | 114 | 90 | Yes | Yes | 39 | 104 | Yes | Yes |
| | NBL/T/R | 1,030 | 106 | 169 | Yes | Yes | 96 | 149 | Yes | Yes | 129 | 213 | Yes | Yes |
| | WBT | 545 | 101 | 97 | Yes | Yes | 105 | 101 | Yes | Yes | 347 | 108 | Yes | Yes |
| | WBR | ***375*** | 219 | 92 | Yes | Yes | 253 | 92 | Yes | Yes | 366 | 213 | Yes | Yes |
| Calimesa Boulevard/Cherry Valley Bl. | EBL | ***300*** | 29 | 29 | Yes | Yes | 31 | 35 | Yes | Yes | 37 | 30 | Yes | Yes |

Notes:
[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
[2] It should be noted that the additional 15 feet could be accommodated in the turn pocket transition.
[3] ***1*** = Storage Length Improvement
Source: Urban Crossroads, 2016.

## Horizon Year (2035) Traffic Analysis

This section discusses the methods used to develop horizon year (2035) traffic forecasts for without and with project conditions and the resulting intersection, roadway segment and freeway mainline operations.

### *Roadway Improvements*

The lane configurations and traffic controls assumed to be in place for horizon year (2035) traffic conditions are consistent with those shown on Exhibit 3-1 of the Traffic Study, with the exception of project driveways, the future intersection of Robert's Road/Cherry Valley Boulevard, and those facilities assumed to be constructed by the project or cumulative development projects (refer to Exhibit 3.16-9).

### *Horizon Year (2035) Without Project Traffic Volume Forecasts*

This scenario includes the refined post-processed volumes obtained from the County of Riverside Traffic Analysis Model (RivTAM) for 2035 using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between Existing (2014) conditions and Horizon Year (2035) conditions. The volumes have been developed with the assumption that the currently adopted roadway circulation network in the immediate vicinity of the project site is in place by 2035. The weekday ADT volumes, which can be expected for Horizon Year (2035) without project traffic conditions are shown on Exhibit 7-1 of the Traffic Study. Exhibits 7-2 and 7-3 of the Traffic Study show the AM and PM peak-hour intersection turning movement volumes for Horizon Year (2035) without project traffic conditions.

### *Horizon Year (2035) With Project Traffic Volume Forecasts*

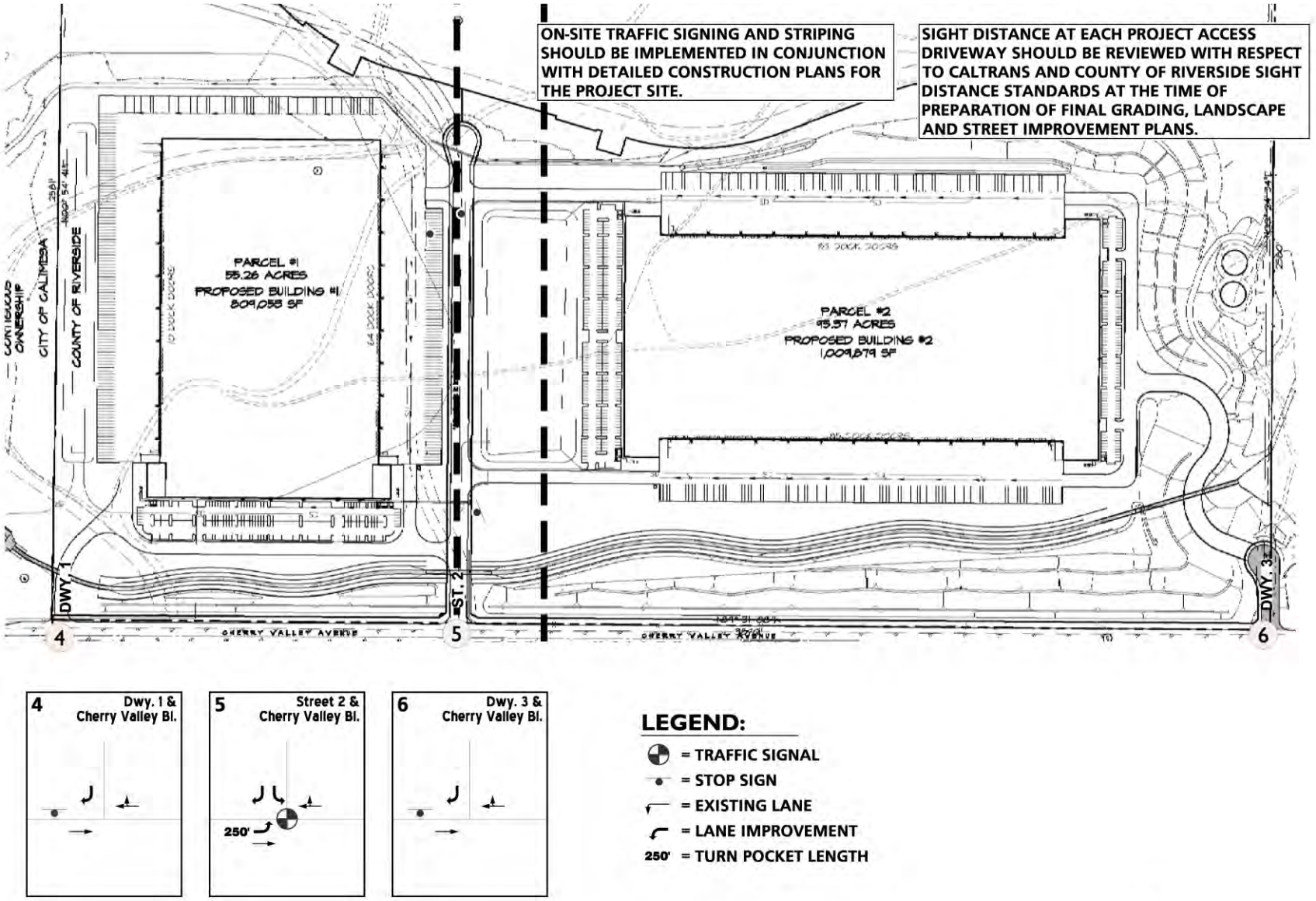
This scenario includes the refined post-processed volumes obtained from the RivTAM plus traffic generated by the project. The weekday ADT volumes that can be expected for horizon year (2035) with project traffic conditions are shown on Exhibit 7-4 of the Traffic Study, and Exhibits 7-5 and 7-6 show the AM and PM peak-hour intersection turning movement volumes for horizon year (2035) with project traffic conditions.

### *Intersection Operations Analysis*

LOS calculations were conducted for the study intersections to evaluate their peak-hour operations under horizon year (2035) without and with project conditions, with existing roadway and intersection geometrics consistent with Exhibit 3-1 of the Traffic Study. The intersection analysis results are summarized in Table 3.16-24, which indicates that the following intersection locations will experience unacceptable LOS E or worse conditions during one or both of the peak hours under horizon year (2035), both without and with project traffic conditions:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements fully included in TUMF)[3]
2. I-10 Westbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements fully included in TUMF)

[3] Clarification regarding improvement's inclusion in the TUMF is provided for informational purposes only.




Source: Urban Crossroads, November 2014.

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# Exhibit 3.16-9
# Horizon Year (2035) With Project Recommended Improvements

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3. Calimesa Boulevard/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements partially included in TUMF)
7. Union Street/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements partially included in TUMF)
8. Nancy Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements partially included in TUMF)
9. Beaumont Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements partially included in TUMF)
10. Roberts Road/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (improvements partially included in TUMF)

## Table 3.16-24: Intersection Analysis for Horizon Year (2035) Conditions

| Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | 2035 Without Project | | | | 2035 With Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Delay[2] (secs.) | | Level of Service | | Delay[2] (secs.) | | Level of Service | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM | AM | PM | AM | PM |
| I-10 EB Ramps/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** | **>100.0** | **>100.0** | **F** | **F** |
| I-10 WB Ramps/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** | **>100.0** | **>100.0** | **F** | **F** |
| Calimesa Boulevard/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** | **>100.0** | **>100.0** | **F** | **F** |
| Driveway 1/Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | ***2*** | 0 | 0 | ***2*** | 0 | Not Applicable | | | | 16.6 | 23.3 | C | C |
| Patton Road/Street 2/Cherry Valley Boulevard | ***TS*** | 0 | 0 | 0 | ***1*** | ***1*** | 0 | ***1*** | 1 | 0 | 0 | 1 | 0 | Not Applicable[4] | | | | Not Applicable[4] | | | |
| Driveway 3/Cherry Valley Boulevard | ***CSS*** | 0 | 0 | 0 | 0 | 0 | ***1*** | 0 | ***2*** | 0 | 0 | ***2*** | 0 | Not Applicable | | | | 14.6 | 17.8 | B | C |
| Union St. (NS)/Cherry Valley Boulevard | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** | **>100.0** | **>100.0** | **F** | **F** |
| Nancy Av. (NS)/Cherry Valley Boulevard | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | **>55.3** | **>56.1** | **F** | **F** | **>55.4** | **>56.2** | **F** | **F** |
| Beaumont Avenue/Cherry Valley Boulevard | TS | 1 | 1 | d | 1 | 1 | d | 1 | 1 | 1 | 1 | 1 | 0 | **85.9** | **110.3** | **F** | **F** | **87.1** | **113.1** | **F** | **F** |
| Roberts Road/Cherry Valley Boulevard | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** | **>100.0** | **>100.0** | **F** | **F** |

Notes:
[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d = *de facto* Right Turn Lane ***1*** = Improvement
[2] Based on the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
TS = Traffic Signal AWS = All-Way Stop CSS = Cross-street Stop **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[4] Existing intersection configuration is not applicable due to the addition of a 4th leg (Future Patton Road). Analysis of the intersection a 4 leg is shown in T3.16-26.
Source: Urban Crossroads, 2014.

### *Basic Freeway Segment Analysis*

The SCAG 2012-2035 RTP and SANBAG have future plans in place for the widening of I-10 Freeway through the study area; however, a schedule for the widening of the I-10 Freeway between Haven Avenue in the City of Ontario and the San Bernardino and Riverside County line has not been set. The I-10 Corridor Project proposes to add a carpool lane (high-occupancy vehicle or HOV lane) in each direction. As indicated on the SCAG 2012-2035 RTP, the additional carpool lanes between Haven Avenue and Ford Street in the City of Redlands is anticipated to be completed in 2020. The additional carpool lane between Ford Street and the San Bernardino and Riverside County line is anticipated to be completed in 2030. As such, the future expansion of the I-10 Freeway has been assumed for the long-range Horizon Year (2035) analysis only. Based on discussions with Caltrans staff, the freeway mainline volumes can potentially be reduced up to fourteen (14) percent with the addition of a single HOV lane. Segment analysis results for the AM and PM peak hours are summarized in Table 3.16-25.

## Table 3.16-25: Basic Freeway Segment Analysis for Horizon Year (2035) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume[2] | Density[3] | LOS | Volume[2] | Density[3] | LOS |
| I-10 Freeway | Westbound | I-215 to Waterman Av. | 4 | AM<br>PM | 8,701<br>9,618 | **50.5**<br>**65.8** | **F**<br>**F** | 8,707<br>9,369 | **51.2**<br>**67.4** | **F**<br>**F** |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 9,441<br>9,872 | **64.9**<br>**73.6** | **F**<br>**F** | 9,448<br>9,892 | **65.0**<br>**74.1** | **F**<br>**F** |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 8,960<br>8,362 | **58.4**<br>**46.4** | **F**<br>**F** | 8,967<br>8,382 | **58.5**<br>**46.6** | **F**<br>**F** |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 9,089<br>7,559 | **53.2**<br>**38.6** | **F**<br>**E** | 9,095<br>7,580 | **53.3**<br>**38.8** | **F**<br>E |
| | | California St. to Alabama St. | 5 | AM<br>PM | 9,773<br>7,927 | **39.8**<br>27.4 | **E**<br>D | 9,780<br>7,948 | **39.8**<br>27.5 | E<br>D |
| | | Alabama St. to Orange St. | 4 | AM<br>PM | 9,081<br>4,666 | **56.0**<br>19.3 | **F**<br>C | 9,088<br>4,686 | **56.1**<br>19.4 | **F**<br>C |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 10,089<br>5,366 | **78.6**<br>22.5 | **F**<br>C | 10,098<br>5,394 | **80.5**<br>22.7 | F<br>C |
| | | Cypress Av. to Ford St. | 4 | AM<br>PM | 6,890<br>6,352 | 32.8<br>27.6 | D<br>D | 6,900<br>6,380 | 32.8<br>27.8 | D<br>D |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 7,228<br>5,482 | 34.4<br>22.8 | D<br>C | 7,237<br>5,510 | 34.5<br>23.1 | D<br>C |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 7,326<br>6,146 | 35.5<br>27.4 | E<br>D | 7,335<br>6,174 | **35.6**<br>27.6 | **E**<br>D |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 5,650<br>4,821 | 24.7<br>20.4 | C<br>C | 5,659<br>4,849 | 24.7<br>20.5 | C<br>C |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 6,890<br>3,776 | **58.7**<br>21.4 | **F**<br>C | 6,907<br>3,820 | **59.1**<br>21.8 | **F**<br>C |

## Table 3.16-25 (cont.): Basic Freeway Segment Analysis for Horizon Year (2035) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume[2] | Density[3] | LOS | Volume[2] | Density[3] | LOS |
| | | W. County Line Rd to Calimesa Bl. | 3 | AM<br>PM | 9,294<br>8,028 | —<br>**104.1** | **F**<br>**F** | 9,317<br>8,087 | —<br>**108.4** | **F**<br>**F** |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 8,504<br>8,472 | **142.1**<br>**148.4** | **F**<br>**F** | 8,532<br>8,541 | **145.5**<br>**159.0** | **F**<br>**F** |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 12,708<br>10,797 | —<br>— | **F**<br>**F** | 12,740<br>10,872 | —<br>— | **F**<br>**F** |
| | | Cherry Valley Bl. to Oak Valley Pkwy. | 3 | AM<br>PM | 11,702<br>10,470 | —<br>— | **F**<br>**F** | 11,755<br>10,496 | —<br>— | **F**<br>**F** |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 7,707<br>8,691 | **86.9**<br>**196.6** | **F**<br>**F** | 7,745<br>8,733 | **88.9**<br>**207.3** | **F**<br>**F** |
| I-10 Freeway | Eastbound | I-215 to Waterman Av. | 5 | AM<br>PM | 8,972<br>9,261 | 33.7<br>**35.9** | D<br>**E** | 8,987<br>9,271 | 33.8<br>**36.0** | D<br>**E** |
| | | Waterman Av. to Tippecanoe Av. | 4 | AM<br>PM | 8,293<br>9,478 | **43.6**<br>**62.7** | **E**<br>**F** | 8,309<br>9,487 | **43.8**<br>**63.0** | **E**<br>**F** |
| | | Tippecanoe Av. to Mountain View Av. | 4 | AM<br>PM | 7,416<br>8,876 | **35.7**<br>**55.3** | **E**<br>**F** | 7,431<br>8,885 | **35.8**<br>**55.5** | **E**<br>**F** |
| | | Mountain View Av. to California St. | 4 | AM<br>PM | 8,581<br>8,913 | **51.8**<br>**52.5** | **F**<br>**F** | 8,596<br>8,922 | **52.0**<br>**52.6** | **F**<br>**F** |
| | | California St. to Alabama St. | 4 | AM<br>PM | 6,466<br>10,066 | 28.1<br>**77.9** | D<br>**F** | 6,481<br>10,076 | 28.4<br>**78.3** | D<br>**F** |
| | | Alabama St. to Orange St. | 4 | AM<br>PM | 5,981<br>9,867 | 25.5<br>**69.7** | C<br>**F** | 5,996<br>9,876 | 25.5<br>**69.8** | C<br>**F** |
| | | Orange St. to Cypress Av. | 4 | AM<br>PM | 6,690<br>8,877 | 31.3<br>**49.5** | D<br>**F** | 6,711<br>8,890 | 31.4<br>**50.2** | D<br>**F** |

## Table 3.16-25 (cont.): Basic Freeway Segment Analysis for Horizon Year (2035) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume[2] | Density[3] | LOS | Volume[2] | Density[3] | LOS |
| | | Cypress Av. to Ford St. | 4 | AM<br>PM | 4,194<br>7,746 | 17.2<br>**38.0** | B<br>**E** | 4,216<br>7,758 | 17.3<br>**38.1** | B<br>**E** |
| | | Ford St. to Wabash Av. | 4 | AM<br>PM | 7,994<br>6,738 | **40.8**<br>30.1 | **E**<br>D | 8,015<br>6,751 | **41.0**<br>30.1 | **E**<br>D |
| | | Wabash Av. to Yucaipa Bl. | 4 | AM<br>PM | 7,994<br>6,738 | **41.2**<br>30.5 | **E**<br>D | 8,015<br>6,751 | **41.4**<br>30.6 | **E**<br>D |
| | | Yucaipa Bl. to Live Oak Canyon Rd. | 4 | AM<br>PM | 10,417<br>7,226 | **99.4**<br>**36.1** | **F**<br>**E** | 10,438<br>7,238 | **100.5**<br>**36.2** | **F**<br>**E** |
| | | Live Oak Canyon Rd. to W. County Line Rd. | 3 | AM<br>PM | 5,779<br>6,907 | **38.7**<br>**58.3** | **E**<br>**F** | 5,816<br>6,926 | **39.1**<br>**59.6** | **E**<br>**F** |
| | | W. County Line Rd to Calimesa Bl. | 3 | AM<br>PM | 6,719<br>11,059 | **53.2**<br>— | **F**<br>**F** | 6,772<br>11,085 | **54.4**<br>— | **F**<br>**F** |
| | | Calimesa Bl. to Singleton Rd. | 3 | AM<br>PM | 6,719<br>11,059 | **53.2**<br>— | **F**<br>**F** | 6,782<br>11,090 | **54.5**<br>— | **F**<br>**F** |
| | | Singleton Rd. to Cherry Valley Bl. | 3 | AM<br>PM | 6,741<br>9,975 | **53.7**<br>— | **F**<br>**F** | 6,809<br>10,008 | **55.9**<br>— | **F**<br>**F** |
| | | Cherry Valley Bl. to Oak Valley Pkwy. | 3 | AM<br>PM | 6,336<br>8,611 | **46.5**<br>**171.2** | **F**<br>**F** | 6,360<br>8,671 | **46.9**<br>**191.7** | **F**<br>**F** |
| | | Oak Valley Pkwy to SR-60 | 3 | AM<br>PM | 6,370<br>7,965 | **47.0**<br>**99.8** | **F**<br>**F** | 6,387<br>8,024 | **47.4**<br>**103.7** | **F**<br>**F** |
| | | I-215 to Day St. | 2 | AM<br>PM | 7,080<br>3,810 | —<br>**37.2** | **F**<br>**E** | 7,085<br>3,825 | —<br>**37.8** | **F**<br>**E** |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 5,290<br>3,818 | **93.2**<br>**38.0** | **F**<br>**E** | 5,295<br>3,833 | **93.6**<br>**38.3** | **F**<br>**E** |



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## Table 3.16-25 (cont.): Basic Freeway Segment Analysis for Horizon Year (2035) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume[2] | Density[3] | LOS | Volume[2] | Density[3] | LOS |
| SR-60 Freeway | Westbound | Frederick St. to Heacock St. | 2 | AM<br>PM | 3,570<br>4,110 | 32.9<br>**42.8** | D<br>**E** | 3,575<br>4,125 | 33.0<br>**43.2** | D<br>**E** |
| | | Heacock St. to Perris Bl. | 2 | AM<br>PM | 3,590<br>3,730 | 32.7<br>**35.5** | D<br>**E** | 3,595<br>3,745 | 33.1<br>**35.7** | D<br>**E** |
| | | Perris Bl. to Nason St. | 2 | AM<br>PM | 3,410<br>3,140 | 29.3<br>26.1 | D<br>D | 3,415<br>3,155 | 29.4<br>26.5 | D<br>D |
| | | Nason St. to Moreno Beach Dr. | 2 | AM<br>PM | 3,936<br>3,583 | **43.1**<br>33.9 | **E**<br>D | 3,941<br>3,598 | **43.2**<br>34.2 | **E**<br>D |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM<br>PM | 3,250<br>3,010 | 29.1<br>26.0 | D<br>D | 3,255<br>3,025 | 29.2<br>26.2 | D<br>D |
| | | Redlands Bl. to Theodore St. | 2 | AM<br>PM | 4,290<br>3,780 | **47.1**<br>**37.6** | **F**<br>E | 4,295<br>3,795 | **47.3**<br>**37.9** | **F**<br>**E** |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM<br>PM | 2,483<br>2,252 | 20.7<br>19.3 | C<br>C | 2,488<br>2,267 | 20.8<br>19.4 | C<br>C |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM<br>PM | 3,460<br>2,670 | 31.3<br>22.7 | D<br>C | 3,470<br>2,696 | 31.5<br>23.0 | D<br>C |
| | | Jack Rabbit Tr. to I-10 | 2 | AM<br>PM | 3,840<br>2,810 | **36.7**<br>24.4 | **E**<br>C | 3,850<br>2,836 | **36.9**<br>24.8 | **E**<br>C |
| SR-60 Freeway | Eastbound | I-215 to Day St. | 3 | AM<br>PM | 3,690<br>5,986 | 20.5<br>**41.5** | C<br>**E** | 3,701<br>5,993 | 20.6<br>**41.6** | C<br>**E** |
| | | Day St. to Frederick St./Pigeon Pass Rd. | 2 | AM<br>PM | 3,043<br>4,263 | 26.5<br>**48.0** | D<br>**F** | 3,054<br>4,270 | 26.7<br>**48.2** | D<br>**F** |
| | | Frederick St. to Heacock St. | 2 | AM<br>PM | 3,600<br>4,263 | 33.6<br>**48.0** | D<br>**F** | 3,612<br>4,270 | 33.8<br>**48.2** | D<br>**F** |



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## Table 3.16-25 (cont.): Basic Freeway Segment Analysis for Horizon Year (2035) Conditions

| Freeway | Direction | Mainline Segment | Lanes[1] | Time Period | Without Project | | | With Project | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Volume[2] | Density[3] | LOS | Volume[2] | Density[3] | LOS |
| | | Heacock St. to Perris Bl. | 2 | AM | 3,540 | 32.2 | D | 3,552 | 32.4 | D |
| | | | | PM | 4,220 | **44.9** | **E** | 4,227 | **45.1** | **F** |
| | | Perris Bl. to Nason St. | 2 | AM | 3,210 | 26.9 | D | 3,222 | 27.1 | D |
| | | | | PM | 3,590 | 31.7 | D | 3,597 | 32.1 | D |
| | | Nason St. to Moreno Beach Dr. | 2 | AM | 2,369 | 20.4 | C | 2,380 | 20.5 | C |
| | | | | PM | 2,682 | 22.6 | C | 2,689 | 22.7 | C |
| | | Moreno Beach Dr. to Redlands Bl. | 2 | AM | 2,910 | 25.2 | C | 2,922 | 25.5 | C |
| | | | | PM | 3,240 | 28.6 | D | 3,247 | 28.7 | D |
| | | Redlands Bl. to Theodore St. | 2 | AM | 3,640 | 34.3 | D | 3,652 | 34.8 | D |
| | | | | PM | 4,280 | **48.5** | **F** | 4,287 | **48.7** | **F** |
| | | Theodore St. to Gilman Springs Rd. | 2 | AM | 1,853 | 15.8 | B | 1,865 | 15.9 | B |
| | | | | PM | 2,771 | 23.7 | C | 2,778 | 23.7 | C |
| | | Gilman Springs Rd. to Jack Rabbit Tr. | 2 | AM | 2,320 | 20.8 | C | 2,342 | 21.0 | C |
| | | | | PM | 4,580 | **59.3** | **F** | 4,592 | **59.7** | **F** |
| | | Jack Rabbit Tr. to I-10 | 2 | AM | 2,390 | 21.3 | C | 2,412 | 21.5 | C |
| | | | | PM | 4,950 | **73.6** | **F** | 4,962 | **74.3** | **F** |

[1] Number of lanes are in the specified direction and is based on existing conditions
[2] I-10 Eastbound and Westbound volumes from the I-215 Freeway to W. County Line Road shown on this table have been reduced to account for the proposed HOV lane in each direction.
[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).
**BOLD** = Unacceptable Level of Service.

As shown on Table 3.16-25, all I-10 and SR-60 Freeway segments analyzed were found to operate at an unacceptable LOS (i.e., LOS "E" or worse) during either the AM or PM peak hours for both Without and With Project traffic conditions with the exception of the following segments:

| ID | Freeway | Direction | Segment |
|---|---|---|---|
| 8 | I-10 | Westbound | Cypress Av. to Ford St. |
| 9 | I-10 | Westbound | Ford St. to Wabash Av. |
| 11 | I-10 | Westbound | Yucaipa Bl. to Live Oak Canyon Rd. |
| 39 | SR-60 | Westbound | Perris Bl. to Nason St. |
| 41 | SR-60 | Westbound | Moreno Beach Dr. to Redlands Bl. |
| 43 | SR-60 | Westbound | Theodore St. to Gilman Springs Rd. |
| 44 | SR-60 | Westbound | Gilman Springs Rd. to Jack Rabbit Tr. |
| 50 | SR-60 | Eastbound | Perris Bl. to Nason St. |
| 51 | SR-60 | Eastbound | Nason St. to Moreno Beach Dr. |
| 52 | SR-60 | Eastbound | Moreno Beach Dr. to Redlands Bl. |
| 54 | SR-60 | Eastbound | Theodore St. to Gilman Springs Rd. |

However, because all of the freeway segments were previously identified as unacceptable without the project under horizon year (2035) conditions, the project is not anticipated to result in any additional freeway segment deficiencies beyond those which are already expected to occur.

### *Freeway Merge/Diverge Analysis*

Ramp merge and diverge operations have been evaluated for horizon year (2035) traffic conditions at the I-10 Freeway and Cherry Valley Boulevard interchange. As shown on Table 3.16-26, it is anticipated that the following ramp junctions along the I-10 Freeway are projected to operate at unacceptable service levels for both horizon year (2035) without and with project conditions:

- I-10 Freeway–Eastbound, off-ramp at Cherry Valley Boulevard—LOS F AM and PM Peak Hours
- I-10 Freeway–Eastbound, on-ramp at Cherry Valley Boulevard—LOS F AM and PM Peak Hours
- I-10 Freeway–Westbound, on-ramp at Cherry Valley Boulevard—LOS F AM and PM Peak Hours
- I-10 Freeway–Westbound, off-ramp at Cherry Valley Boulevard—LOS F AM and PM Peak Hours

Because all of the junctions would operate at unacceptable levels without the project, the project is not anticipated to result in any additional deficiencies.

## Table 3.16-26: I-10 Freeway Ramp Junction Merge/Diverge Analysis for Horizon Year (2035) Conditions

| I-10 Direction | Ramp or Segment | Lanes on Freeway[1] | 2035 Without Project | | | | 2035 With Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS | Density[2] | LOS |
| EB | Off-ramp at Cherry Valley Boulevard | 3 | **42.4** | **F** | **72.9** | **F** | **43.4** | **F** | **73.2** | **F** |
| | On-ramp at Cherry Valley Boulevard | 3 | **38.7** | **F** | **58.5** | **F** | **38.9** | **F** | **59.1** | **F** |
| WB | On-ramp at Cherry Valley Boulevard | 3 | **94.0** | **F** | **77.6** | **F** | **94.2** | **F** | **78.3** | **F** |
| | Off-ramp at Cherry Valley Boulevard | 3 | **92.2** | **F** | **80.0** | **F** | **92.7** | **F** | **80.2** | **F** |

Notes:
[1] Number of lanes is in the specified direction and is based on existing conditions. No future improvements are currently planned.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
Source: Urban Crossroads, 2014.



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### *Level of Significance Before Mitigation*

Potentially significant impacts under Existing plus Ambient Growth plus Project (2017) conditions, and potentially significant cumulative impacts under EAPC (2017), and Horizon Year (2035).

As discussed above, the following intersections are currently operating at an unacceptable LOS (LOS E or worse) and are anticipated to continue to operate at unacceptable LOS with the addition of an ambient growth factor of 6.12 percent and project traffic.

*EAP (2017)*

1. I-10 EB Ramps/Cherry Valley Boulevard (AM peak hour only[4]) LOS C to LOS F
2. I-10 WB Ramps/Cherry Valley Boulevard (PM peak hour only) LOS D to LOS F

The following intersections are anticipated to operate at an unacceptable LOS with addition of cumulative traffic from pending and approved, but not yet constructed known development projects in the area, *in addition* to those previously identified under EAP (2017) traffic conditions.

*EAPC (2017)*

1. Calimesa Boulevard/Cherry Valley Boulevard (AM and PM peak hours) LOS F

*Horizon Year (2035)*

The project would also result in a cumulatively considerable contribution to the existing cumulatively significant impact at the following intersections, which are anticipated to operate at an unacceptable LOS under Horizon Year (2035) with and without Project conditions:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
2. I-10 Westbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
3. Calimesa Boulevard/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
7. Union Street/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
8. Nancy Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
9. Beaumont Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
10. Roberts Road/Cherry Valley Boulevard—LOS F AM and PM Peak Hours

The addition of project traffic is not anticipated to result in any intersection deficiencies beyond those previously identified under Horizon Year (2035) Without Project conditions.

There are three freeway mainline segments that are currently operation at an unacceptable LOS under Existing traffic conditions and are anticipated to continue to operate at unacceptable LOS through Horizon Year (2035) traffic conditions. As the project is expected to contribute peak-hour trips to the existing deficiencies on the regional SHS, the projects incremental contribution is considered cumulatively significant and unavoidable.

[4] Although the project would only create a potentially significant impact during either AM or PM peak hours under EAP [2017] conditions (but not both), the improvements necessary to reduce the existing deficiencies would serve to mitigate impacts under both AM and PM peak hours.

MM TRAN-1a and MM TRAN-1b are required to mitigate impacts to the I-10 Eastbound and Westbound ramps at Cherry Valley Boulevard as well as impacts to the Cherry Valley Boulevard and Calimesa Boulevard intersection under the scenarios described above. MM TRAN-1c is required to reduce impacts to the other intersections listed below in MM TRAN-1c. However, some of the proposed improvements are not specifically included within the TUMF or DIF fee programs at this time. Therefore, while the project would contribute its fair share of fees to support the implementation of necessary improvements, the applicant and the County cannot fully control the timing or implementation of the improvements listed in other jurisdictions, and impacts would remain significant and unavoidable.

### *Mitigation Measures*

**MM TRAN-1a** (a) Prior to the issuance of occupancy permits, the project applicant shall pay the project's fair share toward the construction of the new interchange at the I-10 eastbound and westbound intersections at Cherry Valley Boulevard, provided that the City of Calimesa has established a fair share contribution program for such improvements. The County shall determine whether a fair share program exists in the City of Calimesa and, if one does exist, the fair share payment due from the applicant to the City of Calimesa shall be 5.8 % at the I-10 EB ramps/Cherry Valley Boulevard and 10.6% at I-10 WB ramps/Cherry Valley Boulevard, as determined in the traffic study.

(b) If a fair share contribution program has not been established, and provided that both Caltrans and the City of Calimesa authorize construction within their respective jurisdictional control, the project applicant shall construct the following interim improvements prior to the issuance of occupancy permits:

(i) install traffic signals at I-10 eastbound and westbound ramp intersections at Cherry Valley Boulevard,

(ii) restripe to provide eastbound and westbound left turn pockets within the existing width of the Cherry Valley Boulevard bridge,

(iii) add a southbound right turn lane on the off ramp at the intersection of I-10 EB ramps at Cherry Valley Boulevard, and

(iv) add a westbound right turn lane at the intersection of I-10 WB ramps at Cherry Valley Boulevard.

**MM TRAN-1b** (a) Prior to the issuance of occupancy permits, the project applicant shall pay the project's fair share costs to realign Calimesa Boulevard approximately 550 feet east of the I-10 westbound ramps and construct an eastbound left turn lane at the intersection of Calimesa Boulevard and Cherry Valley Boulevard, provided that the City of Calimesa has established a fair share contribution program for this intersection. The County shall determine whether a fair share program exists in the City of Calimesa and, if one does exist, the fair share payment due from the applicant to the City of Calimesa shall be 12.1%, as determined in the traffic study.

(b) If a fair share contribution program has not been established, and provided that the City of Calimesa authorizes construction within its jurisdictional control, the project applicant shall, prior to the issuance of occupancy permits:
   (i) realign Calimesa Boulevard approximately 550 feet east of the I-10 westbound ramps; and
   (ii) construct an eastbound left turn lane at the intersection of Calimesa Boulevard and Cherry Valley Boulevard.

**MM TRAN-1c** Prior to the issuance of occupancy permits, the project applicant shall participate in the County's DIF and TUMF Fee programs as applicable for the following improvements. For improvements not included in a fee program, the project applicant shall participate in the payment of a fair share contribution towards future improvements.

**I-10 Eastbound Ramps/Cherry Valley Boulevard**

- Install a traffic signal.
- Construct a westbound left turn lane.
- Construct a southbound right turn lane
- Modify the intersection to provide free flow movement for the southbound right turn lane.
- Construct a second eastbound though lane.
- Construct an eastbound right turn lane.
- Construct a second westbound through lane.

**I-10 Westbound Ramps/Cherry Valley Boulevard**

- Install a traffic signal.
- Construct an eastbound left turn lane.
- Construct a westbound right turn lane.
- Construct a northbound left turn lane.
- Construct a second eastbound left turn lane.
- Construct a second eastbound through turn lane.
- Construct a second westbound through lane.
- Construct a westbound right turn lane.

**Calimesa Boulevard/Cherry Valley Boulevard**

- Install a traffic signal.
- Construct an eastbound left turn lane.
- Construct a second eastbound through lane.
- Construct a southbound right turn lane
- Construct a westbound right turn lane
- Construct a second westbound through lane.
- Modify the traffic signal in order to provide overlap phasing for the westbound right turn lane.

**Street 2/Cherry Valley Boulevard**

- Install a traffic signal.
- Construct a westbound left turn lane.
- Construct a second eastbound through lane.
- Construct a second westbound through lane.
- Construct a southbound left turn lane
- Construct a southbound right turn lane.
- Construct a northbound left turn lane.
- Construct a northbound through lane.

**Union Street/Cherry Valley Boulevard:**

- Install a traffic signal.
- Construct a northbound left turn lane.
- Construct a southbound left turn lane.
- Construct an eastbound left turn lane.
- Construct a second eastbound through lane.
- Construct a westbound left turn lane.
- Construct a second westbound through lane.

**Nancy Street/Cherry Valley Boulevard:**

- Install a traffic signal.
- Construct an eastbound left turn lane.
- Construct a second eastbound through lane.
- Construct a westbound left turn lane.
- Construct a second eastbound through lane.

**Beaumont Avenue/Cherry Valley Boulevard:**

- Construct a second eastbound through lane.
- Construct a second westbound through lane.
- Modify traffic signal in order to provide overlap phasing for the EB right turn lane.

**Roberts Road/Cherry Valley Boulevard:**

- Install a traffic signal.
- Construct a southbound left turn lane.
- Construct an eastbound  left turn lane
- Construct a second eastbound through lane
- Construct a second westbound through lane
- Construct a westbound right turn lane

The County shall ensure that the improvements specified will be constructed at that point in time necessary to avoid identified impacts.

The widening of Cherry Valley Boulevard to its ultimate roadway classification as a 4-lane, 2-lanes of travel in each direction, divided arterial highway is currently included in the County's TUMF program. As such, additional eastbound and westbound through lane improvements at study area intersections along Cherry Valley Boulevard are recognized in the County's TUMF program. The installation and/or modification of traffic signals and turn lanes would be subject to payment of fair share.

### *Level of Significance After Mitigation*

*Local Roadway Segments and Intersections*

**Significant and unavoidable impact.** The transportation impacts associated with the development of the project were determined based on the Existing plus Ambient Growth plus Project Year 2017, Existing plus Ambient Growth plus Project plus Cumulative Year 2017 and Horizon Year 2035 Without and With Project analysis. As summarized in Tables 3.16.23, 3.16.24 and 3.16.25, above, the development of the project would create two (2) potentially significant impacts for Existing plus Ambient Growth plus Project Year 2017 conditions, one (1) potentially significant cumulative impact for EAPC (2017) conditions, and five (5) additional cumulatively significant impacts for Horizon Year 2035 traffic conditions, without mitigation.

Implementation of Mitigation Measure TRAN-1b and TRAN-1c requires the applicant to pay its fair share and to participate in the County's DIF and TUMF fee programs as applicable to fund/the improvement costs for the impacted intersections. The fair share calculations are provided in Table 9-2 of the Traffic Study included in Appendix I. However, some of the proposed improvements are not specifically included within the TUMF or DIF fee programs at this time. Therefore, while the project would contribute its fair share of fees to support the implementation of necessary improvements, the applicant and the County cannot fully control the timing or implementation of the improvements listed and impacts would remain significant and unavoidable for the following:

**Opening Year (2017) EAP Plus Cumulative**

1. Calimesa Boulevard/Cherry Valley Boulevard (PM Peak Hour) LOS F

The above impact (Opening Year 2017 EAP Plus Cumulative) is considered a cumulative impact.

**Horizon Year (2035)**

Additionally, the project would result in a cumulatively considerable contribution to the existing cumulatively significant impacts at the following intersections, which are anticipated to operate at an unacceptable LOS under Horizon Year (2035) without and with Project conditions:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (fully identified in TUMF)
2. I-10 Westbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (fully identified in TUMF)
3. Calimesa Boulevard/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (only partially identified in TUMF)

7. Union Street/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (only partially identified in TUMF)
8. Nancy Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (only partially identified in TUMF)
9. Beaumont Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (only partially identified in TUMF)
10. Roberts Road/Cherry Valley Boulevard—LOS F AM and PM Peak Hours (only partially identified in TUMF)

Mitigation Measure TRAN-1b further provides that, in the event a fair share program has not been established in the City of Calimesa for the Calimesa Boulevard/Cherry Valley Boulevard intersection, then the project applicant is required to construct certain interim improvements to mitigate the project's cumulative impacts, provided that the agencies with jurisdiction over the improvements allow for such construction.

Thus, the implementation of recommended mitigation measures at the impacted intersections would mitigate the direct, cumulative, and long-term impacts of the project on local roadway segments and intersections to a less than significant level. However, the Calimesa Boulevard/Cherry Valley Boulevard intersection is partially under the jurisdiction of the City of Calimesa, which the County of Riverside does not control. Thus, even though the project fully mitigates its impacts and the project applicant has satisfied its obligations with regard to the mitigation measures, the County of Riverside cannot control the timing of the improvements. For those reasons, the proposed project could result in a significant unavoidable impact with respect to the Calimesa Boulevard/Cherry Valley intersection under Opening Year (2017) and Horizon Year (2035).

*I-10 Freeway Ramps*

**Significant and unavoidable impact.** Implementation of Mitigation Measures TRAN-1a and TRAN-1c require the applicant to pay its fair share and to participate in the County's DIF and TUMF fee programs as applicable to fund the improvement costs. Mitigation Measures TRAN-1a further provides that, in the event a fair share contribution program has not been established in the City of Calimesa for the I-10 at Cherry Valley interchange, then the project applicant is required to construct certain interim improvements to mitigate the project's cumulative impacts, provided that the agencies with jurisdiction over the improvements allow for such construction. The installation of the new traffic signals and other improvements would significantly increase the capacity of the I-10 at Cherry Valley interchange ramp intersections, such that even with the addition of project traffic, delay and level of service will be improved to better than current conditions.

However, the I-10 Interchange is located within the jurisdiction of Caltrans and the City of Calimesa. Therefore, because the County of Riverside itself does not control these areas, it cannot guarantee the provision or timing of the specified improvements. For example, the County cannot control when or whether the City of Calimesa establishes the Fair Share Contribution Program (under TRAN-1A, Option 1), nor can the County grant the requisite permits for construction of the improvements that would be constructed on Caltrans' and Calimesa's property (under TRAN-1A, Option 2).

Thus, even though the Project would fully mitigate its impacts to less than significant levels (and in the case of the interchange, actually improve the existing conditions) and has satisfied its obligations with regard to the mitigation measures, the County of Riverside cannot make a finding of less than significant impacts because it does not control the areas outside its jurisdiction—namely, I-10 Freeway Eastbound and the I-10 Eastbound Ramps/Cherry Valley Boulevard and I-10 Westbound Ramps/Cherry Valley Boulevard within the jurisdiction of the City of Calimesa and Caltrans.

Therefore, even though the project fully mitigates its impacts and the project applicant has satisfied its obligations with regard to the mitigation measures, the proposed project could have a cumulatively considerable contribution to the significant and unavoidable impact to I-10 Eastbound Ramps/Cherry Valley Boulevard and I-10 Westbound Ramps/Cherry Valley Boulevard.

**EAP (2017)**

1. I-10 EB Ramps/Cherry Valley Boulevard (AM Peak Hours) LOS C to F
2. I-10 WB Ramps/Cherry Valley Boulevard (PM Peak Hours) LOS D to LOS F

These impacts are considered significant as the project contributes traffic to the existing deficiency.

**EAPC (2017)**

1. I-10 EB Ramps/Cherry Valley Boulevard (AM, PM Peak hours) LOS F
2. I-10 WB Ramps/Cherry Valley Boulevard (AM, PM Peak hours) LOS F

**Horizon Year (2035)**

The project would result in a cumulatively considerable impact to the following ramp-to-arterial intersections because they are anticipated to operate at an unacceptable LOS under Horizon Year (2035) Without Project conditions:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
2. I-10 Westbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours

There are no existing public transit, bikeways or pedestrian facilities at the project site or in the area. As discussed below under Impacts TRAN-9 and TRAN-10, the project will not impact modes of non-motorized travel, or other relevant components of the circulation system such as pedestrian and bicycle paths, and mass transit.

*I-10 Freeway Mainline Segments*

**Significant and Unavoidable.** There are three freeway mainline segments that are currently operation at an unacceptable LOS under Existing traffic conditions and are anticipated to continue to operate at unacceptable LOS through Horizon Year (2035) traffic conditions. As the project is expected to contribute peak-hour trips to the existing deficiencies on the regional SHS, the project's incremental contribution is considered cumulatively significant and unavoidable.

## Level of Service Standards

**Impact TRAN-2: The project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.**

### *Impact Analysis*

Each county in California is required to develop a Congestion Management Program (CMP) that analyzes the links between land use, transportation, and air quality. The Riverside County Transportation Commission (RCTC) is the County of Riverside's Congestion Management Agency. The RCTC prepares and periodically updates the county's CMP to meet federal Congestion Management System guidelines and state CMP legislation (RCTC 2013).

According to the 2011 Riverside County Congestion Management Program, Table 2-1, CMP System of Highways and Roadways, the roads adjacent to the project site (Cherry Valley Boulevard and Calimesa Boulevard) are not listed as part of the CMP System of Highways and Roadways. The I-10 is located approximately 0.35 of a mile west of the project site. However, that portion of I-I-10 within the vicinity of the project site is not listed as being part of the CMP System of Highways in Riverside County. Therefore, the project would not conflict with the Riverside County CMP, and potential impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

## Table 3.16-27: Recommended Improvements for Existing Plus Ambient Growth Plus Project (2017) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | **I-10 EB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | -Without Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **84.6** | **>100.0** | **F** | **F** |
| | -With Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | 0 | ***1*** | 1 | 0 | 25.4 | 24.1 | C | C |
| | With Roundabout Alternative[4] | ***RA*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | ***1*** | 0 | 1 | 0 | 2.6 | 3.1 | A | A |
| 2 | **I-10 WB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | -Without Improvements | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **69.8** | **F** | **F** |
| | -With Improvements | ***TS*** | 0 | 1 | 0 | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | ***1*** | 28.6 | 18.2 | C | B |
| | With Roundabout Alternative | ***RA*** | ***1*** | 1 | ***1*** | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | ***1*** | 4.0 | 2.2 | A | A |

Notes:

[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d= *de facto* Right Turn Lane ***1*** = Improvement

[2] Based on the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The signalized I-10 ramp locations at Cherry Valley Boulevard have been analyzed using the Synchro software.

[3] CSS = Cross-street Stop; TS = Traffic Signal **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[4] The roundabout concept is preliminary, and is based on the 2025 interim concept previously presented in the *Roundabout Feasibility Study for Interstate 10 and Cherry Valley Boulevard* Interchange published by Omni-means, Ltd. (September 2013). If a roundabout were to be selected for implementation, additional design and operational analysis consistent with both the Caltrans *Geometric Design Guidance, Final Report* (June 2007), and R*eport 672 Roundabouts: An Informational Guide (Second Edition)* published by the National Cooperative Highway Research Program (NCHRP) and the Federal Highway Administration (FHWA) will need to be performed.

Source: Urban Crossroads, 2014.

## Table 3.16-28: Recommended Improvements for Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | **I-10 EB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | 0 | ***1*** | 1 | 0 | 51.1 | 44.6 | D | D |
| | With Roundabout Alternative[4] | ***RA*** | 0 | 0 | 0 | 0 | 1 | ***1*** | 0 | 1 | ***1*** | 0 | 1 | 0 | 7.3 | 6.7 | A | A |
| 2 | **I-10 WB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | ***TS*** | 0 | 1 | 0 | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | ***1*** | 39.8 | 20.6 | D | C |
| | With Roundabout Alternative | ***RA*** | ***1*** | 1 | ***1*** | 0 | 0 | 0 | ***1*** | 1 | 0 | 0 | 1 | ***1*** | 10.7 | 2.8 | B | A |
| 3 | **Calimesa Boulevard/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | F | **F** |
| | - With Improvements | ***TS*** | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | ***0*** | 15.1 | 15.1 | A | B |

Notes:

[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d= *de facto* Right Turn Lane 1 = Improvement

[2] Based on the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The signalized I-10 ramp locations at Cherry Valley Boulevard have been analyzed using the Synchro software.

[3] CSS = Cross-street Stop TS = Traffic Signal

[4] The roundabout concept is preliminary, and is based on the 2025 interim concept previously presented in the *Roundabout Feasibility Study for Interstate 10 and Cherry Valley Boulevard* Interchange published by Omni-means, Ltd. (September 2013). If a roundabout were to be selected for implementation, additional design and operational analysis consistent with both the Caltrans *Geometric Design Guidance, Final Report* (June 2007), and R*eport 672 Roundabouts: An Informational Guide (Second Edition)* published by the National Cooperative Highway Research Program (NCHRP) and the Federal Highway Administration (FHWA) will need to be performed.

Source: Urban Crossroads, 2014.

## Table 3.16-29: Recommended Improvements for Horizon Year (2035) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 1 | **I-10 EB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | **TS** | 0 | 0 | 0 | 0 | 1 | **1>>** | 0 | **2** | **1** | **1** | **2** | 0 | 34.8 | 54.6 | C | D |
| | With Roundabout Alternative[4] | **RA** | 0 | 0 | 0 | 0 | 1 | **1** | 0 | **2** | **1** | 0 | **2** | 0 | 8.4 | 50.7 | A | D |
| 2 | **I-10 WB Ramps/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | **TS** | **1** | 1 | 0 | 0 | 0 | 0 | **2** | **2** | 0 | 0 | **2** | **1** | 19.0 | 26.7 | B | C |
| | With Roundabout Alternative | **RA** | **1** | 1 | **1** | 0 | 0 | 0 | **1** | **2** | 0 | 0 | **2** | **1** | 2.7 | 3.8 | A | A |
| 3 | **Calimesa Boulevard/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | **TS** | 0 | 0 | 0 | **1** | **0** | **1** | **1** | **2** | 0 | 0 | **2** | **1>** | 2.9 | 7.5 | A | A |
| 5 | **Patton Road/Street 2/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | TS | 0 | 0 | 0 | **1** | **1** | 0 | **1** | 1 | 0 | 0 | 1 | 0 | Not Applicable | | | |
| | - With Improvements Without Project | TS | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **2** | 0 | 22.7 | 36.4 | C | D |
| | - With Improvements With Project | TS | **1** | **1** | 0 | **1** | **1** | 0 | **1** | **2** | 0 | **1** | **2** | 0 | 28.0 | 36.9 | C | D |
| 7 | **Union Street (NS)/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | **>100.0** | **>100.0** | **F** | **F** |
| | - With Improvements | **TS** | **1** | 1 | 0 | **1** | 1 | 0 | **1** | **2** | 0 | **1** | **2** | 0 | 16.3 | 17.1 | B | B |

## Table 3.16-29 (cont.): Recommended Improvements for Horizon Year (2035) Conditions

| # | Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | | | |
| | | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| 8 | **Nancy Avenue (NS)/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | AWS | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | **55.4** | **56.2** | **F** | **F** |
| | - With Improvements | ***TS*** | 0 | 1 | 0 | 0 | 1 | 0 | ***1*** | ***2*** | ***0*** | ***1*** | ***2*** | ***0*** | 24.3 | 28.3 | C | C |
| 9 | **Beaumont Avenue/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | TS | 1 | 1 | d | 1 | 1 | d | 1 | 1 | 1 | 1 | 1 | 0 | **87.0** | **113.1** | **F** | **F** |
| | - With Improvements | TS | 1 | 1 | d | 1 | 1 | d | 1 | ***2*** | ***1>*** | 1 | ***2*** | 0 | 37.1 | 43.6 | D | D |
| 10 | **Roberts Road/Cherry Valley Boulevard** | | | | | | | | | | | | | | | | | |
| | - Without Improvements | CSS | 0 | 0 | 0 | | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | **>100.0** | **>100.0** | F | F |
| | - With Improvements | ***TS*** | 0 | 0 | 0 | ***1*** | ***0*** | ***1*** | ***1*** | ***2*** | 0 | 0 | ***2*** | ***1*** | 32.3 | 24.7 | C | C |

Notes:

[1] When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left T = Through R = Right > = Right-Turn Overlap Phasing d= *de facto* Right Turn Lane >> = Free Right Turn Lane ***1*** = Improvement

[2] Based on the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The signalized I-10 ramp locations at Cherry Valley Boulevard have been analyzed using the Synchro software.

[3] CSS = Cross-street Stop TS = Traffic Signal

[4] The roundabout concept is preliminary, and is based on the 2025 interim concept previously presented in the *Roundabout Feasibility Study for Interstate 10 and Cherry Valley Boulevard* Interchange published by Omni-means, Ltd. (September 2013). If a roundabout were to be selected for implementation, additional design and operational analysis consistent with both the Caltrans *Geometric Design Guidance, Final Report* (June 2007), and R*eport 672 Roundabouts: An Informational Guide (Second Edition)* published by the National Cooperative Highway Research Program (NCHRP) and the Federal Highway Administration (FHWA) will need to be performed.

Source: Urban Crossroads, 2014.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Air Traffic Patterns

| | |
|---|---|
| **Impact TRAN-3:** | **The project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.** |

### *Impact Analysis*

The project is not expected to affect air traffic either in terms of operations or passenger use, because additional trips associated with the project will consist of vehicle trips, and will not impact air traffic. The closest airport to the project site is the Banning Municipal Airport, which is located approximately 9.6 miles southeast of the project site. There are no private airfields located within two miles of the project site. Because of the project's distance from the nearest airport, the project would not have an impact on air traffic.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Alter Traffic

| | |
|---|---|
| **Impact TRAN-4:** | **The project would not alter waterborne, rail or air traffic.** |

### *Impact Analysis*

As described above, the closest airport to the project site is the Banning Municipal Airport, which is located approximately 9.6 miles southeast of the project site. There are no private airfields located within two miles of the project site. Because of the project's distance from the nearest airport, the project would not have an impact on air traffic. Additionally, the project would not directly involve waterborne or rail traffic. Although the project may involve the storage and/or distribution of goods that have traveled by either rail or by water at some point, it is not expected to alter such traffic as it would merely accommodate existing consumer demand for such goods, and would not create or contribute to such demand. Therefore, impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Hazards

| | |
|---|---|
| **Impact TRAN-5:** | **The project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).** |

### *Impact Analysis*

The project involves the conversion of undeveloped land to an industrial development. The project will include improved circulation of existing roads that will be designed in accordance with County standards. The roads in the project vicinity are generally straight or include gentle vertical and horizontal curves, and do not have design feature hazards such as sharp curves such that the project would substantially increase these hazards. However, the project does propose site access improvements from Cherry Valley Boulevard to provide vehicles access to the project site.

Roadway improvements adjoining the project site that are required as mitigation measures to ensure that hazardous conditions are not created are assumed to be constructed in conjunction with site development, and are described below. These improvements should be in place prior to occupancy.

The recommended site-adjacent roadway improvements for the project are:

- **Cherry Valley Boulevard**—Construct Cherry Valley Boulevard from the westerly project boundary to the easterly project boundary at its ultimate half-section width as an Arterial Highway (128-foot right-of-way) consistent with the County of Riverside General Plan Circulation Element.
- **Street 2—**Construct Street 2 from the project's Private Roadway to Cherry Valley Boulevard as a Public Street at its ultimate full-section width as an Industrial Collector (78-foot right-of-way).
- **Private Roadway—**Construct project's Private Roadway from northerly project boundary to its connection with Street 2 as a 56-foot paved section.
- **Driveway 3—**Construct Driveway 3, north of Cherry Valley Boulevard, at its ultimate full-section width as an Industrial Collector (78-foot right-of-way).

The Traffic Study for the project recommends site access driveway improvements for the project, which have been incorporated as mitigation measures to reduce potential impacts from the addition of site access driveways as part of the project.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

In conjunction with adjacent project development activity or as needed for project access purposes, the project applicant shall ensure that the following site access driveway improvements are constructed prior to the issuance of a certificate of occupancy for the project:

**MM TRAN-5a** **Driveway 1 at Cherry Valley Boulevard**—Install a stop control on the southbound approach and construct the intersection with right-in/right-out access only in conjunction with the following geometrics:

- Northbound Approach: not applicable.
- Southbound Approach: One right turn lane.
- Eastbound Approach: One through lane.
- Westbound Approach: One shared through-right turn lane.

**MM TRAN-5b** **Street 2 at Cherry Valley Boulevard**—Install a traffic signal and construct the intersection with the following geometrics:

- Northbound Approach: not applicable.
- Southbound Approach: One left turn lane and one shared through-right turn lane.
- Eastbound Approach: One left turn lane with a minimum of 250-feet of storage and one though lane.
- Westbound Approach: One shared through-right turn lane.

**MM TRAN-5c** **Driveway 3 at Cherry Valley Boulevard**—Install a stop control on the southbound approach and construct the intersection with right-in/right-out access only in conjunction with the following geometrics:

- Northbound Approach: not applicable
- Southbound Approach: One right turn lane.
- Eastbound Approach: One through lane.
- Westbound Approach: One shared through-right turn lane.

**MM TRAN-5d** On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.

**MM TRAN-5e** Sight distance at each project access driveway shall be reviewed with respect to Caltrans and County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

### *Level of Significance After Mitigation*

Less than significant impact.

## New or Altered Road Maintenance

**Impact TRAN-6: The project would not cause an effect upon, or a need for new or altered maintenance of roads.**

### *Impact Analysis*

According to the Traffic Study prepared for the project, on a daily basis, the project would generate 3,126 ADT (4,905 PCE) net trip-ends per day on a typical weekday with approximately 205 (288 PCE) net AM peak-hour trips and 223 (335 PCE) net PM peak-hour trips. As detailed under Impact TRAN-5 above, the project would provide substantial improvements to Cherry Valley Boulevard along its frontage, and payment of TUMF and DIF fees would provide additional funding for improvements to the local road systems, as outlined under Impact TRAN-1. It should also be noted that the project does not involve any changes to the existing roadway system and is consistent with the General Plan Circulation Element. In addition, state and federal gasoline sales taxes generated from the project would further support ongoing County Road maintenance efforts. Therefore, impacts with respect to the need for new or altered maintenance of roads would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Circulation

**Impact TRAN-7: The project would not cause an effect upon circulation during the project's construction.**

### *Impact Analysis*

Construction of the project may cause temporary delays along Cherry Valley Boulevard; however, the County requires temporary road construction and traffic congestion management plans during construction to minimize delay. With the project's required preparation of a traffic congestion management plan, the project is anticipated to have a less than significant impact regarding circulation during construction. However, in order to ensure that such plan properly addresses potential environmental impacts, Mitigation Measure TRAN-7 requires the preparation of a traffic control plan.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM TRAN-7** Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside for approval. The traffic control plan shall describe in

detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. The purpose of these measures is to safely guide motorists, cyclists, and pedestrians, minimize traffic impacts, and ensure the safe and even flow of traffic during construction, consistent with County standards and requirements.

### *Level of Significance After Mitigation*

Less than significant impact.

## Emergency Access

**Impact TRAN-8:** **The project would not result in inadequate emergency access or access to nearby uses.**

### *Impact Analysis*

The project will include improvements on streets adjacent to the project site and will include three site access points for the project site. Considering the temporary nature of project construction, and established County and City requirements for traffic control on public roadways during construction, the project is expected to have a less than significant impact on emergency access during construction. Emergency access to serve the operational project site will be developed in accordance with applicable ordinances, standard conditions of approval, and permits related to emergency access. Therefore, impacts related to emergency access would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Public Transit, Bikeways, or Pedestrian Facilities

**Impact TRAN-9:** **The project would not conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities.**

### *Impact Analysis*

There are no existing public transit, bikeways or pedestrian facilities at the project site or in the area. As this project and the surrounding area develop, the Riverside Transit Authority (RTA) may reassess the potential demand for these facilities in the area, and may establish new routes near the project area. Development coordination with RTA will determine the need for future bus turnouts. The design of the project includes curbs and sidewalks where required, thereby encouraging alternate

methods of transportation for future development. Development of the project will comply with the development standards for the County of Riverside. These standards require sidewalks, and all access will be in compliance with Americans With Disabilities Act (ADA) standards for accessibility. Therefore, potential impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Bike Trails

**Impact TRAN-10: The project would not impact bike trails.**

### *Impact Analysis*

The project will not impact any local or regional bike trail, as is demonstrated by Figure C-7, Bikeways and Trails Plan, of the County of Riverside General Plan, and Figure 8 in The Pass Area Plan.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

# 3.17 - Utilities and Service Systems

This section describes the existing and proposed utility systems setting and potential effects from implementation of the proposed project. Descriptions and analysis in this section are based on information from the Yucaipa Valley Water District (YVWD) website, the Water Supply Assessment (WSA) prepared by the Yucaipa Valley Water District (2013), a memorandum regarding proposed off-site waterline and sewer main improvements prepared by Albert A. Webb Associates (2013), the Urban Water Management Plan for YVWD (2013), the Preliminary Project Service Evaluation from YVWD (2015), and the County of Riverside General Plan (2008).

## 3.17.1 - Existing Conditions

### Potable Water

The YVWD provides potable water service in the vicinity of the project. The proposed project's water and sewer service will be provided by YVWD upon annexation into the YVWD service area.

A 24-inch-diameter water pipeline has been installed in Calimesa Boulevard from Singleton Road to approximately 2,700 feet south where the 24-inch-diameter water pipe turns west, crossing under the Interstate 10 (I-10) Freeway (Exhibit 3.17-1). A connection is proposed at the angle point where the 24-inch-diameter water pipeline turns. According to the YVWD 2010 Urban Water Management Plan (UWMP), the proposed project is within the YVWD Sphere of Influence (YVWD 2010).

#### *Yucaipa Valley Water District*

*Service Area*

The YVWD includes the cities of Yucaipa and Calimesa and portions of unincorporated San Bernardino and Riverside counties (YVWD 2015).

*Distribution System*

The YVWD draws groundwater from approximately ten separate subbasins in the service area. Each groundwater subbasin has different characteristics for water quality and water quantity. To augment the limited groundwater supply, the YVWD also secures drinking water from the State Water Project to meet approximately one-third of the service area's annual water demand. The YVWD also imports water supplies to replenish its groundwater basins for future use (YVWD 2013a).

The Henry N. Wochholz Regional Water Recycling Facility (WRWRF) sewer treatment plant consists of primary, advanced biological secondary, and tertiary treatment with advanced total nitrogen removal. The current overall capacity of the sewer treatment plant is 6.67 million gallons per day (YVWD 2013c).

In 1992, the YVWD completed a master planning document that identified recycled water as a valuable resource for the community. Since then, the District has implemented a series of facilities and improvements that are now operational and capable of meeting the irrigational water demands of parks, schools, golf courses, and other landscaped areas (YVWD 2013b).

*Water Supply*

Descriptions and analysis in this section are based, in part, on information contained in the I-10 Gateway Center WSA, prepared in October 8, 2013 by the YVWD and included in this Draft EIR as Appendix G.

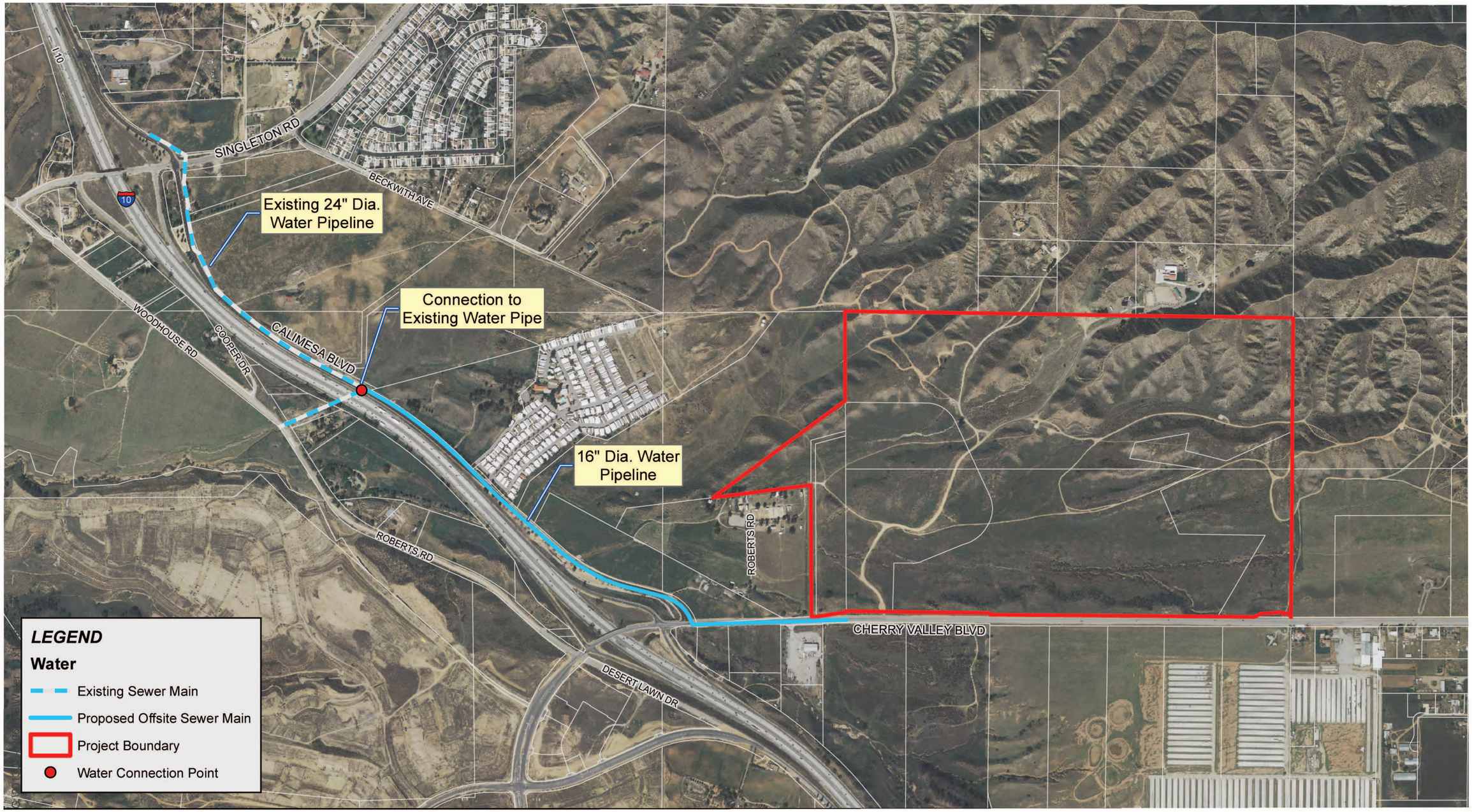
The YVWD relies on four primary water resources to meet annual water demands: groundwater resources, local surface water resources; imported water resources; and recycled water resources, each of which is described below.

1. **Groundwater Resources**
   In the past, the YVWD met the bulk of service area customer needs from groundwater. However, the reliance on over-drafted local groundwater supplies has shifted to other water resources in recent years. In 2000, groundwater resources provided 93.7 percent of the total water demands of the YVWD. By 2010, this resource supplied 60.1 percent of the total water demands (YVWD 2010; UWMP 2010).

2. **Local Surface Water Resources**
   The Oak Glen Surface Water Filtration Facility produces a steady flow of high-quality drinking water for the Yucaipa Valley. In 2000, local surface water supplies provided 6.3 percent of the total water demands of the YVWD. By 2010, this source supplied 3.0 percent of total water demands (YVWD 2010; UWMP 2010).

3. **Imported Water Resources**
   The YVWD receives imported water from the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency. In 2005, the YVWD first operated a water filtration facility to produce drinking water derived from imported water resources delivered to the YVWD from the San Bernardino Valley Municipal Water District (which serves portions of the YVWD in San Bernardino County) and the San Gorgonio Pass Water Agency (which serves portions of the YVWD in Riverside County). By 2010, this resource supplied 28.2 percent of total water demands. The two State Water Contractors convey imported water from the Sacramento-San Joaquin Delta, which is used as a supplemental potable water source to the local supply, and is treated at the Yucaipa Valley Regional Filtration Facility. The imported water is also used for groundwater recharge and recycled water irrigation of landscaping at numerous sites throughout the community (YVWD 2010; UWMP 2010).

4. **Recycled Water Resources**
   In 2002, the YVWD began providing non-potable water service to the Yucaipa Valley. This system began with the use of untreated imported water from the State Water Project and changed to a recycled water source as backwash water was treated at the Yucaipa Valley Regional Water Filtration Facility. By 2014, the YVWD was using recycled water from the Wochholz Regional Water Recycling Facility to meet the recycled water irrigation demands. The recycled water system continues to grow with the addition of new infrastructure and new customers. In 2000, local recycled water resources were not used to meet the water demands of the YVWD. By 2010, this resource supplied 8.6 percent of the total water demands in the Yucaipa Valley (YVWD 2010; UWMP 2010). Table 3.17-1 shows the planned water resources discussed above from 2015 through 2035.




Source: Albert A. Webb Associates. County of Riverside GIS, 2013 and Eagle Aerial, March 2013.

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## Exhibit 3.17-1
## Offsite Water Pipeline

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**Table 3.17-1: Summary of Planned Water Resources**

| Water Source | 2015 | 2020 | 2025 | 2030 | 2035 |
|---|---|---|---|---|---|
| Groundwater Resources | 2,100.0 | 2,100.0 | 2,100.0 | 2,100.0 | 2,100.0 |
| Local Surface Water Resources | 147.5 | 147.5 | 147.5 | 147.5 | 147.5 |
| Imported Water Resources | 2,175.9 | 2,368.5 | 2,580.0 | 2,814.2 | 3,071.7 |
| Recycled Water Resources | 516.5 | 709.1 | 920.5 | 1,154.8 | 1,412.2 |
| **Total Water Resources** | **4,939.9** | **5,325.1** | **5,748.0** | **6,216.5** | **6,731.3** |

Note:
Units are in million gallons.
Source: YVWD UWMP, 2010 (Table 4-1).

## Recycled Water

The YVWD's recycled water distribution system serves commercial and institutional customers. The current recycled system extends westward from the Wochholz Regional Wastewater Recycling Facility to Crafton Hills College and southward to L Avenue in Yucaipa. Recycled water demands account for approximately 8.5 percent of the YVWD's overall water demand. The majority of the increase in the District's projected future water demands are for irrigation or other recycled uses (YVWD 2010; UWMP 2010).

### *Recycled Water Production and Distribution System*

To serve the projected growing recycled water demand, the YVWD has implemented an extensive dual water distribution system. The dual water system includes a potable water conveyance system to convey potable water (treated to comply with drinking water standards) to potable water customers. A separate recycled water distribution system conveys recycled supplies (treated to comply with body-contact and irrigation water standards) to recycled customers. Recycled water sources available to the YVWD include:

- Untreated imported water or untreated local surface water supplies;
- Backwash water from Yucaipa Valley Regional Filtration Facility; and
- Recycled water treated at the Henry N. Wochholz Regional Water Recycling Facility (YVWD 2010; UWMP 2010).

## Groundwater

The YVWD has met the majority of service area customer needs from groundwater using YVWD's groundwater extraction wells. In 2010, over 75 percent of the groundwater used by the YVWD was extracted from the Wilson Creek Basin and the Calimesa Basin. The remaining groundwater production was from the Beaumont Basin, Chicken Hill Basin, Triple Falls Creek Basin, Oak Glen Basin, and the Wildwood Basin (YVWD 2010; UWMP 2010).

Groundwater projection in the Yucaipa Valley generally is associated with three primary groundwater basins: the Yucaipa, San Timoteo, and Beaumont Basins. The Yucaipa Basin is divided into a series of

eight subbasins (listed below), which are separated by faults and other physical barriers (YVWD 2010; UWMP 2010):

- Calimesa Basin
- Chicken Hill Basin
- Gateway Basin
- Oak Glen Basin
- Triple Falls Basin
- Western Heights Basin
- Wilson Basin
- Wildwood Basin

### *Water Supply and Demand*

*Crystal Status Development Program*

The Crystal Status Development Program is a program of the YVWD that allows for sufficient water supplies in the future. With the implementation of the Crystal Status Development Program, the YVWD will have sufficient water supplies to meet the needs of existing and future customers within its service area. This program will provide sufficient water supplies to serve the needs of all new development during normal, single dry, and multiple dry water years during a 20-year period, in addition to existing and planned future uses, which include agricultural and manufacturing uses. The Crystal Status Development Program will rely upon the use of several groundwater basins currently under the management and control of the YVWD and neighboring water providers to ensure that a sufficient water supply exists for existing customers and new development. The Program's intent is to provide the development community with a water supply that is credible, reliable, and robust, in order to minimize challenges while ensuring existing customers are not negatively impacted by the demand for water by new development (YVWD 2010; UWMP 2010).

*Water Supply Multiple-Dry Years*

The multiple dry year scenario for water supply and demand from the UWMP is shown below as a "worst-case" scenario regarding water resources. The UWMP indicates that the YVWD anticipates adequate supplies for years 2015 to 2035 under single-dry year conditions and under normal conditions.

The multiple-dry year is typically the lowest annual runoff for a consecutive period of three or more years. Table 3.17-2 summarizes the district's water supplies available to meet demands over the 20-year planning period during a multiple-dry-year period and compares them with demands for the same time frame. Table 3.17-2 shows that demands are assumed to be 10 percent greater in a multiple-dry year than during an average year. Demands are shown with and without the effects of the assumed demand reduction resulting from conservation actions.

**Table 3.17-2: Projected Multiple-Dry Year Supplies and Demands**

| Category | | 2015 | 2020 | 2025 | 2030 | 2035 |
|---|---|---|---|---|---|---|
| Multiple-Dry Year First Year Supply | Supply Totals | 23,349 | 23,221 | 25,358 | 25,901 | 26,278 |
| | Demand Totals | 20,620 | 19,149 | 20,015 | 20,806 | 21,519 |
| | Difference | 2,729 | 4,072 | 5,343 | 5,095 | 4,759 |
| | Difference as percent of Supply | 12% | 18% | 21% | 20% | 18% |
| | Difference as percent of Demand | 13% | 21% | 27% | 24% | 22% |

**Table 3.17-2 (cont.): Projected Multiple-Dry Year Supplies and Demands**

| Category | | 2015 | 2020 | 2025 | 2030 | 2035 |
|---|---|---|---|---|---|---|
| Multiple-Dry Year Second Year Supply | Supply Totals | 23,349 | 23,221 | 25,358 | 25,901 | 26,278 |
| | Demand Totals | 20,620 | 19,149 | 20,015 | 20,806 | 21,519 |
| | Difference | 2,729 | 4,072 | 5,343 | 5,095 | 4,759 |
| | Difference as percent of Supply | 12% | 18% | 21% | 20% | 18% |
| | Difference as percent of Demand | 13% | 21% | 27% | 24% | 22% |
| Multiple-Dry Year Third Year Supply | Supply Totals | 23,349 | 23,221 | 25,358 | 25,901 | 26,278 |
| | Demand Totals | 20,620 | 19,149 | 20,015 | 20,806 | 21,519 |
| | Difference | 2,729 | 4,072 | 5,343 | 5,095 | 4,759 |
| | Difference as percent of Supply | 12% | 18% | 21% | 20% | 18% |
| | Difference as percent of Demand | 13% | 21% | 27% | 24% | 22% |

Note:
Units in millions of gallons.
Source: YVWD UWMP, 2010 (Table 5-7).

As shown in Table 3.17-2, the YVWD anticipates adequate supplies for years 2015 to 2035 under multiple-dry-year conditions.

## Wastewater

The WRWRF provides sewer treatment and the current overall capacity of the sewer treatment plant is 6.67 million gallons per day (YVWD 2013c). Refer to Exhibit 3.17-2 for the proposed location for sewer line connection.

### *Treatment Plant*

The WRWRF was recently upgraded and expanded. This Reclamation Facility treats domestic wastewater generated from the Yucaipa-Calimesa service area. The current capacity of the facility is 8.0 million gallons per day. The tertiary process, microfiltration/ultraviolet disinfection, was selected to meet the coliform removal and turbidity requirements of Title 22 for reclaimed water. Once the reclaimed water reservoir and the reclaimed piping are put into operation, non-potable water from the facility will be used in the system (Recycling Facility 2013).

### *Storm Drainage*

The regional flood management authority for the western portion of Riverside County is the Riverside County Flood Control and Water Conservation District. This is a Special District and, as such, its jurisdiction does not extend over the entire County but only the western 40 percent. The responsibility for drainage in the eastern part of the County is borne by a combination of the County Transportation Department, the Coachella Valley Water District, and various cities and local entities. The District's mission is to protect people, property, and watersheds from damage or destruction

from flood and stormwater, and to conserve, reclaim, and save such waters for beneficial use (Riverside County Flood Control District 2013).

### *Solid Waste*

Solid waste collection and disposal in Cherry Valley is provided by CR&R Waste and Recycling Services (CR&R). These services include collection of solid waste from residences and businesses, and collection and demolition recycling. CR&R runs its own material recovery facility, which receives and processes recyclables.

## Landfill Capacity

CR&R serves unincorporated Riverside County (CR&R 2013). The closest landfill to the project site, where solid waste would be transported is the Lamb Canyon Landfill, located approximately 6.37 miles southeast of the proposed project (Moreau, pers. comm.). The Badlands Sanitary Landfill is located approximately 6.85 miles southwest of proposed project site. Table 3.17-3 provides details regarding each of these landfills.

**Table 3.17-3: Landfill Summary**

| Name | Location | Maximum Daily Throughput (tons per day)[1] | Approximate Remaining Capacity[1] (million tons) | Closure Date |
|---|---|---|---|---|
| Lamb Canyon Landfill | 16411 Lamb Canyon Road Beaumont, CA 92223 | 5,000.00 | 7.6 (as of January 1, 2013) | 4/30/2021 |
| Badlands Sanitary Landfill | 31125 Ironwood Avenue Moreno Valley, CA 92555 | 4,000.00 | 7.9 (as of January 1, 2013) | 01/01/2024 |

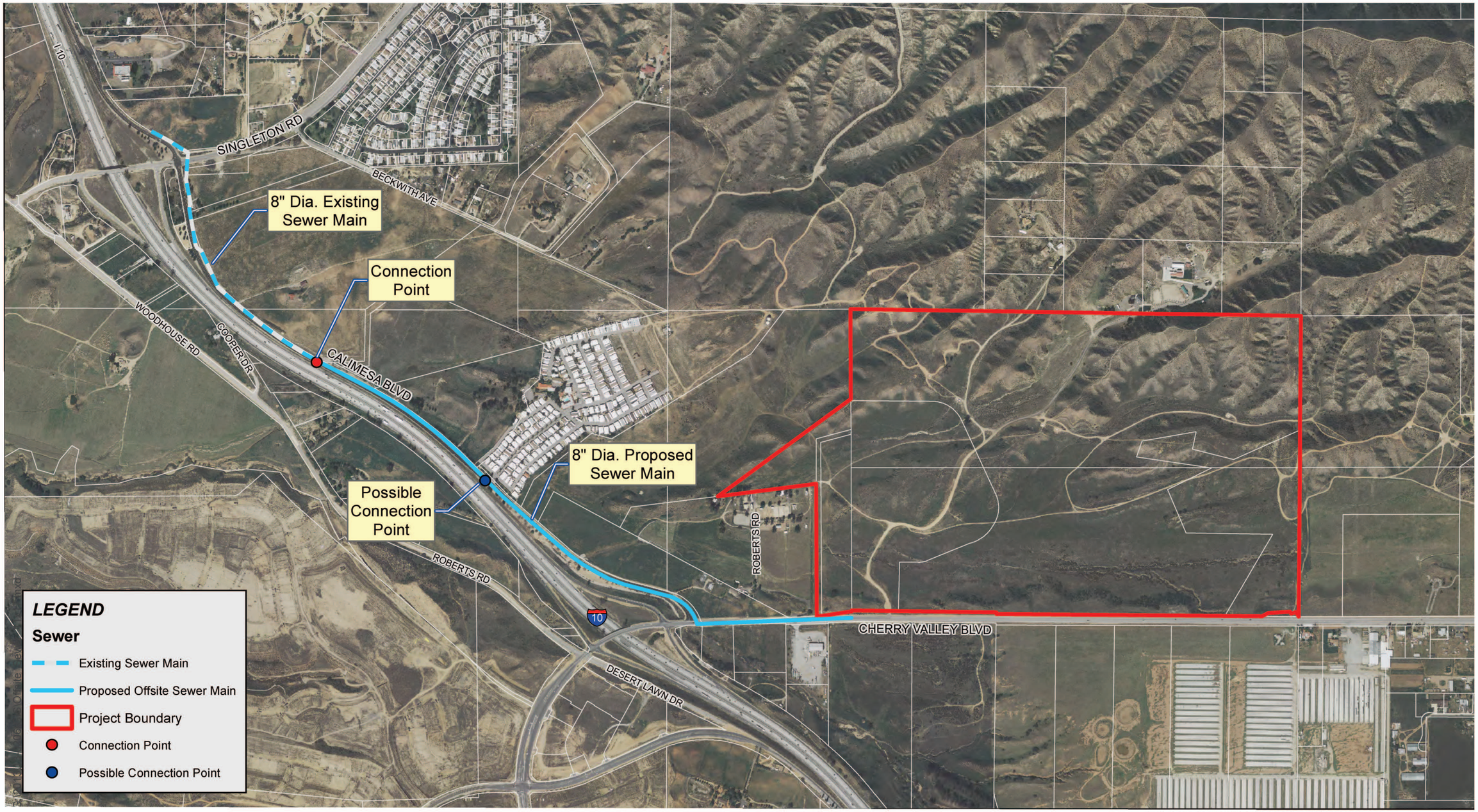
Note:
[1] Source of this information is the February 27, 2014 NOP comment letter from the Riverside County Waste Management Department.
Source: SWIS, 2015.

## Energy

Southern California Edison (SCE) provides electricity, and Southern California Gas Company (SCGC) provides natural gas service to the Cherry Valley area. Below is a discussion of each energy source.

## Electricity

SCE provides electricity service to the project area (SCE Service Area 2013). SCE has delivered electricity to Southern and Central California for more than 125 years and is one of the nation's largest electric utilities. There is an existing 12,000-volt mainline that runs along the south side of Cherry Valley Boulevard. SCE confirmed that the proposed project is within its service territory (Mercado, pers. comm.). The proposed project is located in SCE service territory, and SCE will serve the proposed project's electrical requirements consistent with the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.




Source: Albert A. Webb Associates. County of Riverside GIS, 2013 and Eagle Aerial, March 2013.

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Exhibit 3.17-2
Offsite Sewer Main Connection

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### *Natural Gas*

SCGC, which is a Sempra Energy utility, provides natural gas service to the project area. SCGC is the nation's largest natural gas distribution utility and provides energy to 20.9 million consumers through 5.8 million meters in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles throughout Central and Southern California (SCGC 2013). SCGC is a subsidiary of Sempra Energy.

## 3.17.2 - Regulatory Setting

### State Regulations

#### *Senate Bill 610*

Under Senate Bill (SB) 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to the CEQA (CDWR 2003). As detailed in Water Code 10912 (a) a "project" means any of the following:

1. Proposed residential development of more than 500 dwelling units.
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A proposed hotel or motel, or both, having more than 500 rooms.
5. A proposed industrial, manufacturing, or processing plant, or industrial park 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. A mixed-use project that includes one or more of the projects specified in this subdivision.
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

#### *Assembly Bill 341*

Assembly Bill (AB) 341 requires all businesses and organizations in California that generate 4 cubic yards or more of waste per week and multi-family units of five or more, to recycle. A business shall take at least one of the following actions in order to reuse, recycle, compost, or otherwise divert commercial solid waste from disposal:

- Source separate recyclable and/or compostable material from solid waste and donate or self-haul the material to recycling facilities.
- Subscribe to a recycling service with their waste hauler.
- Provide recycling service to their tenants (if commercial or multi-family complex).
- Demonstrate compliance with the requirements of California Code of Regulations Title 14.

### *California Urban Water Management Planning Act*

The Urban Water Management Planning Act (California Water Code Sections 10610–10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans and update them every five years. The act requires that urban water management plans include a description of water management tools and options used by that urban water supplier to maximize resources and minimize the need to import water from other regions. Specifically, urban water management plans must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier's water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources or water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier's water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures; and
- Assess water supply reliability.

The YVWD UWMP was last updated in 2010, and projects water demand and supply through 2040.

### *Model Water Efficient Landscape Ordinance*

California's Model Water Efficient Landscape Ordinance was adopted by the Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of their review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance, or incorporate provisions of the ordinance into their own local code requirements for landscaping. For new landscaping projects of 2,500 square feet or more that require a discretionary or ministerial approval, the applicant is required to submit a detailed Landscape Documentation Package that discusses water efficiency, soil management, and landscape design elements (Department of Water Resources 2009).

### *California Integrated Waste Management Act*

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive

statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, SB 1016, Wiggins, Chapter 343, Statutes of 2008, introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

### *California Public Utilities Commission*

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

#### *Title 24, Energy Efficiency Standards*

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings.

First adopted in 1977, the Standards have been periodically updated approximately on a three-year cycle. The most recent update, the 2013 Building Energy Efficiency Standards, went into effect on July 1, 2014. The Energy Commission is now in the process of developing the 2016 Standards, which will continue to improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards will go into effect on January 1, 2017.

According to the CEC, reducing energy use has been a benefit to all. Building owners save money, Californians have a more secure and healthy economy, the environment is less negatively impacted, and our electrical system can operate in a more stable state. For each year of construction, in both newly constructed buildings and alterations to existing buildings, the current 2013 Standards (for residential and nonresidential buildings) are expected to reduce the growth in electricity use by 555.5 gigawatt-hours per year (GWh/y) and to reduce the growth in peak electrical demand by 148.4 MW. The 2013 Standards are also expected to reduce the growth in natural gas use by 7.04 million therms per year (therms/y) beyond the prior 2008 Standards. Overall, the 2013 Standards will use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 Standards.

Over time, the energy savings will accumulate as the Standards affect each subsequent year of construction. The savings result from changes to both the residential and nonresidential standards. The Standards affect both newly constructed buildings as well as alterations to existing buildings. These savings result from retrofit insulation requirements for existing roofs and the energy requirement for renovated lighting systems to meet the new 2013 energy requirements.

## Local Regulations

Below are policies from the Land Use Element (LU) and the Multipurpose Open Space (OS) Element of the County of Riverside General Plan that relate to utilities and service systems.

The economy of the developed portions of western Riverside County—the inland valley—is sustained primarily by water imported from northern California and the Colorado River, and secondarily by production of local groundwater. The eastern portion of the County—the majority of which is desert—also relies on water from the Colorado River, northern California, and local groundwater. This portion of the County is largely undeveloped, with uncertain increases in the water resource available to meet increases in water demand being a major factor that might constrain future development.

Riverside County's water supply is uncertain for two reasons: recent water apportionments from northern California have been reduced as part of the CALFED Bay-Delta Program, as well as decreased supplies to California from the Colorado River. Additionally, most of the County's sources of water are currently at capacity. Water storage to meet peak demand, or a two-day to one-day supply, is provided by many local water agencies within Riverside County. However, long-term storage of large quantities of water is provided only in the Metropolitan Water District (MWD) and California Department of Water Resources (DWR) facilities. Total storage capacity in the existing reservoir system is 871,000 acre-feet (af). Three of these storage facilities are located in Riverside County: Lake Mathews, Lake Skinner, and Lake Perris. Together, these storage facilities have a total of 342,300 af of storage capacity. Diamond Valley Lake triples this capacity with an additional 800,000 af of storage, bringing the total storage capacity available within Riverside County to 1,142,300 af. Even though the creation of Diamond Valley Lake has allowed for three times the current storage of water, there is no increase in the total amount of water available to the County that can be identified. This increase in water storage will benefit the whole South Coast region, which includes other significant jurisdictional water users such as San Diego County, as well as Riverside County. Currently, approximately three-eighths of existing storage capacity may be used to meet seasonal demand. The remaining five-eighths are reserved for emergency need such as severe droughts and/or use when a natural disaster, such as an earthquake, makes it impossible to meet demand through usual supply facilities.

Projected 2020 water use and population levels indicate an expected water shortage for the two hydrologic regions that comprise Riverside County: the South Coast and Colorado River regions. Though these regions include most of southern California, and not just Riverside County, they are each representative of the types of supply and demand within the County. The two regions are defined as follows:

- South Coast: Basins draining into the Pacific Ocean from the southeastern boundary of Rincon Creek Basin in western Ventura County to the Mexican border.
- Colorado River: Basins south and east of the South Coast and South Lahontan regions; areas that drain into the Colorado River, the Salton Sea, and other closed basins north of the Mexican border.

The DWR produces a California Water Plan every 5 years that not only includes a statewide water budget but also regional watershed water budgets. These water budgets are based on California Department of Finance population projections, and indicate clearly that demand for water will exceed supply in 2020 whether or not a drought condition exists at that time. Most of the State's regions, except for the North Coast and San Francisco Bay Regions, experience average-year and drought-year shortages now, and are forecasted to experience increased shortages in 2020. The largest average-year shortages are forecasted for the South Coast Region, which heavily relies on imported water. Future average year shortages in the South Coast Region reflect forecasted population growth plus lower Colorado River supplies as California reduces its use of Colorado River water to the State's basic apportionment. The descriptions of the two hydrologic regions as well as regional water budgets are contained within Tables OS-1 and OS-2 of the General Plan Multi-Purpose Open Space Element.

Of the two Hydrologic Units of the State, the Colorado River Region is of particular concern because it encompasses the Coachella Valley in the West Basin and the desert in the East Basin. (Refer to Figure OS-1, Water Resources of the General Plan Multi-Purpose Open Space Element.) Irrigation needs in the Coachella Valley are met almost exclusively by water imported from the Colorado River. Historical extraction of groundwater in the Coachella Valley has caused overdraft. Currently, an extensive groundwater recharge project is being undertaken by the Coachella Valley Water District that recharges Colorado River Water into spreading basins. Within the East Basin, irrigation and domestic water is provided by the Colorado River with only approximately 1 percent groundwater use and little direct reclamation. Agricultural runoff and some domestic wastewater do get returned to the Colorado River. Therefore, the water source at the southern end of the watershed is actually a mixture of Colorado River water, agricultural runoff, and reclaimed water. The following policies are intended to address the County's water supply issues:

### *Policies*

- **OS 1.1:** Balance consideration of water supply requirements between urban, agricultural, and environmental needs so that sufficient supply is available to meet each of these different demands.

Based on the determination by the YVWD in the WSA (Appendix G) prepared for the proposed project, the project's water needs will be met by existing and future supplies.

The General Plan states that with the projected increase in population, demands on/for community facilities and infrastructure—such as roads, utilities, public safety, and schools—will increase. The challenge will be to correlate the provision of infrastructure and public facilities and services with these demands. In order to ensure the correlation between growth and service provisions as well as to minimize capital and service costs, the RCIP Vision dictates that development should only occur where adequate public facilities and services are available or are planned for at the time of development. In addition, it is an expressed desire of the County that those that benefit from these services and facilities bear a fair share of the cost of improvements, as illustrated in the RCIP Vision as follows:

> We know that community building involves significant costs. We seek sharing of benefits and costs in a proportional manner: the community should fund community-wide benefits and development related benefits should be funded by the development, all as part of an equitable overall financing strategy. We seek shared funding methods through partnerships that improve overall cost-effectiveness.

- **LU 5.1:** Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, education and child day care centers (i.e., infant, toddlers, preschool and school age children), transportation systems, and fire/police/medical services.
- **LU 5.2:** Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.

The proposed project's water, wastewater, stormwater drainage, solid waste, and dry utility needs have been analyzed within this section of the Draft EIR. Potential impacts related to the capacities of this infrastructure have been found to be less than significant.

- **LU 5.3L:** Review all projects for consistency with individual urban water management plans.

A Water Supply Assessment (Appendix G) has been prepared for the proposed project to determine whether the project's estimated water needs are consistent with the most recent Urban Water Management Plan (UWMP).

Below are policies from the Safety Element of the County of Riverside General Plan that relate to utilities and service systems.

While local agencies operate and maintain many flood control facilities, funding for the construction of such facilities often is shared with federal and state agencies. Nevertheless, local agencies independently fund many local projects without financial assistance from the federal or state governments.

Flooding susceptibility in Riverside County is primarily associated with several major stream drainages, including but not limited to the Santa Ana, San Jacinto, and Whitewater Rivers, as well as smaller scale and flash flood events on many of the alluvial fans that flank the County's hillsides. Large-scale developments have utilized golf courses and greenbelts as part of a network of channels that collect flood flows on the upstream side of a project, carry it safely through the project, and disperse it on the downstream side. However, given the low permeability of the underlying bedrock, heavy runoff from the surrounding hills and mountains during strong storms cannot be prevented.

The nation has seen several catastrophic collapses of highway and railroad bridges that were due to scouring and a subsequent loss of support of foundations. Major bridge crossings that are vital to the County of Riverside should be designed and built to withstand scouring. Scour at highway bridges involves floodwater sediment-transport and erosion processes that cause streambed

material to be removed from the bridge vicinity. The State of California participates in the bridge scour inventory and evaluation program. In addition, California's seismic retrofit program of bridges includes underpinning of foundations. In western Riverside County, this is expected to help reduce the vulnerability of foundations to be undermined by scour. However, since the eastern portion of the County has only a moderate seismic risk, bridges in these areas are of lower priority for seismic underpinning.

A review of records maintained at the California Office of Emergency Services provided potential failure inundation maps for 23 dams affecting Riverside County. These maps were compiled into the geographic information system digital coverage of potential dam inundation zones for Riverside County. These maps are intended to be used by state and local officials for the development and approval of dam failure emergency procedures as described in Section 8589.5 of the California Government code. The maps are also used to provide information needed to make natural hazard disclosure statements required under recent legislation (AB 1195 Chapter 65, June 9, 1998; Natural Hazard Disclosure Statement).

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay, or harbor, in response to ground shaking during an earthquake. Seismically induced inundation can also occur if strong ground shaking causes structural damage to aboveground water tanks. In response to this hazard, a new tank design includes flexible joints that can accommodate movement in any direction.

- **S 4.10:** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

Recent environmental legislation and improved understanding and analysis of flood hazards in arid environments have resulted in new approaches to flood hazard mitigation implementation. Nationwide, there is a move to leave nature in charge of flood control. The advantages include lower cost, preservation of wildlife habitat, and improved recreation potential. However, this type of flood mitigation is difficult to implement in areas where development has already occurred, as well as in regions susceptible to sheet flow. Where water spreads across broad areas, mitigation without channels or culverts is more difficult. Flood control structures have often been built piecemeal over the years, and new development may funnel water into older systems with insufficient capacity. These issues have been mitigated in recent years by the preparation of Master Plans by local public works agencies.

- **S 4.18:** Require that the design and upgrade of street storm drains be based on the depth of inundation, relative risk to public health and safety, the potential for hindrance of emergency access and regress from excessive flood depth, and the threat of contamination of the storm drain system with sewage effluent. In general, the 10-year flood flows shall be contained within the top of curbs and the 100-year flood flows within the street right-of-way.

The proposed project's water, wastewater, stormwater drainage, solid waste, and dry utility needs have been analyzed within this section of the Draft EIR. Potential impacts related to the capacities of this infrastructure have been found to be less than significant.

## 3.17.3 - Thresholds of Significance

According to the County of Riverside CEQA thresholds, to determine whether impacts to utilities and service systems are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

c) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?

d) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

e) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

f) Does the project comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?

g) Would the project impact electricity facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

h) Would the project impact natural gas facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

i) Would the project impact communications systems facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

j) Would the project impact storm water drainage facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

k) Would the project impact street lighting facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

l) Would the project impact maintenance of public facilities, including roads, requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

m) Would the project impact other government service facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

n) Would the project conflict with any adopted energy conservation plans?

## 3.17.4 - Project Impact Analysis and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### New or Expanded Facilities

| | |
|---|---|
| **Impact USS-1:** | **The project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.** |

***Impact Analysis***

As determined in the WSA (Appendix G.4) prepared for the proposed project, the project's average daily drinking water demands are estimated at 42,840 gallons per day (gpd), although this calculation will be updated prior to issuing occupancy permits in order to determine the exact number of fixture units constructed. Recycled water for landscape irrigation is estimated to be 12.35 million gallons per day, based on similar landscaped areas of commercial projects. However, it is important to note that the WSA was prepared using different calculations that were based on a larger project with approximately 736,240 more square feet of buildings on-site. Thus, the WSA provided very conservative estimates relative to the currently proposed project. The updated Air Quality and Greenhouse Gas Analysis Report contained in Appendix B.1 (FCS 2015) estimates water consumption for outdoor use of approximately 8.81 million gallons per year, and indoor water consumption of 11.14 million gallons a year, for a total of 19.95 million gallons per year. The estimated quantity of recycled water used for irrigation purposes is expected to be further reduced, based on the application of Riverside County Ordinance No. 859, which requires efficient use of water for landscaped areas.

The WSA determined that through buildout, YVWD can provide a reliable supply to serve the community, including the proposed project, despite growing demands. In the near term, YVWD will stabilize its demands on the groundwater basins, continue developing recycled water, and use surface waters for direct delivery and conjunctive use programs. Based on the WSA, the proposed project and its associated fixtures will be equivalent to 61 "Equivalent Dwelling Units." Based on the current General Plan designations of Rural Mountain and Very Low Density Residential, up to 216 single-family residences could be constructed on the project site (based on gross acreage). Therefore, the water usage from buildout of the project site was already indirectly accounted for within the UWMP, based on current General Plan assumptions for the site, which would likely result in greater water demand than the currently proposed project. Water demand (and consequently

sewer demand) of warehouse/industrial uses are also usually much less than residential uses, since employees in such facilities are not typically using water for household applications such as cooking, bathing, laundry, dishes, etc.

A 24-inch-diameter water pipeline has been installed in Calimesa Boulevard from Singleton Road to approximately 2,700 feet south, where the 24-inch-diameter pipe turns west crossing under the I-10 Freeway (Webb 2013). A connection is proposed at the angle point where the 24-inch-diameter water pipeline turns (Exhibit 3.17-1). An 8-inch-diameter water pipeline will have sufficient capacity to serve the equivalent of 61 dwelling units. However, the fire flow needed for the building will exceed the water pipeline capacity. Thus, the needed pipe size is 16-inch-diameter with maximum velocity of 6.38 feet per second.

In addition, two water storage tanks, each with a capacity of 1 million gallons are proposed on the northeastern portion of the project site. The project would provide the concrete pads and access to the future water tanks to the Water District. The on-site water tanks would not serve the proposed project, but would serve other properties within the YVWD service area, and would be considered a public benefit.

As new development is proposed, YVWD will require capital-funding contributions though impact fees, which offset development's demands for groundwater and surface water supply infrastructure. Ultimately, YVWD will be able to serve its customers' drinking water needs through groundwater or surface water, a strategy known as conjunctive use. This allows YVWD to insulate itself from periodic drought by using available surface waters in wetter years and relying more on groundwater in dryer years when surface water is scarce.

Surface supply availability from the State Water Project, San Bernardino Basin Bunker Hill Pressure Zone, Seven Oaks Dam, Mill Creek, and Santa Ana River can be used interchangeably, depending upon local and statewide hydrology, to supplement a stable local groundwater yield.

Additionally, the YVWD will incorporate recycled water delivery systems into new development to provide irrigation demands with recycled water. Recycled water will give YVWD a new local source of water of high reliability, both lessening the dependence on imported sources and increasing reliability of total supply. Overall, as noted in YVWD's Urban Water Management Plan, there are sufficient water resources to meet its current and projected growth in demands, including the proposed project and other projected development through 2030.

As discussed above, the project includes two water quality basins that are included as part of the Site Specific Water Quality Management Plan. The primary function of these basins is to mitigate the stormwater impacts caused by developing the project site.

Based on the conservative determination by the YVWD in the WSA for the larger, previously considered project, the currently proposed project's water needs will be adequately met by existing and future supplies. The project would be required to comply with all requirements of the YVWD, as outlined in the Preliminary Project Service Evaluation (Appendix G).The proposed project will be required to connect with existing water mains currently serving the project area; however, the

project's water needs will not result in the construction of new YVWD water treatment facilities or expansion of existing facilities.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Sufficient Water Supply

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|---|---|
| **Impact USS-2:** | **The project would have sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements will be needed.** |

### *Impact Analysis*

As addressed in Impact USS-1 above, the WSA prepared for the proposed project concluded that YVWD can provide a reliable water supply to serve the community, including the proposed project, despite growing demands. In the near term, YVWD will stabilize its demands on the groundwater basins, continue developing recycled water, and use surface waters for direct delivery and conjunctive use programs. Based on the WSA, the proposed project and its associated fixtures will be equivalent to 61 "Equivalent Dwelling Units," which is far less than the number of dwelling units that could be constructed on the project site based on current General Plan designations. Therefore, water usage for buildout of the project site was already indirectly accounted for in the UWMP, which concluded that YVWD will have adequate supplies for years 2015 to 2035 under multiple-dry-year conditions. As discussed above, industrial land uses typically use less water than residential land uses.

The proposed project's average daily indoor water demands are estimated at 11.14 million gallons a year, although this calculation will be updated prior to issuing occupancy permits in order to determine the exact number of fixture units constructed. Recycled (outdoor) water for landscape irrigation is estimated to be 89.81 million gallons per year (YVWD 2013), for a total of 19.95 million gallons a year of water required to serve the project. The estimated quantity of recycled water used for irrigation purposes is expected to be further reduced based on the application of Riverside County Ordinance No. 859, which requires efficient use of water for landscaped areas. In light of the recent statewide drought conditions, the proposed project would also be required to comply with any future mandates by the YVWD pursuant to its Water Shortage Contingency Plan, which serves to maintain essential public health and safety and minimize adverse impacts from water shortages on economic activity, environmental resources and the region's lifestyle. The YVWD's Water Shortage Contingency Plan consists of advisory, voluntary, mandatory, and emergency curtailment stages with a variety of potential water conservation restrictions, with which the project would be required to comply in order to avoid fines, surcharges, or rate increases (YVWD 2010).

Based on the determination by the YVWD in the WSA, the proposed project's water needs will be met by existing and future supplies. YVWD would have sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements will be needed.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## New or Expanded Facilities

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|---|---|
| **Impact USS-3:** | **The project would not require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects.** |

### *Impact Analysis*

The YVWD's Henry N. Wochholz Regional Water Reclamation Facility has a current capacity of 8 million gallons per day, based on the 2010 Urban Water Management Plan for the YVWD. Currently, an average of approximately 4 million gallons per day of wastewater is treated by the YVWD's Henry N. Wochholz Regional Water Reclamation Facility. The estimated wastewater generation of the proposed project is 8.91 million gallons per year. According to YVWD records, there is an existing 8-inch-diameter gravity sewer main and a 6-inch-diameter sewer force main that turn easterly approximately 2,250 feet south of Singleton Road intersection. The project would utilize this connection point if the slope were feasible for the off-site sewer main, which will be verified as development plans are finalized. There is also an existing sewer within Calimesa Boulevard near the Calimesa Country Club (Trailer Park). However, the size, slope, and condition of this existing sewer are unknown at this time. If the existing sewer within Calimesa Boulevard has capacity, the connection point may be moved southerly in front of the Trailer Park. An 8-inch-diameter gravity sewer main has sufficient capacity to serve the project's 61 equivalent dwelling units (Webb Associates 2013). Upon completion of further feasibility studies, either the existing 8-inch-diameter connection or the existing connection near the Trailer Park within Calimesa Boulevard would be utilized, and either connection would sufficiently serve the site.

As discussed, one (or both) of the sewer main connections has sufficient capacity to serve the proposed project, and the proposed project is not anticipated to generate wastewater in quantities such that a new wastewater treatment facility would need to be constructed. Therefore, the proposed project would have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Wastewater Treatment Provider

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|---|---|
| **Impact USS-4:** | **The project would result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.** |

### *Impact Analysis*

Development of the proposed project would not generate wastewater that would exceed the capacity of the YVWD in combination with the provider's existing service commitments. Implementation of the proposed industrial project would introduce building space and an employee population that does not currently exist on-site. This would result in the generation and discharge of additional wastewater requiring treatment by the YVWD.

Currently, an average of approximately 4 million gallons per day of wastewater is treated by the YVWD's Henry N. Wochholz Regional Water Reclamation Facility, which has a current capacity of 8 million gallons per day (King, pers. comm.). The anticipated additional estimated 24,410 gallons per day generated by the proposed project can be adequately treated by the YVWD. The proposed project's contribution to the wastewater flow would constitute less than 1 percent of the remaining current 8-million-gallon-per-day capacity at the Henry N. Wochholz Regional Water Reclamation Facility. Thus, related impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Landfill Capacity

| | |
|---|---|
| **Impact USS-5:** | **The project is served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.** |

### *Impact Analysis*

CR&R will provide waste disposal service for the proposed project (Moreau, pers. comm.). Solid waste would be generated by short-term construction activities and long-term operational activities.

*Construction Waste Generation*

Implementation of development would include the construction of approximately 1,823,760 square feet of industrial land use. No demolition would occur on-site because there are no existing structures on-site. Using construction debris waste generation rates published by the United States Environmental Protection Agency, an estimate of the total construction debris generated by the proposed project is provided in Table 3.17-4.

**Table 3.17-4: Construction Waste Generation**

| Activity | Type | Waste Generation Rate[1] | Square Footage | Total (tons) |
|---|---|---|---|---|
| Construction | Nonresidential | 3.89 pounds/square foot | 1,823,760 | 3547.2 |

Notes:
[1] Waste generation rate from 1998 United States Environmental Protection Agency report, Characterization of Building-Related Construction and Demolition Debris in the United States.
1 ton = 2,000 pounds
No demolition information is provided because no existing structures on the project site would need to be demolished.
Source: United States Environmental Protection Agency, 1998; FCS, 2015.

Implementation of the proposed industrial project is estimated to generate approximately 3,547 tons of construction debris. This tonnage would be spread out over the length of construction activities, and the actual volumes of construction waste disposed of at any one time are not expected to be more than several tons of debris. Regional landfill capacity would be available to accommodate this amount of solid waste (each landfill has a remaining capacity of over 14,000,000 cubic yards). Additionally, correspondence from CR&R indicates that the proposed project should have no substantial impact on the anticipated closure of the Lamb Canyon Landfill (Moreau, pers. comm.).

*Operational Waste Generation*

The daily and operational solid waste generation estimate is provided in Table 3.17-5. The table below is from the Air Quality and Greenhouse Gas Analysis Report for the San Gorgonio Crossing Project.

**Table 3.17-5: Projected Solid Waste Generation**

| Land Use | Size at buildout (sq ft) | Waste at buildout (tons/year) | Disposal Rate (tons/Ksq ft/year) |
|---|---|---|---|
| Warehouse | 1,823,760 | 1,714 | 0.94 |

Notes:
sq ft = square feet; Ksq ft= thousand square feet
Source of disposal rate: CalEEMod default disposal rate, FCS, 2015 (Table 22); see Appendix B.

The proposed project is estimated to generate a total of approximately 4.7 tons of solid waste on a daily basis, and approximately 1,714 tons on an annual basis. Regional landfill capacity would be available to accommodate this amount of solid waste (each landfill has a remaining capacity of over 14,000,000 cubic yards). Thus, the proposed project is anticipated to have a less than significant

impact regarding operational waste disposal because there is adequate regional landfill capacity to meet the disposal needs of the proposed project.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Comply with Statutes and Regulations

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|---|---|
| **Impact USS-6:** | **The project would comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan).** |

### *Impact Analysis*

AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The CIWMP was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). The proposed project is not anticipated to conflict with the Riverside County policies, other mandatory policies such as AB 341, or the Countywide Integrated Waste Management Plan because it will comply with requirements regarding solid waste disposal, and the project site will be served by a solid waste disposal provider. Thus, the proposed project will have a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Electricity Facilities

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|---|---|
| **Impact USS-7:** | **The project could impact electricity facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

The proposed project is located within Southern California Edison (SCE) service territory. SCE will serve the proposed project's electrical requirements consistent with the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs. SCE may need to conduct utility

studies, where applicable, to assess whether additions or modifications to the existing electric infrastructure are required to serve the proposed project. Currently, a 12,000-volt mainline runs along the south side of Cherry Valley Boulevard (Mercado, pers. comm.). Correspondence with the project's SCE representative indicated that the connection will be scheduled for construction once SCE has all the necessary information for the project (project plans, local permits, easement documents, etc.), and the applicant has submitted or agreed to the applicable requirements and has paid any necessary fees. Compliance with SCE requirements will ensure a less than significant impact related to energy infrastructure and use.

Based on information from the air quality analysis, a default consumption rate of 5,750 megawatt-hours per year (MWh/year) and a reduced (Leadership in Energy and Environmental Design [LEED]/energy efficient) consumption rate of 1,524 MWh/year was used to calculate potential air quality impacts. A megawatt-hour is the power utilization for 1 hour measured in watts. Without LEED and energy efficient features applied (business as usual), the estimated annual use of energy for both buildings would be approximately 5,750 MWh/year. However, with LEED requirements and energy savings applied, the project is estimated to use approximately 1,524 MWh/year. The project would be built to comply with LEED Silver qualifications, and would utilize solar panels to supply approximately 23 percent of the project's energy needs. SCE has not identified any concerns regarding the project's energy demand or system capacity. Energy use is further detailed in Section 5, Other CEQA Considerations.

As previously discussed, SCE has indicated that it will serve the proposed project; thus, a less than significant impact is anticipated.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Natural Gas Facilities

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|---|---|
| **Impact USS-8:** | **The project could impact natural gas facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

The project is located within the boundaries of the SCGC. Based on information from the air quality analysis, a default consumption rate of 3,902,850 thousand British thermal units per year (KBtu/year) was used to calculate potential air quality impacts (FCS 2015). SCGC does not anticipate the need for new or expanded facilities to meet the service demands of the project (Wright, pers. comm.). Additionally, SCGC does not anticipate any adverse impacts as a result of providing services

to the proposed project. The only physical impact identified by SCGC could be with any other substructures that might need to cross SCGC facilities to supply the proposed project (Wright, pers. comm.). The proposed project falls within the service territory of SCGC and it does not anticipate the need for new or expanded facilities to meet the service demands of the proposed project. Furthermore, project natural gas use would be similar to existing and projected future projects, and would not be any more inefficient, wasteful, or unnecessary than for any other similar land use in the region. Thus, a less than significant impact is anticipated.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Communications Systems Facilities

| | |
|---|---|
| **Impact USS-9:** | **The project would not impact communications systems facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

Verizon would provide telephone service and Adelphia would provide cable service to the project site. The proposed industrial land use is not anticipated to have a significant impact on communications systems because they would not be at the scale or intensity that would result in significant impacts to a communications service provider such as phone, internet, or cable company. Therefore, there would be a less than significant impact.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

## Storm Water Drainage Facilities

| | |
|---|---|
| **Impact USS-10:** | **The project would not impact storm water drainage facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

*Short-term Construction Impacts*

The proposed project will include on-site stormwater drainage facilities designed to convey and capture on-site surface flows, as well as those off-site flows that would traverse the project site. As included in the Off-site Hydrology Analysis for Tentative Parcel Map 36564 (Appendix G), there are two drainage areas that exist on-site: Drainage area "A" and "B." The proposed project includes a number of drainage facilities designed to limit the storm flow resulting from project activities, including:

- Open channels designed to intercept and convey bulked off-site flows through the project site without comingling them with flows generated from the proposed developed area;
- Infiltration Best Management Practices (BMPs) such as basins and trenches, sized to infiltrate the first flush flows generated in the proposed development area;
- Storm drain facilities that will collect and route on-site runoff through a detention basin that is sized to limit 10-year storm discharge from the site to be equal or less than flows under the existing condition;
- A detention basin that will incorporate hydromodification requirements by limiting the increase in the 2-year storm flow caused by the proposed development to less than 10 percent beyond existing conditions.

Additionally, off-site drainage improvements are required to capture and direct flows. The east side drainage improvements would include a rock protection berm (Exhibit 3.9-3). This berm would capture the off-site runoff and drain into a concrete wingwall structure. This inlet structure will be connected to a concrete culvert and will discharge into the trap channel on site. This water will eventually drain from the outlet structure on the Calimesa side (western side) of the project. Improvements within the City of Calimesa are composed of drainage channels and appurtenances, including a concrete trap channel, a concrete box culvert, two concrete outlet structures, and rip rap rock energy dissipaters. The Applicant has also agreed to construct a rock-lined berm to protect the adjacent property owners (see Exhibit 3.9-3).

As provided in the Water Quality Management Plan (Appendix G), the proposed detention basins have been sized to incorporate hydromodification requirements by limiting the increase in runoff during a 2-year storm event to less than 10 percent beyond existing conditions (Albert A. Webb 2014b). The basin will include a low-flow concrete channel extending from the basin inlet to the basin outlet structure (Albert A. Webb Associates 2014a). The orifice plate in the outlet structure will restrict flows exiting the basin during low-flow conditions. Overflows will overtop the low-flow channel's sidewall (weir condition) and flow into the basin for detention. The detained overflows will later drain out of the basin through a flap-gate in the channel sidewall. As designed, the detention basin in conjunction with infiltration BMPs will limit the 2-year, 24-hour storm runoff, reducing the potential for off-site erosion.

Thus, although the proposed project will require development of new stormwater drainage facilities on the project site, these improvements will be located within the project's development footprint,

and, therefore, impacts associated with the construction and operation of these facilities are analyzed as part of the environmental impact analysis contained within this Draft EIR. No additional off-site stormwater drainage facilities, the construction of which could cause significant environmental effects, will be required to convey and contain on-site and adjacent surface flows.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Street Lighting Facilities

| | |
|---|---|
| **Impact USS-11:** | **The project would not impact street lighting facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

The proposed project will provide street lighting in conformance with County requirements in Ordinance No. 461 (which pertains to Roadway Standards) and Ordinance No. 460 (which regulates the division of land). All physical environmental impacts associated with street lighting would occur within the project boundaries and/or street rights-of-way and no off-site streetlights or roadway maintenance would be the responsibility of the project proponent.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Public Facilities

| | |
|---|---|
| **Impact USS-12:** | **The project would not impact the maintenance of public facilities, including roads, requiring or resulting in the construction of new facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

"A" Street—a new public street located between Building 1 and Building 2—would provide additional access to existing residences generally to the north of the project site that currently take access through the project site via a dirt road. The street that is proposed to replace the existing dirt road

would be approximately 1,600 feet in length designed to Riverside County standards, and would provide residents access through the project site (if needed). Additionally, a roadway and utility easement would be granted to Holbert Ranch (upon successful negotiation with this adjoining property owner) within the northwest corner of the site that would provide access to existing residents.

Three access points to the project would be provided from Cherry Valley Boulevard. A landscaped, raised median would be installed on Cherry Valley Boulevard to direct project traffic, and improve the aesthetics of the streetscape. The proposed "A" Street and roadway/utility easement are analyzed under CEQA as part of the proposed project footprint, and would not require or cause the expansion or construction of additional facilities that could cause significant environmental effects.

Water and sewer service for the project will be provided by the YVWD. In order to provide service to the project site, the project will involve the construction of off-site water and sewer lines in Cherry Valley Boulevard and Calimesa Boulevard. The project's potential sewer connection points are discussed in detail under USS-3, above.

In addition, two water storage tanks, each with a capacity of one-million gallons are proposed on the northeastern portion of the project site to serve other properties within the YVWD. The water tanks will be provided for and maintained by YVWD. YVWD maintains a master plan that provides long-term planning direction and outlines new water facilities and efforts that may be required to serve future growth within the service area. The project would result in no additional maintenance other than that already anticipated for the YVWD; therefore, the project would result in a less than significant impact to the maintenance of public facilities.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

## Other Government Service Facilities

| | |
|---|---|
| **Impact USS-13:** | **The project would not impact other government service facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects.** |

### *Impact Analysis*

No other known governmental facilities would require off-site construction or maintenance as a result of the proposed project. Thus, no impacts are anticipated.

### *Level of Significance Before Mitigation*

No impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

No impact.

## Energy Conservation

**Impact USS-14: The project would not conflict with any adopted energy conservation plans.**

### *Impact Analysis*

The project consists of two industrial buildings that will be designed to be eligible for LEED Certification. Building 1 will comprise approximately 811,000 square feet and Building 2 approximately 1,012,760 square feet for a total of approximately 1,823,760 square feet of floor area. Development of the project would convert the site from an undeveloped state to two industrial buildings. This change in land use on-site would increase demand for energy. More specifically, the proposed project is anticipated to increase demand of electricity, natural gas, and motor vehicle fuel, air conditioning and fuel associated with construction of the project. Energy resources would be consumed during project construction and over the operational lifetime of the project. Solar panels are proposed on the roofs of the buildings. It is estimated that the solar panels will meet approximately 23 percent of the proposed project's total energy needs.

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the California Energy Commission (CEC) and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The project also is required to adhere to building standards of the County of Riverside.

Although the proposed project would consume energy and have an impact on available energy resources, it will comply with Title 24 and would have a less than significant impact on energy conservation plans.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Less than significant impact.

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# SECTION 4: CUMULATIVE IMPACT ANALYSIS

## 4.1 - CEQA Requirements

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an Environmental Impact Report (EIR) when a project's incremental effects are cumulatively considerable. Cumulatively considerable means, ". . .the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those that are outside of the control of the lead agency.

In accordance with CEQA Guidelines Section 15130(b), ". . .the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact. For the purposes of this analysis, a list approach is being used to analyze cumulative impacts of the project.

## 4.2 - Cumulative Impact Setting

As established in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, Section 15355). As part of the Traffic Impact Study (Appendix I) prepared for the project, a cumulative project list was developed for the purposes of this analysis through consultation with staff from the County of Riverside. In addition, cumulative development projects were also obtained from adjacent jurisdictions (i.e., City of Beaumont and City of Calimesa). Table 4-1 summarizes projects in the vicinity of the project that have the potential to create cumulative considerable effects in conjunction with the project.

The projects listed in Table 4-1 are illustrated in Exhibit 4-1.

**Table 4-1: Cumulative Projects**

| No. | Project Name | Land Use | Quantity 1, 2 |
|---|---|---|---|
| 1 | CUP 03629 | Mini-warehouse | 90 TSF |
| 2 | TR 31966 | Single-family Residential | 60 DU |
| 3 | TTM 30543 Holbert Ranch | Single-family Residential | 131 DU |

## Table 4-1 (cont.): Cumulative Projects

| No. | Project Name | Land Use | Quantity 1, 2 |
|---|---|---|---|
| 4 | Borstein Property | Single-family Residential | 209 DU |
| 5 | Heartland[3] | Single-family Residential | 988 DU |
| | | Commercial Retail | 126 TSF |
| 6 | Tuscany Townhomes | Condos/Townhomes | 188 DU |
| 7 | Noble Creek Vistas | Single-family Residential | 648 DU |
| 8 | Oak Valley Village (Mountain Bridge) | Commercial Retail | 441.709 TSF |
| 9 | Beaumont Commons<br>American Villas<br>8th Street Condos<br>Pennsylvania Avenue Apartments | Single-family Residential | 120 DU |
| | | Single-family Residential | 36 DU |
| | | Condos/Townhomes | 16 DU |
| | | Apartments | 8 DU |
| 10 | Kirkwood Ranch | Single-family Residential | 403 DU |
| 11 | Sundance | Single-family Residential | 4716 DU |
| | | Commercial Retail | 163.35 TSF |
| 12 | Rolling Hills Ranch Industrial Prologis[4] | High-Cube Warehouse | 1200 TSF |
| 13 | Dowling Orchard Business Park[4] | High-Cube Warehouse | 548.82 TSF |
| 14 | Farmer Boys<br>Ramona Tire/Firestone | Commercial Retail<br>Commercial Retail | 6.752 TSF<br>4.792 TSF |
| 15 | Oak Valley Senior Center | Senior Attached Housing | 372 DU |
| 16 | Aspen Creek (TT 31426) | Single-family Residential | 106 DU |
| 17 | Jerome Taurek (Tract No. 31162) | Single-family Residential | 244 DU |
| 18 | Hidden Canyon Industrial | High-Cube Warehouse | 2890.00 TSF |
| 19 | Pacific Scene (Tract No. 32850) | Single-family Residential | 95 DU |
| 20 | Sunny-Cal Specific Plan | Single-family Residential | 497 DU |
| 21 | Jack Rabbit Trail | Single-family Residential | 2000 DU |
| | | Commercial Retail | 49.005 TSF |
| 22 | Four Seasons (Tract No. 31462) | Single-family Residential | 2041 DU |
| | | Commercial | 95.832 TSF |



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## Table 4-1 (cont.): Cumulative Projects

| No. | Project Name | Land Use | Quantity 1, 2 |
|---|---|---|---|
| 23 | TTM 33931 Fiesta Oak Valley/Mesa Verde Estates | Single-family Residential<br>Condos/Townhomes<br>Active Park<br>Elementary School<br>Commercial Retail | 3535 DU<br>453 DU<br>48 AC<br>1200 ST<br>200 TSF |
| 24 | Summerwind Ranch | Single-family Residential<br>Middle School<br>Elementary School<br>Commercial Retail<br>Business Park | 3683 DU<br>900 ST<br>1200 ST<br>1000 TSF<br>1579 TSF |
| 25 | Sun Cal/Various Builders | Single-family Residential<br>Commercial Retail | 2366 DU<br>505.296 TSF |
| 26 | World Logistics Center | High-Cube Warehouse | 21450 TSF |
| 27 | Potrero Creek Estates | Single-family Residential | 700 DU |
| 28 | TAZ-28 | Single-family Detached | 193 DU |
| | | General Office Building | 182.342 TSF |
| | | Shopping Center | 130.244 TSF |
| 29 | TAZ-29 | Business Park | 59.512 TSF |
| | | Shopping Center | 49.876 TSF |
| | | General Light Industrial | 26.737 TSF |
| | | General Office Building | 69.827 TSF |
| 30 | TAZ-30 | General Office Building | 2.363 TSF |
| | | Shopping Center | 1.699 TSF |
| 31 | TAZ-31 | Shopping Center | 62.019 TSF |
| | | General Office Building | 86.826 TSF |
| 32 | TAZ-32 | Single-family Detached | 94 DU |
| 33 | TAZ-33 | Shopping Center<br>General Office Building<br>General Light Industrial<br>Business Park<br>Apartment | 6.861 TSF<br>9.605 TSF<br>35.109 TSF<br>78.147<br>41 DU |
| 34 | TAZ-34 | Shopping Center<br>General Office Building | 54.613 TSF<br>76.459 TSF |
| 35 | TAZ-35 | Single-family Detached | 28 DU |
| 36 | TAZ-36 | Single-family Detached | 17 DU |
| 37 | TAZ-37 | Shopping Center | 11.87 TSF |
| | | General Office Building | 16.618 TSF |
| | | Single-family Detached | 6 DU |

**Table 4-1 (cont.): Cumulative Projects**

| No. | Project Name | Land Use | Quantity 1, 2 |
|---|---|---|---|
| 38 | TAZ-38 | Shopping Center | 69.478 TSF |
| | | General Office Building | 97.269 TSF |
| 39 | TAZ-39 | Shopping Center | 103.023 TSF |
| | | General Office Building | 42.46 TSF |
| 40 | TAZ-40 | Single-family Detached | 478 DU |
| 41 | Singleton Heights (Mastercraft) TR 26811 | Single-family Detached | 268 DU |
| 42 | Sunset Ranch (Osborne/Dunham) TR 31450 | Single-family Detached | 231 DU |
| 43 | JP Ranch | Single-family Detached<br>Commercial Retail | 689 DU<br>72.7 TSF |

Notes:
[1] TSF= Thousand Square Feet; DU= Dwelling Unit; ST= Students
[2] Commercial/Industrial Square Footage calculated based on Floor Area Ratio of 0.25.
[3] General Plan Land Use obtained from Heartland Tentative Tract Map 27971 TIA, October 3, 2011 by Urban Crossroads.
[4] Land Use and Quantity obtained from Potrero Boulevard Interchange, Phase 1 Focused Traffic Analysis, September 26, 2011 by Urban Crossroads.
[5] Phase 1 Kohl's completed. Commercial square footage obtained from City's website (http://www.ci.beaumont.ca.us/DocumentCenter/Home/View/118).
Source: San Gorgonio Crossing (Parcel Map No. 36093) Traffic Impact Analysis, Urban Crossroads, November 5, 2015.

Table 4-1 and Exhibit 4-1 both provide a reasonable picture of the ongoing trend toward urbanization along the I-10 Freeway Corridor, both in the adjoining cities of Calimesa and Beaumont as well as along Cherry Valley Boulevard, within the Cherry Valley Gateway Area, including the Sunny Cal residential project (Project #20) and residential Tentative Tract Map 31966 (Project #2), both located on the south side of Cherry Valley Boulevard and proximate to the project site. In addition, areas to the south and southwest of the project site between the project and the I-10 Freeway on both sides of Cherry Valley Boulevard are zoned and designated in the general plans of Calimesa and Riverside County for commercial land uses.

## 4.3 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact consists of an impact, which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.

- When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, an EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.
- An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant if the project is required to implement or fund its fair-share of a mitigation measure or measures designed to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on the principles above as the basis for determining the significance of the project's cumulative contribution to various impacts.

### 4.3.1 - Aesthetics

The geographic scope of the cumulative aesthetics analysis is the area surrounding the project site. This includes the area up to the ridgeline of the hills to the north of the project site as well as adjoining areas along Cherry Valley Boulevard, as well as areas where the project is prominent as viewed from the I-10 Freeway. The project consists of developing previously undeveloped land with two industrial buildings on the project site. Although historically rural and undeveloped in character, recent new and planned development is transitioning this area to be more urban. Such projects include the approved Sunny Cal Specific Plan, with 497 dwelling units (see cumulative project # 20), and Holbert Ranch (TTM 3054) with 131 dwelling units (cumulative project # 3). When developed, these two projects (which adjoin the project site) would result in this area transitioning to an area with visual characteristics that are more urban as compared to existing conditions. These nearby cumulative developments, together with the proposed project, will contribute to an overall change in the visual character of the area. However, compliance with County General Plan policies, design guidelines, Municipal Code and Zoning Ordinance will be required for the proposed project and all other cumulative projects in the area, which will ensure cohesive and attractive development that is compatible with the surroundings.

As determined in the discussion of direct project impacts in this document's Section 3.1, Aesthetics, potential impacts would be less than significant. The location and design of the project places the proposed buildings well below the grade of Cherry Valley Boulevard (up to 48.3 feet some places), which would afford the most prominent public views of the project. Because of their low profiles, views of the buildings would not break the ridgeline profile of the hills to the north of the buildings. Large building setbacks from Cherry Valley Boulevard as well as substantial project landscaping further facilitate the project blending with the existing landscape. As indicated in Section 3.1, the project will not significantly impact scenic vistas or scenic resources, or substantially degrade the visual character or quality of the site or its surroundings, either from direct project impacts or cumulative impacts. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have cumulatively considerable aesthetic impacts.

With mitigation, the project would have a less than significant impact regarding creation of a new source of substantial light or glare. Other future projects would be required to implement similar mitigation measures in compliance with County standards. Therefore, the project, in conjunction with other planned or approved projects, would not result in cumulatively significant light and glare impacts.

## 4.3.2 - Agriculture and Forestry Resources

The geographic scope of the cumulative agriculture and forestry resources analysis is the area surrounding the project site, as well as the general project area as a whole. None of the area within the project site is currently used for agriculture. Additionally, while historically rural in nature, the general project area has more recently experienced urbanization and development activities, which has resulted in land use changes on formerly agricultural land.

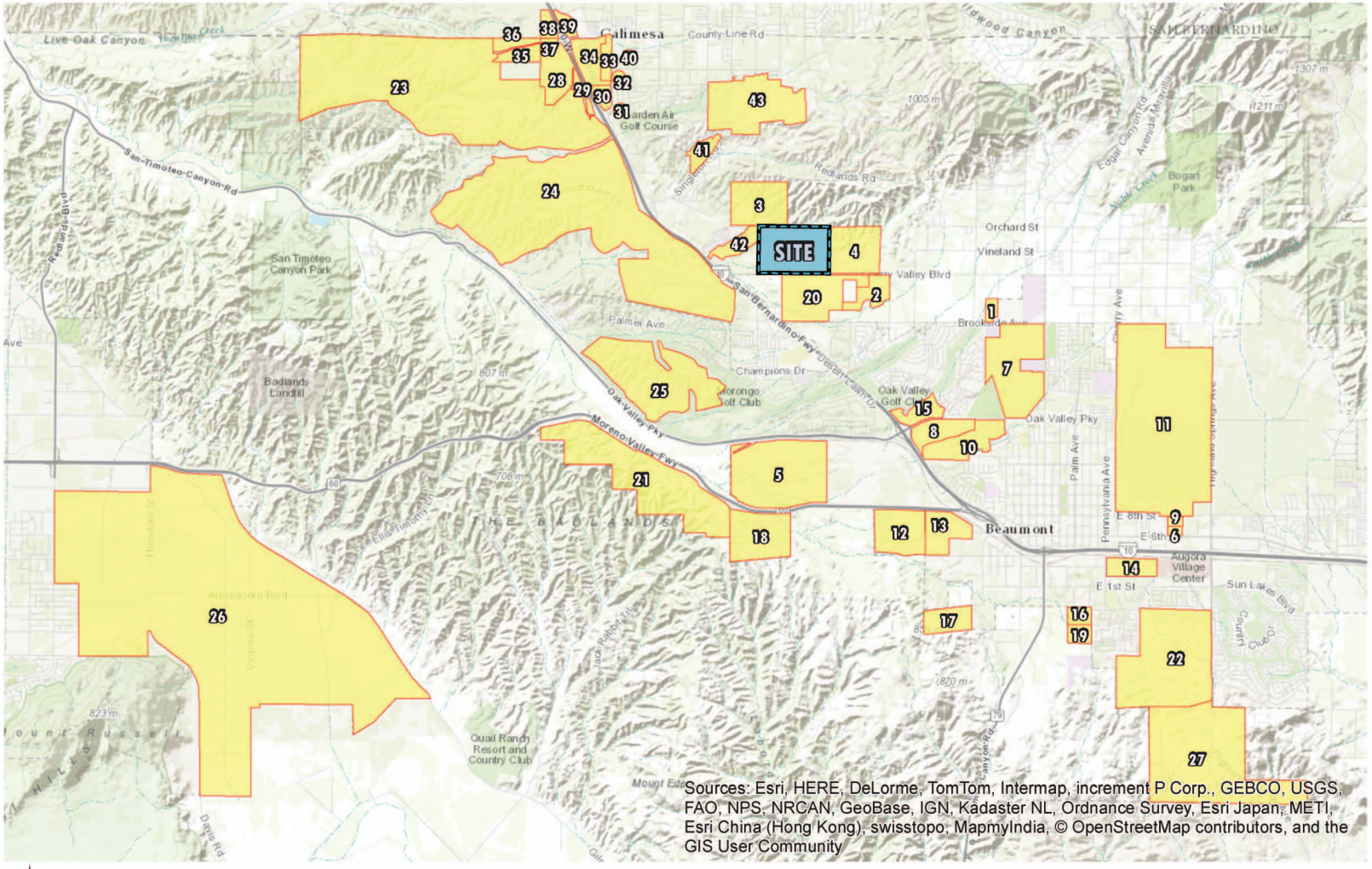
The unincorporated County area to the north of the project site is zoned Residential Agriculture, one acre minimum lot size (R-A-1) and W-2. Areas to the east and south are also zoned R-A-1 and W-2. The areas directly west of the project site located within the City of Calimesa are zoned and designated by the General Plan as Residential Low (2-4 dwellings per acre) and Residential Low Medium (4–7 dwellings per acre). However, the area further to the west, near Cherry Valley Boulevard, is designated Commercial Regional. The area within the City of Calimesa that lies to the north and northwest of the project site is zoned/designated as Rural Residential (RR) (0-2 dwellings per acre).

Although the project site and the surrounding areas were historically used for agriculture activities, currently none of the areas immediately surrounding the project site are used for agriculture. Rural residential land uses are currently located north, east, and west of the project site. The land located south of the project site contains an abandoned egg farm and is planned for residential development. Therefore, the project, in conjunction with other planned or approved projects, would not result in cumulatively considerable impacts to Agriculture and Forestry Resources.

## 4.3.3 - Air Quality

The geographic scope of the cumulative air quality analysis is the South Coast Air Basin. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by the project's air emissions. In combination with carbon monoxide (CO) emissions from other regional emission sources, the project would not result in an exceedance of the CO ambient air quality standard at project-impacted intersections. Therefore, the project would not result in cumulative health effects from CO exposure.

The project could impede attainment of air quality standards because its emissions exceed the South Coast Air Quality Management District (SCAQMD) regional significance thresholds. Even with implementation of all feasible mitigation, the project would have a significant air quality impact during operation. Impacts would be less than significant during construction. Thus, the project will have a cumulatively considerable impact regarding attainment of air quality standards. Additionally, after mitigation, the project's operational emissions would exceed the SCAQMD's regional thresholds for reactive organic gases (ROG) and oxides of nitrogen ($NO_x$). Therefore, operational impacts would be significant and unavoidable, and the project would have a cumulatively considerable air quality impact due to operational ROG and $NO_x$ emissions. The project would also result in cumulatively considerable net increase in ozone, because regional significance thresholds for ROG and $NO_x$, (ozone precursors), are exceeded. Thus, the project would result in cumulatively significant operational air quality impacts. This impact would be significant and unavoidable, even with implementation of all feasible mitigation.




Source: Urban Crossroads.

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# Exhibit 4-1
# Cumulative Projects

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All other project-related air quality impacts were found to be less than significant and did not require mitigation (e.g., sensitive receptors and objectionable odors). Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all of these remaining air quality impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these impact areas.

### 4.3.4 - Biological Resources

The geographic scope of the cumulative biological resources analysis is the Cherry Valley area. Biological impacts tend to be localized; therefore, the area near the project area would be the area most affected by project activities (generally within a 0.5-mile radius). The site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), but it not located within any Criteria Cells. Mitigation is proposed to reduce potential impacts on species to a less than significant level. Impacts to MSHCP Riverine areas shall be mitigated to below a level of significance by on-site creation or restoration at a 2:1 ratio. It is reasonable to assume that other future development projects located within the MSHCP would be required to mitigate for impacts on species in a manner similar to the project. In part, the MSHCP was enacted to offset and control cumulative impacts to biological resources within western Riverside County. Implementation of the project would directly impact raptor foraging habitat and potentially could directly or indirectly impact raptor nests during construction. These impacts are considered potentially adverse, but will be reduced to less than significant with mitigation. Therefore, the project, in conjunction with other projects, would not result in cumulatively significant impacts to animal or plant species.

The project would not have any significant impacts on fish or wildlife movement and would not conflict with locally adopted biological policies and ordinances. Impacts to United States Army Corps of Engineers (USACE) jurisdictional areas total 0.40 acre, all consisting of ephemeral drainage. The project would also impact 1.11 acres of CDFW jurisdictional area. The loss of these on-site waters would be mitigated and would not cumulatively increase impacts on other jurisdictional waters in the region. Other future development projects would be required to evaluate impacts on these issues and mitigate where necessary, including the payment of MSHCP fees. Therefore, the project, in conjunction with other projects, would not result in cumulatively significant conflicts with wildlife movement or local biological ordinances and policies.

### 4.3.5 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the Cherry Valley Gateway Policy area. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 500-foot radius). No cultural resources have been found on the project site, and only three resources have been recorded within 0.5 mile of the project site (see Section 3.5, Cultural Resources Table 3.5-1, Previously Recorded Cultural Resources). Most of these are historic-era artifacts and/or historic features. The project area has a determination of high paleontologic sensitivity at or slightly below the modern ground surface. Potential impacts to cultural resources will be mitigated to a less than significant level by

ensuring appropriate measures are in place in case any such resources are located during ground disturbance.

It is always possible that unknown historic, archeological, paleontological resources or human remains could be uncovered during grading. Therefore, the project's potential impacts on unknown resources could contribute to potentially significant cumulative impacts. However, Mitigation Measures CUL-1 through CUL-7 would reduce any potential cumulative impacts to less than significant. Also, given a lack of resources that have been found near the project site, it is unlikely that additional historical or archaeological resources would be found, and even less likely that they would result in cumulative impacts by affecting nearby areas, since cultural resources impacts tend to be localized. In addition, other future development projects would be required to evaluate cultural resources impacts and provide mitigation as necessary. Therefore, the project, in conjunction with other projects, would not result in cumulatively significant impacts to cultural resources.

## 4.3.6 - Geology and Soils

The geographic scope of the cumulative geology/soils analysis is the Cherry Valley area. Geologic, soil, and seismic impacts tend to be localized; therefore, the area near the project area would be the area most affected by project activities. As identified in Section 3.6, Geology and Soils, with Mitigation Measures GEO-2 through GEO-11b for earthquake faults, groundshaking, unstable soils, soil erosion, and landslides, the project will result in a less than significant impact. In addition, all potential impacts are site-specific and limited to on-site conditions, and thus would not affect off-site locations or projects. Similarly, other cumulative development within Cherry Valley would be required to provide mitigation as appropriate to address potential impacts with respect to geology and soils. Therefore, the project, in conjunction with other projects, would not result in a cumulatively significant impact related to geology and soils.

## 4.3.7 - Greenhouse Gas Emissions

There is no geographic scope for cumulative greenhouse gas impacts; therefore, impacts are a global issue. Greenhouse gas emissions are inherently a cumulative impact, as no single project could produce a quantity of greenhouse gas emissions significant enough to influence global climate change.

The County of Riverside's Climate Action Plan (CAP) is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change. The CAP has adopted a target of reducing GHG emissions down to 15 percent below 2008 levels within the County of Riverside by 2020. This reduction target is compliant with AB 32, and is therefore consistent with the State's efforts to reduce GHG emissions globally and substantially lessen the cumulative contribution to GHG impacts. The CAP includes GHG screening tables with energy efficient implementation measures that would help to achieve the target reduction.

Pursuant to the CAP, projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG

Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects are determined to have a less than significant individual and cumulative impact for GHG emissions.

As discussed in Section 3.7, impacts related to GHG emissions are potentially significant. However, the project will comply with the CAP, achieving at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables by implementing reduction measures specified in the CAP and described in Section 3.7, Table 3.7-3. The project would also be consistent with the overarching goals of AB 32 and the strategies of ARB's Scoping Plan, as well as the regulatory measures adopted to further AB 32's goals. Accordingly, under either threshold, the project's GHG emissions would not be cumulatively significant..

### 4.3.8 - Hazards and Hazardous Materials

The analysis area for evaluation of cumulative impacts to hazards and hazardous materials comprises the Cherry Valley area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. The project area is mostly undeveloped with rural land uses in the vicinity. With the exception of potential soils contamination from previous use of chemicals associated with past agricultural uses, potential impact with respect to Hazards and Hazardous Materials were all found to be less than significant and, by their site-specific nature, will not cause cumulatively significant impacts. In addition, the project, as well as future development projects, would be required to comply with all applicable hazardous materials handling and storage requirements to ensure that potential impacts would be less than significant. Therefore, the project, in conjunction with other future development projects, would not result in a cumulatively significant impact related to hazards and hazardous materials.

### 4.3.9 - Hydrology and Water Quality

The analysis area for evaluation of cumulative impacts to hydrology and water quality includes the Cherry Valley area. Hydrologic and water quality impacts tend to be localized; therefore, the area near the project site would be the area most affected by project activities.

As discussed in Section 3.9, proposed drainage improvements and retention basins would ensure that storm runoff does not exceed what occurs under existing conditions and would not result in an increase in erosion either on-site or off-site. With the proposed improvements, the project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, contribute to downstream flooding, or provide substantial additional sources of polluted runoff. The project will also comply with County Ordinance 458, which requires special construction standards for new construction and/or substantial improvements within mapped floodplains, to reduce damage to the public and property.

Development activities associated with the project have the potential to impact water quality, potentially impacting the water quality of the Santa Ana Watershed. The project would prepare and submit a Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP) to the County of Riverside for review and approval, and will implement Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater and non-

stormwater discharges. With mitigation, the project would not degrade water quality or violate waste discharge requirements. The Water Supply Assessment prepared for the project indicated that there are adequate water supplies to serve the project, and the project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Other future development projects in the project area would be required to implement similar mitigation and comply with state and county requirements related to hydrology and water quality. Therefore, the project, in conjunction with other future development projects, would not result in cumulatively significant impacts related to hydrology and water quality.

## 4.3.10 - Land Use and Planning

The geographic scope of the cumulative land use analysis is the Cherry Valley area and the adjoining Cities of Calimesa and Beaumont. The project requires the adoption of a General Plan Amendment and a Zone Change to facilitate the development of the project, although such changes will not require a change to the General Plan Foundation Component, which currently identifies the project site as within the Community Development Foundation.

Although the project would change land use designations from large-lot residential to accommodate light industrial, warehouse distribution, and public facilities on the southern portion of the site, this change reflects an ongoing trend toward urbanization along this part of Cherry Valley Boulevard. In addition, it is a logical extension of urban type uses already occurring to the west and the south of the project and along the I-10 Freeway corridor. This trend, which is largely driven by the good freeway access afforded by Cherry Valley Boulevard and its interchange connection to the I-10 Freeway, is discussed in Section 4.2, Cumulative Setting, as well as Section 3.10, Land Use and Planning, of this Draft EIR. Because of this ongoing trend and the clear orientation of the project site to the I-10 Freeway corridor (approximately one-third mile from the I-10 Freeway), a land use change is appropriate and consistent with this setting.

The project will be compatible with the several uses and planned developments to be located on the properties immediately surrounding the project site, including the Sunny-Cal Egg Ranch residential ("Sunny Cal") project to the south, the residential projects planned adjacent to the project site to the east and southeast, the regional commercial uses planned to the west, and the rural/open space area to the north. As proposed, the Sunny-Cal project will include a substantial "buffer" to help reduce the risks of unwanted impacts to its residents. These "buffers" include (1) providing substantially larger lot sizes along Cherry Valley Boulevard (minimum lot sizes of 20,000 square feet); (2) including a 10-foot-high landscaped berm to be located on the south side of Cherry Valley Boulevard; (3) orienting homes away from the north side of Cherry Valley Boulevard, (4) including a minimum 50-foot-wide landscaped buffer, and (5) adding a 5-foot wall atop the landscaped berm to help further screen and reduce impacts between the Sunny-Cal property and all uses to its north, including the project site (City of Beaumont 2014).

Like the approved Sunny-Cal development, the project includes extensive measures to buffer potential impacts to and from nearby residents, including providing robust landscaping between the project buildings and Cherry Valley Boulevard. The location, configuration, and design of the project

will allow it to blend into the existing landscape. The two buildings would be set back approximately 375 to 575 feet from Cherry Valley Boulevard; approximately 300 feet from the east project boundary; and approximately 400 feet from the west project boundary, allowing for generous buffers with extensive landscaping, a berm, a meandering equestrian and pedestrian trail, and a five-foot-wide meandering sidewalk, separated by a three-railed fence. Given the number of buffering features proposed by both the Sunny-Cal project and the San Gorgonio Crossings Project, no building or structure between the two projects is expected to be closer than 600 feet in distance, providing substantial open space between the two projects and thereby ensuring minimal impacts between the two projects.

Building 1 would be located approximately 29.8 feet above the centerline of Cherry Valley Boulevard, and Building 2 would be located approximately 48.3 feet below the centerline of Cherry Valley Boulevard. Although the project's buildings rise 41 feet in height, neither would be visible from motorists or pedestrians traveling along Cherry Valley Boulevard, as their lines of sight would be directed above the building. A berm, water tower, barn, and landscaping would further screen views of the buildings. The project site would not be visible from the residents located north of the site. The proposed buildings would not break the ridgeline silhouette of the hills behind them to the north. All of these factors, combined with the proposed tree planting and other landscape and screening elements, will make the project visually unobtrusive and in accordance with the existing visual characteristics of the surrounding areas.

With respect to the largely undeveloped areas to the east and south of the project site, potential impacts that could affect land use compatibility have been addressed in other sections of this Draft EIR. These include aesthetics, agricultural resources, noise, hazards, population and housing, and local air quality impacts, all of which have been evaluated in the respective sections of this Draft EIR and have been found to be less than significant, or less than significant with mitigation. For example, the eastside of Building 2 has been specifically designed so that it does not include any bay doors or loading areas. As a result, this area of the project site will not create significant impacts on the easterly residential uses in terms of truck activity, noise, odors, visual impacts, or up-lighting. Additionally, the area between Building 2 and the eastern property boundary will primarily include employee parking, employee car circulation, a generously landscaped slope, and two 1-million-gallon water tanks, all of which are lower-intensity uses commonly found near residential uses. The design and development of the project site with the uses proposed will not restrict or constrain the existing land uses, or future land uses allowed by current zoning or general plan land use designations. As detailed in Table 3.10-3, the project is consistent with all County of Riverside General Plan land use policies. The project is also consistent with the Cherry Valley Gateway Policy Area policies of preserving open space and providing an "entrance" feature that evokes the rural identity of the community, by preserving approximately 84.8 acres of the project site as natural open space, and providing western and agricultural architectural elements such as decorative barn and water tower features.

Other development projects would also be required to demonstrate consistency with applicable General Plan, Zoning and Municipal Code requirements, and provide mitigation as necessary to avoid any significant land use impacts or incompatibility with adjoining land uses.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to land use.

## 4.3.11 - Mineral Resources

The geographic scope of the cumulative mineral resources analysis is the Cherry Valley area. The County's General Plan does not identify any significant mineral resources on the project site or in the project vicinity. Other future development projects would be required to evaluate impacts on mineral resources and provide mitigation where necessary. Therefore, the project, in conjunction with other projects, would not result in cumulatively significant impacts to mineral resources.

## 4.3.12 - Noise

The geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area near the project site (approximately 0.25 mile) would be the area most affected by project activities. In order for the project to create a cumulatively significant noise impact, the project would have to result in a 5 dBA cumulative increase within Riverside County, or a 3 dBA increase within the City of Calimesa.

As discussed in Section 5.2 of the Noise Report, operation of the project would not create any significant stationary noise impacts above existing levels, nor would they exceed residential noise standards; therefore, stationary noise impacts would not be cumulatively significant.

Construction activities associated with the proposed project have the potential to result in substantial sources of noise. As discussed in Section 3.12, Noise, the construction activities for the proposed project could potentially exceed the noise thresholds for certain receivers. Mitigation is proposed that would require the contractor to implement various sound control measures, including limitation of construction hours and using noise attenuation devices on heavy equipment. Implementation of these mitigation measures would reduce project impacts to a less than significant level.

Other planned and approved projects would be required to evaluate construction noise impacts and implement mitigation, if necessary, to minimize noise impacts pursuant to local regulations. In addition, the *timing* of construction activities associated with other development projects would overlap minimally, if at all, with the proposed project. Furthermore, because noise is a highly localized phenomenon, even if construction activities did overlap in time with the proposed project, distance would diminish any additive effects. Construction noise would generally be limited to daytime hours and would be short-term in duration. Therefore, it is reasonable to conclude that construction noise from the proposed project would not combine with noise from other development projects to cause cumulatively significant noise impacts.

The proposed project's construction and operational vibration levels would not exceed annoyance thresholds. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the project to combine with vibration from other projects because of their distances from the project site. Therefore, the proposed project would not contribute result in a cumulatively significant vibration impact.

The cumulative roadway noise impacts were calculated in the project-specific noise analysis (FCS 2015) for the year 2035 scenarios (as shown in Appendix H, Noise Impact Analysis). The 2035 scenarios are based on the Traffic Study, which included traffic that is expected to be generated by cumulative projects. The highest increases attributable to project-related traffic, 0.4 dBA, are found on the road segments of Cherry Valley Boulevard-Calimesa Boulevard to Driveway 1 and Cherry Valley Boulevard- Driveway 1 to Street 2 (Table 12 of Noise Report). As the noise level generated along these segments is less than 3 dBA, the impacts are considered less than cumulatively considerable, and thus a less than significant cumulative roadway noise impact for the year 2035 project conditions would occur. Moreover, stationary noise and transportation noise are localized phenomena, and there is very limited potential for other projects to contribute to cumulative noise impacts beyond transportation-related noise, which would not be cumulatively significant. As such, the proposed project, in conjunction with other projects, would not make a cumulatively considerable contribution to any permanent increase in ambient noise levels in the project vicinity.

## 4.3.13 - Population and Housing

The geographic scope of the cumulative population and housing analysis is the Cherry Valley area, as well as the cities of Calimesa and Beaumont. The project's creation of temporary and permanent jobs is not anticipated to have a significant impact regarding a demand for additional housing, because it is anticipated that a large portion of the permanent jobs created would be filled by persons already living in the project area, due to current high rates of unemployment. Other planned and approved projects would be required to evaluate the potential for growth inducement and, if necessary, to mitigate such impacts. Therefore, the project, in conjunction with other projects, would not result in a cumulatively significant impact related to population and housing.

## 4.3.14 - Public Services

The analysis area for evaluation of cumulative impacts to public services is the Cherry Valley area. The project would not create any significant impacts with respect to public services. The project would not substantially increase the need for new or expanded facilities for fire, police, schools, and other public facilities. In addition, the project would pay into established development impact fee programs to offset incremental increases in demand for fire, police, and school facilities from the project.

According to the provided statistics (refer to Section 3.14), none of the engines/truck(s) required would be able to reach the site in under 6 minutes and 30 seconds, and would therefore not meet the suburban response time goal. This existing response time deficit would exist even without development of the project. Thus, the project would potentially contribute to existing cumulative impacts to response times within the area.

The project would impact RCFD's ability to provide an acceptable level of emergency services, which will be most effectively addressed through the Applicant's required participation in the County's development impact fee program. Participation in development impact fees typically provides the flexibility necessary to RCFD to determine what capital expenditures/assets (e.g., new station, engine, equipment, etc.) are best suited to maintain acceptable service (Johnson, pers. comm.).

Based on the project's planned 1,823,760 square feet, the project would be assessed approximately $291,743 in development impact fees[1]. Payment of these fees is mandatory and is therefore not included as mitigation. The project will be required to pay its "fair share" contribution into the County's development impact fee program. Fire Mitigation Fees are estimated at approximately $455,940,[2] but would ultimately be finalized during the land development review process by RCFD Emergency Services Engineering and Planning Staff located at TLMA Permit Assistance Centers. Total project fees related to fire protection and related infrastructure would be approximately $747,683.[3]

The Riverside County Fire Department has developed a methodology to determine the location of future fire stations. Attachment F of the adopted Riverside County Fire Department Strategic Plan (November 2009) indicates that the Strategic Planning Bureau was formed in 2007. The Strategic Planning Bureau reviews guidelines utilized to evaluate response and station placement related to speed, intersections, traffic, time of day, etc. This analysis is used as a fire station needs assessment tool. The information is used to determine threshold values for square footage of commercial/ industrial and residential units allowed prior to a facility requirement. These thresholds are applied through the planning process for predetermined locations within the planning area zoning layers. It is recommended that this planned methodology continue to be used in order to establish appropriate facility placement concurrent with the adopted Strategic Plan response criteria.

Based on the adopted Riverside County Fire Protection Master Plan, one new fire station and/or engine company is recommended for every 2,000 new dwelling units and/or 3.5 million square feet of commercial/industrial occupancy. The project's square footage would not meet this threshold, (project is less than 3.5 million square feet) and therefore would not trigger the need to create new or physical altered fire protection facilities, based on County standards.

The project will be developed in conformance with all applicable RCFD and building code standards to meet fire flow/pressure requirements and emergency access requirements. The two buildings would include internal sprinkler systems. Thus, the project is anticipated to generate an incremental increase for fire and emergency service. However, any project impacts that could contribute to the existing need for improvements to fire and emergency services would be alleviated through the project's fair-share contribution of development impact fees and mitigation fees. The Applicant would be required to pay such fees prior to the issuance of occupancy permits. Should the RCFD ultimately establish additional facilities to alleviate the existing response time deficit, appropriate environmental analysis as required by state law would be required.

Located approximately 2.65 miles from the project site, Station 21 (Calimesa) at 906 Park Avenue, Calimesa, California, 92320 is the nearest station with a total response time of 7 minutes and 5 seconds (7:05), and therefore does not meeting the response time standard for a "suburban" land use as defined by RCFD. Station 2/Truck 2 in Moreno Valley would have a response time of 21 minutes and 50 seconds, which would not meet the response time standard for a "suburban" land

[1] 1,779 per acre x 164 applicable acres (Parcel 1, Parcel 2, Cherry Valley, Storm Drain and Grading, and overall backbone acreage included) = $291,743 (County of Riverside 2015).
[2] This is an estimate based on available data, subject to change.
[3] This is an estimate based on available data, subject to change.

use. The project will be designed to meet safety equipment standards, adequate emergency access, fire hydrants, water flows in compliance with the RCFD, and the payment of all applicable development impact fees. The project will be required to pay its "fair share" contribution into the County's development impact fee program. Fire Mitigation Fees are estimated at approximately $455,940,[4] but would ultimately be finalized during the land development review process by RCFD Emergency Services Engineering and Planning Staff located at TLMA Permit Assistance Centers. Total project fees related to fire protection and related infrastructure would be approximately $747,683.[5] The Applicant would be required to submit payment of such fees prior to issuance of occupancy permits.

The project would also facilitate the construction of—or provide substantial fair share funding for—interim improvements at the Cherry Valley Boulevard/I-10 interchange, which would improve existing traffic conditions and further alleviate existing and future response time deficits.

Other future development projects would also increase demands for fire protection, police protection, schools, and library facilities. Similar to the project, these projects would be required to pay development impact fees to offset incremental increases in service demand or provide additional mitigation as required. Therefore, the project, in conjunction with other future development projects, would not have cumulatively significant impacts related to public services, with the required payment of development impact fees.

## 4.3.15 - Recreation

The geographic scope of the cumulative recreation analysis is the Cherry Valley area. There is a potential for the project to draw new residents in the project area. Although the exact number is speculative, the increase is not expected to substantially increase demands on existing neighborhood or regional parks or other recreational facilities. The project does not provide on-site recreation amenities. Most of the new employment positions generated by the project would be filled by individuals already residing in the region, who would already be utilizing existing recreation facilities. Furthermore, other planned and approved projects would be required to mitigate for potential impacts to recreational facilities, such as through dedication of parkland or payment of in lieu fees pursuant to County of Riverside requirements. Therefore, the project, in conjunction with other projects, would not have a cumulatively significant impact related to parks and recreation facilities.

## 4.3.16 - Transportation and Traffic

The scope of the cumulative transportation analysis includes the Cherry Valley area. Cumulative transportation and traffic impacts are already evaluated in Section 3.16, Transportation and Traffic (see Impact TRAN-1's discussion). The following scenarios and intersections/ramps are considered to be significantly impacted under cumulative conditions:

### Opening Year (2017) EAP Plus Cumulative

1. I-10 EB Ramps/Cherry Valley Boulevard (AM, PM Peak hours) LOS F

[4] This is an estimate based on available data, subject to change.
[5] This is an estimate based on available data, subject to change.

2. I-10 WB Ramps/Cherry Valley Boulevard (AM, PM Peak hours) LOS F
3. Calimesa Boulevard/Cherry Valley Boulevard (PM Peak Hour) LOS F

The project would also contribute 50 or more peak hour trips to the following intersections under Horizon (2035) conditions, which would result in a potentially significant impact even though these intersections have already been identified as deficient without the project:

1. I-10 Eastbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
2. I-10 Westbound Ramps/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
3. Calimesa Boulevard/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
7. Union Street/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
8. Nancy Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
9. Beaumont Avenue/Cherry Valley Boulevard—LOS F AM and PM Peak Hours
10. Roberts Road/Cherry Valley Boulevard—LOS F AM and PM Peak Hours

Again, mitigation may not fully mitigate these impacts because the County of Riverside and the project applicant have no control over the provision of timing of the intersection because it is within the City of Calimesa's jurisdiction. Similarly, the project applicant and the County do not have jurisdiction over the Caltrans right-of-way. Therefore, these cumulative impacts are significant and unavoidable. Refer to Section 3.16, Transportation and Traffic for an in depth discussion of all cumulative impacts.

## 4.3.17 - Utilities and Service Systems

The geographic scope of the cumulative utility systems analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the utilities' topical areas, each is discussed below.

### Water

The project will be annexed into the Yucaipa Valley Water District (YVWD) service area for provision of water and sewer service. Therefore, the scope of cumulative analysis for water is the YVWD service area. The YVWD prepared a Water Supply Analysis (Appendix G) for the project, which estimated an average daily demand for potable water at 42,840 gallons per day (gpd). In addition, the WSA estimated that the usage of recycled water for landscape irrigation would be approximately 12.35 million gpd. The WSA was based on a larger, previously proposed version of the project with approximately 736,240 more square feet of buildings on-site. Thus, the WSA is very conservative relative to the currently proposed project. The WSA concluded that YVWD would have adequate potable and recycled water to accommodate the project, in addition to projected future demand within the YVWD. In addition, Riverside County Ordinance No. 859, which requires efficient use of water for landscaped areas, would further reduce the demand for recycled water.

Additionally, the project would potentially provide water storage for the local area by utilizing the proposed detention basins for groundwater recharge. Furthermore, the project will construct two 1-million-gallon reservoirs in order to provide the YVWD with additional storage capacity. The two

water tanks would be located on the eastern side of the project site, and would not be utilized by the project. Other cumulative development projects would also be required to demonstrate that potable water supply sources are available, and these projects may also be required to implement water conservation measures. Based upon the findings of the WSA and the system improvements that would be provided by the project for the two new reservoirs, cumulative impacts to potable water supply would be less than significant.

### Wastewater

Currently, an average of approximately 4 million gallons per day of wastewater is treated by the YVWD's Henry N. Wochholz Regional Water Reclamation Facility, which has a current capacity of 8 million gallons per day (King, pers. comm.). The estimated wastewater generation of the project is 10,000 gallons per day, or 0.25 percent based on the WSA, which was calculated for a much larger project with approximately 736,240 more square feet than is currently proposed. Other projects within the project area would also be required to demonstrate that adequate wastewater collection and treatment capacity would be available. The project, in conjunction with other future development projects, would not result in cumulatively significant impacts related to wastewater, as there is available capacity to meet current and future wastewater needs.

### Storm Drainage

The project would create impervious surfaces on the project site, but it is not anticipated to significantly increase the quantity of runoff from the site compared with pre-project conditions and, therefore, would not increase storm drainage needs. The project will not substantially increase the rate or amount of surface runoff or result in flooding; either on-site or off-site, and project runoff will not exceed the capacity of existing or planned storm water drainage systems. Other projects within the project area would likewise be required to install storm drainage infrastructure that is designed to detain runoff during peak storm events and prevent downstream flooding, pursuant to a County-approved WQMP or SWPPP. Therefore, the project, in conjunction with other future development projects, would not result in cumulatively significant impacts related to storm drainage.

### Solid Waste

The project is estimated to generate a total of approximately 3,547.2 tons of solid waste during construction. During operation, the project would generate approximately 4.7 tons on a daily basis and approximately 1,714 tons on an annual basis. Landfill capacity in the region is available to serve the project, as well as other planned projects, through 2021 and 2024 for the Lamb Canyon and Badlands Sanitary landfills, respectively. Regional landfill capacity would be available to accommodate this amount of solid waste (each landfill has a remaining capacity of over 14,000,000 cubic yards). Additionally, based on correspondence from CR&R Inc., the operator of both landfills, the project should have no substantial impact on the expected closure of the Lamb Canyon Landfill. Thus, the project is anticipated to have a less than significant impact regarding operational waste disposal because there is adequate regional landfill capacity to meet the disposal needs of the project.

Therefore, the project, in conjunction with other future development projects, would not result in cumulatively significant impacts related to solid waste.

## Energy

The project, in conjunction with future development in the Southern California Edison (SCE) and Sempra Utilities (Sempra) service area, would increase demand for electricity and natural gas. SCE confirmed that the project is located in SCE service territory and that SCE will serve the project's electrical requirements in compliance with California Public Utilities Commission and Federal Energy Regulatory Commission tariffs. Likewise, the Southern California Gas Company (SCGC) would provide natural gas service to the project, and does not anticipate the need for new or expanded facilities to meet the service demands of the project. In addition, the project and other future projects would be required to implement energy-efficient measures in accordance with the most recent Title 24 standards to reduce energy demand. Therefore, the project, in conjunction with other future development projects, would not result in cumulatively significant impacts related to energy.

# SECTION 5: OTHER CEQA CONSIDERATIONS

## 5.1 - Introduction

This section addresses other considerations of the California Environmental Quality Act (CEQA). More specifically, this section includes a description of growth inducing impacts of the project, which pertains to ways in which the project could promote either direct or indirect growth. Additionally, this section addresses significant irreversible changes to the environment, which would result from implementation of the project. This section includes a discussion of significant and unavoidable impacts of the project, which are significant impacts that result from the project and that can be mitigated, but not to a less than significant level. Finally, consistent with CEQA and CEQA Guidelines, Appendix F, this section includes a discussion of energy conservation.

## 5.2 - Growth Inducing Impacts

Growth inducing impacts are addressed in Section 15126.2(d) of the CEQA Guidelines. The CEQA Guidelines define growth inducing impacts as ". . . the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."

Growth inducing impacts can occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area of the project. Also included in this category are projects that would remove physical obstacles to population growth, such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional new development. Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those which may provide a catalyst for future unrelated development in the area (such as a new residential community that requires additional commercial uses to support residents). The growth inducing potential of a project would also be considered significant if it fosters growth in excess of what is assumed in the local master plans and land use plans, or in projections made by regional planning agencies.

As discussed in Section 2, Project Description of this document, the project proposes two industrial buildings that will be designed to be eligible for Leadership in Energy and Environmental Design (LEED) Silver Certification. Building 1 will comprise approximately 811,000 square feet and Building 2 will comprise approximately 1,012,760 square feet, for a total of approximately 1,823,760 square feet of floor area. The two industrial buildings would include approximately 30,000 square feet of office space.

The project site is surrounded by some rural residential development. Existing water and wastewater infrastructure are available in the project area, as detailed in Section 17, Utilities and Service Systems. In order to provide service to the project site, off-site water and sewer lines in Cherry Valley Boulevard and Calimesa Boulevard will be constructed. In addition, two on-site water

tanks, each with a capacity of 1 million gallons, will be provided to serve other properties in the Yucaipa Valley Water District (YVWD) service area. There are developed properties in the project area, and 43 additional projects planned in the area. Refer to Table 4-1 and Exhibit 4-1 of Section 4, Cumulative Impact Analysis for a listing of planned projects. While the project does not include the construction of major infrastructure improvements, such as a wastewater treatment plant, it does facilitate the construction of two 1-million-gallon water storage tanks by the YVWD. If the tanks were not constructed as part of the project, the YVWD would need to site and construct them elsewhere in order to provide water in this region of its service area. The construction of the two water storage tanks, as well as the extension of wastewater and potable water services, would potentially encourage subsequent development by removing infrastructure barriers to growth in the vicinity of the project.

A General Plan Amendment application to change the Land Use designation from Rural Mountainous (RM), and Very Light Density Residential (VLDR) to Rural Mountainous, Open Space Recreation (OS-R), Public Facility (PF), and Light Industrial (LI) is proposed as part of the project entitlements. The project also includes a Change of Zone from Controlled Development (W-2) to Industrial Park (I-P), to be consistent with the General Plan Amendment. The area re-designated as PF would contain the two proposed water tanks for use by the YVWD. The northern portion of the project site designated as RM will remain designated as RM, and would not be developed as part of this project. The northern portion of the site currently designated VLDR would be changed to OS-R, and would also remain undeveloped.

The new public roadway that is proposed to provide access to the project buildings would also provide access to the four existing, single-family residences located to the north of the project site, but otherwise will not induce growth. The main purposes of the roadway are to provide access to and between the project buildings, to accommodate the turning movements and stacking requirements of the truck-trailer traffic, to provide a distinctive entrance to the project site with a signalized intersection, and to provide alternate access to the existing residences to the north.

Because the project involves the development of an industrial land use in a predominantly rural area of the unincorporated County of Riverside, the construction of off-site water and sewer lines in Cherry Valley Boulevard and Calimesa Boulevard and the inclusion of on-site water storage tanks have the potential induce growth, as the project would not only remove infrastructure barriers to growth in the project area but could also foster economic growth.

The project site is located in The Pass Area Plan and the Cherry Valley Gateway Policy Area. The Gateway Area is already in the process of transitioning to higher-intensity land uses. For example, the Sunny Cal Egg Ranch project, which includes up to 597 residential lots immediately to the south of the project site has been approved. Additionally, the City of Calimesa General Plan designates land adjacent to the area west of the project site as “Commercial Retail,” and this area is zoned by the City of Calimesa as “Commercial Regional,” which allows for developments with floor area ratios (FAR) up to 75:1. As specified by the City of Calimesa’s General Plan, Commercial Regional properties allow for the development of commercial uses “that will cater to a wide market, including a full range of retail shops and services within a shopping center environment.”

In addition, the unincorporated area at the southeast corner of the I-10 Freeway and Cherry Valley Boulevard located directly west of the proposed project is zoned as Scenic Highway Commercial (CPS). There are several other projects in Cherry Valley and the cities of Beaumont and Calimesa in the vicinity of the proposed project, as depicted by Exhibit 3.10-1. These include some industrial projects (Rolling Hills Ranch Industrial Prologis and the Dowling Orchard Business Park).

Because of the evolving nature of the Cherry Valley Gateway Policy area, the General Plan acknowledges the potential for higher intensity uses for undeveloped parcels by stating explicitly that "[h]igher densities may be allowed through a general plan amendment . . . ." This evolution can be seen in the history of higher intensity uses located on and around the project site, and in the various higher intensity developments proposed for neighboring parcels. For example, the now defunct Sunny Cal Chicken Ranch immediately south of the site was a major industrial chicken ranch, which included 400 chicken houses with the capacity to process 500 cases of eggs per hour. Additionally, the nearby truck repair business, Luther's Truck and Equipment, has been operating for nearly two decades and employs a staff of 10 to 19 individuals. Thus, the Gateway Policy area has historically accommodated a variety of industrial and commercial uses. Therefore, implementation of the project would not likely induce growth that is inconsistent with historic trends in the area, or inconsistent with the policy of allowing higher densities with approval of a general plan amendment, which will be part of the project entitlements.

## 5.3 - Significant Irreversible Changes

As mandated by the CEQA Guidelines, the EIR must address any significant irreversible environmental change that would result from implementation of the project. Pursuant to CEQA Guidelines (§ 15126.2(c)), such a change would occur if one of the following scenarios is involved:

- The project would involve a large commitment of nonrenewable resources;
- Irreversible damage can result from environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy.)

The environmental effects of the project are discussed in Section 3 of this Draft EIR. Implementation of the project would require the long-term commitment of natural resources and land, as discussed in the following paragraphs.

Approval and implementation of actions related to the project would result in an irretrievable commitment of non-renewable resources such as energy supplies and other construction related materials. The energy resource demands would be used for construction, heating, and cooling of buildings; transportation of people and goods; heating and refrigeration; lighting; and other associated energy needs.

Environmental changes with implementation of the project would occur as the physical environment is altered through continued commitments of land and construction materials to urban development. There would be an irretrievable commitment of materials used in construction.

Nonrenewable resources would be committed primarily in the form of fossil fuels and would include fuel, oil, natural gas, and gasoline used by vehicles and equipment associated with implementation of the project.

The consumption of other non-renewable or slowly renewable resources would result from the development of the project. These resources would include but would not be limited to lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, and water.

The project is not anticipated to result in significant irreversible environmental damage because, pursuant to CEQA Guidelines (Section 15126.2(c)), the project does not meet any of the three scenarios listed above. Irreversible damage is not anticipated from environmental accidents associated with the project, as it will comply with all applicable local and state regulations regarding handling and storage of hazardous materials. While a large commitment to nonrenewable resources would be required, the project would use the energy efficiently and would not result in the wasteful use of energy. Electric trailer movers will be used on-site to move trailers throughout the project site, and to minimize the amount of emissions generated. Other on-site support equipment required to serve the project would also be electrically powered. Short-term construction and long-term operational energy consumption are discussed below.

### 5.3.1 - Short-Term Construction

The United States Environmental Protection Agency (EPA) regulates non-road diesel engines. The EPA has set emission standards for the engines used in most construction equipment. The EPA has also adopted non-road diesel fuel requirements to decrease the allowable levels of sulfur, which can damage advanced emission control technologies. The most recent non-road engine and fuel regulations complement similarly stringent regulations for highway diesel fueled vehicles for 2007. In 1994, the EPA adopted the first set of emissions standards (Tier 1) for all new non-road diesel engines greater than 37 kilowatts (50 horsepower). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing nitrogen oxide ($NO_x$) emissions from these engines by 30 percent. The EPA has since adopted more stringent emission standards for $NO_x$, hydrocarbons, and particulate matter from new non-road diesel engines. This program includes the first set of standards for non-road diesel engines less than 37 kilowatts (kW). It also phases in more stringent Tier 2 emission standards from 2001 to 2006 for all engine sizes, and includes yet more stringent Tier 3 standards for engines between 37 and 560 kW (50 and 750 horsepower) from 2006 to 2008. These standards will further reduce non-road diesel engine emissions by 60 percent for $NO_x$ and 40 percent for particulate matter (PM) from Tier 1 emission levels. In 2004, the EPA issued the Clean Air Non-road Diesel Rule. This rule, which took effect in 2008 and has been fully phased since 2014, adopted Tier 4 emission standards, in which engine manufacturers produce engines with advanced emission control technologies that will cut emissions from non-road diesel engines by more than 90 percent. These emission standards are intended to promote advanced clean technologies for non-road diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The project is anticipated to break ground as early as the first quarter of 2016 and to be completed in approximately 18 months.[1] Table 5-1 provides an estimate of the project's construction fuel consumption.

**Table 5-1: Construction Fuel Consumption**

| Phase | Fuel Consumption (gallons) |
|---|---|
| Site Preparation | 330,630 |
| Mass Grading | 520,239 |
| Building Construction | 447,382 |
| Tenant Improvements (Architectural Coatings) | 110,428 |
| Paving | 31,796 |
| **Total** | **1,330,046** |
| Source: FirstCarbon Solutions, 2015. | |

As shown in Table 5-1, construction activities associated with the proposed project would be estimated to consume 1,330,046 gallons of diesel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

## 5.3.2 - Long-Term Operations

### Transportation Energy Demand

Vehicle fuel efficiency is regulated at the federal level. Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. The fuel economy standard for new passenger cars has been 27.5 miles per gallon since 1990; however, in 2011 this standard was updated to 30.2 miles per gallon. The fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been updated to 24.1 miles per gallon since 2011. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; rather, compliance is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Trip generation figures provided in the Traffic Impact Study prepared by Urban Crossroads were used to estimate vehicular fuel consumption associated with trips to and from the project site. Table 5-2 provides an estimate of the daily fuel consumed by vehicles traveling to and from the project. These

[1] Construction of the project would be more likely be initiated in early 2017, but a 2016 estimate is more conservative in terms of energy use and impacts.

estimates were derived using the same assumptions used in the operational air quality analysis in Section 3, Air Quality.

**Table 5-2: Daily Vehicle Fuel Consumption**

| Vehicle Type | Percent of Vehicle Trips | Daily Vehicle Miles Traveled | Average Fuel Economy (miles per gallon) | Total Daily Fuel Consumption (gallons) |
|---|---|---|---|---|
| Passenger Vehicles | 35 | 11,022 | 33.5 | 329 |
| Light trucks | 27 | 8,502 | 25.7 | 331 |
| Heavy trucks | 38 | 46,680 | 7.9 | 5,909 |
| **Total** | **100** | **66,204** | **—** | **6,569** |

Notes:
Daily trips and vehicle miles traveled provided by CalEEMod modeling output.
Average fuel economy provided by the United States Department of Transportation, Bureau of Transportation Statistics.
Source: FirstCarbon Solutions, 2015.

As shown in Table 5-2, daily vehicular fuel consumption is estimated to be 6,569 gallons of both gasoline and diesel. It is expected that vehicular fuel consumption associated with the project would be similar to other distribution warehouses within the project area, and would not be any more inefficient, wasteful, or unnecessary than for any other similar land use in the region.

## Building Energy Demand

The project is estimated to demand 5.75 million kWh of electricity on an annual basis and 3.9 million kBtu of natural gas on an annual basis. These figures were derived from energy consumption rates calculated within CalEEMod.

Furthermore, as detailed in Section 2, the project is designed to comply with the United States Green Building Council's (USGBC's) LEED Silver Certification. The LEED rating system is intended to assess and promote sustainable design and operation, including reducing the energy use and water consumption, among other sustainable materials and indoor environmental quality parameters. LEED recognizes four levels of certification. The number of points a project earns determines the level of LEED certification that the project will receive. Typical certification thresholds are as follows: Certified—40 to 49 points, Silver—50 to 59 points, Gold—60 to 79 points, and Platinum—80-plus points. Additionally, the project includes the use of rooftop solar panels. The on-site solar panels would provide an estimated 23 percent of the project's power needs.

Without LEED and energy efficient features applied (business as usual), the estimated annual use of energy for both buildings would be approximately 5,750 megawatt-hours per year (MWh/year). However, with LEED requirements and energy savings applied, the project is estimated to use approximately 1,524 MWh/year.

Thus, the project would not result in wasteful use of energy.

## 5.4 - Significant and Unavoidable Impacts

Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Section 3 of this Draft EIR. Section 15126.2(b) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less than significant levels. There are significant and unavoidable impacts from the project. Those impacts include air quality and transportation/traffic. Specific, significant, adverse, and unavoidable impacts for each issue area are discussed below.

**Air Quality**—The project would exceed South Coast Air Quality Management District (SCAQMD) regional thresholds for $NO_x$ and ROG during operation, even after mitigation. The project would also obstruct implementation of the Air Quality Management Plan because its operational emissions exceed the SCAQMD regional significance thresholds and would impede the timely attainment of ambient air quality standards. The project would also result in cumulatively considerable net increase in a criteria pollutant, ozone, because regional significance thresholds for ROG and $NO_x$, both ozone precursors, are exceeded. Therefore, the project's operational impact in this regard will be significant, adverse, and unavoidable.

**Traffic**—Cumulative impacts for I-10 Freeway—Eastbound and Westbound, and the on- and off-ramps at Cherry Valley Boulevard, as well as the intersection of Calimesa Boulevard and Cherry Valley Boulevard would be considered significant, adverse, and unavoidable.

The following environmental issues addressed in the Draft EIR were determined to be less than significant, or could be reduced to less than significant levels with mitigation measures:

- Aesthetics
- Agricultural and Forestry Resources
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

## 5.5 - Energy Conservation and Appendix F Considerations

Public Resources Code section 21100(b)(3) and CEQA Guidelines section 15126.4 require environmental impact reports to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs; license thermal power plants of 50 megawatts or larger; develop energy technologies and renewable energy resources; plan for and direct state responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code section

21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the CEQA Guidelines. Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy.

Appendix F of CEQA states:

> Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
> - decreasing overall per capita energy consumption,
> - decreasing reliance on fossil fuels such as coal, natural gas and oil, and
> - increasing reliance on renewable energy sources.

In order to assure that energy implications are 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 (see Public Resources Code 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 the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production. Electricity and gas providers for the project are discussed below. Refer to Section 3.17, Utilities and Service Systems for additional information.

## 5.5.1 - Electricity

SCE provides electricity service to the project area. There is an existing 12,000-volt mainline that runs along the south side of Cherry Valley Boulevard. SCE confirmed that the project is within its service territory. SCE would serve the project's electrical requirements consistent with the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

### Natural Gas

SCGC, which is a Sempra Energy utility, provides natural gas service to the project area. The company's service territory encompasses approximately 20,000 square miles in throughout Central and Southern California (SCGC 2013).

### Title 24, Energy Efficiency Standards

California Code of Regulations (CCR) Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings.

First adopted in 1977, the Standards have been periodically updated approximately on a three-year cycle. The current 2013 standards improve upon the 2008 standards for new construction of, and

additions and alterations to, residential and nonresidential buildings. The 2013 Standards went into effect July 1, 2014.

The project consists of two industrial buildings that would be designed to be eligible for LEED Silver Certification. Building 1 would comprise approximately 811,000 square feet, and Building 2 approximately 1,012,760 square feet for a total of approximately 1,823,760 square feet of floor area. Development of the project would convert the site from an undeveloped state to two industrial buildings. This change in land use on-site would increase demand for energy. More specifically, the project is anticipated to increase demand of electricity, natural gas and motor vehicle fuel, air conditioning and fuel associated with construction of the project. Energy resources would be consumed both during project construction and during the lifetime of the project. The project would provide rooftop solar panels that would meet approximately 23 percent of the project's total energy needs. Additionally, Mitigation Measure AQ-8 of this document would require a minimum of two electric vehicle charging stations for automobiles or light-duty trucks at each building, along with bicycle storage, showers, and preferred parking for low-emitting or fuel-efficient vehicles.

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the California Energy Commission (CEC) and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The project is also required to adhere to building standards of the County of Riverside.

Although the project would consume energy and have an impact on available energy resources, it will comply with Title 24 and would have a less than significant impact on energy conservation plans.

## 5.5.2 - Energy Use from Vehicles

While a large commitment to nonrenewable resources would be required, the project would use the energy efficiently and would not result in the wasteful use of energy. Electric trailer movers will be used on-site to move trailers throughout the project site, and to minimize the amount of emissions generated. Other on-site support equipment required to serve the project would also be electrically powered. Short-term construction and long-term operational energy consumption are discussed below.

### Short-Term Construction

The United States Environmental Protection Agency (EPA) regulates non-road diesel engines. The EPA has set emission standards for the engines used in most construction equipment. The EPA has also adopted non-road diesel fuel requirements to decrease the allowable levels of sulfur, which can damage advanced emission control technologies. The most recent non-road engine and fuel regulations complement similarly stringent regulations for highway diesel fueled vehicles for 2007. In 1994, the EPA adopted the first set of emissions standards (Tier 1) for all new non-road diesel engines greater than 37 kilowatts (50 horsepower). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing $NO_x$ emissions from these engines by 30 percent. The EPA has since adopted more stringent emission standards for $NO_x$, hydrocarbons, and particulate matter from new non-road diesel engines. This program includes the first set of

standards for non-road diesel engines less than 37 kilowatts (kW). It also phases in more stringent Tier 2 emission standards from 2001 to 2006 for all engine sizes, and includes yet more stringent Tier 3 standards for engines between 37 and 560 kW (50 and 750 horsepower) from 2006 to 2008. These standards will further reduce non-road diesel engine emissions by 60 percent for $NO_x$ and 40 percent for particulate matter (PM) from Tier 1 emission levels. In 2004,the EPA issued the Clean Air Non-road Diesel Rule. This rule, which took effect in 2008 and has been fully phased since 2014, adopted Tier 4 emission standards, in which engine manufacturers produce engines with advanced emission control technologies that will cut emissions from non-road diesel engines by more than 90 percent. These emission standards are intended to promote advanced clean technologies for non-road diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The project is anticipated to break ground as early as the first quarter of 2016 and to be completed in approximately 18 months.[2] Table 5-3 provides an estimate of the project's construction fuel consumption.

**Table 5-3: Construction Fuel Consumption**

| Phase | Fuel Consumption (gallons) |
|---|---|
| Site Preparation | 330,630 |
| Mass Grading | 520,239 |
| Building Construction | 447,382 |
| Tenant Improvements (Architectural Coatings) | 110,428 |
| Paving | 31,796 |
| **Total** | **1,330,046** |
| Source: FirstCarbon Solutions, 2015. | |

As shown in Table 5-3, construction activities associated with the proposed project would be estimated to consume 1,330,046 gallons of diesel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

## Long-Term Operations

### *Transportation Energy Demand*

Vehicle fuel efficiency is regulated at the federal level. Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. The fuel economy standard for new passenger cars has been 27.5 miles per gallon since 1990; however, in 2011 this standard was updated to 30.2 miles per gallon. The fuel economy standard for new light trucks

[2] Construction of the project is more likely to be initiated in early 2017.

(gross vehicle weight of 8,500 pounds or less) has been updated to 24.1 miles per gallon since 2011. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; rather, compliance is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Trip generation figures provided in the Traffic Impact Study prepared by Urban Crossroads were used to estimate vehicular fuel consumption associated with trips to and from the project site. Table 5-4 provides an estimate of the daily fuel consumed by vehicles traveling to and from the project. These estimates were derived using the same assumptions used in the operational air quality analysis in Section 3, Air Quality.

**Table 5-4: Daily Vehicle Fuel Consumption**

| Vehicle Type | Percent of Vehicle Trips | Daily Vehicle Miles Traveled | Average Fuel Economy (miles per gallon) | Total Daily Fuel Consumption (gallons) |
|---|---|---|---|---|
| Passenger Vehicles | 35 | 11,022 | 33.5 | 329 |
| Light trucks | 27 | 8,502 | 25.7 | 331 |
| Heavy trucks | 38 | 46,680 | 7.9 | 5,909 |
| **Total** | **100** | **66,204** | **—** | **6,569** |

Notes:
Daily trips and vehicle miles traveled provided by CalEEMod modeling output.
Average fuel economy provided by the United States Department of Transportation, Bureau of Transportation Statistics.
Source: FirstCarbon Solutions, 2015.

As shown in Table 5-4, daily vehicular fuel consumption is estimated to be 6,569 gallons of both gasoline and diesel. It is expected that vehicular fuel consumption associated with the project would be similar to other distribution warehouses within the project area, and would not be any more inefficient, wasteful, or unnecessary than for any other similar land use in the region.

### *Building Energy Use*

As previously discussed, the project is estimated to demand 5.75 million kWh of electricity on an annual basis and 3.9 million kBtu of natural gas on an annual basis. These figures were derived from energy consumption rates calculated within CalEEMod.

Furthermore, as detailed in Section 2, the project is designed to comply with the United States Green Building Council's (USGBC's) LEED Silver Certification. The LEED rating system is intended to assess and promote sustainable design and operation, including reducing the energy use and water consumption, among other sustainable materials and indoor environmental quality parameters. LEED recognizes four levels of certification. The number of points a project earns determines the level of LEED certification that the project will receive. Typical certification thresholds are as follows: Certified—40 to 49 points, Silver—50 to 59 points, Gold—60 to 79 points, and Platinum—80-plus

points. Additionally, the project includes the use of rooftop solar panels. The on-site solar panels would provide an estimated 23 percent of the project's power needs.

Without LEED and energy-efficient features applied (business as usual), the estimated annual use of energy for both buildings would be approximately 5,750 megawatt-hours per year (MWh/year). However, with LEED requirements and energy savings applied, the project is estimated to use approximately 1,524 MWh/year.

# SECTION 6: ALTERNATIVES TO THE PROPOSED PROJECT

## 6.1 - Introduction

In accordance with CEQA Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the project. The primary purpose of this section is to provide decision makers and the public with a reasonable range of feasible project alternatives that could attain most of the basic project objectives, but would avoid or substantially lessen any of the significant effects of the project. Important considerations for analysis of these alternatives are noted below (as stated in CEQA Guidelines Section 15126.6):

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

Alternatives to a project must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly (CEQA Guidelines Section 15126.6(b)). However, the range of alternatives addressed in an EIR need not be exhaustive, and is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project. An EIR need not consider an alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or an alternative that would not substantially lessen or avoid the significant effects of the project. CEQA Guidelines Section 15126.6(d) states that if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but "in less detail than the significant effects of the project as proposed."

CEQA Guidelines Section 15364 defines "feasibility" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The determination of the feasibility of project alternatives may include, but is not limited to, factors such as: site suitability, economic viability, infrastructure availability, general plan consistency, regulatory and jurisdictional limitations, and whether the project proponent can reasonably acquire, control or otherwise have access to an alternative project site (CEQA Guidelines Section 15126.6(f)(1)).

A comparison of impacts associated with the project and alternatives is provided within this Section. In several cases, the description and severity of the impact may be the same under each scenario when compared with the CEQA Thresholds of Significance (i.e., both scenarios would result in a "less than significant" impact). However, the actual degree of impact may be slightly different under each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts. In addition, the alternatives analysis includes the assumption that all applicable mitigation measures associated with the project would be implemented with a given project alternative (e.g. Reduced Intensity Alternative).

An evaluation of a No Project Alternative is required by CEQA Guidelines Section 15126.6(e), and is included in this section. Both a No Project—No Build Alternative, and a No Project General Plan Build Alternative, consistent with the General Plan, are evaluated. In addition to the No Project Alternative, a reasonable range of alternatives are analyzed and compared with the project. Alternatives evaluated in detail include:

1. No Project—No Build Alternative
2. No Project—Cherry Valley Gateway Specific Plan (CVGPA SP)
3. Residential Alternative
4. Reduced Intensity Industrial Alternative
5. Mixed Use/Business Park Alternative

An alternative would be considered environmentally superior to the project if it would result in fewer or less significant environmental impacts. As required by the CEQA Guidelines, an environmentally superior alternative has been identified among the alternatives evaluated in this Draft EIR, and is discussed in Section 6.6, Environmentally Superior Alternative.

## 6.1.1 - Alternatives Considered but Rejected

### Alternative Site Location

The project applicant attempted to identify other suitable sites for the project along the I-10 Freeway, within the general vicinity of the project site and within the control of the County. Key considerations for site selection include adequate acreage, the extent to which the site can be served by existing infrastructure, the site's proximity to the freeway, and other considerations such as access, truck routes and proximity to sensitive uses. The use of an alternative project site was not considered feasible, because no other sites are owned or controlled by the project applicant, and no other site was deemed sufficient to support the project, based on the above considerations, including size, configuration, and accessibility to the I-10 Freeway.

In addition, even if it were feasible to use an alternative site, doing so would not reduce the project's significant adverse and unavoidable impacts identified below in Section 6.1.2, Significant, Adverse and Unavoidable Impacts. Specifically, air quality impacts under an alternative site scenario would be similar to the project, since both scenarios would involve grading and new construction of over two million square feet of building area. Likewise, cumulative traffic impacts to the I-10 Freeway would be similar to the project, due to the increase in truck trips that would occur. Accordingly, an Alternative Site Location was rejected from further consideration.

### Original 2.5 Million Square-feet Warehouse Alternative

The project applicant originally proposed a two building warehouse project totaling 2.5 million square feet, consistent with the Notice of Preparation published April 24, 2013. During preparation of the Draft EIR, the project applicant received feedback from the County of Riverside on preliminary plans, application documents, technical reports, and administrative drafts of the Draft EIR. Two scoping meetings were held to the obtain comments on the scope of the evaluation for the EIR. In addition, several community meetings regarding the project were held. Collectively, this information provided constructive feedback regarding initial County comments, preliminary understanding of the project environmental impacts, and both local and generalized sentiment regarding the project by the public. Based on consideration of these collective inputs, the applicant elected to redesign the project to reduce environmental impacts, improve project compatibility, and increase amenities, while still providing a feasible project that meets project objectives and is economically feasible.

Compared with the original project, the current project would provide a little over 1.8 million square feet of warehouse and office space, a reduction of approximately 700,000 square feet or 28 percent. Reduction of the warehouse sizing in the current project would have proportionate reduction in truck trips, reducing both truck traffic related impacts and truck related diesel emissions, compared with the Original 2.5 Million Square-feet Warehouse Alternative. Similarly, less warehouse space would require less energy use for lighting, cooling/heating, and equipment use internal and external to the warehouse. Thus, energy consumption related would be reduced in the current project, compared with the Original 2.5 Million Square-feet Warehouse Alternative. The smaller building size has allowed for an increase in the project setback, facilitated the inclusion of on-site riparian mitigation that was not previously feasible, facilitated the inclusion of a trail along the project frontage, and allowed for the incorporation of additional aesthetic amenities to improve the compatibility of the project with the existing land use setting. Economic benefits (employment, rents, and tax revenues) of the new project are expected to be reduced proportionate to the reduction in square footage, but the project will still provide economic benefits, and be economically feasible.

Based on the benefits of the new project, the Original 2.5 Million Square-feet Warehouse Alternative has been withdrawn from further consideration by the project applicant.

## 6.1.2 - Significant, Adverse and Unavoidable Impacts

The project would result in the following significant unavoidable impacts, even after the imposition of all feasible mitigation measures, for the potential impacts listed below.

**Air Quality**—With mitigation, the project emissions would exceed SCAQMD regional thresholds for $NO_x$ and ROG during operations. The project would also obstruct implementation of the AQMP, because its emissions would exceed the SCAQMD regional significance thresholds, and would thus impede the timely attainment of ambient air quality standards. The project would also result in a cumulatively considerable net increase in ozone, a criteria pollutant, because regional significance thresholds for ROG and $NO_X$ (both ozone precursors), are exceeded.

**Traffic—**Cumulative impacts for the intersection of Calimesa Boulevard /Cherry Valley Boulevard intersection as well as the I-10 Freeway—Eastbound and Westbound/ the on- and off-ramps at Cherry Valley Boulevard would be significant, adverse, and unavoidable under 2035 conditions that would occur even without the project. The project would install new traffic signals and other improvements that would significantly increase the capacity of the I-10 at Cherry Valley interchange ramp intersections, such that even with the addition of project traffic, delay and level service will be improved to better than current conditions. However, mitigation may not fully mitigate these impacts, because the County of Riverside and the project applicant have no control over Caltrans right-of-way or City of Calimesa intersection, and the County has no control over the provision or timing of the improvements specified in the necessary mitigation measures.

## 6.1.3 - Project Objectives

The project objectives are listed below.

**OBJ-1** Provide an industrial park that supports regional warehouse distribution and logistics tenants which benefit from the strategic location located in close proximity to the I-10 Freeway.

**OBJ-2** Provide additional employment opportunities to local residents of Cherry Valley and neighboring cities to provide local economic opportunities and reduced commute times and air pollution, in accordance with Riverside County General Plan Policies LU 7.12, LU 10.1 and AQ 8.2.

**OBJ-3** Provide new development that will assist the County in obtaining fiscal balance in the years and decades ahead through increased tax revenues.

**OBJ-4** Provide convenient freeway access to trucks that will use the warehouse distribution facilities on the project site in a manner that limits truck traffic disruption to residential areas within Cherry Valley and neighboring cities.

**OBJ-5** Locate industrial uses near existing roadways and freeways to reduce traffic congestion and air pollutant emissions.

**OBJ-6** Facilitate goods movement for the benefit of local, regional, statewide and nationwide economic growth.

**OBJ-7** Provide for a reasonable return on investment needed to develop the project.

**OBJ-8** Create a high quality design industrial complex that maximizes the use of the site and promotes the efficient use of land while still providing natural open space consistent with the rural identity of the community.

**OBJ-9** Develop and operate an industrial park supporting regional warehouse distribution and logistics tenants that meets industry standards for operational design criteria.

## 6.2 - No Project Alternative—No Build Alternative

CEQA Guidelines Section 15126.6(e) requires the discussion and evaluation of a No Project Alternative. The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur.

Impacts from the project are compared with the No Project Alternative for each of the 17 topical issue areas discussed in the EIR in the sections that follow.

### 6.2.1 - Aesthetics

The EIR concluded that with mitigation, aesthetics and light and glare impacts from the project would be reduced to a less than significant level. The No Project Alternative would allow the site to remain in its current underutilized and undeveloped condition. Therefore, the No Project Alternative would have reduced impacts on aesthetics, light, and glare compared with the project, although impacts under the project would be less than significant.

### 6.2.2 - Agriculture and Forestry Resources

Under the No Project Alternative, the site would remain vacant and undeveloped, and there would be no impacts related to agricultural or forestry resources. The Draft EIR determined that the project would have less than significant impacts on agricultural resources, and no impacts to forestry resources. Therefore, impacts in these areas under the No Project Alternative would be slightly less than would occur under the project, although impacts under the project would be less than significant.

### 6.2.3 - Air Quality

The No Project Alternative would result in no development on the site, so there would be no air quality impacts from construction or operational emissions. The project would result in a significant, adverse, and unavoidable operational air quality impact, as discussed in Section 6.1.2, Significant, Adverse, and Unavoidable Impacts, which would be avoided under the No Project Alternative.

### 6.2.4 - Biological Resources

The No Project Alternative would leave the site in its largely undeveloped condition, which would allow plant and animal species to continue utilizing the site. Impacts under this alternative to jurisdictional waters of the U.S. and the state would also be avoided entirely. However, impacts from the project to biological resources were found to be less than significant with mitigation, and the Draft EIR concluded that the project would not have significant impacts on biological resources. Therefore, the No Project Alternative would have reduced impacts on biological resources compared with the project, although impacts under the project would be also be less than significant with mitigation.

### 6.2.5 - Cultural Resources

The No Project Alternative would leave the site in its present condition without disturbing the ground, and there would be no impacts on cultural resources. The Draft EIR concluded that the project would not have significant impacts to cultural resources, with mitigation. Therefore, the No Project Alternative would have reduced impacts on cultural resources compared with the project, although impacts under the project would also be less than significant with mitigation.

### 6.2.6 - Geology and Soils

Under the No Project Alternative, the site would remain in its present state, and there would be no potential impacts to future structures from geotechnical hazards. While the Draft EIR determined that implementation of the project would have various geotechnical impacts, they would be reduced to less than significant levels through the implementation of recommended mitigation measures. The No Project Alternative would have reduced impacts on geology and soils compared with the project, although impacts under the project would also be less than significant with mitigation.

### 6.2.7 - Greenhouse Gas Emissions

Under the No Project Alternative, no new development on the site would occur, and there would be no greenhouse gas impacts from construction or operations on the site. Therefore, the No Project Alternative would result in fewer greenhouse gas emissions than would occur under the project, which were found to be less than significant with mitigation.

### 6.2.8 - Hazards and Hazardous Materials

Under the No Project Alternative, the site would remain in its present condition, and there would be no increased impacts from hazards or hazardous materials associated with new uses. Implementation of the project would have impacts related to hazardous materials that could potentially be used by various industrial uses on the site, as well as the potential for accidental spills during construction. However, these potential impacts will be reduced to less than significant levels through compliance with existing laws and regulations regarding hazardous materials, and through implementation of the recommended mitigation measure. Therefore, the No Project Alternative would have reduced impacts related to hazards and hazardous materials compared with the project, although impacts under the project would also be less than significant with mitigation.

### 6.2.9 - Hydrology and Water Quality

Under the No Project Alternative, the site would remain in its present condition, and there would be no potential impacts to existing drainages or water quality. However, this alternative would not result in improvements to drainage channels and related drainage structures, which would leave the project site still vulnerable to flooding. The project is not expected to result in any significant impacts to hydrology or water quality with implementation of the planned flood control improvements and recommended mitigation measures, and would actually reduce the site's vulnerability to flooding hazards. Thus, the project would result in fewer impacts to hydrology and water quality than under the No Project Alternative.

## 6.2.10 - Land Use and Planning

The site would remain in its present condition under the No Project Alternative, and there would be no impacts with respect to land use or consistency with Southern California Association of Governments (SCAG) Policies. The Draft EIR concluded that the project would not have significant impacts regarding land use or SCAG regional growth policies. Thus, neither the project nor the No Project Alternative would result in impacts to Land Use and Planning.

## 6.2.11 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. The site would remain undisturbed and in its present condition under the No Project Alternative, so no impacts to mineral resources would occur. The Draft EIR found that the project would have a less than significant impact regarding mineral resources. Therefore, the No Project Alternative would have reduced impacts on mineral resources compared with the project, although impacts under the project would also be less than significant.

## 6.2.12 - Noise

The site would remain in its present undeveloped condition under the No Project Alternative, and no construction noise or operational noise would occur. The Draft EIR concluded that with implementation of mitigation measures, the project would have less than significant impacts regarding noise. Although the project would result in an increase in the ambient noise level in the area compared with the No Project Alternative, this impact would be less than significant with mitigation. Therefore, the No Project Alternative would have reduced noise impacts compared with the project, although impacts under the project would also be less than significant with mitigation.

## 6.2.13 - Population and Housing

The No Project Alternative would leave the site in its present condition, and therefore would not result in increased population, housing, or employment. The Draft EIR concluded that the project would also have a less than significant impact regarding population and housing, and would therefore be similar to the No Project Alternative with regard to this impact area.

## 6.2.14 - Public Services

The No Project Alternative would not involve any new development, and would therefore not result in an increased need for police, fire, schools, or public services. Therefore, this alternative would have fewer impacts compared with the project, which will necessarily result in the need for certain public services. However, the Draft EIR determined that with the required payment of development impact fees for public services, the project would not result in significant impacts to public services or recreation. Therefore, the No Project Alternative would have reduced impacts on public services compared with the project, although impacts under the project would also be less than significant.

## 6.2.15 - Recreation

The No Project Alternative would not involve any new residential development, and would therefore not result in an increased need for recreation/park services. Therefore, this alternative would have

fewer impacts compared with the project. However, the Draft EIR determined that with the required payment of development impact fees for recreation/park services, the project would not produce significant impacts to recreation facilities. Therefore, the No Project Alternative would have reduced impacts on recreation facilities compared with the project, although impacts under the project would also be less than significant.

### 6.2.16 - Transportation and Traffic

The No Project Alternative would allow the site to remain in its present condition, resulting in fewer traffic impacts on local roads and the I-10 Freeway. With the exception of the Cherry Valley Boulevard Ramps, I-10 Mainline Facilities, and the Cherry Valley Boulevard/Calimesa Boulevard intersection, the Draft EIR determined that the transportation impacts of the project could be reduced to less than significant levels with implementation of the recommended mitigation measures, including on-site road and intersection improvements, a traffic signal, and fair share contributions to off-site intersection and road improvements. Because there are several intersections/facilities that currently operate at unacceptable levels even without the addition of project traffic, the associated improvement programs would not receive funding from the project under the No Project Alternative, thereby reducing the overall funding for such improvements. The No Project Alternative would avoid the significant, adverse, and unavoidable traffic impacts that would occur under the project with respect to cumulative contributions to the I-10 Freeway segments, I-10 Ramps, Cherry Valley Boulevard/Calimesa Boulevard under 2035 conditions, which would occur even if the proposed project was not constructed.

### 6.2.17 - Utilities and Service Systems

Under the No Project Alternative, the site would remain in its present condition and there would be no potential impacts to existing or planned utility systems (i.e., no increase in the consumption of water or energy resources, or the additional production of wastewater or solid waste). With construction of planned improvements and payment of established development impact fees, the project is also not expected to produce any significant impacts on these systems. Therefore, the No Project Alternative would have reduced impacts on utilities and service systems compared with the project, although impacts under the project would also be less than significant.

### 6.2.18 - Conclusion for No Project Alternative

The No Project Alternative would eliminate all of the significant and unavoidable impacts that would occur under construction and operation of the project, including impacts to air quality, greenhouse gas emissions, and traffic. However, this alternative does not achieve any of the objectives of the project, and would not generate substantial benefits to the County and local economy, by providing new jobs and additional tax revenues. Table 6-5 provides a summary comparison, by individual issue area, for each alternative to the project.

## 6.3 - No Project—Cherry Valley Gateway Policy Area Specific Plan Alternative

Implementation of the Cherry Valley Gateway Policy Area Specific Plan (CVGPA SP) alternative would involve development of the project site with 216 single-family homes on 110 acres, in the following configurations and under the following, existing General Plan land use designations:

- Rural Mountainous: 1 custom lot/unit
- Very Low Density Residential (VLDR): 39 custom lots/units
- Low Density Residential (LDR): 176 units (7,000 sf lot minimum)

Internal street, sidewalk and utility improvements would also be installed under the CVGPA SP Alternative (see Exhibit 6-1).

The majority of the site is currently designated as Very Low Density Residential (VLDR), while a small portion of the site (approximately 20 percent) is designated as Rural Mountainous (RM). Single-family residential uses with a minimum 10-acre lot size are allowed under the RM land use designation, and single-family residential uses with minimum 1 to 2 acre lot sizes are allowed under the VLDR land use designation.

The site is zoned Controlled Development Area (W-2), which allows for single-family residential uses consisting of lot sizes no less than 20,000 square feet, with a minimum average lot width of 100 feet and a minimum average lot depth of 150 feet, unless larger minimum lot area and dimensions are specified for a particular area or use.

Therefore, the 176 proposed 7,000 square foot LDR lots under this alternative would not strictly comply with the current General Plan or zoning designations of the site, and a General Plan Amendment and Zone Change would be required in order to achieve compliance. However, this alternative also considers the requirements of the Pass Area Plan Cherry Valley Gateway Policy Area, which states that "Higher densities may be allowed through a general plan amendment provided such development meets the goals of the policy area." Policy PAP 4.1 states: "Clustering of dwelling units and lots is encouraged in order to preserve open space areas."

The CVGPA SP has been evaluated as the no project alternative that likely would be developed in the absence of the proposed project due to several factors: (1) the CVGPA encourages higher densities in this area [confirm correct] in order to [describe reason/purpose as stated in Specific Plan]; (2) the technical and physical site restraints of the property lend itself to a residential development that is clustered within the south of the site to preserve open space, consistent with Policy PAP 4.1. This allows for the preservation of open space areas to the north. Furthermore, the project is clustered in very low and low densities in the south of the site in order to avoid development within the slopes to the north while also maintaining an appropriate distance from the fault line that runs east/west across the property. The highest density on-site would be under the Low (Residential) designation at 3.3 dwelling units an acre. Please refer to Exhibit 6-1 for additional detail; and (3) this alternative is consistent with the pattern of residential development within the area, such as the proposed community directly adjacent to the west as well as the approved Sunny Cal Development to the south. The proposed site is further restricted by the drainages and drainage pattern of the site, with jurisdictional features running from east to west. Potential impacts to other biological resources also need to be considered for the selection of alternatives, thus the siting of this alternative within the southern portion of the site would avoid some of the potential impacts to sensitive plant communities in the northern area of the site. Because of site constraints and layout, strict compliance with the minimum one-acre lots over the entirety of the project site would not allow for clustered development, and would not allow for the maximization of open space and preservation of

rural character. Therefore, this alternative provides a site layout that would achieve consistency with the applicable Cherry Valley Gateway Policy Area, which would allow for a higher density with approval of a general plan amendment.

According to SCAG, unincorporated areas within the County of Riverside have an average of 3.19 persons per household. Therefore, the 216 housing units under the CVGPA SP Alternative could add an estimated 689 persons within the project area. The following discussion evaluates the potential environmental impacts associated with the CVGPA SP Alternative compared with impacts from the project.

## 6.3.1 - Aesthetics

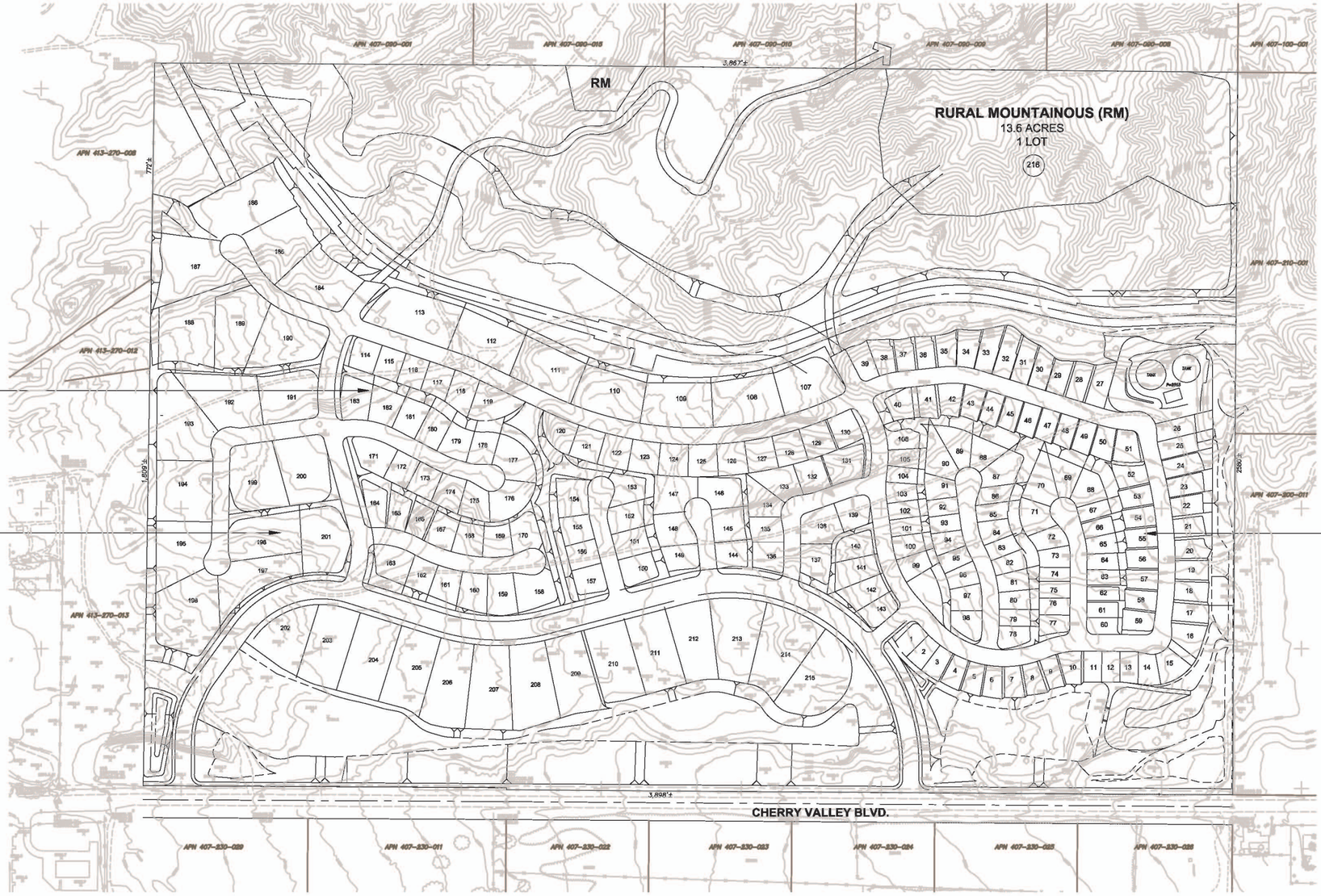
Aesthetics impacts relate to scenic resources within a State scenic highway, visual character, and new sources of light and glare. Short-term aesthetics impacts would occur during construction for the project, and mitigation in the form of a photometric plan is anticipated to reduce potential operational impacts from light and glare to a less than significant impact. The EIR concluded that with mitigation, the proposed project's aesthetics and light and glare impacts would be reduced to a less than significant level.

The No Project—CVGPA SP Alternative would have similar construction grading and earthwork requirements as the project, due to the currently undeveloped nature of the site. The single-family residences proposed under this alternative would comply with the County's restriction of 40 feet in height for residential development within the VLDR land use designation. Likewise, the proposed project would also not introduce any building in excess of 39 feet. Both the project and the No Project—CVGPA SP Alternative would be required to comply with the County's Municipal Code requirements pertaining to limiting light and glare from structures on-site. Both the project and the No Project—CVGPA SP Alternative would create new sources of light and glare that currently do not exist. The No Project—CVGPA SP Alternative would also have no impact on scenic resources within a State scenic highway.

The proposed project would be located significantly below grade, and screened by landscaping, and would therefore not be visible to motorists on Cherry Valley Boulevard. However, due to the fact that 216 single-family buildings would be constructed at higher elevations under the No Project—CVGPA SP Alternative, many of the residences would likely be visible to passing motorists, and would therefore have a greater impact on the visual character of the site and hillsides than the proposed project.

## 6.3.2 - Agriculture and Forestry Resources

Development of the No Project—CVGPA SP Alternative would involve similar construction grading and earthwork requirements as the project due to the currently undeveloped nature of the site, for the construction of 216 dwelling units and associated street and sidewalk improvements. The Draft EIR determined that the project would have less than significant impacts on agricultural resources, and no impacts to forestry resources.




**PROJECT SUMMARY**

**RESIDENTIAL SUMMARY**

| LAND USE DESIGNATION | PRODUCT | ACRES | UNITS | DENSITY | % MIX |
|---|---|---|---|---|---|
| **RURAL MOUNTAINOUS** | CUSTOM LOTS | 13.6 | 1 | 0.1 | 0% |
| **VERY LOW (0 - 2 DU/AC)** | CUSTOM LOTS | 42.8 | 39 | 0.9 | 18% |
| **LOW (2-5 DU/AC)** | 7000 S.F. LOT MIN. | 53.6 | 176 | 3.3 | 81% |
| TOTAL | | **110.0** | **216** | | **100%** |

Source: Danielian Associates Architecture and Planning, March 2015.

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# Exhibit 6-1
# General Plan Build Alternative

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Agriculture and forestry impacts relate to potential impacts to forestry resources, Williamson Act land and Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The project site is categorized as Farmland of Local Importance (approximately 147.64 acres) and Other Land (approximately 97.67 acres) under the Farmland Mapping and Monitoring Program (FMMP). Loss of farmland under these categorizations is not considered a significant impact. Furthermore, the project site is not used for agriculture, is not subject to a Williamson Act contract, and does not contain any designated forestland. Therefore, development of the No Project—CVGPA SP would result in less than significant impacts on agriculture and forestry resources, similar to the project.

### 6.3.3 - Air Quality

The EIR found that the project would have a cumulatively significant and unavoidable impact with respect to ROG and $NO_X$ emissions during operation. All project impacts during construction were found to be less than significant with the implementation of mitigation. SCAQMD regional emission thresholds would be exceeded even after all feasible mitigation is incorporated for $NO_X$ and ROG during operations. In addition, although the project would comply with all applicable SCAQMD rules and regulations, the project would impede timely attainment of ambient air quality standards and impede implementation of the AQMP, because its emissions exceed the SCAQMD regional significance thresholds for $NO_X$ and ROG. Thus, the project will have a cumulatively considerable impact regarding attainment of air quality standards.

The No Project—CVGPA SP Alternative and the project would disturb roughly the same amount of ground surface and involve roughly the same amount of grading and building construction activity; therefore, construction emissions would be similar to the project. Refer to Table 6-1 below. The No Project—CVGPA SP Alternative would not exceed the SCAQMD mitigated regional construction emissions threshold for $NO_X$ of 100 pounds per day or the ROG threshold of 75 pounds per day, because the project construction is estimated to produce 50.72 pounds of $NO_X$ per day and 23.41 pounds per day of ROG, and the grading and construction activities under both scenarios would be similar.

Based on the Trip Generation Evaluation prepared by Urban Crossroads, the No Project—CVGPA SP Alternative would generate 2,056 daily PCE trips, thereby decreasing total operational vehicle trips by approximately 58 percent (from a total of 4,905 daily PCE trips that would occur under the project) and reducing estimated total long-term air quality emissions compared with the project. CalEEMod version 2013.2.2 was used to estimate operational emissions for the No Project—CVGPA SP Alternative.

In addition, the No Project—CVGPA SP Alternative would avoid the significant and unavoidable impact from operational ROG and NOx emissions that would occur under the project.

**Table 6-1: No Project—General Plan Build Alternative Air Pollutant Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile | 7.8 | 24.5 | 86.9 | 0.2 | 16.1 | 4.5 |
| Area | 9.5 | 0.2 | 18.0 | 0.0 | 0.4 | 0.4 |
| Energy | 0.2 | 1.8 | 0.8 | 0.0 | 0.2 | 0.2 |
| **Total Alternative Emissions** | **17.5** | **26.5** | **105.7** | **0.2** | **16.7** | **5.0** |
| **Project Emissions** | **75.6** | **315.3** | **301.4** | **1.5** | **18.9** | **11.1** |
| Would Project Result in Significant Impact? | Yes | Yes | No | No | No | No |
| Would the Alternative Result in Significant Impact? | No | No | No | No | No | No |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |

Notes:
ROG = reactive organic gases; $NO_X$ = nitrogen oxides; CO = carbon monoxide
$SO_X$ = sulfur oxides; $PM_{10}$ and $PM_{2.5}$ = particulate matter; Area = painting and consumer products
Source of emissions: Appendix A: CalEEMod Output.
Source of project emissions: Table 33 (mitigated summer)
Source of thresholds: South Coast Air Quality Management District 2011a.

## 6.3.4 - Biological Resources

Potential impacts to biological resources relate to effects on candidate, sensitive or special status species, and conflicts with local policies or ordinances protecting biological resources and effects on U.S. and State jurisdictional waters. The Draft EIR found that mitigation is required under the project for potential impacts to US Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) jurisdictional habitats and Multiple Species Habitat Conservation Plan (MSHCP) Riverine areas. Additionally, with implementation of mitigation measures for potential impacts to burrowing owls, raptors, and water resources, the project would have a less than significant impact.

Given the scope of the development under the No Project—CVGPA SP Alternative, which would involve the construction of 216 dwelling units and associated street and sidewalk improvements, impacts in this regard would be roughly similar to the project, and would be less than significant with mitigation for both the project and the No Project—CVGPA SP Alternative.

## 6.3.5 - Cultural Resources

Cultural resources impacts relate to potential impacts to historical, cultural, and paleontological resources, as well as potential impact to human remains. The Draft EIR found that the project would have less than significant impacts to cultural resources with mitigation, to address the potential that buried cultural resources are discovered during project construction. Mitigation is also required to reduce the project's potential impacts to paleontological resources to a less than significant level.

The No Project—CVGPA SP Alternative scenario and the project would both disturb roughly the same amount of ground surface, due to the currently undeveloped nature of the site and the need to substantially clear and grade the site to accommodate residential dwellings and associates street and sidewalk improvements. Similar mitigation measures would likely be required under the No Project—CVGPA SP Alternative, and impacts to cultural resources would be similar to those under the project and less than significant with mitigation.

## 6.3.6 - Geology and Soils

Geology and Soils impacts relate to potential hazards associated with liquefaction, unstable soil, and seismic settlement. The Draft EIR found that the site is considered developable from a geotechnical perspective; however, mitigation would be required to reduce impacts regarding structural setback zones, hydroconsolidation, soil stability, and landslides. Implementation of mitigation and compliance with County and the Uniform Building Code construction standards would reduce geology and soils impacts under the project to less than significant levels.

The No Project—CVGPA SP Alternative would also require mitigation for structural setback zones, hydroconsolidation, soil stability, and landslides. Therefore, the No Project—CVGPA SP Alternative and the project would require similar mitigation measures to reduce impacts related to geology and soils to a less than significant level. The No Project—CVGPA SP Alternative would allow up to 216 housing units, which could add an estimated 689 persons within the project area. Therefore the No Project—CVGPA SP Alternative would likely result in a greater number of persons exposed to hazards associated with the earthquake fault on the project site compared with the project. However, similar to the project, these impacts would be less than significant with appropriate mitigation.

## 6.3.7 - Greenhouse Gas Emissions

The County of Riverside's Climate Action Plan (CAP) is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change. The CAP has adopted a target of reducing GHG emissions down to 15 percent below 2008 levels within the County of Riverside by 2020.

Pursuant to the CAP, and discussed in further detail in Section 3.7, projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects are determined to have a less than significant individual and cumulative impact for GHG emissions. The Draft EIR determined that the project would be less than significant after incorporating at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables.

The No Project—CVGPA SP Alternative would produce 3,467 $MTCO_2e$, substantially less than the project. Additionally, it is logical to conclude that the No Project—CVGPA Alternative would be able to achieve the necessary 100 points from the screening tables, because this alternative would be single-family residential units compared with the project. Single-family uses would not generate the substantial truck trips proposed under the project or require as many resources in general to

operate, thereby reducing overall GHG emissions. Therefore, the impacts of the No Project—CVGPA SP Alternative with respect to greenhouse gas emissions would also be considered less than significant, similar to the proposed project. Although both the project and the No Build—CVGPA SP alternative would result in less than significant impacts, this alternative would result in lesser overall impacts.

### 6.3.8 - Hazards and Hazardous Materials

Hazards and hazardous material impacts relate to posing a hazard to the public or environment, handling hazardous materials, interfering with emergency response plans, airport hazards, potential location on a hazardous site, location in relation to existing or proposed schools, and location in relation to fire hazard areas. Potential impacts of the project would be less than significant regarding hazards and hazardous materials, with the inclusion of mitigation to address potential soils contamination due to previous agricultural uses on-site.

The No Project—CVGPA SP Alternative and the project would disturb similar amounts of ground surface during construction, resulting in similar potential for exposure and disposal of potentially contaminated soils, due to prior agricultural uses on-site. In addition, the No Project—CVGPA SP Alternative would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment. Both the project and the No Project—CVGPA SP Alternative would comply with all applicable federal, state, and local laws with respect to use, handling and disposal of hazard materials, and neither the project nor the No Project—CVGPA SP Alternative would involve uses that would involve the use of hazardous materials. Therefore, assuming that similar mitigation measures would be implemented for the No Project—CVGPA SP Alternative, impacts in this regard would be less than significant, similar to the project.

### 6.3.9 - Hydrology and Water Quality

Hydrology and Water quality impacts relate to drainage, water quality, groundwater, runoff, and flood hazards. The project is not expected to result in any significant impacts to hydrology or water quality with implementation of the planned flood control improvements and recommended mitigation measures, and would actually reduce the site's vulnerability to flooding hazards. The No Project—CVGPA SP Alternative would be expected to construct similar improvements to drainage channels and related drainage structures as would occur under the proposed project, to ensure that the residential uses are not subject to flooding. Development of the No Project— CVGPA SP Alternative would result in a similar amount of land disturbed by grading and construction, but would likely result in the creation of less impervious area, which would likely include street and sidewalk improvements, driveways, patios, and other hardscapes that are typical of residential development, but with less building square footage than under the project. Therefore, the No Project—CVGPA SP Alternative would have slightly reduced impacts on hydrology and water quality compared with the project due to a smaller amount of impervious surfaces, although hydrology and water quality impacts under the project would also be less than significant.

## 6.3.10 - Land Use and Planning

As discussed above, due to site constraints and layout, strict compliance with the minimum one-acre lots over the entirety of the project site would not allow for clustered development, and would not allow for the maximization of open space and preservation of rural character. Therefore, the No Project—CVGPA SP Alternative provides a site layout that would achieve consistency with the applicable Cherry Valley Gateway Policy, which would allow for a higher density with approval of a general plan amendment. Likewise, the project would require a general plan amendment and zone change to allow for industrial use, along with other County land use approvals, the impacts of which were determined to be less than significant.

A General Plan Foundation Component Amendment would not be required under the proposed project or for the No Project—CVGPA SP Alternative. The EIR found that the project would not divide an existing community, and would not result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. In addition, as discussed in Section 3.10, Land Use and Planning, the project would be consistent with the policies of the Cherry Valley Gateway Policy Area. The No Project—CVGPA SP Alternative would be subject to the same County review and approval processes as the project, and would be subject to standard County conditions of approval to ensure consistency with Land Use and Planning policies. In this regard, the County approval process and general plan amendment process would serve as self-executing mitigation for any potential Land Use and Planning impacts.

In summary, the No Project—CVGPA SP Alternative would have similar Land Use and Planning impacts compared with the project, since both development scenarios would require a General Plan Amendment. Nonetheless, the No Project—CVGPA SP Alternative would generally be more in-keeping with the General Plan's intention for residential uses on the site. However, ultimately both the proposed project and the No Project—CVGPA SP would require a discretionary approval for a General Plan Amendment and would comply with the policies and further the goals of the CVGPA. Thus, these potential land use impacts would be similar.

## 6.3.11 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses, and hazards related to quarries/mines. The Draft EIR found that the project would have a less than significant impact regarding mineral resources. The No Project—CVGPA SP Alternative and the project would be expected to affect roughly the same amount of ground surface during construction, and would therefore result in less than significant impact to mineral resources, similar to the project.

## 6.3.12 - Noise

The Draft EIR found that the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. However, the Draft EIR found that project construction would result in the following noise impacts:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

As a result, mitigation measures to reduce project construction noise loading/unloading operational noise to less than significant levels were required.

The No Project—CVGPA SP Alternative would generate less long-term traffic noise since it would generate fewer vehicle trips than the project. The No Project—CVGPA SP Alternative would also likely not exceed the 5dB (decibel) threshold over ambient levels, and isolated noise levels at project ingress/egress points would not increase noise levels during peak hours for sensitive receptors. Therefore, similar to the project, the No Project—CVGPA SP Alternative would not create a substantial permanent increase in ambient noise levels. In addition, short-term noise levels during construction would be less than significant with the implementation of mitigation measures. Project impacts from loading/unloading activities would not occur with the No-Project–CVGPA SP Alternative. Therefore, potential short and long-term noise impacts from the No Project—CVGPA SP Alternative would be less than significant, similar to the project. The No Project—CVGPA SP Alternative would generate approximately 58 percent fewer vehicle trips than the project (refer to Section 6.3-16, Transportation and Traffic) and would therefore reduce traffic noise compared with the project. In summary, the No Project—CVGPA SP Alternative would have slightly reduced noise impacts compared with the project, due to the reduction in vehicle trips; however, noise impacts under the project would also be less than significant.

## 6.3.13 - Population and Housing

Population and housing impacts relate to housing, affordable housing, displacement of persons or housing, and population. The jobs attributed to the project are not anticipated to require specific skills that necessitate substantial hiring outside of the project region. Given the high rate of unemployment in the County and surrounding cities, most of the anticipated new positions in employment would likely be filled from individuals already living in the project region. Therefore, the Draft EIR found that the project neither would directly nor indirectly induce substantial new population growth in the area.

The No Project—CVGPA SP Alternative would generate approximately 689 new full-time residents, compared with the project's estimated 748 employees (including 507 permanent on-site full time jobs and 241 off-site indirect and induced jobs). The No Project—CVGPA SP Alternative would therefore exacerbate the current jobs-to-housing imbalance in Cherry Valley and surrounding areas. Therefore, the No Project—CVGPA SP Alternative would create greater impacts relative to population and housing growth than the project. However, such impacts would still be considered less than significant, because the Residential Alternative is based on buildout consistent with the site's existing General Plan and zoning designations.

## 6.3.14 - Public Services

Project impacts to with respect to public services were found to be less than significant, because the project will comply with the County's Local Park Code requirements by compensating for impacts to public service and park facilities through the payment of development impact fees.

The No Project—CVGPA SP Alternative would generate approximately 689 new, full-time residents, compared with the project's 748 full time employees. Therefore, this alternative would result in greater demands on public services for fire and police services, schools, libraries, government facilities. However, these greater impacts would also likely be less than significant, as the No Project—CVGPA SP Alternative would also likely be required to pay development impact fees and user fees to offset the demand for such. Therefore, while the No Project—CVGPA SP Alternative may create greater impacts relative to public services, overall impacts would be less than significant, similar to the project.

## 6.3.15 - Recreation

Recreation impacts relate to potential impacts to recreational facilities, usage of existing neighborhood/regional parks, and recreational trails. The Draft EIR found that the project would have a less than significant impact regarding recreational resources.

The No Project—CVGPA SP Alternative would generate approximately 689 new, full-time residents in the immediate area, compared with the project's 748 full time employees. Given the skill set required for the new jobs and current unemployment in the area, it is assumed that most of these new jobs would be filled from individuals that already live in the region. Housing tends to place greater demands on local recreational areas as opposed to places of employment, since employees are not expected to access recreational facilities during the workday; therefore, the new residents under the No Project—CVGPA SP Alternative would place a higher demand on recreational facilities compared with the project. However, it is anticipated that the No Project—CVGPA SP Alternative would be required to pay park fees (Quimby Act fees) or in-lieu land dedications that would offset such demand. Therefore, while the No Project—CVGPA SP Alternative may create greater impacts relative to recreation facilities, overall impacts would be less than significant, similar to the project.

## 6.3.16 - Transportation and Traffic

The project is expected to generate approximately 4,905 PCE trips per day. As indicated within Section 3.16, Traffic and Transportation, implementation of Mitigation Measures TRANS-1 through TRANS-3 would be required for the project.

Despite incorporation of these mitigation measures, however, cumulative impacts to mainline segments of the I-10 Freeway, I-10 ramps, and Cherry Valley Boulevard/ Calimesa Boulevard intersection would remain adverse and unavoidable under Opening Year 2017 EAP plus Cumulative and 2035 Horizon Conditions. The mainline and ramp junctions of the I-10 Freeway east and west of Cherry Valley Boulevard would operate at LOS F even without the project under Horizon Year (2035) traffic conditions. Even though the project's contribution to cumulative impacts under Horizon Year (2035) conditions is relatively de minimis, involving only a small percentage (approximately 1 percent or less) of the forecasted traffic occurring on the identified freeway mainline and ramp junction under 2035 conditions, there would still be a cumulatively significant and unavoidable impact.

Using the ITE trip generation factor of 9.52 [1] trips per dwelling for Single-Family Detached Housing, the estimated number of average daily trips (ADT) for the No Project—CVGPA SP Alternative is estimated at 2,056 trips, or approximately 58 percent fewer trips than the 4,905 PCE trips that would be generated by the project (Urban Crossroads 2015b).

Regardless, while the No Project—CVGPA SP Alternative would create fewer trips, it would also be required to provide similar mitigation measures as the project. However, despite the 58 percent fewer trips,[2] the No Project—CVGPA SP Alternative would ultimately have cumulatively significant and unavoidable impacts (albeit lesser than under the project) for the I-10 Freeway mainline and on- and off-ramps at Cherry Valley Boulevard. Therefore, the No Project—CVGPA SP Alternative would also result in cumulatively significant and unavoidable traffic impacts similar to the project, although these impacts would be somewhat reduced under the No Project—CVGPA SP Alternative.

## 6.3.17 - Utilities and Service Systems

Utilities and service system impacts relate to water supply, wastewater, solid waste/landfill capacity, electricity, natural gas, and storm water drainage. With mitigation, the project would have a less than significant impact on utilities and service systems.

Typically, residential uses have a higher demand for utilities and service systems compared with warehouse/industrial uses or other or other employment generating uses. In particular, warehouse areas of industrial buildings are generally not heated or cooled, thus reducing energy consumption. Water demand (and consequently sewer demand) of warehouse/industrial uses are also usually much less than residential uses, since employees in such facilities do not use water for household applications such as cooking, bathing, laundry, dishes, etc. Specifically, the proposed project is anticipated to use 54,621.32 gpd or 61.23 afy of water for industrial warehouse uses, while 216 residential dwelling units would use 151,200 gpd or 169.48 afy of water, or nearly three times as much as the proposed project. Therefore, development and operation of the No Project—CVGPA SP Alternative would substantially increase the demand on utilities and service systems, specifically pertaining to water supply, wastewater, landfill capacity, electricity, and energy. Therefore, the No Project—CVGPA SP Alternative would result in higher demand and consumption of utilities and service systems than the project, although this could be offset by proper design and conservation features, likely resulting in a less than significant impact similar to the project.

## 6.3.18 - Conclusion for No Project—General Plan Build Alternative

The No Project—General Plan Build Alternative would result in similar impacts related to Agriculture and Forestry Resources, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Land Use and Planning, and Mineral Resources as the proposed project. The No Project—CVGPA SP Alternative would result in greater impacts to Aesthetics, Geology and Soils, Population and Housing, Public Services, Recreation, and Utilities and Service Systems than the proposed project, although impacts would likely remain less than significant with mitigation, similar to the project. The No Project—CVGPA SP Alternative would result in fewer impacts related to Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, Noise, and Traffic. However, the No Project—CVGPA SP

[1] Trip Generation (8th edition), ITE.
[2] Based on average trip rate per 1,000 square feet of floor area (42.94) from Trip Generation 8th Edition, ITE.

Alternative would not eliminate the significant and unavoidable traffic impacts that would occur under the proposed project. Furthermore, this alternative does not achieve any of the objectives of the project, and would not generate substantial benefits to the County and local economy, by providing new jobs and additional tax revenues. Table 6-5 provides a summary comparison, by individual issue area, for each alternative to the project.

## 6.4 - Residential Alternative

Implementation of the Residential Alternative would involve the construction of 792 dwelling units on 140 acres, in the following configurations:

- VLDR: 30 custom lots/units
- LDR: 110 lots/units (minimum 7,000 sf lots)
- Medium Density Residential (MDR): 191 (minimum 4,500 sf lots)
- High Density Residential (HDR): 221 townhomes
- Very High Density Residential (VHDR): 240 apartments

Internal street and sidewalk improvements would also be installed under the Residential Alternative. Two park/open space areas would be provided under the Residential Alternative, consisting of 3 acres towards the west of the site near the proposed townhomes, and 2.2 acres near the southeastern portion of the site. A private recreation area would also be provided for the proposed apartments. Refer to Exhibit 6-2 for a conceptual site plan.

The majority of the site is designated as Very Low Density Residential (VLDR), while a small portion of the site (approximately 20 percent) is designated as Rural Mountainous (RM). Single-family residential uses with a minimum 10-acre lot size are allowed under the RM land use designation, and single-family residential uses with a minimum 1 to 2 acre lot sizes are allowed under the VLDR land use designation.

The site is zoned Controlled Development Area (W-2), which allows for single-family residential uses consisting of lot sizes no less than 20,000 square feet, with a minimum average lot width of 100 feet and a minimum average lot depth of 150 feet, unless larger minimum lot area and dimensions are specified for a particular area or use.

Therefore, the Residential Alternative would involve development of the project site at a unit yield that would exceed what is permitted under the existing zoning and General Plan Land Use Designations of VLDR and RM, and a General Plan Amendment and Zone Change would be required in order to achieve consistency. This alternative was analyzed based on the surrounding development patterns of the area and the feasibility restraints discussed under the No Project—CVGPA SP Alternative, above. As depicted in Table 4-1: Cumulative Projects, several other larger scale residential projects have been approved for implementation. Examples include the Sunny-Cal Egg Ranch project to the south (497 dwelling units) and the residential projects planned adjacent to the project site to the east and southeast. More specifically, and discussed in greater detail in Table 4-1 and Exhibit 4-1, additional projects in the vicinity include the Heartland project consisting of 988 dwelling units and 126,000 square feet of commercial uses; Noble Creek Vistas consisting of 648 dwelling units; the Sundance project consisting of 4,716 dwelling units; Jack Rabbit Trails consisting of 2,000 dwelling units; and Potrero Creek Estates consisting

of 700 dwelling units, among many others. If the site is not ultimately developed as an industrial or commercial use, it is likely that the project site would be developed for residential uses of various densities.

According to SCAG, unincorporated areas within the County of Riverside have an average of 3.19 persons per household. Therefore, the 792 housing units under the Residential Alternative could add an estimated 2,526 persons within the project area. The following discussion evaluates the potential environmental impacts associated with the Residential Alternative compared with impacts from the project.

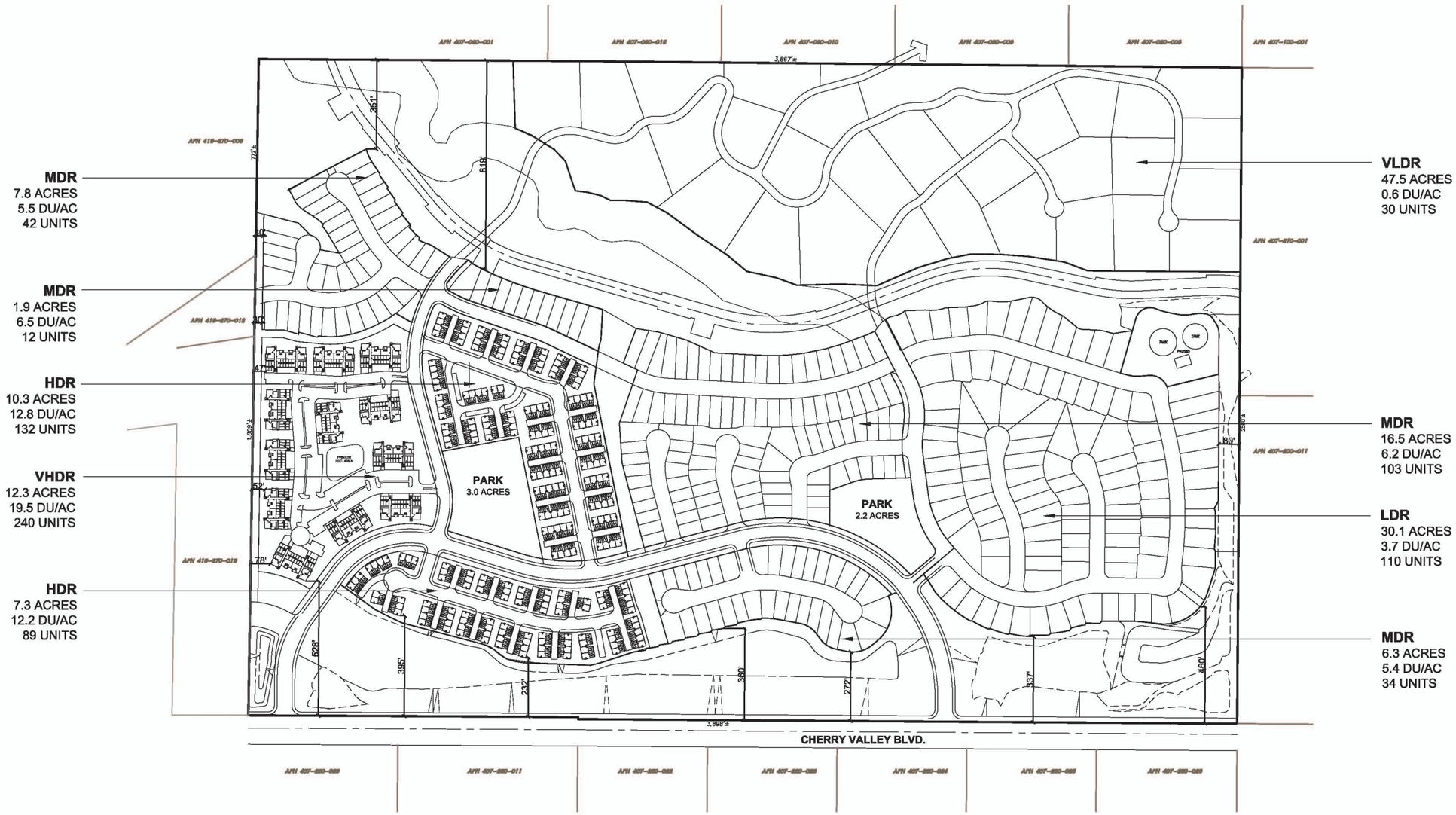
## 6.4.1 - Aesthetics

Aesthetics impacts relate to scenic resources within a State scenic highway, visual character, and new sources of light and glare. Short-term aesthetics impacts would occur during construction for the project, and mitigation in the form of a photometric plan is anticipated to reduce potential operational impacts from light and glare to a less than significant impact. The Residential Alternative would have similar construction grading and earthwork requirements as the project, due to the currently undeveloped nature of the site.

This alternative would introduce varying building heights due to the townhome and apartment component, as well as the single-family residences. The Residential Alternative would comply with the County of Riverside's maximum height requirement of 40 feet for single-family and multi-family zones. Both the project and the Residential Alternative would be required to comply with the County's Municipal Code requirements pertaining to limiting light and glare from structures on-site. Both the project and the Residential Alternative would create new sources of light and glare that currently do not exist. The Residential Alternative would also have no impact on scenic resources within a State scenic highway, and changes to the scenic character of the site would be similar to the project. However, due to greater building heights of the townhomes and apartments that would be developed under this alternative, the Residential Alternative would result in overall greater impacts than the project.

## 6.4.2 - Agriculture and Forestry Resources

Development of the Residential Alternative would involve similar construction grading and earthwork requirements as the project, for the construction of 792 dwelling units and associated street and sidewalk improvements. Agriculture and forestry impacts relate to potential impacts to forestry resources, Williamson Act land and Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The project site is categorized as Farmland of Local Importance (147.64 acres) and Other Land (97.67 acres) under the Farmland Mapping and Monitoring Program (FMMP). Loss of farmland under these categorizations is not considered a significant impact. Furthermore, the project site is not used for agriculture, is not subject to a Williamson Act contract, and does not contain any designated forestland. Therefore, development of the Residential Alternative would result in less than significant impacts on agriculture and forestry resources, similar to the project.




## PROJECT SUMMARY

### RESIDENTIAL PRODUCT SUMMARY

| LAND USE DESIGNATION | PRODUCT | ACRES | UNITS | DENSITY | % MIX |
|---|---|---|---|---|---|
| VLDR - VERY LOW DENSITY RESIDENTIAL (0 - 2 DU/AC) | CUSTOM LOTS | 47.5 | 30 | 0.6 | 4% |
| LDR - LOW DENSITY RESIDENTIAL (2-5 DU/AC) | 7000 S.F. LOT MIN. | 30.1 | 110 | 3.7 | 14% |
| MDR - MEDIUM DENISTY RESIDENTIAL (5 - 8 DU/AC) | 4500 S.F. LOT MIN. | 32.5 | 191 | 5.9 | 24% |
| HDR - HIGH DENSITY RESIDENTIAL (8 - 14 DU/AC) | TOWNHOMES | 17.6 | 221 | 12.6 | 28% |
| VHDR - VERY HIGH DENISTY RESIDENTIAL (14 - 20 DU/AC) | APARTMENTS | 12.3 | 240 | 19.5 | 30% |
| TOTAL | | **140.0** | **792** | | **100%** |

Source: Danielian Associates Architecture and Planning, June 2015.

FirstCarbon SOLUTIONS

# Exhibit 6-2
# Residential Alternative

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## 6.4.3 - Air Quality

The EIR found that the project would have a cumulatively significant and unavoidable impact with respect to ROG and $NO_X$ emissions. All potential project construction impacts would be mitigated to less than significant levels. SCAQMD regional emission thresholds would be exceeded even after all feasible mitigation is incorporated for $NO_X$ and ROG during operations. In addition, although the project would comply with all applicable SCAQMD rules and regulations, the project would impede timely attainment of ambient air quality standards and impede implementation of the AQMP, because its emissions exceed the SCAQMD regional significance thresholds for $NO_X$ and ROG. Thus, the project will have a cumulatively considerable impact regarding attainment of air quality standards.

The Residential Alternative and the project would disturb roughly the same amount of ground surface and involve roughly the same amount of grading and building construction activity; therefore, construction emissions would be similar to the project. The Residential Alternative would not exceed the SCAQMD mitigated regional construction emissions threshold for $NO_X$ of 100 pounds per day or the ROG threshold of 75 pounds per day, because the project construction is estimated to produce 99.10 pounds of $NO_X$ per day and 62.15 pounds per day of ROG, and the grading and construction activities under both scenarios would be similar.

The Residential Alternative would generate a total of 7,540 daily trips, thereby increasing total operational vehicle trips by approximately 53 percent (from a total of 4,905 daily PCE trips that would occur under the project) and increasing estimated total long-term air quality emissions compared with the project. CalEEMod version 2013.2.2 was used to estimate operational emissions for the Residential Alternative. The operational air pollutant emissions for the Residential Alternative are shown in Table 6-2. As shown in the table, the project would have comparable ROG and $SO_x$ emissions compared with the Residential Alternative. Both scenarios would result in significant ROG emissions. The project would have greater $NO_X$ emissions than the Residential Alternative; however, both scenarios would result in significant $NO_X$ emissions. The project would result in fewer CO, $PM_{10}$, and $PM_{2.5}$ emissions than the Residential Alternative. A comparison of the project and the Residential Alternative indicate that impacts would be similar.

**Table 6-2: Residential Alternative Air Pollutant Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile | 32.6 | 120.1 | 474.7 | 1.3 | 91.4 | 25.6 |
| Area | 34.9 | 0.8 | 66.1 | 0.0 | 1.4 | 1.4 |
| Energy | 0.8 | 6.8 | 2.9 | 0.0 | 0.5 | 0.5 |
| **Total Alternative Emissions** | **68.3** | **127.7** | **543.7** | **1.3** | **93.3** | **27.5** |
| **Project Emissions** | **75.6** | **315.3** | **301.4** | **1.5** | **18.9** | **11.1** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |

**Table 6-2 (cont.): Residential Alternative Air Pollutant Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Would Project Result in Significant Impact? | Yes | Yes | No | No | No | No |
| Would Alternative Result in Significant Impact? | Yes | Yes | No | No | No | No |

Notes:
ROG = reactive organic gases; $NO_X$ = nitrogen oxides; CO = carbon monoxide
$SO_X$ = sulfur oxides; $PM_{10}$ and $PM_{2.5}$ = particulate matter; Area = painting and consumer products
Source of emissions: Appendix A: CalEEMod Output.
Source of project emissions: Table 33 (mitigated summer)
Source of thresholds: South Coast Air Quality Management District 2011a.

## 6.4.4 - Biological Resources

Potential impacts to biological resources relate to effects on candidate, sensitive or special status species, and conflicts with local policies or ordinances protecting biological resources and effects on U.S. and State jurisdictional waters. The Draft EIR found that mitigation is required under the project for potential impacts to US Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) jurisdictional habitats and Multiple Species Habitat Conservation Plan (MSHCP) Riverine areas. Additionally, with implementation of mitigation measures for potential impacts to burrowing owls, raptors, and water resources, the project would have a less than significant impact. Given the scope of the development under the Residential Alternative, which would involve the construction of 792 dwelling units and associated street and sidewalk improvements, impacts in this regard would be roughly similar to the project, and would be less than significant with mitigation for both the project and the Residential Alternative.

## 6.4.5 - Cultural Resources

Cultural resources impacts relate to potential impacts to historical, cultural, and paleontological resources, as well as potential impact to human remains. The Draft EIR found that the project would have less than significant impacts to cultural resources with mitigation, to address the potential that buried cultural resources are discovered during project construction. Mitigation is also required to reduce the project's potential impacts to paleontological resources to a less than significant level.

The Residential Alternative scenario and the project would both disturb roughly the same amount of ground surface. Similar mitigation measures would likely be required under the Residential Alternative, and impacts to cultural resources would be similar to those under the project.

## 6.4.6 - Geology and Soils

Geology and Soils impacts relate to potential hazards associated with liquefaction, unstable soil, and seismic settlement. The Draft EIR found that the site is considered developable from a geotechnical perspective; however, mitigation would be required to reduce impacts regarding structural setback

zones, hydroconsolidation, soil stability, and landslides. Implementation of mitigation and compliance with County and the Uniform Building Code construction standards would reduce geology and soils impacts under the project to less than significant levels.

The Residential Alternative would also require mitigation for structural setback zones, hydroconsolidation, soil stability, and landslides. Therefore, the Residential Alternative and the project would require similar mitigation measures to reduce impacts related to geology and soils to a less than significant level. The Residential Alternative would allow up to 792 housing units, which could add an estimated 2,526 persons within the project area. Therefore the Residential Alternative would likely result in a greater number of persons exposed to hazards associated with the earthquake fault on the project site compared with the project. However, similar to the project, these impacts would be less than significant with appropriate mitigation.

## 6.4.7 - Greenhouse Gas Emissions

In order to evaluate differences between the project and the Residential Alternative with respect to greenhouse gas emissions, CalEEMod was used to estimate greenhouse gas emissions. The County of Riverside's Climate Action Plan (CAP) is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change.

Pursuant to the CAP, and discussed in further detail in Section 3.7, projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects are determined to have a less than significant individual and cumulative impact for GHG emissions. The Draft EIR determined that the project would be less than significant after incorporating at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables.

Operational greenhouse gas emissions for the Residential Alternative are shown in Table 6-2. As shown in Table 6-2 the project would have approximately 16 percent greater greenhouse gas emissions compared with the Residential Alternative. The project's greenhouse gas emissions are less than significant because pursuant to Mitigation Measure GHG-1, the project would be implementing at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables to reduce greenhouse gas emissions. The project would also be implementing on-site solar photovoltaic panels and other sustainability features discussed in greater depth within Section 3.7Greenhouse Gas. It is possible that the Residential Alternative would also be able to implement 100 points, thereby reducing its level of significance. Therefore, the Residential Alternative's greenhouse gas impact would likely be similar to the project.

## 6.4.8 - Hazards and Hazardous Materials

Hazards and hazardous material impacts relate to posing a hazard to the public or environment, handling hazardous materials, interfering with emergency response plans, airport hazards, potential location on a hazardous site, location in relation to existing or proposed schools, and location in relation to fire hazard areas. Potential impacts of the project would be less than significant regarding

hazards and hazardous materials, with the inclusion of mitigation to address potential soils contamination due to previous agricultural uses on-site.

The Residential Alternative and the project would disturb similar amounts of ground surface during construction, resulting in similar potential for exposure and disposal of potentially contaminated soils, due to prior agricultural uses on-site. In addition, the Residential Alternative would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment. Both the project and the Residential Alternative would comply with all applicable federal, state, and local laws with respect to use, handling and disposal of hazard materials, and neither the project nor the Residential Alternative would involve uses that would involve the use of hazardous materials. Therefore, assuming that similar mitigation measures would be implemented for the Residential Alternative, impacts in this regard would be less than significant, similar to the project.

## 6.4.9 - Hydrology and Water Quality

Hydrology and Water quality impacts relate to drainage, water quality, groundwater, runoff, and flood hazards. The project would have a less than significant impact regarding hydrology and water quality, with mitigation. Similar drainage and flood control improvements would likely be required for development of the Residential Alternative. Development of the Residential Alternative would result in a similar amount of land disturbed by grading and construction, but would likely result in the creation of less impervious area, which would likely include street and sidewalk improvements, driveways, patios, and other hardscapes that are typical of residential development, but with less building square footage than under the project. Therefore, the Residential Alternative would have slightly reduced impacts on hydrology and water quality compared with the project due to a smaller amount of impervious surfaces, although hydrology and water quality impacts under the project would also be less than significant.

## 6.4.10 - Land Use and Planning

The Residential Alternative would require a General Plan Amendment and Zone change to allow for development at densities in excess of the current RM and VLDR designations and to allow for multi-family residential. Likewise, the project would require a general plan amendment and zone change to allow for industrial use, along with other County land use approvals, the impacts of which were determined to be less than significant.

A General Plan Foundation Component Amendment would not be required under the proposed project or for the Residential Alternative. The EIR found that the project would not divide an existing community, and would not result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. In addition, as discussed in Section 3.10, Land Use and Planning, the project would be consistent with the policies of the Cherry Valley Gateway Policy Area. The Residential Alternative would be subject to the same County review and approval processes as the project, and would be subject to standard County conditions of approval to ensure consistency with Land Use and Planning policies. In this regard, the County approval process and general plan amendment process would serve as self-executing mitigation for any potential Land Use and Planning impacts.

In summary, the Residential Alternative would have similar Land Use and Planning impacts compared with the project, since both development scenarios would require a General Plan Amendment and Zone Change. Land Use and Planning impacts under both the project and the Residential Alternative would likely be less than significant.

## 6.4.11 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses, and hazards related to quarries/mines. The Draft EIR found that the project would have a less than significant impact regarding mineral resources. The Residential Alternative and the project would be expected to affect roughly the same amount of ground surface during construction, and would therefore result in less than significant impact to mineral resources, similar to the project.

## 6.4.12 - Noise

A more detailed noise analysis was prepared for the Residential Alternative than for the other three alternatives that would involve development on the project site, due to the fact that the type of construction, number of structures and site layout would be drastically different under the Residential Alternative, while the other development scenarios envisioned under the various alternatives are either similar to the proposed project layout and footprint, or involve less intense residential development.

### Construction Noise Impacts

Project-related construction noise levels were calculated for the Residential Alternative using the RCNM provided by the FHWA. Table 6-3 summarizes the construction noise modeling results for the Residential Alternative at the closest sensitive receptors to the project site. Modeling output and modeling parameters are provided in Appendix H of this EIR.

**Table 6-3: Comparison of Existing Ambient and Construction Noise Levels**

| Sensitive Receptor[1] | Location—Distance/Direction from Site | Ambient Noise Level dBA $L_{max}/L_{eq}$ | Construction Noise Level dBA $L_{max}/L_{eq}$ | Temporary Increase due to Construction Noise dBA $L_{max}/L_{eq}$ |
|---|---|---|---|---|
| East end of Mobile Home Ranch | City of Calimesa—1500 feet northwest of nearest construction footprint | $56/52^{(NM1)}$ | $50^{2}/50$ | 0/0 |
| Single family home | City of Calimesa—850 feet west of nearest construction footprint | $84/68^{(NM2)}$ | 63/63 | 0/0 |
| Single family home | County of Riverside—1200 feet north of nearest construction footprint | $52/46^{(NM3)}$ | 74/73 | 22/27 |
| Single family home | County of Riverside—1600 feet north of nearest construction footprint | $52/46^{(NM3)}$ | 68/67 | 16/21 |

**Table 6-3 (cont.): Comparison of Existing Ambient and Construction Noise Levels**

| Sensitive Receptor[1] | Location—Distance/Direction from Site | Ambient Noise Level dBA $L_{max}/L_{eq}$ | Construction Noise Level dBA $L_{max}/L_{eq}$ | Temporary Increase due to Construction Noise dBA $L_{max}/L_{eq}$ |
|---|---|---|---|---|
| Single family home | City of Calimesa—670 feet west of nearest construction footprint | 55/51(NM4) | 80/79 | 25/28 |
| Single family homes | County of Riverside—110 feet to southeast of nearest project driveway construction area | 85/69(NM5) | 78/77 | 0/8 |

Notes:
[1] Sensitive Receptor locations are shown in Exhibit 2.
[2] An extra 10 dB was deducted due to intervening topography.
NM = Noise Measurement Location

As noted previously, the City of Calimesa has established noise level limits for construction activities at receiving land uses of 75 dBA $L_{eq}$ (8-hour). As shown in Table 6-3, construction noise levels at off-site sensitive receptors could range up to levels above those that would be experienced under implementation of the project. This is primarily due to that fact that construction of proposed residential structures could occur closer to off-site sensitive receptors than the proposed construction footprint of the warehouse structures. Such noise levels would be expected to be shorter in duration as the time required to do site preparation for a single family home is substantially less than that required for construction of the proposed warehouse buildings. Therefore, overall construction impacts would be similar to those experienced under implementation of the project. However, construction noise levels at the nearest off-site residence in Calimesa, west of the project site, would experience noise levels in excess of the City's standard. Therefore, additional mitigation would likely be required for the Residential Alternative, such as the use of temporary sound barriers.

## Operational Noise Impacts

Operational noise impacts associated with the Residential Alternative were also analyzed in the noise report prepared for the project (included in Appendix H of this EIR). As shown in this analysis, implementation of the Residential Alternative would result in traffic noise impacts to proposed noise sensitive land uses that would not otherwise occur with implementation of the proposed project.

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was again used to evaluate traffic-related noise conditions in the vicinity of the project site that would result with implementation of the Residential Alternative. Traffic data used in the model was obtained from the Traffic Impact Analysis prepared by Urban Crossroads (2014). As a worst case analysis, future roadway widening that would occur with implementation of the project was assumed for both without project and with project future conditions. The traffic noise modeling input and output files are included in Appendix H of this EIR.



CVAR_08238

The highest traffic noise levels on segments of Cherry Valley Boulevard adjacent to the project site would occur under horizon (year 2035) traffic conditions with implementation of the Residential Alternative. Based on the traffic noise modeling results, the project site would be exposed to traffic noise levels ranging up to approximately 73.9 dBA CNEL at 50 feet from the centerline of the nearest travel lane of Cherry Valley Boulevard, under horizon (year 2035) plus Residential Alternative traffic conditions. At the nearest proposed residential property line, located approximately 200 feet from the centerline of Cherry Valley Boulevard (due to the proposed landscape buffer and riparian landscape setback), these traffic noise levels would attenuate to approximately 64 dBA CNEL.

According to the County's land use compatibility guidelines, environments with noise levels from 55 dBA up to 70 dBA CNEL are considered "conditionally acceptable" for new residential land use development. In such cases, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, with closed windows and fresh air supply systems or air conditioning will normally suffice. Therefore, all proposed residences located within 350 feet of the centerline of Cherry Valley Boulevard would be required to include a fresh air supply system or air conditioning that will permit windows to remain closed for prolonged periods of time.

Implementation of the Residential Alternative would result in overall slightly higher traffic noise levels than those that would be experienced under the proposed project. For example, traffic noise levels under existing plus Residential Alternative conditions would range up to 55.3 dBA CNEL, an increase of up to 3.6 dBA along Union Street south of Cherry Valley. However, under the proposed project, traffic noise levels along this segment under Existing plus Project conditions would range up to 52.9 dBA CNEL, representing an increase of 1.2 dBA over conditions existing without the project. Therefore, traffic noise impacts associated with implementation of the Residential Alternative would be slightly higher than those that would be experienced with implementation of the proposed project, and additional mitigation would likely be required.

Calculated noise levels from mechanical ventilation equipment would be slightly higher at off-site receptors under the Residential Alternative conditions compared with those under the proposed Project. This is primarily due to the assumption that mechanical equipment associated with the Residential Alternative would be located closer to the project borders than the rooftop mechanical equipment of the proposed project. However, overall stationary noise levels of the proposed project, including noise levels from parking lot noise and truck loading and unloading operations (ranging up to 58 dBA $L_{eq}$ at the closest off-site receptor) would be higher than the overall stationary noise levels of the Residential Alternative (ranging up to 47 dBA $L_{eq}$).

Therefore, the Residential Alternative would result in greater noise impacts than the less than significant noise impacts that would occur under the proposed project.

## 6.4.13 - Population and Housing

Population and housing impacts relate to housing, affordable housing, displacement of persons or housing, and population. The jobs attributed to the project are not anticipated to require specific skills that necessitate substantial hiring outside of the project region. Given the high rate of

unemployment in the County and surrounding cities, most of the anticipated new positions in employment would likely be filled from individuals already living in the project region. Therefore, the Draft EIR found that the project neither would directly nor indirectly induce substantial new population growth in the area.

The Residential Alternative would generate approximately 2,526 new full-time residents, compared with the project's estimated 748 full time employees. The Residential Alternative would therefore exacerbate the current jobs-to-housing imbalance in Cherry Valley and surrounding areas. Therefore, the Residential Alternative would create greater impacts relative to population and housing growth than the project.

## 6.4.14 - Public Services

Project impacts to with respect to public services were found to be less than significant, because the project will comply with the County's Local Park Code requirements by compensating for impacts to public service and park facilities through the payment of development impact fees.

The Residential Alternative would generate approximately 2,526 new, full-time residents, compared with the project's 748 employees (including 507 permanent on-site full time jobs and 241 off-site indirect and induced jobs). Therefore, this alternative would result in greater demands on public services for fire and police services, schools, libraries, government facilities. However, these greater impacts would also likely be less than significant, as the Residential Alternative would also likely be required to pay development impact fees and user fees to offset the demand for such. Therefore, while the Residential Alternative may create greater impacts relative to public services, overall impacts would be less than significant, similar to the project.

## 6.4.15 - Recreation

Recreation impacts relate to potential impacts to recreational facilities, usage of existing neighborhood/regional parks, and recreational trails. The Draft EIR found that the project would have a less than significant impact regarding recreational resources.

The Residential Alternative would generate approximately 2,526 new, full-time residents in the immediate area, compared with the project's 748 full time employees. Given the skill set required for the new jobs and current unemployment in the area, it is assumed that most of these new jobs would be filled from individuals that already live in the region. Housing tends to place greater demands on local recreational areas as opposed to places of employment, since employees are not expected to access recreational facilities during the workday; therefore, the new residents under the Residential Alternative would place a higher demand on recreational facilities compared with the project. However, it is anticipated that the Residential Alternative would be required to pay park fees (Quimby Act fees) or in-lieu land dedications that would offset such demand. In addition, the Residential Alternative would provide 5.2 acres of park area and a private recreational area adjacent to the apartment buildings. Therefore, while the Residential Alternative may create greater impacts relative to recreation facilities, overall impacts would be less than significant, similar to the project.

## 6.4.16 - Transportation and Traffic

The project is expected to generate approximately 4,905 PCE trips per day (according to Appendix I, Traffic Study's Table 1, Project Trip Generation Summary prepared for the project). As indicated within Section 3.16, Traffic and Transportation, implementation of Mitigation Measures TRANS-1 through TRANS-3 would be required for the project.

Despite incorporation of these mitigation measures, however, cumulative impacts to mainline segments of the I-10 Freeway would remain adverse and unavoidable under the 2035 Horizon scenario. The mainline and ramp junctions of the I-10 Freeway east and west of Cherry Valley Boulevard would operate at LOS F even without the project under Horizon Year (2035) traffic conditions. Even though the project's contribution to cumulative impacts under Horizon Year (2035) conditions is relatively de minimis, involving only a small percentage (approximately 1 percent or less) of the forecasted traffic occurring on the identified freeway mainline and ramp junction under 2035 conditions, there would still be a cumulatively significant impact. The proposed project would also result in a significant and unavoidable impact to the intersection at Cherry Valley Boulevard/ Calimesa Boulevard. Although the project would implement mitigation to reduce this impact to acceptable levels, the intersection is also located within the jurisdiction of the City of Calimesa so the County of Riverside cannot control the timing of these improvements.

Using the ITE trip generation factor of 9.52 [3] trips per dwelling for Single-Family Detached Housing, the estimated number of average daily trips (ADT) for the Residential Alternative is estimated at 7,540 trips, or approximately 53 percent more trips than the 4,905 daily PCE trips that would occur under the project (Urban Crossroads 2015b). The Residential Alternative would be required to provide similar mitigation measures as the project, but would ultimately have greater cumulatively significant and unavoidable impacts than the project for the I-10 Freeway mainline and on-and off-ramps at Cherry Valley Boulevard, as well as the intersection of Cherry Valley Boulevard/Calimesa Boulevard.

## 6.4.17 - Utilities and Service Systems

Utilities and service system impacts relate to water supply, wastewater, solid waste/landfill capacity, electricity, natural gas, and storm water drainage. With mitigation, the project would have a less than significant impact on utilities and service systems.

Typically, residential uses have a higher demand for utilities and service systems compared with warehouse/industrial uses or other or other employment generating uses. In particular, warehouse areas of industrial buildings are generally not heated or cooled, thus reducing energy consumption. Water demand (and consequently sewer demand) of warehouse/industrial uses are also usually much less than residential uses, since employees in such facilities are not typically using water for household applications such as cooking, bathing, laundry, dishes, etc. Specifically, the Residential Development is estimated to use up to 12 times more water than the proposed project. Therefore, development and operation of the Residential Alternative would substantially increase the demand on utilities and service systems, specifically pertaining to water supply, wastewater, landfill capacity,

[3] Trip Generation (8th edition), ITE.

electricity, and energy. Therefore, the Residential Alternative would result in higher demand and consumption of utilities and service systems than the project, although this could be offset by proper design and conservation features, likely resulting in a less than significant impact similar to the project.

### 6.4.18 - Conclusion for Residential Alternative

Table 6-5, Alternatives Comparison, provides a summary comparison, by individual issue area, for each alternative against the project. The Residential Alternative would result in greater significant adverse and unavoidable impacts to Air Quality and Traffic compared with the project, due to increased vehicle trips.

The remaining 15 issue areas under the Residential Alternative would be less than significant, similar to the project. The Residential Alternative would also result in greater noise impacts than the proposed project, due to the fact that buildings would be located closer to sensitive receptors under the Residential Alternative. When compared with the project, six areas would have greater (but still less than significant) impacts under the Residential Alternative (in the areas of Geology and Soils, Noise, Population and Housing, Public Services, Recreation, and Utilities and Service Systems); one areas would have fewer/reduced impacts compared with the project (Hydrology and Water Quality), and the remaining seven issue areas would have similar or equal impacts to the project (Table 6-5).

The Residential Alternative would not fully meet any of the project objectives, because it would not involve the development of an industrial park in support of regional warehouse distribution and logistics, and would not take advantage of the proximity to the I-10 Freeway to facilitate efficient goods movement. The Residential Alternative would also not improve the jobs-housing balance in the Cherry Valley/Calimesa area because it would not create any new jobs, and would not reduce commute times for residents. The Residential Alternative would partially meet Objective 2, in that it would create temporary construction jobs for the development of the single-family residences.

The Residential Alternative may also meet Objective 7 by providing for a reasonable return on investment, although this is less certain given the current housing market. The creation of new housing units is also less desirable than industrial/warehousing uses, because of the current jobs-to-housing ratio. This ratio identifies the number of jobs available in a given region compared with the number of housing units in the same region. For example, a region with a jobs-to-housing factor of 1.5 would indicate that 1.5 jobs exist for every housing unit within that region. The 2010 estimated jobs-to-housing ratios for Riverside County was only 0.73, which is expected to increase to 1.14 by 2035. This is below the current SCAG standard of 1.24 jobs for every household, which means the creation of new housing units will only further contribute to this imbalance.[4]

## 6.5 - Reduced Intensity Industrial Alternative

Under the Reduced Intensity Industrial Alternative, the proposed development of the site would be scaled down by reducing the building square footage development footprint. The project site plan

[4] Adopted 2012 RTP Growth Forecast, Southern California Association of Governments.

consists of two buildings located north of Cherry Valley Boulevard. Building 1 will comprise approximately 811,000 square feet, and Building 2 will comprise approximately 1,012,760 square feet, for a total of approximately 1,823,760 square feet of floor area. The project would occupy approximately 230 acres, of which approximately 154.9 acres would be included within the developed portion of the project and would include on-site parking and truck loading areas. The remaining 75.1 acres would remain as natural open space (approximately 32 percent of the project site).

The Reduced Intensity Industrial Alternative would develop two equally sized buildings of approximately 651,266 square feet, for a total floor area of 1,302,532 square feet, or a 30 percent reduction in building floor area. In addition, on-site parking and truck loading areas would be proportionally reduced as part of the Reduced Intensity Industrial Alternative. This alternative assumes that access to the site would be identical to the project, with access points provided off Cherry Valley Boulevard.

Impacts upon development and operation of Reduced Intensity Industrial Alternative compared with the project are discussed below. Refer to Exhibit 6-3 for a conceptual site plan.

### 6.5.1 - Aesthetics

Aesthetic impacts under the project were all determined to be less than significant, without the need for mitigation. The Reduced Intensity Industrial Alternative would have similar construction grading and earthwork requirements, and would have a similar overall design as the project consisting of two large buildings, but with a smaller development footprint, which would result in a commensurate reduction in any potential impacts related to aesthetics, light and glare. This alternative would also be of similar height to the project. Similar to the project, the Reduced Intensity Industrial Alternative would have no impact on scenic resources within a State scenic highway, and impacts of changes to the scenic character of the site would generally be similar to the project. Therefore, the Reduced Intensity Industrial Alternative would have reduced impacts on aesthetics, light, and glare compared with the project due to the smaller development footprint, but impacts under the project would also be less than significant.

### 6.5.2 - Agricultural and Forest Resources

Agricultural impacts for the project were determined to be less than significant. The Reduced Intensity Industrial Alternative would have agricultural and forest resources impacts equivalent to the project because, as detailed in Section 3.2, Agricultural Resources and Forest Resources, there is no Prime Farmland or Farmland of Statewide Importance or Forest Resources located within the project site. Thus, the Reduced Intensity Industrial Alternative will have less than significant impacts to agricultural and forest resources, similar the project.

### 6.5.3 - Air Quality

The EIR found that the project would have a cumulatively significant and unavoidable impact with respect to ROG and $NO_X$ emissions. SCAQMD regional emission thresholds would be exceeded even after all feasible mitigation is incorporated for $NO_X$ and ROG during operations. In addition, although the project would comply with all applicable SCAQMD rules and regulations, the project would impede timely attainment of ambient air quality standards and impede implementation of the AQMP, because

its emissions exceed the SCAQMD regional significance thresholds for $NO_X$ and ROG. Thus, the project will have a cumulatively considerable impact regarding attainment of air quality standards.

For purposes of modeling construction emissions, the Reduced Intensity Industrial Alternative and the project would disturb roughly the same amount of ground surface and involve roughly the same amount of grading and building construction activity. Although the building floor area would be reduced by 30 percent, the emissions would be roughly similar, due to the use of similar construction equipment for a similar duration, and because roughly the same acreage would be disturbed even if the vertical improvements on the site were scaled back. Any differences in emissions would likely be negligible and would not result in a change to the impact determination. Therefore, construction emissions would be similar to the project.

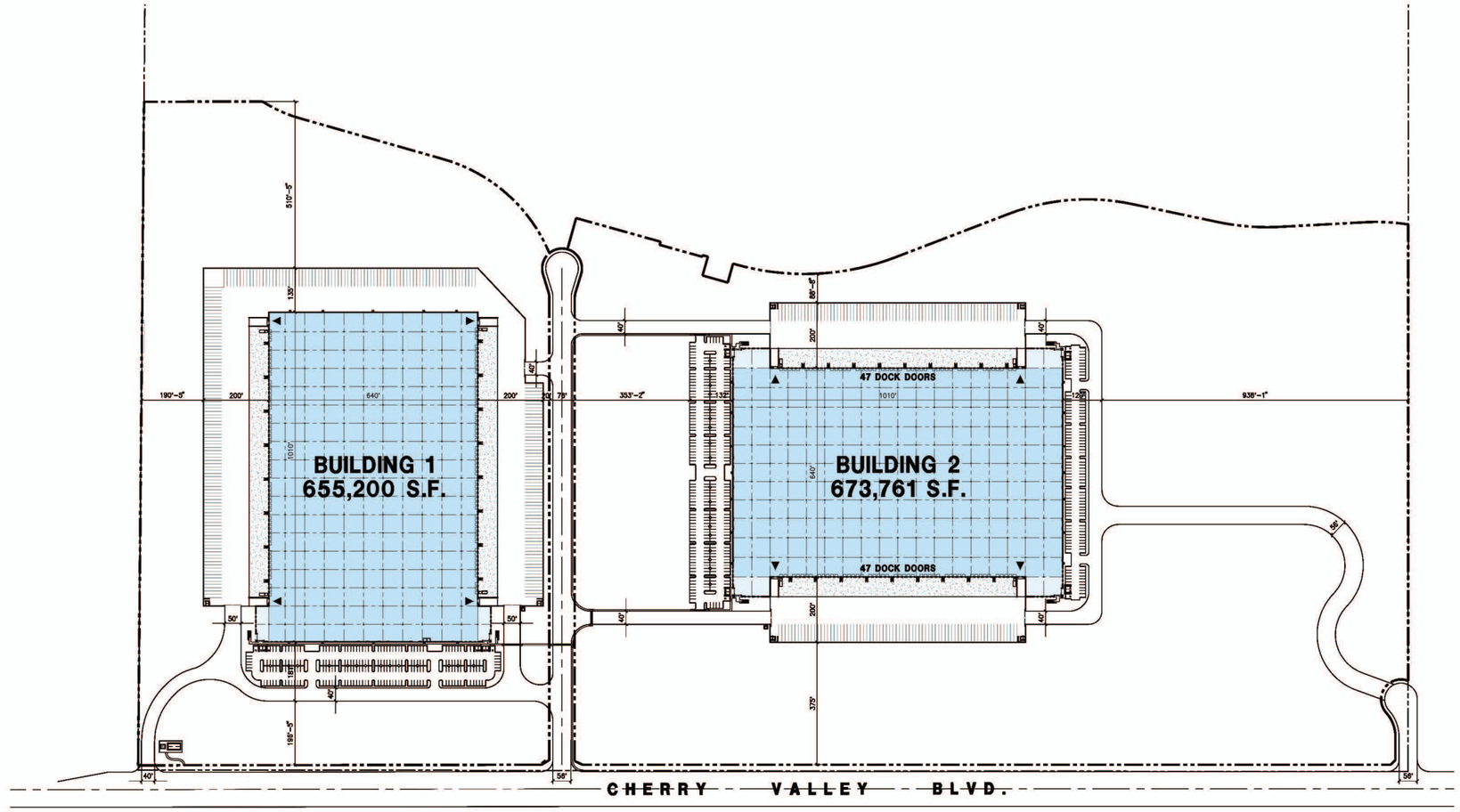
The Reduced Intensity Industrial Alternative would exceed the SCAQMD mitigated regional construction emissions threshold for $NO_X$ of 100 pounds per day, but would not exceed the threshold of 75 pounds per day for ROG emissions. The project construction is estimated to produce 217.97 pounds of $NO_X$ per day and 47.09 pounds per day of ROG, and the grading and construction activities under both scenarios would be similar.

The Reduced Intensity Industrial Alternative would generate 3,433 daily PCE trips, thereby reducing total operational vehicle trips by approximately 30 percent (from a total of 4,905 daily PCE trips that would occur under the project) and reducing estimated total long-term air quality emissions compared with the project. CalEEMod version 2013.2.2 was used to estimate operational emissions for the Reduced Intensity Industrial Alternative. As shown in the table, the project would result in comparable $SO_x$ emissions compared with the Reduced Intensity Industrial Alternative. The project would result in greater ROG emissions than the Reduced Intensity Industrial Alternative, and both scenarios would result in significant $NO_x$ emissions. The project would result in proportionally greater CO, $PM_{10}$, and $PM_{2.5}$ emissions; however, both the Reduced Intensity Alternative and the Project would result in less than significant impacts to CO, $SO_x$, $PM_{10}$ and $PM_{2.5}$. The calculated emissions are approximate based on a 30 percent reduction. It is unlikely that the Reduced Intensity Alternative would meet the full 30 percent reduction; therefore, these calculations are approximate. Nonetheless, because of the type of use (logistics warehousing), a 30 percent reduction would not fully reduce NOx and ROG emissions to less than significant levels.

Regional air quality impacts under the Reduced Intensity Industrial Alternative would be significant and similar to the project for construction $NO_X$ and ROG emissions. In addition, the Reduced Intensity Industrial Alternative would not avoid the significant and unavoidable impact due to operational $NO_X$ emissions. Similar to the project, the Reduced Intensity Industrial Alternative would have a cumulatively considerable impact regarding attainment of air quality standards.

### 6.5.4 - Biological Resources

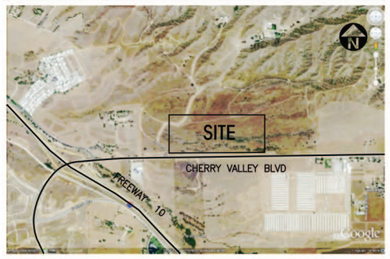
The area of the site that would be occupied by the Reduced Intensity Industrial Alternative would be approximately 30 percent smaller than the project, resulting in a smaller development footprint and a corresponding reduction in potential impacts to biological resources.




## Tabulation

| | BUILDING 1 | BUILDING 2 | NET TOTAL | PRIVATE STREET | GROSS TOTAL |
|---|---|---|---|---|---|
| **SITE AREA** | | | | | |
| sq. ft. | 2,396,402 | 4,132,543 | 6,528,945 s.f. | 126,709 s.f. | 6,655,654 s.f. |
| acres | 55.01 | 94.87 | 149.88 ac | 2.91 ac | 152.79 ac |
| **BUILDING AREA** | | | | | |
| office | 10,000 | 20,000 | 30,000.00 s.f. | | |
| warehouse | 645,200 | 653,761 | 1,298,961.00 s.f. | | |
| TOTAL | 655,200 | 673,761 | 1,328,961 s.f. | | |
| **COVERAGE** | 27.34% | 16.30% | 20.35% | | |
| **CLEAR HEIGHT** | 36 ft | 36 ft | | | |
| **BUILDING HEIGHT** | +/- 45 ft | +/- 45 ft | | | |
| **AUTO PARKING REQUIRED** | | | | | |
| 1/2000 sf of gross floor area | 328 | 337 | 665 stalls | | |
| **AUTO PARKING PROVIDED** | | | | | |
| standard (9'X18') | 233 | 422 | 655 stalls | | |
| **TRAILER PARKING PROVIDED** | | | | | |
| trailer (10'X55') | 237 | 422 | 659 stalls | | |

## Aerial Map




## Legend

- POTENTIAL OFFICE
- WAREHOUSE
- ▼ DRIVE THRU DOOR

**Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.**

Source: HPA Architecture, May 2015.

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# Exhibit 6-3
# Reduced Intensity Industrial Alternative

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However, the Reduced Intensity Industrial Alternative would likely need to incorporate similar mitigation for biological resources as the project, since it would also involve the disturbance of land and new construction on a site that is currently undeveloped. Impacts in this regard would be roughly similar to the project, and would be less than significant with mitigation for both the project and the Reduced Intensity Industrial Alternative.

### 6.5.5 - Cultural Resources

The only potential impacts to cultural resources would occur from the unexpected discovery of new resources, likely during grading activities. The Reduced Intensity Industrial Alternative and the project would necessarily disturb similar areas with respect to grading and surface area disturbance, a 30 percent smaller area would be disturbed under the Reduced Intensity Industrial Alternative. Impacts to cultural resources for both the project and the Reduced Intensity Industrial Alternative would be less than significant with mitigation.

### 6.5.6 - Geology and Soils

The Draft EIR found that the site is considered developable from a geotechnical perspective; however, mitigation would be required to reduce impacts regarding structural setback zones, hydroconsolidation, soil stability, and landslides. Implementation of mitigation measures and compliance with County and Uniform Building Code construction standards would reduce geology and soils impacts to less than significant levels. The smaller size of the Reduced Intensity Industrial Alternative would minimally reduce potential exposure of building occupants to strong seismic groundshaking. However, impacts related to geology and soils would remain similar to the project. Through consistency with recommendations outlined within the project's Geotechnical Investigation Report, as well as standard Uniform Building Code requirements, impacts in this regard would remain roughly equivalent to the project.

### 6.5.7 - Greenhouse Gas Emissions

The County of Riverside's Climate Action Plan (CAP) is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change. The CAP has adopted a target of reducing GHG emissions down to 15 percent below 2008 levels within the County of Riverside by 2020.

Pursuant to the CAP, and discussed in further detail in Section 3.7, projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects are determined to have a less than significant individual and cumulative impact for GHG emissions. The Draft EIR determined that the project would be less than significant after incorporating at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables.

Likewise, it is logical to conclude that the Reduced Intensity Industrial Alternative would be able to achieve the necessary 100 points from the screening tables, because this alternative would be a

smaller version of the project. Therefore, the impacts of the Reduced Intensity Industrial Alternative with respect to greenhouse gas emissions would also be considered less than significant, similar to the proposed project.

### 6.5.8 - Hazards and Hazardous Materials

The Reduced Intensity Industrial Alternative would reduce total building area at the site by 30 percent. Although building area at the site would be reduced, safety risk impacts in this regard would remain roughly equivalent to the project, due to the similar design and uses at the site. While the Reduced Intensity Industrial Alternative would likely disturb a smaller area of ground surface during construction and would result in less potential exposure to, and disposal of potentially contaminated soils due to prior agricultural uses on-site, this impact would still be potentially significant, and similar mitigation would need to be incorporated. Therefore, impacts related to hazards and hazardous materials would be less than significant with mitigation for both the project and the Reduced Intensity Industrial Alternative.

### 6.5.9 - Hydrology and Water Quality

Impacts to Hydrology and Water Quality would be less than significant for both the project and the Reduced Intensity Industrial Alternative, as all drainage and water quality issues within the confines of the project site would be fully addressed under each scenario with the installation of stormwater and drainage improvements. Although the 30 percent reduction in the size of the Reduced Intensity Industrial Alternative would likely result in less impervious surfaces and less surface runoff, impacts to hydrology and water quality would be less than significant under both the Reduced Intensity Industrial Alternative and the project.

### 6.5.10 - Land Use and Planning

The project would require a General Plan amendment and zone change, among other County approvals. However, the Draft EIR found that the project would not divide an existing community nor would it result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Although the project would require a General Plan amendment and zone change, it would not require a Foundation Component amendment to the General Plan. In addition, as discussed in Section 3.3-10, Land Use and Planning, the Gateway area of Cherry Valley is already in the process of transitioning to land uses with higher intensities and residential densities compared with Cherry Valley proper. This is evidenced by the many development plans, proposed and approved, adjoining the project site or within the Gateway area, including the large-scale residential development approved for the former Sunny Cal Egg Ranch directly to the south of the project, and the commercially zoned areas within the City of Calimesa directly to the west of the project. Therefore, impacts with respect to Land Use and Planning for the project were determined to be less than significant.

The Reduced Intensity Industrial Alternative includes development similar to the project, although the building area would be reduced by 30 percent. Regardless, the Reduced Intensity Industrial

Alternative would still require a General Plan amendment and zone change, as would the project. Further, similar to the project, the Reduced Intensity Industrial Alternative would not divide an existing community, nor would it result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, as with the project, impacts with respect to Land Use and Planning would be less than significant.

## 6.5.11 - Mineral Resources

The Draft EIR found that the project would have a less than significant impact regarding impacts to mineral resources. While the Reduced Intensity Industrial Alternative would be 30 percent smaller than the project, this reduction would not provide a meaningful decline in the level of significance compared with the project, and impacts to mineral resources would be less than significant, similar to the project.

## 6.5.12 - Noise

The Draft EIR found that the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. However, the Draft EIR found that project construction would result in the following noise impacts:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

As a result, mitigation measures to reduce project construction noise and loading/unloading activity noise to less than significant levels were required.

The Reduced Intensity Industrial Alternative would generate less long-term traffic noise, since it would generate fewer vehicle trips than the project. Also, the Reduced Intensity Industrial Alternative would likely not exceed the 3dB (decibel) threshold over ambient levels, and isolated noise levels at project ingress/egress points would not increase noise levels during peak hours for sensitive receptors. Therefore, similar to the project, the Reduced Intensity Industrial Alternative would not create a substantial permanent increase in ambient noise levels. In addition, short-term noise levels during construction would be less than significant with the implementation of mitigation measures. Similarly, operational noise impacts from loading/unloading activities would be reduced to less than significant with implementation of the stated mitigation measures. Therefore, potential short and long-term noise impacts from the Reduced Intensity Industrial Alternative would be less than significant, similar to the project. The Reduced Intensity Industrial Alternative would generate 30 percent fewer vehicle trips than the project (refer to Section 6.3.16, Transportation and Traffic) and would therefore reduce traffic noise compared with the project. In summary, the Reduced Intensity Industrial Alternative would have slightly reduced noise impacts compared with the project, due to the reduction in vehicle trips; however, noise impacts under the project would also be less than significant.

## 6.5.13 - Population and Housing

Population and housing impacts relate to housing, affordable housing, displacement of persons or housing, and population. The jobs attributed to the project are not anticipated to require specific skills that necessitate substantial hiring outside of the project region. Given the high rate of unemployment in the County and surrounding cities, most of the anticipated new jobs generated by the project would likely be filled from individuals already living in the project region. Therefore, the Draft EIR found that the project neither would directly nor indirectly induce substantial new population growth in the area. Given the reduced building area of the Reduced Intensity Industrial Alternative, fewer jobs would be created, and potential population and housing impacts would be less than significant, similar to the project.

## 6.5.14 - Public Services

The Reduced Intensity Industrial Alternative would produce 30 percent less square footage compared with the project. With payment of applicable development impact fees that would correlate to the equivalent impact on public services, impacts to fire protection, police protection, schools, parks, public facilities vehicles and equipment would be less than significant under the Reduced Intensity Industrial Alternative, similar to the project.

## 6.5.15 - Recreation

Recreation impacts relate to potential impacts to recreational facilities, usage of existing neighborhood/regional parks, and recreational trails. The Draft EIR found that the project would have a less than significant impact regarding recreational resources, because the project would not create any new residential dwellings, and employees of industrial/warehouse facilities such as the project are unlikely to use recreation facilities during the workday, and generally do not create demand for such resources. The Reduced Intensity Industrial Alternative would produce 30 percent less square footage compared with the project, but due to the similar type of development and uses at the site, total demand for recreation facilities would remain roughly similar to the project, and would be less than significant for both the project and the Reduced Intensity Industrial Alternative.

## 6.5.16 - Transportation and Traffic

The project is expected to generate approximately 4,905 passenger car PCE trips per day (Appendix I, Traffic Study's Table 1, Project Trip Generation Summary). As indicated within Section 3.16, Traffic and Transportation, implementation of Mitigation Measures TRANS-1 through TRANS-3 would be required for the project.

Despite incorporation of these measures, however, cumulative impacts (2035 conditions) to mainline segments of the I-10 Freeway would remain adverse and unavoidable on a cumulative basis. The mainline and ramp junctions of the I-10 Freeway east and west of Cherry Valley Boulevard would operate at LOS F even without the project under Horizon Year (2035) traffic conditions. Even though the project's contribution to cumulative impacts under Horizon Year (2035) conditions is relatively de minimis, involving only a small percentage (approximately 1 percent or less) of the forecasted traffic occurring on the identified freeway mainline and ramp junction under 2035 conditions, there would still be a cumulatively significant impact. Cumulative impacts to Cherry Valley Boulevard/Calimesa

Boulevard intersection would also be significant and unavoidable under the project conditions. Although the project mitigates impacts, the timing of the necessary improvements cannot be controlled by the County of Riverside because the intersection is also within the jurisdiction of the City of Calimesa.

Impacts on transportation and traffic would be reduced under the Reduced Intensity Industrial Alternative. The buildable area of the site that would be occupied by the industrial park would be reduced by approximately 30 percent, and would result in a commensurate reduction in vehicle trips, for 3,433 net PCE trips per day (Urban Crossroads 2015b) compared with the 4,905 daily PCE trips that would be generated by the project. Regardless, while the Reduced Intensity Industrial Alternative would create fewer trips, it would also be required to provide similar mitigation measures as the project. Based on input from the County of Riverside Transportation Department, the Reduced Intensity Alternative could accommodate a loop road, thereby providing improved internal circulation and additional left-turn access from Cherry Valley Boulevard.

Despite the fewer trips, the Reduced Intensity Industrial Alternative would ultimately have cumulatively significant and unavoidable impacts (albeit somewhat lesser than under the project) for the I-10 Freeway mainline, on- and off-ramps at Cherry Valley Boulevard, and intersection of Cherry Valley Boulevard/Calimesa Boulevard. Therefore, the Reduced Intensity Industrial Alternative would also result in cumulatively significant and unavoidable traffic impacts similar to the project, although these impacts would be somewhat reduced under the Reduced Intensity Industrial Alternative.

### 6.5.17 - Utilities and Service Systems

Impacts to Utilities and Services Systems under the Reduced Intensity Industrial Alternative would be less than under the project, mainly reflecting the 30 percent reduction in the building square footage and development footprint. Consequently, demand for utilities and services would be proportionately reduced under the Reduced Intensity Industrial Alternative. However, all impacts would remain less than significant or less than significant with mitigation, similar to the project.

### 6.5.18 - Conclusion for Reduced Intensity Alternative

Because of the 30 percent reduction in building area, the impacts under the Reduced Intensity Industrial Alternative would be less than the project for many issue areas. However, potential impacts with respect to transportation and traffic and air quality would remain significant and unavoidable under this alternative, similar to the project. Although the Reduced Intensity Industrial Alternative's operational emissions would not exceed the SCAQMD significance threshold for ROG, it would still exceed SCAQMD significance threshold for operational $NO_X$ emissions. Therefore, implementation of the Reduced Intensity Industrial Alternative will still result in an exceedance of operational emission thresholds for $NO_X$.

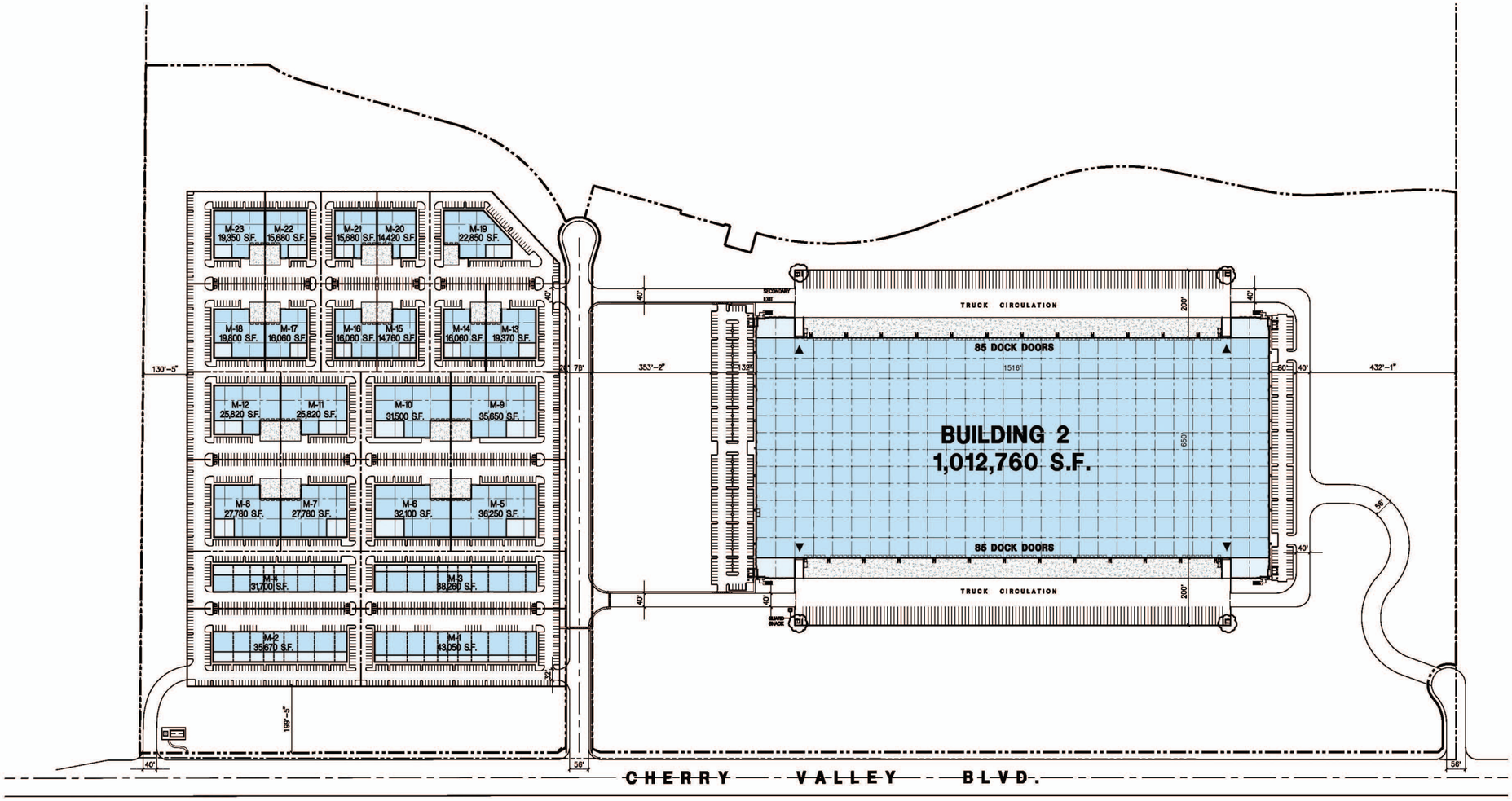
This alternative does not meet all of the project objectives to the same degree as the project. For example, Objective 2 calls for providing additional employment opportunities to local residents of Cherry Valley and neighboring cities to provide local economic opportunities and reduced commute times. The Reduced Intensity Alternative would result in approximately 30 percent fewer jobs compared with the project, due to the corresponding reduction in size. In addition, Objective 3 calls

for providing new development that will assist the County in obtaining fiscal balance in the years and decades ahead. The reduction in the size of the project will limit the attainment of this objective by generating less tax revenues. Ultimately, implementation of the Reduced Intensity Alternative would reduce building sizes compared with the project, which narrows the range of warehouse/industrial tenants who could potentially occupy the site. This reduction would limit the range of users to those needing smaller square footage, because the Reduced Intensity Alternative would be less attractive to tenants/end users who required larger spaces Similarly, this alternative would meet Objective 4 and Objective 5, which relate to the location of the project near the freeway and how proper siting could reduce the potential for truck traffic within residential areas and neighboring cities. It is unlikely, however, that this alternative would be required or able to (based on the return on investment) to implement all of the same traffic and air quality reduction strategies in place under the proposed project. Furthermore, the Reduce Intensity Alternative would meet Objective 6, in that it would facilitate goods movement for local, regional, and nationwide economic growth. However, the Reduce Intensity Alternative would not meet it to the same extent as the project, due to its smaller operational size. This may also limit the ability of the Reduced Intensity Alternative to fully meet Objective 7, which is to generate a reasonable return on the investment needed to develop the project. Objective 8 also calls for maximizing use of the site, a goal that would not be fully realized under the Reduced Intensity Alternative due to the 30 percent reduction in building area. The Reduced Intensity Alternative would meet Objective 9 as well, but to a lesser extent because fewer design features may be feasible based on the return on the investment for a smaller use. Lastly, the Reduced Intensity Alternative would not meaningfully reduce any of the significant environmental impacts that would occur under the project despite the smaller building footprint, since grading and new construction would be required under both scenarios.

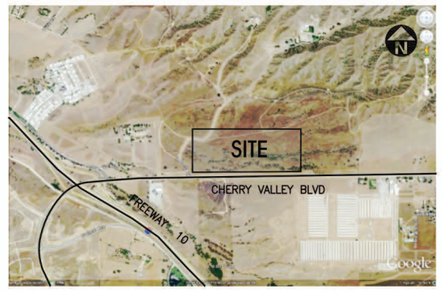
## 6.6 - Mixed Use/Business Park Alternative

This alternative would replace Building 1 under the proposed project with 14 smaller business park buildings, totaling 581,470 square feet. These buildings would consist of flex-type or incubator one- or two-story buildings served by a common roadway system. The tenant spaces would be flexible and would be designed to lend themselves to a variety of uses. The spaces may include offices, retail and wholesale stores, restaurants, recreational areas and warehousing, manufacturing, light industrial, or scientific research functions. Based on the average mix of tenants in business park settings, it is estimated that 20 to 30 percent would consist of office/commercial uses, and the remaining 70 to 80 percent would consist of a mix of industrial warehousing, general office building, corporate headquarters, single-tenant office building and research and development uses.

The 1,012,760 square foot Building 2 proposed under the project would still be constructed, for a total of 1,594,230 square feet, or an approximately 13 percent reduction in building floor area compared with the proposed project. This alternative would occupy 152.76 gross acres. This alternative assumes that access to the site would be similar to the proposed project, with access points provided off of Cherry Valley Boulevard. Refer to Exhibit 6-4 for a conceptual site plan.




## Aerial Map




## Legend

- POTENTIAL OFFICE
- WAREHOUSE
- ▼ DRIVE THRU DOOR

Source: HPA Architecture, May 2015.

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# Exhibit 6-4
# Mixed Use/Business Park Alternative

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Impacts upon development and operation of the Mixed Use/Business Park Alternative are discussed below.

## 6.6.1 - Aesthetics

Aesthetics impacts relate to changes to scenic resources within a State scenic highway, visual character, and new sources of light and glare. While this alternative would have similar structure heights (due to Riverside County's 40 foot height limitation) and would require building and parking lot lighting, the two projects would have differing looks and styles related to building design, signage, entry points, internal circulation and landscaping. The square footage under the Mixed Use/Business Park Alternative would be divided among multiple smaller buildings and one large building, instead of the two, larger buildings that would be developed under the project, resulting in different massing and scale of the buildings. However, under both the project and the Mixed Use/Business Park Alternative, the site would be developed with a similar intensity on land that is currently vacant.

The Mixed Use/Business Park Alternative would also need to be consistent with the County's Municipal Code, which regulates light and glare from structures on-site. The Mixed Use/Business Park Alternative would have no impact on scenic resources within a State scenic highway, and impacts from changes to the scenic character of the site would be similar to the project. Therefore, the Mixed Use/Building Park Alternative would have less than significant impacts to aesthetics, light, and glare, similar to the project.

## 6.6.2 - Agriculture and Forestry Resources

Agriculture and forestry impacts relate to potential impacts to forestry resources, Williamson Act land and Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The project site is categorized as Farmland of Local Importance (147.64 acres) and Other Land (97.67 acres) under the Farmland Mapping and Monitoring Program (FMMP). Furthermore, the project site is not currently used for agriculture. It is not subject to a Williamson Act contract, and does not contain any designated forestland. Since the Mixed Use/Business Park Alternative would develop the project in a similar manner as the project, coupled with the lack of prime farmland on-site or operational impacts to surrounding agricultural operations, it is anticipated that development of the Mixed Use/Business Park Alternative will have less than significant impacts to agriculture and forestry resources, similar to the project.

## 6.6.3 - Air Quality

The EIR found that the project would have a cumulatively significant and unavoidable impact with respect to ROG and $NO_X$ emissions. SCAQMD regional emission thresholds would be exceeded even after all feasible mitigation is incorporated for $NO_X$ and ROG during operations. In addition, although the project would comply with all applicable SCAQMD rules and regulations, the project would impede timely attainment of ambient air quality standards and impede implementation of the AQMP, because its emissions exceed the SCAQMD regional significance thresholds for $NO_X$ and ROG. Thus, the project will have a cumulatively considerable impact regarding attainment of air quality standards.

The Mixed Use/Business Park Alternative and the project would disturb roughly the same amount of ground surface and involve roughly the same amount of grading and building construction activity; therefore, construction emissions would be similar to the project. The Mixed Use/Business Park Alternative would exceed the SCAQMD mitigated regional construction emissions threshold for $NO_X$ of 100 pounds per day and the threshold of 75 pounds per day for ROG emissions. The project construction is estimated to produce 388.81 pounds of $NO_X$ per day and 105.03 pounds per day of ROG, and the grading and construction activities under both scenarios would be similar.

The Mixed Use/Business Park Alternative would generate 7,645 daily PCE trips, thereby increasing total operational vehicle trips by approximately 56 percent (from a total of 3,126 daily PCE trips) and increasing estimated total long-term air quality emissions compared with the project. CalEEMod version 2013.2.2 was used to estimate operational emissions for the Mixed Use/Business Park Alternative. The operational air pollutant emissions for the Mixed Use/Business Park Alternative are shown in Table 6-4. As shown in the table, the project would have comparable $SO_x$ emissions compared with the Mixed Use/Business Park Alternative. The project would have greater ROG emissions than the Mixed Use/Business Park Alternative, and both scenarios would have significant $NO_X$ emissions. The project would have fewer CO, $PM_{10}$, and $PM_{2.5}$ emissions than the Mixed Use/Business Park Alternative.

**Table 6-4: Mixed Use/Business Park Alternative Operational Emissions—Summer**

| Source | Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile—Gasoline Vehicles | 2.9 | 3.4 | 40.0 | 0.1 | 9.5 | 2.5 |
| Mobile—Heavy Duty Diesel Trucks | 28.1 | 580.5 | 272.8 | 1.8 | 67.5 | 25.9 |
| Area | 26.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Energy | 0.6 | 0.6 | 0.5 | 0.0 | 0.0 | 0.0 |
| **Total Alternative Emissions** | **58.1** | **584.5** | **313.4** | **1.9** | **77.0** | **28.4** |
| **Project Emissions** | **75.6** | **315.3** | **301.4** | **1.5** | **18.9** | **11.1** |
| Significance Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Would Project Result in Significant Impact? | Yes | Yes | No | No | No | No |
| Would Alternative Result in Significant Impact? | Yes | Yes | No | No | No | No |

Notes:
ROG = reactive organic gases; $NO_X$ = nitrogen oxides; CO = carbon monoxide
$SO_X$ = sulfur oxides; $PM_{10}$ and $PM_{2.5}$ = particulate matter; Area = painting and consumer products
Source of emissions: Appendix A: CalEEMod Output.
Source of project emissions: Table 33 (mitigated summer)
Source of thresholds: South Coast Air Quality Management District 2011a.

Regional air quality impacts under the Mixed Use/Business Park Alternative would be significant and similar to the project for construction $NO_X$ and ROG emissions. In addition, the Mixed Use/Business Park Alternative would not avoid the significant and unavoidable impact that would occur under the project due to operational ROG and NOx emissions. Regardless, similar to the project, the Mixed Use/Business Park Alternative would have a cumulatively considerable impact regarding attainment of air quality standards.

### 6.6.4 - Biological Resources

Biological resources impacts relate to effects on candidate, sensitive or special status species, and conflicts with local policies or ordinances protecting biological resources. The Draft EIR found that mitigation is required under the project for potential impacts to USACE and CDFW jurisdictional habitats and MSHCP Riverine areas. Additionally, with implementation of mitigation measures for potential impacts to burrowing owls, raptors, and water resources, the project would have a less than significant impact. Development of the Mixed Use/Business Park Alternative would involve a similar amount of ground disturbance on a site that is currently vacant. Therefore, impacts in this regard would be roughly similar under the Mixed Use/Business Park Alternative, and would be less than significant with mitigation, similar to the project.

### 6.6.5 - Cultural Resources

Cultural resources impacts relate to potential impacts to historical, cultural, and paleontological resources, as well as potential impact to human remains. The Draft EIR found that the project would have less than significant impacts regarding cultural resources with mitigation, to account for the potential that buried cultural resources are discovered during project construction. Mitigation is also required to reduce potential impacts to paleontological resources to a less than significant level.

The Mixed Use/Business Park Alternative scenario and the project would be roughly equivalent with respect to ground surface disturbance, and similar mitigation measures would likely be required under both scenarios. Therefore, impacts related to historical, cultural, and paleontological resources, as well as potential impact to human remains, would be less than significant under the Mixed Use/Business Park Alternative, similar to the project.

### 6.6.6 - Geology and Soils

Geology and Soil impacts relate to potential hazards associated with liquefaction, unstable soil, and seismic settlement. The Draft EIR found that the site is considered developable from a geotechnical perspective; however, mitigation would be required to reduce impacts regarding structural setback zones, hydroconsolidation, soil stability, and landslides. Implementation of mitigation and compliance with County and Uniform Building Code construction standards would reduce geology and soils impacts to less than significant levels for the project.

Given the similar size and scale of the Mixed Use/Business Park Alternative, this alternative would face similar hazards related to geological impacts, and would require mitigation for structural setback zones, hydroconsolidation, soil stability, and landslides. Overall, impacts would be less than significant with mitigation, similar to the project.

## 6.6.7 - Greenhouse Gas Emissions

The County of Riverside's Climate Action Plan (CAP) is a geographically specific plan that was adopted by the County of Riverside for the purpose of reducing GHG emissions under the control or influence of the County consistent with AB 32 and subsequent state legislation and state agency action to address climate change. The CAP has adopted a target of reducing GHG emissions down to 15 percent below 2008 levels within the County of Riverside by 2020.

Pursuant to the CAP, and discussed in further detail in Section 3.7, projects that achieve at least 100 points based on the County's screening tables are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report. As such, further project-specific GHG quantification is not required. Consistent with CEQA guidelines, such projects are determined to have a less than significant individual and cumulative impact for GHG emissions. The Draft EIR determined that the project would be less than significant after incorporating at least 100 points from the Riverside County Greenhouse Gas Emissions Screening Tables.

Likewise, it is logical to conclude that the Mixed Use/Business Park Alternative would be able to achieve the necessary 100 points from the screening tables, because this alternative would be a type of use relatively similar to the project; therefore, similar mitigation or project design features could potentially be implemented. However, because emissions are greater for the ozone precursor $NO_x$ (ozone is a greenhouse gas) under this alternative, GHG impacts would be greater under the Mixed Use /Business Park Alternative than the proposed project. Therefore, the impacts of the Mixed Use/Business Park Alternative with respect to greenhouse gas emissions would be greater than the project, but would also be considered less than significant.

## 6.6.8 - Hazards and Hazardous Materials

Hazards and Hazardous Material impacts relate to posing a hazard to the public or environment, handling hazardous materials, interfering with emergency response plans, airport hazards, potential location on a hazardous site, location in relation to existing or proposed schools and location in relation to fire hazard areas. With mitigation for potential soils contamination due to previous agricultural uses on-site, the project would have a less than significant impact regarding hazards and hazardous materials.

The Mixed Use/Business Park Alternative scenario and the project would disturb similar amounts of ground surface during construction, resulting in similar potential for exposure and disposal of potentially contaminated soils due to the prior agricultural uses on-site. In addition, the Mixed Use/Business Park Alternative would result in construction (improvements and building) and operational activities that are similar to the project.

The Mixed Use/Business Park Alternative would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment, because the operations on-site would comply with all applicable federal, state, and local laws regarding commercial land uses. Further, similar to the project, the alternative would not handle substantial quantities of hazardous materials, and there are no uses contemplated that would involve the use of hazardous materials. Therefore, with

implementation of similar mitigation measures, impacts in this regard would be less than significant for both the Mixed Use/Business Park Alternative and the project.

## 6.6.9 - Hydrology and Water Quality

Hydrology and Water Quality impacts relate to drainage, water quality, groundwater, runoff, and flood hazards. With mitigation, the project would have a less than significant impact regarding hydrology and water quality.

Development of the Mixed Use/Business Park Alternative would not substantially reduce the amount of land disturbed by construction, nor reduce the amount of impermeable surfaces despite the 22 percent reduction in building square footage, since internal access roadways would need to be provided between the mixed use buildings. Therefore, with mitigation measures to control stormwater run-off and associated pollutants, impacts of the Mixed Use/Business Park would be less than significant and similar to those of the project with respect to hydrology and water quality.

## 6.6.10 - Land Use and Planning

The project would require a General Plan amendment and zone change, among other County approvals. However, the Draft EIR found that the project would not divide an existing community nor would it result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Although the project would require a General Plan amendment and zone change, it would not require a Foundation amendment to the General Plan, since the proposed land uses are consistent with the Community Development Foundation (which the project is located within). In addition, as demonstrated in Section 3.10, Land Use and Planning, the project is in accordance with the Pass Area Plan, the Cherry Valley Policy Area, and the Cherry Valley Gateway Policy Area. Therefore, impacts with respect to Land Use and Planning for the project were determined to be less than significant.

The Mixed Use/Business Park Alternative includes development similar in nature, although it would generate more traffic and pollutant emissions. The Mixed Use/Business Park Alternative would also require a General Plan amendment and zone change, as would the project. Further, similar to the project, this alternative would not divide an existing community, nor would it result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Impacts with respect to Land Use and Planning would be less than significant under the Mixed Use/Business Park Alternative, similar to the project.

## 6.6.11 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. The Draft EIR found that the project would have a less than significant impact regarding mineral resources. The area that would be disturbed by the Mixed Use/Business Park is similar to the project, and no impacts beyond those identified for the project would occur.

Therefore, the Mixed Use/Business Park Alternative would result in less than significant impacts to mineral resources, similar to the project.

## 6.6.12 - Noise

The Mixed Use/Business Park Alternative would increase vehicle trips by 56 percent (refer to 6.5.16, Transportation and Traffic) compared with the project. Therefore, while construction noise impacts would remain similar, the increase in vehicle trips would increase traffic noise, and would likely result in noise levels that would exceed cumulative traffic noise thresholds along segments of Cherry Valley Boulevard. In addition, this alternative would likely result in similar operational noise impacts from loading/unloading activities as the project. Impacts would therefore be substantially greater under the Mixed Use/Business Park Alternative compared with the project, and additional mitigation measures may be needed to offset the increase in traffic noise under the Mixed Use/Business Park Alternative, beyond what would be required for the project.

## 6.6.13 - Population and Housing

Population and housing impacts relate to housing, affordable housing, displacement of persons or housing, and population. The estimated jobs attributed to the project are not anticipated to require specific skills that necessitate substantial hiring outside of the project region. Given the high rate of unemployment in the County and surrounding cities, most of the anticipated new jobs would likely be filled by individuals already living in the project region. Therefore, the Draft EIR found that the project neither would directly nor indirectly induce substantial new population growth in the area.

The Mixed Use/Business Park Alternative would generate an estimated 667 employees from the mixed use/business park uses alone, based on the generation factor of one job per 600 square feet of Business Park square footage used in the 2008 Riverside County General Plan.[5] When combined with the jobs that would be generated by the 1,012,760 square feet of industrial uses which would be retained as "Building 2," this alternative would exceed the estimated 748 jobs (including 507 permanent on-site full time jobs and 241 off-site indirect and induced jobs). However, because these jobs would also be filled by the existing workforce in the project region, impacts to population and housing under the Mixed Use/Business Park Alternative would be less than significant and similar to the project.

## 6.6.14 - Public Services

The Mixed Use/Business Park Alternative would produce 13 percent less square footage compared with the project. Demand on school facilities and other resident-focused facilities such as libraries, recreational facilities would be similar to the project, and would be less than significant. Police and Fire service demand would likely be higher compared with the project, due to the higher number of employees, and the higher vehicle trips associated with the Regional Commercial Alternative compared with the project (7,645 versus 4,905; refer to Section 6.5.16, below). However, applicable development impact fees, geared specifically toward service demand levels for commercial uses would offset impacts of the Mixed Use/Business Park Alternative, similar to the project. Therefore, although demand for some services may be greater for the Mixed Use/Business Park Alternative

[5] Riverside County General Plan, Appendix E, Socioeconomic Build-out Projections Assumptions & Methodology.

compared with the project, impacts would remain less than significant for both the project and this alternative.

## 6.6.15 - Recreation

The Mixed Use/Business Park Alternative would develop 13 percent less square footage compared with the project (for Building 2). However, due to the similar use of the site, total demand for recreation facilities would remain roughly similar to the project, since employees are not likely to use recreation facilities during the workday. Similar to the project, the jobs created for the alternative would likely be filled by employees in the region, as opposed to bringing in new employees to the region who would use existing recreation facilities near their places of residence. Impacts to recreation under the Mixed Use/Business Park Alternative would be less than significant, similar to the project.

## 6.6.16 - Transportation and Traffic

The Mixed Use/Business Park Alternative would increase the number of daily vehicle trips compared with the project. The project would generate approximately 4,905 PCE trips per day (Appendix I, Traffic Impact Study's Table 1, Project Trip Generation Summary), and the Mixed Use/Business Park Alternative would generate an estimated 7,645 PCE trips, roughly 56 percent more than the number of vehicles generated by the project (Urban Crossroads 2015b). Thus, the project would generate approximately 2,741 fewer PCE trips than the Mixed Use/ Business Park Alternative. As indicated within Section 3.16, Traffic and Transportation, implementation of Mitigation Measures TRANS-1 through TRANS-3 would be required for the project and, likewise, would be assumed for the Mixed Use/Business Park Alternative. Further, additional mitigation measures to offset this level of traffic would likely be required for the Mixed Use/Business Park Alternative. Given the increase in vehicle trips from the Mixed Use/Business Park Alternative compared with the project, additional level of service failures at street intersections and freeway ramps would be anticipated, unless additional mitigation measures were implemented, as feasible. Cumulative impacts to mainline segments of the I-10 Freeway and I-10 ramps would also be exacerbated and would remain significant, adverse, and unavoidable. Impacts would also remain significant and unavoidable for the Cherry Valley Boulevard/Calimesa Boulevard intersection under 2035 conditions.

Consequently, the Mixed Use/Business Park Alternative would also result in a significant and unavoidable traffic impact similar to the project, but to a greater degree than the project.

## 6.6.17 - Utilities and Service Systems

Impacts to Utilities and Services Systems under the Mixed Use/Business Park Alternative would likely be greater than the project with respect to water, sewer, electricity, natural gas, based on the higher number of employees and visitors to under the Mixed Use/Business Park Alternative (see discussion under 6.5.14, above). However, it is expected that these increases in demand would be offset by applicable development impact fees and user/service fees, which would reflect the higher demand. In addition, if the Mixed Use/Business Park Alternative required new or expanded facilities, mitigation could be imposed to require that such facilities be provided. Therefore, although demand

for services would be greater under the Mixed Use/Business Park Alternative than the project, impacts would still likely be less than significant, similar to the project.

## 6.6.18 - Conclusion for Mixed Use/Business Park Alternative

Table 6-5 provides a summary comparison, by individual issue area, for each alternative to the project. The Mixed Use/Business Park Alternative would not eliminate any significant adverse and unavoidable impacts compared with the project, due to the need for site grading and new construction on the site, and the increase in vehicle trips for the Mixed Use/Business Park Alternative compared with the project (refer to Section 6.5.16, Transportation and Traffic). In fact, due to the increase in vehicle trips, it would result in a worsening of these impacts with respect to air quality, greenhouse gas emissions and cumulative traffic impacts on the I-10 Freeway with respect to mainline segments and Cherry Valley Boulevard ramps. In addition, the Mixed Use/Business Park Alternative, similar to the project (refer to discussion in Section 6.5.3, Air Quality) would exceed SCAQMD operational significance thresholds for ROG and $NO_X$ criteria pollutants. Although less than significant, the Mixed Use Business Park Alternative would also generate greater GHG emissions than the proposed project.

This alternative would not result in significant adverse and unavoidable impacts in any of the 14 remaining issue areas, although it would result in increased impacts related to noise, public services and utilities and service systems. The remaining 11 issue areas would have impacts similar to the project (Table 6-3).

The Mixed Use/Business Park Alternative would likely meet three of the project objectives: Objective 2 (provide additional employment opportunities), Objective 3 (fiscal balance for the County) and Objective 7 (reasonable return on investment). This alternative would also meet Objectives 6 (facilitate goods movement), and 9 (regional logistics warehouse that meets industry standards) but to a much lesser extent than the project. Additionally, although this alternative would locate industrial uses near existing roadways and freeways (Objective 5), traffic and air pollutant emissions would actually increase under the Mixed Use/Business Park Alternative and this objective cannot be met. The Mixed Use/Business Park Alternative may provide more jobs than the project because of its office, research, and development components, although the exact tenant mix is uncertain. In addition, fewer jobs would be available to adults with only a high school education under the Mixed Use/Business Park Alternative than under the project. This is critical for the Pass Area and Riverside County, where it has been estimated that approximately 45 percent of adults have a high school education or less. This alternative would meet Objective 1 to a lesser degree than the proposed project, because the Mixed Use/Business Park Alternative would reduce the size of the regional warehouse distribution and logistics component, and would not facilitate efficient goods movement by taking advantage of the site's proximity to the I-10 Freeway to the same extent as the proposed project. Objectives 4 and 5 would also not be met to the same extent, which are to provide convenient freeway access in a manner that limits truck traffic disruption to residential areas within Cherry Valley and neighboring cities, and to locate industrial uses near existing roadways and freeways to reduce traffic congestion and pollutant emissions. If the site were partially developed for Mixed Use/Business Park uses, the opportunity to locate industrial uses in this prime location

near a major freeway would be reduced, and traffic congestion and pollutant emissions would not be reduced.

## 6.7 - Environmentally Superior Alternative

As required by CEQA Guidelines Section 15126.6, one of the alternatives must be identified as an Environmentally Superior Alternative. The Environmentally Superior Alternative is the one that would result in the fewest or least significant impacts. If the Environmentally Superior Alternative is the No Project Alternative, as in this case, then an Environmentally Superior Alternative must be selected from the remaining alternatives.

Table 6-5 provides a summary of each alternative related to the environmental issues evaluated in Section 3, Environmental Impact Analysis, of this Draft EIR, and includes the level of significance associated with the project in order to facilitate a thorough comparison of the alternatives. Refer to Section 3 of this document for a detailed discussion of each environmental issue. For some impacts, while the alternative may have a reduced level of impact, the impact would still be considered significant and unavoidable. With the exception of the No Project Alternative, none of the other three alternatives completely eliminate the significant, adverse, and unavoidable impacts that would occur under the project regarding traffic and air quality.

The No Project—CVGPA SP Alternative would eliminate the significant and unavoidable ROG operational impact that would occur under the project, and would also eliminate the significant and unavoidable operational $NO_X$ impact that would occur under the project. Both the No Project—CVGPA SP Alternative and the Reduced Intensity Industrial alternatives would reduce vehicle trips compared with the project, although the Reduced Intensity Industrial Alternative would result in a trip reduction of 30 percent, compared with the 58 percent reduction in vehicle trips that would be realized under the No Project—CVGPA SP Build Alternative.

The lower number of vehicle trips generated by the No Project—CVGPA SP Alternative compared with the Reduced Intensity Industrial Alternative would also result in a commensurate reduction of traffic-generated impacts with respect to air quality, greenhouse gases and noise. The No Project—CVGPA SP Alternative would result in impacts for six issue areas that were greater than the project, although still less than significant, while the Reduced Intensity Industrial Alternative did not have impacts in any issue areas that were greater than the project. Because of the reduction in vehicle trips that would be realized under the No Project—CVGPA SP Alternative, the No Project—CVGPA SP Alternative is considered the Environmentally Superior Alternative. This is due to the fact that this alternative would reduce the significant and unavoidable impacts that would occur under the project to a greater extent than the Reduced Intensity Industrial Alternative would. However, as discussed above, this alternative does not achieve any of the objectives of the project, and would not generate substantial benefits to the County and local economy by providing new jobs and additional tax revenues.

## Table 6-5: Alternatives Comparison

| Environmental Issue | Proposed Project | Alternative 1: No Project Alternative | Alternative 2: No Project—General Plan Build Alternative | Alternative 3: Residential Alternative | Alternative 4: Reduced Intensity Industrial Alternative | Alternative 5: Mixed Use/Business Park |
|---|---|---|---|---|---|---|
| Aesthetics | LTS | L | G | G | L | E |
| Agriculture and Forestry Resources | LTS | L | E | E | L | E |
| Air Quality | SIG | L | L | SIG/L | SIG/L | SIG/G |
| Biological Resources | LTS | L | E | E | L | E |
| Cultural Resources | LTS | L | E | E | E | E |
| Geology and Soils | LTS | L | G | G | L | E |
| Greenhouse Gas Emissions | LTS | L | L | E | L | G |
| Hazards and Hazardous Materials | LTS | L | E | E | L | E |
| Hydrology and Water Quality | LTS | L | L | L | L | E |
| Land Use and Planning | LTS | L | E | E | L | E |
| Mineral Resources | LTS | E | E | E | L | E |
| Noise | LTS | L | L | G | L | G |
| Population and Housing | LTS | L | G | G | E | E |
| Public Services | LTS | L | G | G | L | E |
| Recreation | LTS | L | G | G | E | E |
| Transportation and Traffic | SIG | L | SIG/L | SIG/G | SIG/L | SIG/G |
| Utilities and Service Systems | LTS | L | G | G | L | G |

Notes:
L = Lesser impact than the proposed project.
G = Greater impact than the proposed project.
LTS = Less than Significant.
E = Equivalent impact to the proposed project.
SIG = Significant, Adverse and Unavoidable.

# SECTION 7: PERSONS AND ORGANIZATIONS CONSULTED

## 7.1 - Public Agencies

### 7.1.1 - Lead Agency

**Riverside County Planning**

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Project Planner ..... Brett Dawson

### 7.1.2 - Local Agencies

**Sheriff Department**

Administrative Sergeant, County of Riverside Sheriff Department, Cabazon Station ..... Don Fortney

**Fire Department**

Planning and Development Supervisor, CAL FIRE ..... Ben Johnson, AICP
Fire Captain, CAL FIRE/Riverside County Fire ..... Bill Lawe

## 7.2 - Private Organizations

**Shopoff Realty Investments, L.P.**

Director, Asset Management ..... Brian Rupp
Assistant Project Manager ..... Lonnie Ellisor

## 7.3 - Others

Design Representative, Southern California Edison ..... Edward Mercado
Substitute Director of Facilities and Planning, Beaumont Unified School District ..... Alice Grundman
Field Planning Associate, Southern California Gas Company ..... Donald Wright
Senior Park Planner, Riverside County Parks Department ..... Marc Brewer
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