

**Interstate 15 Rehabilitate Existing Mainline and Ramp Pavement**  
San Bernardino County, California  
District 08  
SBd/15/PM R28.6-37.5  
EA 08-0K1223/PN  
0815000244

**Initial Study [Proposed]  
Mitigated Negative Declaration**



Prepared by the  
State of California Department of Transportation



**December 2021**

## **General Information About This Document**

### **What's in this document:**

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in San Bernardino County, California. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures.

### **What you should do:**

- Please read this document.
- We welcome your comments. If you have any comments about the proposed project, please send your written comments via U.S. mail to Caltrans by the deadline below:  
Gabrielle Duff, Senior Environmental Planner  
California Department of Transportation, District 8  
464 West 4<sup>th</sup> Street MS 829  
San Bernardino, CA 92401-1400
- Submit comments via email to: [gabrielle.duff@dot.ca.gov](mailto:gabrielle.duff@dot.ca.gov)
- Submit comments by the deadline: **1/17/2022.**

### **What happens next:**

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

### **Alternative formats:**

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Gabrielle Duff, Senior Environmental Planner, 464 West Fourth Street, San Bernardino, 92401, or use the California Relay Service 1(800) 735-2929 (TTY to Voice), 1(800) 735-2922 (Voice to TTY), 1(800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1(800) 854-7784 (Spanish and English Speech-to-Speech) or 711.

SCH  
08-SBD-15-  
PM R28.6-37.5  
EA 08-0K1223/  
PN 0815000244

Interstate 15 Rehabilitate Existing Mainline and Ramp Pavement from PM R28.6-37.5 in  
San Bernardino County, California

**INITIAL STUDY  
with (Proposed) Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

December 13, 2021

Date

*Kurt Heidelberg*  
for David Bricker  
Deputy District Director, California  
Department of Transportation  
CEQA Lead Agency

The following persons may be contacted for more information about this document:

Gabrielle Duff, Senior Environmental Planner  
California Department of Transportation District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA  
92410-1400

Phone: (909) 501-5142

# CEQA Environmental Checklist

## **PROPOSED PROJECT DESCRIPTION AND BACKGROUND**

**Project Title:** Interstate 15 Rehabilitate Existing Mainline and Ramp Pavement

**Lead agency name:** Caltrans District 8

**Address:** 464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

**Contact person:** Gabrielle Duff

**Phone number:** (909) 501-5142

**Project sponsor's name:** Caltrans District 8

**Address:** 464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

**Project Location:** Interstate 15 in San Bernardino County from PM R28.6-37.5

**General plan description:** N/A

**Zoning:** N/A

### **Description of project:**

The proposed project consists of resurfacing, restoration, and rehabilitation (3R) in both directions on the highway, it is proposed to replace existing Asphalt Concrete (AC) traveled ways and shoulders with Jointed Plain Concrete Pavement (JPCP). The proposed project would upgrade existing non-standard guardrails/median barriers, construct vegetation control, reconstruct dikes, and adjust drainage inlets. This proposed project would also include cold in-place recycling in the city of Hesperia on the existing AC on the local streets. The project proposes the installation of 4 emergency access roads with gravel from southbound I-15 to local roads.

### **Surrounding land uses and setting:**

The proposed project is located in Mojave Desert, with the most southern location being near the San Bernardino National Forest and mountains. The areas surrounding the project site consists of commercial use and disturbed/developed land.

**Other public agencies whose approval is required** (e.g. permits, financial approval, or participation agreements):

California Department of Fish and Wildlife 2081 Incidental Take Permit

## **NATIVE AMERICAN CONSULTATION**

**Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1?**  Yes  No

**If yes, ensure that consultation and heritage resource confidentiality follow PRC sections 21080.3.1 and 21080.3.2 and California Government Code 65352.4**

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and proposed project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the

California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this proposed project. Please see the checklist beginning on page 3 for additional information.

- |   |  |
|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry        |
| <input type="checkbox"/> Air Quality                        | <input checked="" type="checkbox"/> Biological Resources |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                          |
| <input type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions        |
| <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality         |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources               |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing              |
| <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                      |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources       |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                        |
| <input type="checkbox"/> Mandatory Findings of Significance |  |



## PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

**State Clearinghouse Number:**

**DIST-CO-RTE-PM: 08-SBd-15 (PM R28.6-37.5).**

**EA: 0K122**

---

### **Project Description**

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in San Bernardino County, California. The project consists of resurfacing, restoration, and rehabilitation (3R) in both directions on the highway, it is proposed to replace existing Asphalt Concrete (AC) traveled ways and shoulders with Jointed Plain Concrete Pavement (JPCP). The project would upgrade existing non-standard guardrails/median barriers, construct vegetation control, reconstruct dikes, and adjust drainage inlets. This project would also include cold in-place recycling in the city of Hesperia on the existing AC on the local streets. The project proposes the installation of 4 emergency access roads with gravel from southbound I-15 to local roads.

The proposed project extends approximately 8.9 miles along Interstate 15 (PM R28.6-37.5) and is located in Baldy Mesa and Cajon Pass U.S. Geological Survey (USGS) 7.5-minute quadrangle (Table 1). The proposed project crosses through several ranges and townships, as indicated below.

**Table 1. Project Township, Range, and Section Data**

<b>USGS 7.5-minute Quadrangle</b>	<b>Township</b>	<b>Range</b>	<b>Section(s)</b>
Baldy Mesa	T4N	R5W	33,28,27,22,14,11,12,1
Cajon Pass	T3N	R5W	8,5

## **Determination**

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a MND for this proposed project. This does not mean that Caltrans' decision regarding the proposed project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this proposed project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have no effect on Aesthetics, Agriculture and Forest Resources, Cultural Resources, Geology and Soils, Energy, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, Hydrology and Water Quality and Wildfire.
- In addition, the proposed project would have less-than-significant effects on Air Quality, Greenhouse Gas Emissions, and Transportation and Traffic.
- With the following measures incorporated, the proposed project would have less- than-significant effects on Biological Resources:

**BIO-1** The designated temporary staging areas are approved in Table 1, additional temporary staging areas would require a Caltrans Biologist analysis for potential project impacts and authorization. Prior to the beginning of construction, the temporary staging areas would be fenced with temporary construction fence and maintained throughout the construction of the proposed project. The temporary staging areas would be appropriately fenced in order to accurately delineate the work areas and to prevent the work areas from extending beyond the approved temporary staging area.

**BIO-2** Pre-construction botanical surveys would be conducted by the Caltrans Biologist prior to mobilization to ensure the construction areas, including the temporary staging areas do not support any listed or special-status flora as described in Table 2. If listed or special-status flora are identified, then all flora within the proposed project impact area would be flagged in order to ensure they are visible to construction personnel and are avoided.

**BIO-3** Equipment Staging: Equipment, vehicles, and materials must be staged and stored in Caltrans right-of-way and in areas previously paved or previously disturbed. No work would require native vegetation removal.

**BIO-4** Materials and Spoils Control: Project materials would be not cast from the project site into surrounding areas and project related debris, spoils, and trash would be contained and removed to a proper disposal facility. Additionally, the project would prevent material, equipment, and debris from falling into the desert washes, streams, and drainages by containing all work to the designated temporary staging area and within the paved roadway.

**BIO-5** The federal Migratory Bird Treaty Act, 16 USC § 703–711, 50 CFR 10, and Fish & Game Code §§ 3503, 3513, and 3800 protect migratory and nongame birds, their occupied nests, and their eggs. Per the Migratory Bird Treaty Act, migratory birds, their nests, and their eggs are protected; and as a result of the construction activities, the project would consider construction windows for seasonal requirements for breeding birds and migratory non-resident species. In addition, habitat clearing, if applicable, would be avoided during species active breeding season defined as February 15 to September 1. The project footprint of disturbance shall be minimized to the maximum extent feasible and access into the project site would be through pre-existing access routes.

**BIO-6** If vegetation removal is necessary, vegetation removal would occur outside of the migratory bird nesting season, February 15 to September 1. If proposed project activities cannot be avoided during the nesting period from February 15 through September 1, a Caltrans Biologist would complete pre-construction bird nesting surveys for the entire project site and within the CDFW recommended 500 foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The surveys would be conducted by a Caltrans Biologist at the appropriate time(s) of day, no more than 2-weeks prior to commencement of project activities. If an active avian nest is located, the biologist would implement a 300-foot buffer for passerine birds and a 500-foot buffer for raptors until nesting is complete or the young have fledged.

**BIO- 7** The fence would be repaired, replaced and maintained throughout the construction of the project. And, immediately prior to the start of any ground-disturbing activities and prior to the installation of any fencing, clearance surveys for the desert tortoise would be conducted by the Contractor-Supplied Biologist or Caltrans Biologist. The entire project area would be surveyed for desert tortoise and their burrows by the Contractor-Supplied Biologist or Caltrans Biologist before the start of any ground-disturbing activities following the 2010 Field Survey Protocol. If burrows are found, they would be examined by the biologist to determine if desert tortoises are present. If desert tortoises are found at the project site, then Caltrans would consult with US Fish and Wildlife Service to determine appropriate protective measures.

**BIO-8** Work Environmental Awareness Training: Contractor-Supplied Biologist or Caltrans Biologist would present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They would be advised of proper identification of the desert tortoise, the steps to avoid impacts to the species and the potential penalties for the taking of such species. At a minimum, the program would include the following topics: occurrence of the listed and sensitive species in the project area and their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impact area. If at any time a desert tortoise is observed in the project area, the Resident Engineer would cease operations immediately and would contact the Caltrans Environmental Stewardship and Monitoring Unit.

**BIO-9** Whenever project vehicles are parked outside of a fence that is intended to preclude entry by desert tortoises, workers would check under the vehicle before moving it. If a desert tortoise is beneath the vehicle, the worker would notify the Contractor-Supplied Biologist and if the biologist is not onsite, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers would not be allowed to capture, handle, or relocate tortoises.

**BIO-10** Litter control measures would be implemented. Litter would be contained in containers to prevent attracting common ravens or other potential predators of the desert tortoise. Workers are prohibited from feeding all wildlife.

**BIO-11** If a desert tortoise is found in the work area, work would stop immediately, if possible, the desert tortoise would be allowed to leave on its own accord. Caltrans Biologist and workers are not allowed to capture, handle, or relocate tortoises. If it is necessary to relocate a desert tortoise consultation and coordination with USFWS and CDFW would be initiated.

**BIO-12** Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.

**BIO-13** Pre-construction clearance surveys for burrowing owl and nesting bird surveys would be conducted by the District Biologist prior to mobilization to ensure ESA does not have the nesting bird species. Bird nesting season is from February 15 to September 1. And, Preconstruction clearance surveys for burrowing owls are required and should follow CDFW's Burrowing Owl 2012 Staff Report on Burrowing Owl Mitigation.

**BIO-14** If burrowing owls or nesting birds are identified, the nest(s) would be flagged by the District Biologist. CDFW recommended 500-foot to 1500-foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The surveys would be conducted by the District Biologist at the appropriate time(s) of day, no more than 30-days prior to commencement of project activities. If an active nest is located, the biologist would implement a 500-foot buffer for raptors and 1500-foot buffer for burrowing owls until nesting is complete or the young have fledged.

### **Signature**

---

David Bricker  
Deputy District Director  
Caltrans District 8

---

Date

# Contents

---

<b>Chapter 1 Introduction</b> .....	<b>1</b>
Project Description and Background.....	1
<b>Chapter 2 CEQA Environmental Checklist</b> .....	<b>3</b>
I. Aesthetics .....	4
II. Agriculture and Forest Resources .....	4
III. Air Quality .....	6
IV. Biological Resources .....	9
V. Cultural Resources .....	15
VI. Energy .....	17
VII. Geology and Soils .....	18
VIII. Greenhouse Gas Emissions .....	20
IX. Hazards and Hazardous Materials .....	21
X. Hydrology and Water Quality .....	23
XI. Land Use and Planning .....	25
XII. Mineral Resources .....	25
XIII. Noise.....	26
XIV. Population and Housing .....	27
XV. Public Services.....	27
XVI. Recreation.....	29
XVII. Transportation .....	29
XVIII. Tribal Cultural Resources .....	31
XIX. Utility and Service Systems .....	32
XX. Wildfire .....	33
XXI. Mandatory Findings of Significance .....	34
<b>Climate Change</b> .....	<b>36</b>
Regulatory Setting .....	36
Environmental Setting .....	40
Project Analysis .....	44
Greenhouse Gas Reduction Strategies .....	45
Adaptation.....	49
<b>Public Involvement, Draft IS Circulation and Response to Comments</b> .....	<b>54</b>
<b>References</b> .....	<b>58</b>

## Appendices

---

Appendix A	Maps
Appendix B	Distribution List
Appendix C	List of Preparers
Appendix D	Title VI Policy Statement
Appendix E	List of Technical Studies
Appendix F	Environmental Commitments Record

## Tables and Figures

---

<b>Table</b>	<b>Page</b>
Table 1. Project Township, Range, and Section Data .....	1
Table 2. Regional and Local Greenhouse Gas Reduction Plans .....	43

<b>Figure</b>	<b>Page</b>
Figure 1. U.S. 2019 Greenhouse Gas Emissions .....	41
Figure 2. California 2019 Greenhouse Gas Emissions by Economic Sector .....	45
Figure 3. Change in California GDP, Population, and GHG Emissions since 2000 .	42
Figure 4. California Climate Strategy .....	46
Figure 5. Project Vicinity Map .....	Appendix A
Figure 6. Aerial Project Location Map .....	Appendix A
Figure 7. Project Location Map .....	Appendix A

# Chapter 1 Introduction

---

## Project Description and Background

Project Title:	Interstate 15 Road Rehabilitation on Existing Mainline and Ramp Pavement
Lead Agency Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
Contact Person and Telephone Number:	Gabrielle Duff, Senior Environmental Planner Email address: gabrielle.duff@dot.ca.gov (909) 383-6933
Project Location:	Interstate 15 in San Bernardino County from PM R28.6-37.5
Project Sponsor's Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
General Plan Description:	N/A
Zoning:	N/A
Description of Project:	The proposed project consists of resurfacing, restoration, and rehabilitation (3R) in both directions on the highway, it is proposed to replace existing AC traveled ways and shoulders with Jointed Plain Concrete Pavement (JPCP). Purpose: To restore the structural integrity and ride quality of mainline and ramp pavements by rehabilitating the existing Portland Cement Concrete (PCC) and Asphalt Concrete (AC) pavements as appropriate. The proposed pavement rehabilitation strategies will reduce maintenance frequency and costs, improve ride quality, and increase the service life of the pavement. Need: The 2011 Pavement Condition Survey Inventory (PCS) data and the 2015 pavement condition report using Pavement Management (PaveM) tools indicate that the pavement within the project limits exhibits extensive cracking, faulting, and general poor ride quality.

Surrounding Land  
Uses and Setting:

The proposed project is located in the Mojave Desert, with the most southern location being near the San Bernardino National Forest. The areas surrounding the project site consists of commercial use and disturbed/developed land.

Other Public  
Agencies Whose  
Approval is  
Needed:

California Department of Fish & Wildlife (CDFW).

## Chapter 2 CEQA Environmental Checklist

---

**DIST-CO-RTE:08-SBd-15**

**PM/PM: R28.6/37.5**

**EA/Project No.: 0K122/0815000244**

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the proposed projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

**I. AESTHETICS**

Except as provided in Public Resources Code Section 21099, would the project:

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

**Response to Item a): No Impact.** Visual impacts on scenic vistas are not anticipated as the proposed project would involve pavement rehabilitation.

**Response to Item b): No Impact.** Interstate-15 (I-15) is not designated as state scenic highways according to Caltrans' State Scenic Highway Program. The proposed project site does not contain any structures and would not damage any scenic resources or historic buildings.

**Response to Item c): No Impact.** The existing visual character or quality of the site and its surroundings would remain the same as existing conditions; therefore, the proposed project would not substantially degrade the area.

**Response to Item d): No Impact.** The proposed project would not implement or create any new sources of light or glare that would adversely affect day or nighttime views in the area.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Aesthetics.

**II. AGRICULTURE AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental

effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Question	CEQA Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

**Response to Item a): No Impact.** According to the California Department of Conservation Farmland Mapping and Monitoring Program, there are no farmlands, or vacant lands that are mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance within the vicinity of the proposed project. The project vicinity consists mostly of Grazing Land, Urban Land, and Built-Up Land.

**Response to Item b): No Impact.** The proposed project would not conflict with areas that are zoned for agricultural use or the Williamson contract.

**Response to Item c): No Impact.** No forest lands, timberland, or timberland zoned Timberland Production are identified within the 0.5-mile radius of the proposed project location. A portion of the proposed project is located within the San Bernardino National Forest. The proposed project would not impact forest lands because the project is located within Caltrans right-of-way. The proposed project would not conflict within existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

**Response to Item d): No Impact.** The proposed project would not result in the loss

or conversion of forest land.

**Response to Item e): No Impact.** There are no forest lands, timberlands, or agricultural lands within the proposed project site. National Forest land is outside of the project area and would not be impacted. The proposed project would not involve changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Agriculture and Forest Resources.

**III. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

**Response to Item a): No Impact.** The proposed project is located in the Mojave Desert Air Basin (Basin). The Mojave Desert Air Management District (MDAQMD) has the responsibility of for managing the air resources for the portion of the Basin in which the project is located and is responsible for bringing the Basin into attainment for federal and state air quality standards. To achieve this goal, MDAQMD prepares plans for the attainment of air quality standards, as well as maintenance of those standards once achieved.

The proposed project is listed, as currently proposed, in the region’s conforming Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2019 Federal Transportation Improvement Program (FTIP) regional transportation planning documents. As such, the proposed project emissions are consistent with applicable air quality plans.

## **Response to Item b): Less-than-Significant Impact**

### Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by grading, and other construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NOX), volatile organic compounds (VOCs), directly emitted particulate matter (PM10 and PM2.5), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NOX and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involve clearing; cut/fill, trenching, and grading. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM10, PM2.5, and small amounts of CO, sulfur dioxide (SO<sub>2</sub>), NOX, and VOCs to be of concern.

Sources of fugitive dust would include disturbed soils at the construction site and trucks grading and paving the roadway. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to dust related PM10 emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO<sub>2</sub>, NOX, VOCs, and some soot particulate (PM10 and PM2.5) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO<sub>2</sub> is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and California Air Resources Board (ARB) regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 parts per million of sulfur), so SO<sub>2</sub>-related issues due to diesel exhaust would be minimal.

Most of the construction impacts on air quality are short-term in duration and, therefore, would not result in long-term adverse conditions. Implementation of the standardized measures, such as compliance with MDAQMD Rule 403 to reduce onsite fugitive dust,

would reduce any air quality impacts resulting from construction activities to a less-than-significant level.

#### Operation

No Impact because the proposed project would not increase the number of travel lanes on I-15, it would not likely lead to a substantial or measurable increase in vehicle travel, and therefore does not require a travel analysis. Therefore, the proposed project would not increase roadway capacity on I-15 would not increase emissions of criteria pollutants and their precursors following the construction period. No operational impacts related to violation of air quality standards would occur.

As discussed above, the proposed project construction would generate criteria pollutants and their precursors. However, such emissions would be short term and transitory, and fugitive dust would be limited through compliance with MDAQMD Rule 403. No net increase in operational emissions would occur, as traffic volumes would be the same under the Build Alternative and No-Build Alternative. Implementation of the proposed project would not increase roadway capacity on I-15 would not increase emissions of criteria pollutants and their precursors following the construction period. Because the proposed project construction would result in short-term generation of emissions, but no increases would occur for project operation, impacts related to a cumulatively considerable net increase of any criteria pollutants would be less than significant.

**Response to Item c): No Impact.** ARB characterizes sensitive receptors as children, elderly, asthmatics, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. Sensitive receptor locations may include hospitals, schools, and day care centers.

Sensitive receptors are not located within 500 feet of proposed project improvements. As such, impacts related to exposure of sensitive receptors to substantial pollutant concentration would not occur.

**Response to Item d): No Impact.** According to ARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Since the proposed project would not include these types of sensitive land uses so no impacts would occur.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Air Quality.

**IV. BIOLOGICAL RESOURCES**

Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
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?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

**Response to Items a): Less Than Significant with Mitigation Incorporated.** The information from this section is based on the Natural Environment Study (Minimal Impact) (NESMI) (Caltrans 2021). The proposed project is located in San Bernardino county in the city of Hesperia and Victorville. The Biological Study Area (BSA) included the area within 300 feet of State Right-Of-Way (ROW). The project limits include the area from Post Mile (PM) R28.6 to 37.5.

Natural Communities

The majority of the Biological Study Area (BSA) is comprised of Mojave Desert creosote scrub, including Creosote bush (*Larrea tridentata*), burrobush scrub

(*Ambrosia dumosa*) and non-native shrubs, and disturbed/developed land adjacent to the roadway. The proposed Project Impact Area is in disturbed/developed land adjacent to the roadway.

### Plant Species

Western Joshua tree (*Yucca brevifolia*) (WJT) became a candidate species under the California Endangered Species Act (CESA), effective October 9, 2020. As a candidate species, western Joshua tree now has full protection under CESA and any take of the species (including removal of western Joshua tree or similar actions) would require authorization under CESA. Joshua trees occur in desert grasslands and shrublands in hot, dry sites on flats, mesas, bajadas, and gentle slopes in the Mojave Desert (Gucker 2006). Soils in Joshua tree habitats are silts, loams, and/or sands and variously described as fine, loose, well drained, and/or gravelly, while the plants can reportedly tolerate alkaline and saline soils (Gucker 2006). Cole et al. (2011) characterizes populations as discontinuous and reaching their highest density on the well-drained sandy to gravelly alluvial fans adjacent to desert mountain ranges. The proposed project acquired one parcel to install a culvert to allow for better drainage in that area. The grading that is needed to maintain the culvert would result in the impact of one WJT. Caltrans would consult with CDFW and acquire a 2081 permit to authorize the impact to the candidate species.

Additionally, Santa Ana River woolly-star (*Eriastrum densifolium ssp. sanctorum*), Greata's aster (*Symphyotrichum greatae*), Palmer's mariposa-lily (*Calochortus palmeri var. palmeri*), Parish's alumroot (*Heuchera parishii*), San Bernardino aster (*Symphyotrichum defoliatum*), Short-joint beavertail (*Opuntia basilaris var. brachyclada*), White-bracted spineflower and (*Chorizanthe xanti var. leucotheca*) and Slender horned spineflower (*Dodecahema leptoceras*) were also identified as having the potential to occur within the BSA. However, Habitat suitability was not observed during the survey and no individuals were found within the project impact areas.

### Mammal Species

USFWS IPAC species lists indicated that San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) may occur within the BSA. California Natural Diversity Database (CNDDB) species list indicated potential occurrences for American badger (*Taxidea taxus*), Mohave ground squirrel (*Xerospermophilus mohavensis*), and Pallid bat (*Antrozous pallidus*). Suitable habitat for these species is not present and no observations were noted during the general surveys.

### Avian Species

The BSA contains suitable habitat for burrowing owl (*Athene cunicularia*), gray vireo (*Vireo vicinior*), Le Conte's thrasher (*Toxostoma lecontei*), and loggerhead shrike (*Lanius ludovicianus*) and migratory birds. Although no observations of any special status species were noted, these species are regarded as present. However, the potential suitable habitat for these species is degraded and highly unlikely for these to inhabit the existing pavement and disturbed roadway shoulders and no impacts to these listed species are anticipated. This proposed project may contribute to temporary increased noise levels around the proposed project site; therefore BIO-5 and BIO-6

would be implemented.

### Amphibian, Fish, and Reptile Species

It was identified that federal and state threatened listed species desert tortoise (*Gopherus agassizii*) may occur in the BSA. Additionally, the arroyo toad (*Anaxyrus californicus*), mohave tui chub (*Siphateles bicolor mohavensis*), coast horned lizard (*Phrynosoma blainvillii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), two-striped gartersnake (*Thamnophis hammondi*), and Santa Ana speckled dace (*Rhinichthys osculus ssp. 3*) may occur within the BSA as well. The proposed project area provides no suitable habitat for any of the species listed. Specifically, Caltrans has determined the proposed project would have “no take” to desert tortoise or mohave tui chub and does not require consultation with CDFW. Additionally, the proposed project would have “no effect” to desert tortoise or arroyo toad and requires no consultation with CDFW or USFWS. The proposed project is a covered action per the Programmatic Biological Opinion (8-8-10-F-59) Type 1 Project on the California Department of Transportation’s Small Projects and Operational Improvement Activities in Desert Tortoise Habitat in Imperial, Riverside, Inyo, Eastern Kern, Los Angeles, and San Bernardino Counties, California. The implementation of BIO-3, BIO-4, BIO-7, BIO-8, BIO-9, BIO-10, and BIO-11 would insure no impacts to desert tortoise and its habitat.

### **Response to Items b), c), and d): No Impact.**

#### Regional Species and Habitats and Natural Communities of Concern

Desert Tortoise (*Gopherus agassizii*) is reported by the IPaC and CNDDDB systems as having potential to occur within the BSA. There is no suitable habitat for desert tortoise is present within the Preliminary Investigation Area (PIA) including channels/drainages. The proposed project limits are disturbed to from roadway usage. A desert tortoise biological monitor would ensure no impacts result from work activities

#### Wetlands and Other Waters

The proposed project is located within the Colorado River watershed. The proposed project would feature repaving resurfacing, restoration, and rehabilitation in both directions on the highway, it is proposed to replace existing Asphalt Concrete traveled ways and shoulders with Jointed Plain Concrete Pavement. Therefore, Caltrans does not anticipate the proposed project would require any water or wetland regulatory permits.

#### Habitat Connectivity/Wildlife Corridors

The proposed project would not impact or contribute to a barrier for habitat connectivity.

**Response to Item e): No Impact.** The County of San Bernardino Ordinance No. 559 provides regulations and guidelines for the management of native trees within unincorporated areas of the County to ensure that timberlands of the County are

protected, and ecological balance is preserved. The Ordinance stipulates that tree removal may not occur on property greater than one-half acre in size and located at an elevation above 5,000 feet unless a permit to do so is obtained first or unless the tree removal is exempted. However, removal of regulated trees shall not apply to lands owned by the United States or State of California and to all trees removed by any federal or state agency and therefore Caltrans is exempt under Section 4B and 4D.

Chapter 88.01 of the San Bernardino County Development Code (SBCDC) provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. The intent of the regulations are to promote and sustain the health, vigor, and productivity of plant life and aesthetic values within the County through appropriate management techniques. Section 88.01.060 provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. Desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with Section 88.01.050 (Tree or Plant Removal Permits). However, removal of regulated trees or plants shall not apply to lands owned by the United States or State of California and is exempt under Section 88.01.030. Therefore, Caltrans is exempt under Section 88.01.030.

**Response to Item f): No Impact.** The proposed project is not located within the boundaries of an established Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other natural resources conservation plan. The proposed project footprint is not located within Federally designated Critical Habitat for any listed species. Therefore, the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

#### **Avoidance, Minimization, and/or Mitigation Measures**

**BIO-1** The designated temporary staging areas are approved in Table 1, additional temporary staging areas would require a Caltrans Biologist analysis for potential project impacts and authorization. Prior to the beginning of construction, the temporary staging areas would be fenced with temporary construction fence and maintained throughout the construction of the project. The temporary staging areas would be appropriately fenced in order to accurately delineate the work areas and to prevent the work areas from extending beyond the approved temporary staging area.

**BIO-2** Pre-construction botanical surveys would be conducted by the Caltrans Biologist prior to mobilization to ensure the construction areas, including the temporary staging areas do not support any listed or special-status flora as described in Table 2. If listed or special-status flora are identified, then all flora within the project impact area would be flagged in order to ensure they are visible to construction personnel and are avoided.

**BIO-3** Equipment Staging: Equipment, vehicles, and materials must be staged and stored in Caltrans right-of-way and in areas previously paved or previously disturbed. No work would require native vegetation removal.

**BIO-4** Materials and Spoils Control: Project materials would be not cast from the project site into surrounding areas and project related debris, spoils, and trash would be contained and removed to a proper disposal facility. Additionally, the project would prevent material, equipment, and debris from falling into the desert washes, streams, and drainages by containing all work to the designated temporary staging area and within the paved roadway.

**BIO-5** The federal Migratory Bird Treaty Act, 16 USC § 703–711, 50 CFR 10, and Fish & Game Code §§ 3503, 3513, and 3800 protect migratory and nongame birds, their occupied nests, and their eggs. Per the Migratory Bird Treaty Act, migratory birds, their nests, and their eggs are protected; and as a result of the construction activities, the project would consider construction windows for seasonal requirements for breeding birds and migratory non-resident species. In addition, habitat clearing, if applicable, would be avoided during species active breeding season defined as February 15 to September 1. The project footprint of disturbance shall be minimized to the maximum extent feasible and access into the project site would be through pre-existing access routes.

**BIO-6** If vegetation removal is necessary, vegetation removal would occur outside of the migratory bird nesting season, February 15 to September 1. If proposed project activities cannot be avoided during the nesting period from February 15 through September 1, a Caltrans Biologist would complete pre-construction bird nesting surveys for the entire project site and within the CDFW recommended 500-foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The surveys would be conducted by a Caltrans Biologist at the appropriate time(s) of day, no more than 2-weeks prior to commencement of project activities. If an active avian nest is located, the biologist would implement a 300-foot buffer for passerine birds and a 500-foot buffer for raptors until nesting is complete or the young have fledged.

**BIO- 7** The fence would be repaired, replaced, and maintained throughout the construction of the project. And, immediately prior to the start of any ground-disturbing activities and prior to the installation of any fencing, clearance surveys for the desert tortoise would be conducted by the Contractor-Supplied Biologist or Caltrans Biologist. The entire project area would be surveyed for desert tortoise and their burrows by the Contractor-Supplied Biologist or Caltrans Biologist before the start of any ground-disturbing activities following the 2010 Field Survey Protocol. If burrows are found, they would be examined by the biologist to determine if desert tortoises are present. If desert tortoises are found at the project site, then Caltrans would consult with US Fish and Wildlife Service to determine appropriate protective measures.

**BIO-8** Work Environmental Awareness Training: Contractor-Supplied Biologist or Caltrans Biologist would present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They would be advised of proper identification of the desert tortoise, the steps to avoid impacts to the species and the potential penalties for the taking of such species. At a minimum, the program would include the following topics: occurrence of the listed and sensitive species in the project area and their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal

and State laws, reporting requirements, and project features designed to reduce the impact area. If at any time a desert tortoise is observed in the project area, the Resident Engineer would cease operations immediately and would contact the Caltrans Environmental Stewardship and Monitoring Unit.

**BIO-9** Whenever project vehicles are parked outside of a fence that is intended to preclude entry by desert tortoises, workers would check under the vehicle before moving it. If a desert tortoise is beneath the vehicle, the worker would notify the Contractor-Supplied Biologist and if the biologist is not onsite, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers would not be allowed to capture, handle, or relocate tortoises.

**BIO-10** Litter control measures would be implemented. Litter would be contained in containers to prevent attracting common ravens or other potential predators of the desert tortoise. Workers are prohibited from feeding all wildlife.

**BIO-11** If a desert tortoise is found in the work area, work would stop immediately, if possible, the desert tortoise would be allowed to leave on its own accord. Caltrans Biologist and workers are not allowed to capture, handle, or relocate tortoises. If it is necessary to relocate a desert tortoise consultation and coordination with USFWS and CDFW would be initiated.

**BIO-12** Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.

**BIO-13** Pre-construction clearance surveys for burrowing owl and nesting bird surveys would be conducted by the District Biologist prior to mobilization to ensure ESA does not have the nesting bird species. Bird nesting season is from February 15 to September 1. And, Preconstruction clearance surveys for burrowing owls are required and should follow CDFW's Burrowing Owl 2012 Staff Report on Burrowing Owl Mitigation.

**BIO-14** If burrowing owls or nesting birds are identified, the nest(s) would be flagged by the District Biologist. CDFW recommended 500-foot to 1500-foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The surveys would be conducted by the District Biologist at the appropriate time(s) of day, no more than 30-days prior to commencement of project activities. If an active nest is located, the biologist would implement a 500-foot buffer for raptors and 1500-foot buffer for burrowing owls until nesting is complete or the young have fledged.

**V. CULTURAL RESOURCES**

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

**Response to Items a), b): No Impact.** Information from this section was taken from the Supplemental Historic Property Survey Report (SHPSR 2021), Finding of Effect (FOE 2021), Historic Property Survey Report (HPSR) (Caltrans 2020), Archaeological Survey Report (Caltrans 2020) and Screened Undertaking Memorandum (Caltrans 2018). Caltrans uses a single process to fulfill both its CEQA and National Historic Preservation Act (NHPA) Section 106 responsibilities. The Area of Potential Effects (APE) includes all areas that may be potentially, directly, and indirectly affected by the proposed project. The APE was established as the existing roadway of I-15 (PM 28.6/R37.5) including TCEs, staging and storage areas, right-of-way acquisitions, utility relocations, and a buffer to include potential indirect effects that may occur during construction. A cultural resources review was performed in October 2018, which included a review of location maps, project plans, aerial photography, the Native American Heritage Commission (NAHC) Sacred Lands File, a review of the Caltrans Cultural Resource Database (CCRD), and Caltrans Historic Bridge Inventory.

A Sacred Lands File request was sent out to the NAHC April 13, 2021. A response with a positive Sacred Lands File finding and recommendation to contact the San Manuel Band of Mission Indians was received April 27, 2021.

Two Native American Tribes were contacted under Assembly Bill (AB) 52. Letters were sent on April 13, 2021 to the San Manuel Band of Mission Indians and Twenty-Nine Palms Band of Mission Indians. The San Manuel Band of Mission Indians responded on April 15, 2021 with interest in the proposed project. The HPSR was provided to both Tribes on April 22, 2021. The San Manuel Band of Mission Indians responded on April 26, 2021 indicating the Tribe had no concerns with the proposed project and asked that standard measures for unanticipated discoveries and encountering human remains be included in the environmental commitments. To date, the Twenty-Nine Palms Band of Mission Indians has not responded.

A total of five resources were identified in the APE. Of these, two are historic-period roads (P-36-002910, National Old Trails Road/U.S. Route 66 [NOTR/Route 66] and P-36-007545, U.S. Route 395). The fragment of NOTR/Route 66 in the APE has been previously determined eligible for the National Register of Historic Places (NRHP), with previous concurrence from the State Historic Preservation Officer (SHPO). However, the proposed project would have No Adverse Effect on NOTR/Route 66. The fragment of U.S. 395 in the APE has been previously evaluated and determined not eligible for the NRHP, with previous concurrence from the SHPO. The remaining three include P36-010316, Southern Sierras Power Company "Tower Line", P36-021351, California Aqueduct (Eastern Branch), and P36-021326, Southern Pacific Railroad (SPRR). The power line and aqueduct pass above and below the vertical APE, respectively, and did not require evaluation. The fragment of the SPRR was exempted from evaluation under the Section 106 Programmatic Agreement (PA). Additionally, ten bridges in the APE are listed in the Caltrans Historic Bridge Inventory as Category 5: not eligible for the NRHP.

Caltrans, pursuant to Section 106 PA Stipulation X.B.1.a, has determined a Finding of No Adverse Effect is appropriate for this undertaking. In a letter dated June 8, 2021, the SHPO concurred with this Finding. As a result, no historical resources would be impacted by the proposed project activities as outlined in State CEQA Guidelines 15064.5(a).

**Response to Item c): No Impact.** No human remains were discovered during field surveys conducted for the proposed project, and no formal cemeteries are located within the project site. If buried cultural materials, including human remains, are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. If human remains are discovered, California Health and Safety code (H&SC) Section 7050.5 would be followed, which, in summary, states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought to be Native American, the Native American Heritage Commission would be contacted, who pursuant to PRC Section 5097.98 would then notify the Most Likely Descendent (MLD), as further detailed in measure CR-2.

### **Avoidance, Minimization, and/or Mitigation Measures**

The following measures would be included with implementation of the proposed project.

**CR-1: Treatment of Previously Unidentified Cultural Resources.** If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

**CR-2: Treatment of Human Remains.** In the event that human remains are found, the county coroner shall immediately be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains

are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC), who would then notify the Most Likely Descendent. The person who discovered the remains would contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

**VI. ENERGY**

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

**Response to a) and b): No Impact.** The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, as the proposed project involves of resurfacing, restoration, and rehabilitation in both directions on the highway, and includes upgrade existing non-standard guardrails/median barriers, construct vegetation control, reconstruct dikes, and adjust drainage inlets and would also include cold in-place recycling. The proposed project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency.

Caltrans promotes energy-efficient development by incorporating statewide goals from California's Energy Efficiency Strategic Plan, setting policies, codes, and actions. Implementing these actions would assist in energy conservation and would minimize the impact on climate change.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Energy.

**VII. GEOLOGY AND SOILS**

Would the project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

**Response to Item a): No Impact.** None of the proposed project segments are near an Alquist-Priolo Special Studies Zone; therefore, no impacts are anticipated. The proposed project area, like most of Southern California, is in a seismically active area. According to the California Department of Conservation California Earthquake Hazardous Zone Application (EQ Zapp) Map, the Telegraph Peak, Cajon, and Devore fault zones and traces are located about 5.7 miles southwest of the proposed project location. The Apple Valley South fault zone and traces are located about 10 miles East from the project location, and the Turtle Valley fault zone and traces are located about 16 miles northeast from the project location.

According to the California Department of Conservation EQ Zapp Map and the San Bernardino County Land Use Plan General Plan Geologic Hazardous Overlay Victorville Map, the proposed project area is outside of any landslide or liquefaction zones. Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, is anticipated to avoid or minimize any significant impacts related to liquefaction and seismic risk. Seismic

design would also meet city and county requirements under the Uniform Building Code. Therefore, through the incorporation of standard seismic design practices, the proposed project would result in no impact because construction or operation would not cause any seismic-related ground failure, including liquefaction.

**Response to Item b): No Impact.** Resurfacing, restoration, and rehabilitation occurring during the construction phase of the proposed project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. The disturbed soil area is defined by Caltrans as consisting of areas of exposed, erodible soil that are within the construction limits and results from construction-related activity. Most of the work would occur in previously disturbed land. Construction site BMPs, which are standard practices for erosion and water quality control, would be used on the proposed project site and would include the use of street sweeping, temporary cover for materials storage, and equipment parking at staging areas and side slopes. Construction methods related to water conservation practices, vehicle and equipment cleaning, fueling, and maintenance would be followed.

State jurisdictions require that an approved Stormwater Pollution Prevention Plan (SWPPP) be prepared for projects that involve greater than one acre of disturbance. A SWPPP specifies BMPs that would minimize erosion and keep all products of erosion from moving off site into receiving waters. Earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications, the project SWPPP, and the requirements of applicable government agencies; therefore, the proposed project would result in no impacts.

**Response to Item c and d): No Impact.** According to the California Department of Conservation EQ Zapp Map and the San Bernardino County Land Use Plan General Plan Geologic Hazardous Overlay Victorville Map, the proposed project area is outside of any liquefaction zones. The proposed project would not create substantial direct or indirect risks to life or property. Any earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications; therefore, the proposed project would result in no impact.

**Response to Item e): No Impact.** The proposed project would not affect existing or proposed septic tanks or alternate wastewater disposal systems, nor would the use of septic tanks be involved during construction. Therefore, no impacts would occur.

**Response to Item f): No Impact.** In coordination with the District Paleontological Studies, it was determined that due to the nature of the proposed project, no paleontological studies would be required for this project. No uniquely geologic feature was identified with the project area. The proposed project is not anticipated to destroy a unique paleontological resource or site or unique geologic feature directly or indirectly.

### **Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Geology and Soils.

## VIII. GREENHOUSE GAS EMISSIONS

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

**Response to Item a): Less-than-Significant Impact.** While the proposed project would result in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. With implementation of construction GHG-reduction measures, the impact would be less than significant.

**Response to Item b):** The proposed project does not conflict with an applicable plan, policy or regulation. See extensive climate change discussion below.

### **Project-Level GHG Reduction Strategies**

**TRF-1:** Prior to construction, a Traffic Management Plan would be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.

**IX. HAZARDS AND HAZARDOUS MATERIALS**

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

**Response to Items a), b): No Impact.** Implementation of the proposed project is not expected to result in the creation of any new health hazards or expose people to potential new health hazards. No storage of toxic materials or chemicals would occur, and the proposed project is not anticipated to increase the potential hazardous materials in the project area. The Initial Site Assessment (ISA) Checklist completed for this proposed project determined that the potential for hazardous waste involvement was low.

Following construction of the project, no structures or facilities would be constructed. As such, the proposed project would result in no impacts.

**Response to Item c): No Impact.** There are no schools within one-quarter mile of the proposed project site; therefore, no impacts would occur.

**Response to Item d): No Impact.** The Department of Toxic Substances Control (DTSC) EnviroStor database did not identify any sites containing hazardous material near the proposed project. No Impacts are expected to occur from project activities.

**Response to Items e): No Impact.** The proposed project is not in the vicinity of any airports and the proposed project would not result in a safety hazard for people residing or working in the area. Additionally, the proposed project would not contain any skyward features that would interfere with any air traffic flight paths or other airport activities. There are no private airstrips near the project. No impacts would occur.

**Response to Item f): No Impact.** The proposed project is not anticipated to interfere with any adopted local emergency response plans or emergency evacuation plans. Applicable traffic controls (e.g., flag person, signage), as identified in the Transportation Management Plan (TMP), would be implemented to minimize any potential interference with any adopted emergency response plan or evacuation plan.

**Response to Item g): No Impact.** The project area is surrounded by Rural Residential, Commercial land use, and some US Forest Service land. The surrounding landscape supports high density fuels to carry wildland fires. Because the proposed project is located within a fire prone area, measures to prevent construction related fires include following Forest Service and California Department of Forestry and Fire Protection guidelines for equipment use during Red Flag Warnings or other similar weather events.

### **Avoidance, Minimization, and/or Mitigation Measures**

The following measures would be included with implementation of the proposed project:  
**HW-1:** SSP 14-9.02: For rehabilitation of a bridge requiring Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) Notification.

**HW-2:** SSP 36-4: For residue from grinding and cold planing that contains lead from paint and thermoplastic-Requires Lead Compliance Plan.

**HW-3:** SSP 84-9.03B: Separate removal of painted or thermoplastic traffic stripe and pavement marking containing lead-Requires Lead Compliance Plan.

**HW-4:** SSP 7-1.02K(6)(j)(iii): Earth Material Containing Lead-Requires Lead Compliance Plan for disturbance when lead concentrations are non-hazardous.

**HW-5:** SSP 14-11.14: For generation of Treated Wood Waste.

**HW-6:** SSP 14-11.16: For removal and management of asbestos-containing construction materials in bridges.

**X. HYDROLOGY AND WATER QUALITY**

Would the project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:  (i) result in substantial erosion or siltation on- or off-site;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

**Response to Item a): No Impact.** According to the Waterboard Groundwater Information System Interactive Map and USGS National Water Information System Mapper, no groundwater or surface water sites were identified within the proposed project area. The potential temporary effects of the proposed project on the quality of the water in the area would come from runoff during construction, including erosion. Although the California Aqueduct does run through the project, proper discharge and protocol would be followed to ensure that the project will not violate any water quality standards or waste discharge requirements.

**Response to Item b): No Impact.** According to the Waterboard Groundwater Information System Interactive Map and USGS National Water Information System Mapper, no groundwater was identified within the proposed project area. The proposed project is in an impacted area of rural residential and commercial land use. It is not

expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed project is not expected to affect the amount of water consumed regionally through increased withdrawals from groundwater sources.

**Response to Items c): No Impact.** According to the USGS National Water Information System Mapper, no surface water sites were identified within the proposed project area. The project is located on previously disturbed land. This proposed project would not exceed the stormwater drainage capacity or redirect flood flow.

**Response to Item d): No Impact.** Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the proposed project has undetermined flood hazards as no analysis of flood hazards has been conducted.

**Response to Item e): No Impact.** According to the Waterboard Groundwater Information System Interactive Map and USGS National Water Information System Mapper, no groundwater or surface water sites were identified within the project area. This proposed project is not anticipated to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### **Avoidance, Minimization, and/or Mitigation Measures**

The following standard measures would be included for Hydrology and Water Quality:

**WQ-1:** Prior to the start of construction, a Storm water Pollution Prevention Plan (SWPPP) for reducing impacts on water quality shall be developed by the contractor, and approved by the Department.

**WQ-2:** The SWPPP control measures shall address the following categories: soil stabilization practices; sediment control practices; sediment tracking control practices; wind erosion control practices; and non-stormwater management and waste management and disposal control practices.

**WQ-3:** The contractor shall be required to comply with water pollution control provisions and SWPPP and conform to the requirements of the Department's Standard Specification Section 7-1.01G "Water Pollution," of the Standard Specifications.

**WQ-4:** If necessary, soil disturbed areas of the project site would be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted.

**XI. LAND USE AND PLANNING**

Would the project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

**Response to Items a), b): No Impact.** According to the Hesperia General Plan Land Use Map and the San Bernardino County Land Use Plan – Public San Bernardino County Map Viewer, the proposed project area consists mostly of Rural Residential and Commercial land use. A permanent R/W acquisition of a private parcel would be required for this project. Based on the proposed project scope and description, construction would not impact access by providing proper traffic control and access roads for emergency vehicles. After reviewing the Hesperia 2010 General Plan, the project does not interfere with the City’s land use goals. This proposed project would not physically divide an established community or cause significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Land Use and Planning.

**XII. MINERAL RESOURCES**

Would the project:

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
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?	No Impact

**Response to Items a), b): No Impact.** According to the Department of Conservation, the proposed project area has not been studied since 1994. According to the Department of Conservation Mines Web Map, no mines are located within a 0.5-mile radius of the project. No classified or designated mineral deposits of statewide or regional significance are known to occur within the proposed project area.

## Avoidance, Minimization, and/or Mitigation Measures

No measures are required Mineral Resources.

### XIII. NOISE

Would the project result in:

Question	CEQA Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

**Response to Item a): No Impact.** There are no noise-sensitive receptors located within or near the proposed project. The proposed project is not adjacent to or within a community. No construction noise impacts would occur because there are no residences or businesses in the immediate vicinity of the project. Additionally, construction noise would be short term and intermittent during the 640-day (working days) construction period and construction would be conducted in accordance with Caltrans Standard Specifications Section 14.8-02. The proposed project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies.

**Response to Item b): No Impact.** Any ground borne noise or vibration would be limited to the 3-year construction period (640 working days) and would be a long duration. There are no noise- or vibration-sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specifications, no impacts would occur.

**Response to Item c): No Impact.** The proposed project is not in the vicinity of a private airstrip, an airport land use plan or within two miles of a public airport or public use airport.

## Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Noise.

**XIV. POPULATION AND HOUSING**

Would the project:

Question	CEQA Determination
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

**Response to Item a): No Impact.** The proposed project is a rehabilitation project and would not induce population growth in an area, either directly or indirectly. The proposed project would not result in any construction of new homes, businesses, nor would the project result in the need for roads or other infrastructure that would facilitate an increase in population. No impacts are anticipated in this regard.

**Response to Item b): No Impact.** The proposed project requires additional right of way to construct a drainage pipe to alleviate water runoff in the area. However, the right of way acquired has no structures on it, so no residents or businesses would need to be relocated because of implementing the project. The proposed project would not necessitate the relocation of any existing developments and/or people. No impacts are anticipated in this regard.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Population and Housing.

**XV. PUBLIC SERVICES**

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

**Response to a) Fire Protection: No Impact.** The County of San Bernardino provides fire protection in the proposed project vicinity. The nearest fire stations are in San Bernardino County at San Bernardino County Fire Station #305 located at 8331 Caliente Rd in the city of Hesperia. The proposed project involves pavement rehabilitation to I-15 and would not result in an increase population and therefore not increase the demand for community services. In addition, the proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. No fire stations would be acquired or displaced.

**Response to b) Police Protection: No Impact.** The San Bernardino County Sheriff's Department and California Highway Patrol (CHP), as appropriate, provide police protection in the project vicinity. The nearest sheriff's station is the San Bernardino Sheriff's Department Victorville Station located at 14200 Amargosa Rd, in the city of Victorville. The proposed project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional police protection. No impacts on police protection from the implementation of the proposed project would occur. Implementation of a construction-period TMP, which is prepared for all Caltrans highway projects, would ensure that access is maintained to and from the project area and that the police service providers are notified prior to the start of construction activities; therefore, there are no anticipated impacts.

**Response to c) Schools: No Impact.** No schools are located near the project vicinity. The proposed project would not result in accessibility problems to existing schools in the vicinity of the project and is not expected to result in any other impacts on school services.

**Response to d) Parks: No Impact.** No parks are within the project vicinity and would not be affected by either construction or operation of the project.

**Response to e) Other Public Facilities: No Impact.** There are no other public facilities in the immediate project area and, as such, there would be no impacts on public facilities as a result of construction or operation of the project.

#### **Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Public Services.

**XVI. RECREATION**

Question	CEQA Determination
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

**Response to Items a) and b): No Impact.** The proposed project implementation does not have the capacity to generate a substantial increase to any existing neighborhood, regional parks, or other recreational facilities such that substantial physical deterioration would occur, nor would it require the construction or expansion of existing recreational facilities.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Recreation.

**XVII. TRANSPORTATION**

Would the project:

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

**Response to Items a) and b): No Impact.** The proposed project would not conflict with any adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities. Accordingly, no impacts in this regard are expected. The project would not increase traffic because no new land uses are proposed. The project would accommodate existing traffic demand, but it would not create new demand, directly or indirectly. The proposed project would also not reduce congestion and/or improve the level of service of traffic. The proposed 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 impacts are anticipated.

**Response to Item c): No Impact.** Due to the nature and scope of the project, no change in road alignment including curves or intersections area proposed.

**Response to Item d): Less-Than-Significant Impact.** The completed project would not interfere with any emergency access. Construction activities have the potential to result in temporary, localized, site-specific disruptions during the 640-day (working days) construction period. This could lead to an increase in delay times for emergency response vehicles during construction; however, the proposed project would include the preparation and implementation of a Transportation Management Plan (TMP), which would avoid or minimize any potential impacts. There would be installation of 4 emergency access roads with gravel from South Bound I-15 to local roads as well as applicable traffic controls (e.g., flag person, signage), as identified in the TMP, would be implemented to minimize any potential interference with any adopted emergency response plan or evacuation plan. Impacts would be less-than-significant during the construction period.

#### **Avoidance, Minimization, and/or Mitigation Measures**

The following avoidance and/or minimization measure would be implemented to minimize potential traffic impacts.

**TRF-1:** Prior to construction, a Traffic Management Plan would be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.

## **XVIII. TRIBAL CULTURAL RESOURCES**

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

<b>Question</b>	<b>CEQA Determination</b>
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

**Response to Item a): No Impact.** The NAHC was contacted on April 13, 2021 to obtain cultural resource information available in the Sacred Lands File. Two Native American Tribes were contacted under Assembly Bill (AB) 52. Letters were sent on April 13, 2021 to the Twenty-Nine Palms Band of Mission Indians and San Manuel Band of Mission Indians. One response was received as a result of this correspondence. San Manuel Band of Mission Indians responded April 13, 2021, requesting consultation. Caltrans provided to the San Manuel Band of Mission Indians and the Twenty-Nine Palms Band of Mission Indians the HPSR on April 22, 2021. San Manuel Band of Mission Indians responded April 26, 2021 asking that they be contacted if any artifacts or human remains are found during construction. These requests are recognized as part of the standard Cultural Studies Environmental Commitments for all Caltrans Projects. No Tribal Cultural Resources have been identified within the project site. As such, no impacts on Tribal Cultural Resources are anticipated.

**Response to Item b): No Impact.** There are no significant resources for a California Native American tribe identified near or within the project study area.

### **Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Tribal Cultural Resources.

**XIX. UTILITIES AND SERVICE SYSTEMS**

Would the project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

**Response to Item a): No Impact.** Construction of the proposed project would not generate the need for additional wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. No impacts would occur.

**Response to Item b): No Impact.** The proposed project would not require a water supply, as there are no existing entitlements or resources within the project area. No impacts would occur.

**Response to Item c): No Impact.** The proposed project would not require wastewater treatment. As a result, there would be no impact.

**Response to Item d and e): No Impact.** The proposed project would be in compliance with all federal, state, and local solid waste statutes and regulations; therefore, there would be no impact.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures are required for Utility and Service Systems.

**XX. WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

**Response to Item a): No Impact.** According to the Calfire Fire Hazard Severity Zones Map, the proposed project is located near very high, high, and moderate fire severity zones for State Responsibility Area (SRA) designation. There is a TMP in place to ensure that there will not be delay times for emergency response vehicles during construction. No Very High Fire Hazard Severity Zones for Local Responsibility Area (LRA) are designated within the project area.

**Response to Item a): No Impact.** The proposed project area is surrounded by rural residential and commercial land use. BLM land is located within the 0.5-mile radius of the project area. The proposed project is on LRA and SRA. Based on Cal Fire, Fire Hazard Severity Zones Map of the County of San Bernardino, the project is in an area designated as LRA Moderate. The proposed project is also located near very high, high, and moderate fire severity zones for SRA designation. No Very High Fire Hazard Severity Zones for LRA are designated within the project area.

**Response to Item c) and d): No Impact.** It is proposed to replace existing AC traveled ways and shoulders with Jointed Plain Concrete Pavement (JPCP) on Interstate-15. The proposed project would upgrade existing non-standard guardrails/median barriers, construct vegetation control, reconstruct dikes, and adjust drainage inlets and would also include cold in-place recycling in the city of Hesperia on the existing AC on the local streets. The proposed project would not install infrastructure that may result in increased fire risk. The proposed project does not significantly alter drainage patterns that would cause downslope or downstream flooding or landslides should a fire occur.

## Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Wildfire.

### **MANDATORY FINDINGS OF SIGNIFICANCE**

Question	CEQA Determination
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	No Impact
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

#### **Response to Item a): Less-than-Significant Impact with Mitigation Incorporated.**

Western Joshua tree (*Yucca brevifolia*) (WJT) became a candidate species under the California Endangered Species Act (CESA), effective October 9, 2020. As a candidate species, western Joshua tree now has full protection under CESA and any take of the species (including removal of western Joshua tree or similar actions) would require authorization under CESA. The proposed project acquired one parcel to install a culvert to allow for better drainage in that area. The grading that is needed to maintain the culvert would result in the impact of one WJT. Caltrans would consult with CDFW and acquire a 2081 permit to authorize the impact to the candidate species. BIO measures 1-14 would be implemented to avoid and/or minimize any other potential impacts.

**Response to Item b): No Impact.** The proposed project's impacts are either temporary and/or avoidable. In the case of temporary impacts, Caltrans standard measures would be implemented to avoid and/or minimize potential impacts. In the case of biological resources, specific measures would be implemented to minimize potential impacts or avoid impacts altogether. Therefore, there would be no cumulatively considerable impacts.

**Response to Item c): No Impact.** The proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

**Avoidance, Minimization, and/or Mitigation Measures**

No measures that have not already been identified for other topics are required for Mandatory Findings of Significance.

## **Climate Change**

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), and various hydrofluorocarbons (HFCs). CO<sub>2</sub> is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO<sub>2</sub>.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis would include a discussion of both.

## **REGULATORY SETTING**

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

### **Federal**

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach

encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— “the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

## **State**

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California’s GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective

reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor’s 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it would achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State’s long-range transportation plan to identify strategies to address California’s climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMT<sub>CO<sub>2</sub>e</sub>).<sup>1</sup> Finally, it requires the Natural Resources Agency to update the state’s climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

<sup>1</sup> GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO<sub>2</sub> is the most important GHG, so amounts of other gases are expressed relative to CO<sub>2</sub>, using a metric called “carbon dioxide equivalent” (CO<sub>2</sub>e). The global warming potential of CO<sub>2</sub> is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO<sub>2</sub>.

SB 1386, Chapter 545, 2016, declared “it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state’s greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands.”

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state’s goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California’s climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

EO N-79-20 (September 2020) establishes goals for 100 percent of in-state sales of new passenger cars and trucks to be zero-emissions vehicles by 2035, that the state transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible, and that 100 percent of medium- and heavy-duty vehicles in the state be zero-emissions by 2045 where feasible.

## **ENVIRONMENTAL SETTING**

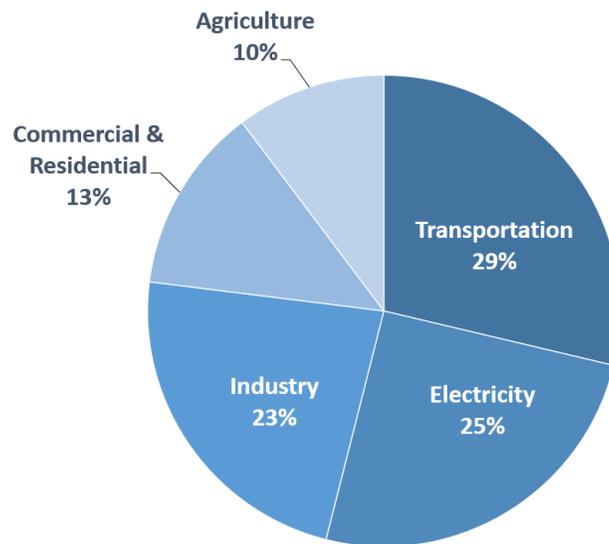
The proposed project is in a desert, rural residential, commercial area within San Bernardino County. Interstate 15 is the main transportation routes to and through the area for both passenger and commercial vehicles. I-15 links Southern California to neighboring states like Arizona and Nevada, where high volumes of goods are transported. This area is heavily traveled and often becomes congested.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allow countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

### **National GHG Inventory**

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, perfluorocarbons, SF<sub>6</sub>, and nitrogen trifluoride. It also accounts for emissions of CO<sub>2</sub> that are removed from the atmosphere by “sinks” such as forests, vegetation, and soils that uptake and store CO<sub>2</sub> (carbon sequestration). The 1990-2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8% from 1990 levels. Of these, 80 percent were CO<sub>2</sub>, 10 percent were CH<sub>4</sub>, and 7 percent were N<sub>2</sub>O; the balance consisted of fluorinated gases. CO<sub>2</sub> emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown on Figure 1, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021a, 2021b).

## Total U.S. Greenhouse Gas Emissions by Economic Sector in 2019

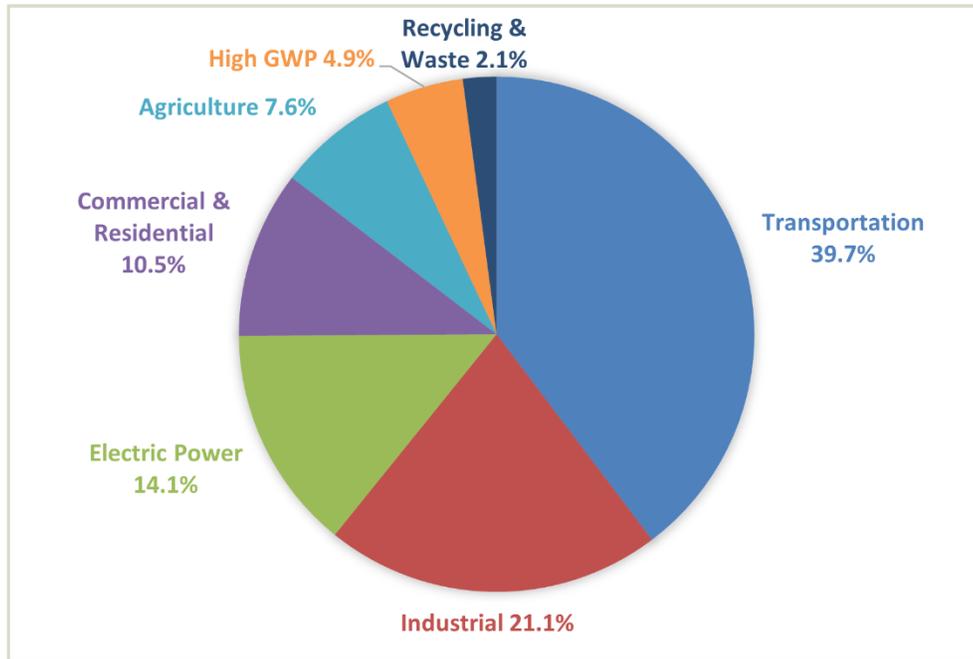


U.S. Environmental Protection Agency (2021). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019

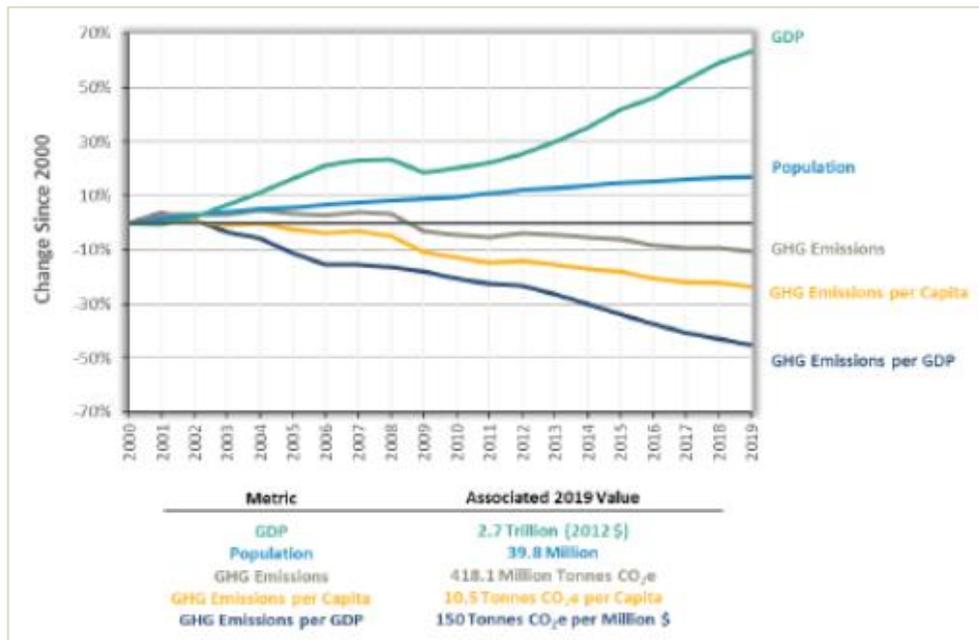
**Figure 1. U.S. 2019 Greenhouse Gas Emissions (Source: U.S. EPA 2021c)**

### State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2021 edition of the GHG emissions inventory reported emissions trends from 2000 to 2019. It found total California emissions were 418.2 MMTCO<sub>2e</sub> in 2019, a reduction of 7.2 MMTCO<sub>2e</sub> since 2018 and almost 13 MMTCO<sub>2e</sub> below the statewide 2020 limit of 431 MMTCO<sub>2e</sub>. The transportation sector (including intrastate aviation and off road sources) was responsible for about 40 percent of direct GHG emissions, a 3.5 MMTCO<sub>2e</sub> decrease from 2018. Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (Figure 3) (ARB 2021a).



**Figure 2. California 2019 Greenhouse Gas Emissions by Economic Sector (Source: ARB 2021a)**



**Figure 3. Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2021a)**

AB 32 required ARB to develop a Scoping Plan that describes the approach California

would take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California’s 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California would use to reduce GHG emissions.

## Regional Plans

ARB sets regional targets for California’s 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that would cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 8 percent and 19 percent for the years 2020 and 2035, respectively (ARB 2021b). San Bernardino County’s Emissions Reduction Plan sets a target to reduce countywide GHG emissions from all sources by 15 percent below 2007 levels by 2020. SCAG and San Bernardino County policies directed at reducing GHG emissions include the following, among other measures.

**Table 2. Regional and Local Greenhouse Gas Reduction Plans**

Title	GHG Reduction Policies or Strategies
<p>Southern California Association of Governments <i>2016-2040 Regional Transportation Plan/Sustainable Communities Strategy</i> (adopted April 2016)</p>	<ul style="list-style-type: none"> <li>● Invest in long-term emission-reduction investments for trucks and rail.</li> <li>● Implement technology and mobility innovations.</li> <li>● Invest in adding capacity and improving critical road conditions.</li> <li>● Implement technology and mobility innovations.</li> </ul>
<p><i>San Bernardino County Regional Greenhouse Gas Reduction Plan</i> (adopted March 2014)</p>	<ul style="list-style-type: none"> <li>● Roadway improvements, including signal synchronization and transportation flow management.</li> <li>● Expand renewable fuel/low-emission vehicle use.</li> <li>● Anti-idling enforcement.</li> <li>● Electric-powered construction equipment.</li> </ul>

## **PROJECT ANALYSIS**

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. CO<sub>2</sub> emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

### **Operational Emissions**

The purpose of the proposed project is to rehabilitate the pavement of I-15 and would not increase the vehicle capacity of the roadway. The proposed project includes pavement rehabilitation that does not involve construction of new roadway. The 500-foot long emergency access roads would improve safety along I-15 without adding travel capacity. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on I-15 or local roads, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

### **Construction Emissions**

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction is expected to require 640 working days during a 3-year construction window and to result in approximately 12,267 tons of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e)<sup>2</sup>.

The project would comply with all MDAQMD emissions control requirements during construction. All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and would comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. In addition, a TMP would be implemented minimize traffic delays during construction.

### **CEQA Conclusion**

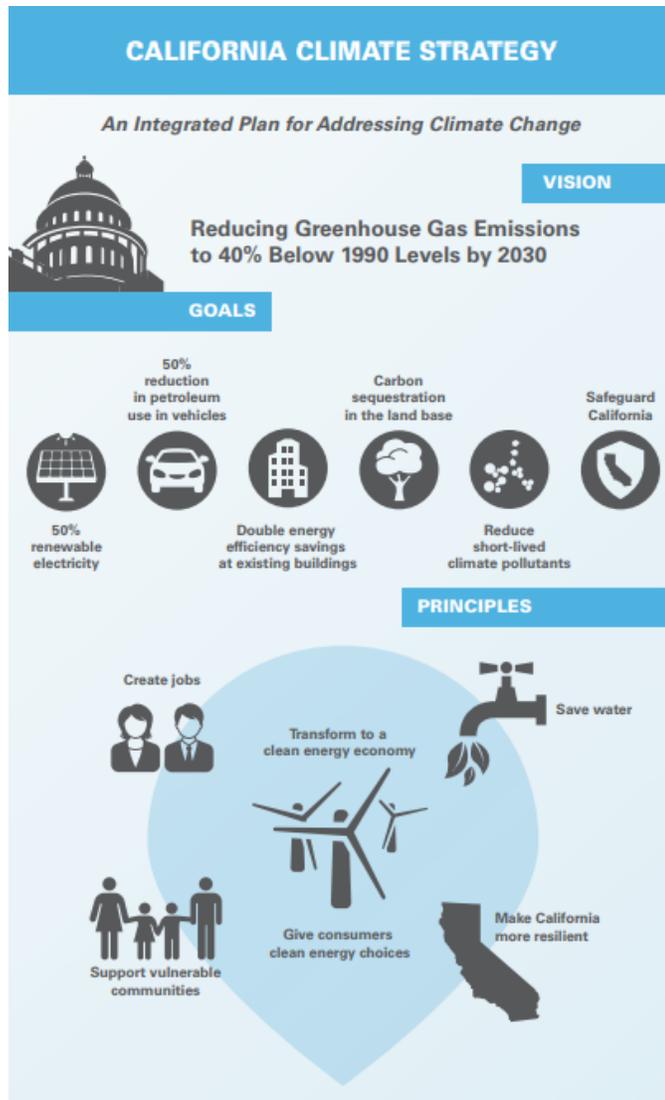
While the proposed project would result in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

## **GREENHOUSE GAS REDUCTION STRATEGIES**

### **Statewide Efforts**

Major sectors of the California economy, including transportation, would need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.



**Figure 4. California Climate Strategy**

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions would come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 40 percent by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes

and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged and vulnerable communities. Each agency is to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the State's carbon neutrality goal and build climate resilience.

### **Caltrans Activities**

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

#### ***CALIFORNIA TRANSPORTATION PLAN***

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, the CTP identifies additional strategies.

#### ***CALTRANS STRATEGIC PLAN***

The Caltrans 2020–2024 Strategic Plan includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program;

and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

### ***FUNDING AND TECHNICAL ASSISTANCE PROGRAMS***

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

### ***CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES***

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

### **Project-Level GHG Reduction Strategies**

The following measures would also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- Project would use cold-in-place recycling, which grinds and reuses existing pavement to repair the road. This saves energy and reduces emissions that result from production and transportation of new pavement material and disposal of old pavement.
- Project will in installing JPCP. This is considered "long-life" pavement and avoids GHG's that would occur if it was necessary to replace pavement more frequently.
- Implementation of a TMP includes strategies to minimize traffic delays (TRF-1) through the construction zone. The reduction of traffic delays would also reduce short-term increases in GHG emissions from disruptions in traffic flow.
- In the event that portable changeable message signs are required as part of the TMP, these signs would be solar-powered and would not involve GHG emissions during use.
- Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and would comply with all ARB emission reduction regulations.
- Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality.
- Requirements of the MDAQMD would apply to this project. Requirements that

reduce vehicle emissions, such as limits on idling time, may help reduce GHG emissions.

## **ADAPTATION**

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects would vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

### **Federal Efforts**

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy

to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

## State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment (2018)* is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience".
  - Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles

and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate “sea-level rise (SLR) projections into planning and decision making for projects in California” in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

## **Caltrans Adaptation Efforts**

### ***CALTRANS VULNERABILITY ASSESSMENTS***

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.

- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments would guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

## **Project Adaptation Analysis**

### ***SEA-LEVEL RISE***

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

### ***FLOODPLAINS***

The proposed project is not in or near a floodplain. The Caltrans Climate Change Vulnerability Assessment for District 8 maps projected changes in 100-year storm precipitation depths under climate change scenarios. In the project area, storm depth is projected to change by less than 5% through 2085. The project would include shoulder backing, which improves drainage. Due to poor drainage in the area that often floods portions of I-15 during rainfall, permanent treatment controls, soil stabilization, and erosion control measures would avoid or reduce sediment transport onto the roadway during rainfall. The addition of modified channel with infiltration trenches and underground pipes with a depth from 8 to 10 feet from original ground would improve stormwater drainage. Effects of climate change on precipitation are not likely to adversely affect the project.

### ***WILDFIRE***

The area surrounding the proposed project is undeveloped desert with sparse vegetation. The project is in a designated Local Responsibility Area and State Responsibility Area. Based on the Cal Fire, Fire Hazard Severity Zones Map for the County San Bernardino, the project is in designated Federal Responsibility Area (FRA) and Local Responsibility Area (LRA). The proposed project is not in or near any areas designated as LRA Very High, or LRA High fire hazard severity zones. The project would not introduce new structures or uses that exacerbate fire risk or be vulnerable to fire damage. Caltrans 2018 revised Standard Specification 7-1.02M(2) mandates fire prevention procedures during construction, including a fire prevention plan. The project would not impair emergency response vehicles or emergency evacuation. Accordingly,

the project is not anticipated to be vulnerable to or exacerbate the impacts of wildfires intensified by climate change.

## **Public Involvement and Draft IS Circulation**

---

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings and Project Development Team (PDT) meetings. This section summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

### **U.S. Fish and Wildlife Service**

A list of threatened and endangered species was obtained from the USFWS on May 04, 2021.

### **Native American Tribes**

AB 52 consultation was initiated on April 13, 2021. Caltrans contacted San Manuel Band of Mission Indians. The Tribe responded on April 13, 2021, requesting consultation. The HPSR was provided on April 22, 2021. San Manuel Band of Mission Indians responded on April 26, 2021 and requested measures to be included on the project. The measures are covered by Caltrans Standard Specifications.

Caltrans also contacted the Twenty-Nine Palms Band of Mission Indians. Caltrans did not receive a response.

## References

---

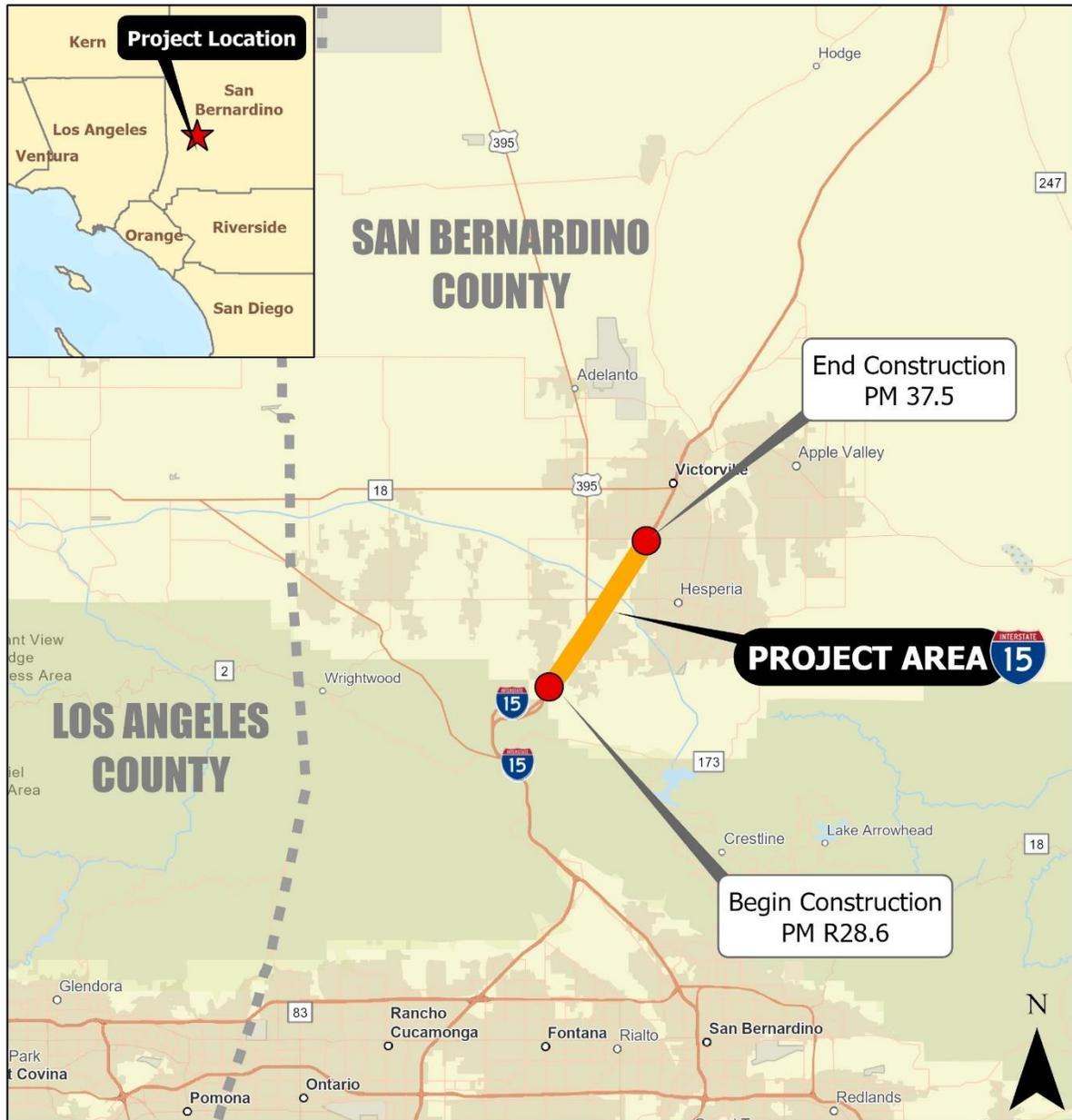
- California Air Resources Board (ARB). 2021a. *California Greenhouse Gas Emissions Inventory–2021 Edition*. <https://ww2.arb.ca.gov/cc/inventory/data/data.htm>. Accessed: October 13, 2021.
- California Air Resources Board (ARB). 2021b. *SB 375 Regional Plan Climate Targets*. <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: August 21, 2019.
- California Department of Transportation. 2019. *Caltrans Climate Change Vulnerability Assessments. District 8 Technical Report*. June. Prepared by WSP. <https://dot.ca.gov/programs/transportation-planning/2019-climate-change-vulnerability-assessments>.
- California Department of Transportation. 2021a. *California Transportation Plan 2050*. February. <https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan>. Accessed: March 3, 2021.
- California Department of Transportation. 2021b. *Caltrans 2020-2024 Strategic Plan*. <https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf>. Accessed: May 19, 2021.
- Federal Highway Administration (FHWA). 2019. Sustainability. <https://www.fhwa.dot.gov/environment/sustainability/resilience/>. Last updated February 7, 2019. Accessed: August 21, 2019.
- Federal Highway Administration (FHWA). No date. Sustainable Highways Initiative. <https://www.sustainablehighways.dot.gov/overview.aspx>. Accessed: August 21, 2019.
- State of California. 2018. California’s Fourth Climate Change Assessment. <http://www.climateassessment.ca.gov/>. Accessed: August 21, 2019.
- State of California. 2019. California Climate Strategy. <https://www.climatechange.ca.gov/>. Accessed: August 21, 2019.
- U.S. Department of Transportation (U.S. DOT). 2011. Policy Statement on Climate Change Adaptation. June. [https://www.fhwa.dot.gov/environment/sustainability/resilience/policy\\_and\\_guidance/us\\_dot.cfm](https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/us_dot.cfm). Accessed: August 21, 2019.
- U.S. Environmental Protection Agency (U.S. EPA). 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed: August 21, 2019.

U.S. Global Change Research Program (USGCRP). 2018. Fourth National Climate Assessment. <https://nca2018.globalchange.gov/>. Accessed: August 21, 2019.

## Appendix A Maps

---

- Figure 5. Project Vicinity Map
- Figure 6. Aerial Project Location Map
- Figure 7. Project Location Map



**VICINITY MAP**  
 I-15 Pavement Rehabilitation  
 08-SBD-15 PM R28.6/37.5  
 EA 08-0K122

**Figure 5. Vicinity Map**



0 1 2 3 4 Miles

0 1 2 3 4 Kilometers

### PROJECT LOCATION MAP

I-15 Pavement Rehabilitation

08-SBD-15 PM R28.6/37.5

EA 08-0K122

#### Legend

 Postmile

 Project Area

Figure 6. Aerial Project Location Map



**PROJECT LOCATION MAP**

I-15 Pavement Rehabilitation

08-SBD-15 PM R28.6/37.5

EA 08-0K122

**Figure 7. Project Location Map**

## Appendix B Distribution List

---

A public notice of this IS and/or a Notice of Intent to Adopt a Mitigated Negative Declaration was distributed to federal, state, regional and local agencies, elected officials and utilities and service providers. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided the Notice of Intent.

Mr. Cameron Gregg  
Mayor of Hesperia, CA  
(District 3)  
City Hall  
9700 Seventh Ave.  
Hesperia, CA 92345

Mr. William J. Holland,  
Council Member  
(District 2)  
City Hall  
9700 Seventh Ave.  
Hesperia, CA 92345

CHP San Bernardino  
2211 Western Ave.  
San Bernardino, Ca 92411

Mr. Larry Bird  
Council Member  
(District 5)  
City Hall  
9700 Seventh Ave.  
Hesperia, CA 92345

Ms. Brigit Bennington  
Mayor Pro Tem  
City Hall  
9700 Seventh Ave.  
Hesperia, CA 92345

Mr. Nils Bentsen  
City Manager  
9700 Seventh Ave.  
Hesperia, CA 92345

Ms. Rebekah  
Swanson, City  
Councilmember  
(District 1)  
City of Hesperia City Hall  
9700 Seventh Ave.  
Hesperia, CA 92345

Kevin Johnston  
2288 Buena Vista Ave,  
Livermore, CA 94550

Ms. Rachel Molina  
Deputy City Manager  
9700 Seventh Ave.  
Hesperia, CA 92345

Jon Billings, Captain  
Hesperia Police Department  
15840 Smoke Tree Street  
Hesperia, CA 92345

John Wickum, Captain  
Victorville Police Department  
14200 Amargosa Road  
Victorville, CA 92392

Ryan Leonard, Senior Planner  
City of Hesperia Development  
Services Department  
9700 Seventh Avenue  
Hesperia, CA 92345

Lynna Monell  
Clerk of the Board of  
Supervisors  
385 N. Arrowhead Avenue,  
2nd Floor  
San Bernardino, CA 92415- 0130

Dan Munsey, Fire Chief  
San Bernardino County Fire  
157 W. Fifth Street, 2<sup>nd</sup> Floor San  
Bernardino, CA 92415-0451

RWQCB Lahontan Region (6)  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA  
96150

CDFW Inland Deserts Region  
(Region 6)  
3602 Inland Empire Blvd, Suite C-  
220, Ontario, CA 91764

Christina Snider  
California Native American  
Heritage Commission  
1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691

San Bernardino County  
Transportation Authority  
(SBCTA)  
1170 W 3rd St 2nd floor, San  
Bernardino, CA 92410

California Department of Fish  
and Wildlife Inland Region  
ATTN: Wendy Campbell  
3602 Inland Empire Blvd, Suite  
C-220 Ontario, CA 91764

Col. Paul Cook  
First District Supervisor  
14955 Dale Evans Parkway  
Apple Valley, CA 92307

California State Assembly,  
District 33  
9700 7th Ave., Suite 227  
Hesperia, CA 92345

## **Appendix C List of Preparers**

---

The following personnel contributed to the preparation of this IS:

### **California Department of Transportation**

- Adam Compton, Senior Environmental Planner, Regulatory Permits
- Andrew Walters, Senior Environmental Planner, Cultural Studies
- Dicken Everson, Environmental Planner, Cultural Studies
- Edison Jaffery, Transportation Engineer, Environmental Engineering "A"
- Gabrielle Duff, Senior Environmental Planner, Environmental Studies "B"
- Kevin Gholamzadeh-Khoei, Transportation Engineer, Environmental Engineering "A"
- Luz Quinnell, Associate Environmental Planner, Biological Studies
- Meenu Chandan, Transportation Engineer, Environmental Engineering "A"
- Nancy Frost, Senior Environmental Planner, Biological Studies
- Paul Phan, Senior Transportation Engineer, Environmental Engineering "A"
- Rachel Darney-Lane, Associate Environmental Planner (Generalist), Environmental Studies "B"
- Sarah Gallimore, Associate Environmental Planner, Regulatory Permits



## **Appendix E List of Technical Studies**

---

Historic Property Survey Report, for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Dicken Everson, Caltrans, March 2020.

Supplemental Historic Property Survey Report, for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Dicken Everson, Caltrans, June 2021.

Natural Environment Study (Minimal Impacts), for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Luz Quinnell, Caltrans, April 2018.

Initial Site Assessment (ISA) Checklist for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Kevin Gholamzadeh-Khoe, Caltrans, June 2021.

Air Quality Analysis Exemption Memorandum, for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Edison Jaffery, Caltrans, February 2018.

Noise Study Memorandum, for I-15 Road Rehabilitation, 08-SBD-15-PM R28.6/37.5, EA 0K122/0815000244. Prepared by Meenu Chandan, Caltrans, February 2018.

## **Appendix F Environmental Commitments Record**

---

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During the project design, avoidance, minimization, and /or mitigation measures would be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits would be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff would ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long- term mitigation maintenance and monitoring would take place, as applicable. As the following ECR is a draft, some fields have not been completed, and would be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Permit Type	Agency	Date Submitted	Date Received	Expiration	Fee	Notes	Permit Requirement Completed	
							Name	Date
2081	California Department of Fish and Wildlife							

Date of ECR: 11/16/2021

Date: 11/25/2021

Project Phase:

PA/ED (DED/FED)

PS&E 100%

Construction

## ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015

PM R28.6/37.5

EA 08-0K122

PN 0815000244

Generalist: Rachel Darney-Lane

ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<b>CULTURAL RESOURCES</b>										
<b>CR-1:</b> If buried cultural resources are encountered during construction, it is Caltrans policy that work stop within 60 feet until a qualified archaeologist can evaluate the nature and significance of the find.	CE/CE	Standard on Projects.	RE/Contractor	Construction	Standard Specifications 2018: Section: 14-2.03A Archeological Resources: General.					
<b>CR-2:</b> In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD). The person who discovered the remains would contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505.	CE/CE	Standard on Projects.	RE/Contractor	Construction	Standard Specifications 2018: Section: 14-2.03A Archeological Resources: General. Health & Safety Code 7050.5 & Public Resource Code 5097					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Further provisions of PRC 5097.98 are to be followed as applicable.										
<b>HAZARDOUS WASTE</b>										
<b>HW-1</b> Remove Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue	1	ISA Checklist	RE/Contractor	Construction	Standard Specifications 2018: Section 14-11.12					
<b>HW-2</b> Residue Containing Lead from Paint and Thermoplastic	1	ISA Checklist	RE/Contractor	Construction	Standard Specifications 2018: Section 36-4					
<b>HW-3</b> For residue from removing yellow painted or yellow thermoplastic traffic stripes and pavement markings.	1	ISA Checklist	RE/Contractor	Construction	Standard Specifications 2018: Section 84-9.03B					
<b>HW-4</b> For disturbance of soil containing non-hazardous concentration of ADL. Requires Lead Compliance Plan.	1	ISA Checklist	RE/Contractor	Construction	Standard Special Provisions 2018: SSP 7-1.02K(6)(j)(iii)					
<b>HW-6</b> For generation of Treated Wood Waste.	1	ISA Checklist	RE/Contractor	Construction	Standard Special Provisions 2018: SSP 14-11.14					
<b>HW-7</b> Disposing Electrical Equipment containing Hazardous Waste.	1	ISA Checklist	RE/Contractor	Construction	Standard Special Provisions 2018: SSP 14-11.15					
<b>HW-8</b> For the removal and management of asbestos-containing construction materials in bridges. Requires Asbestos Compliance Plan.	1	ISA Checklist	RE/Contractor	Construction	Standard Special Provisions 2018: SSP 14-11.16					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<b>BIOLOGY</b>										
<b>BIO-1 Designated Temporary Staging and Fencing in Table 1 of NESMI (PM 31.5, Northbound I-15).</b> Additional temporary staging areas would require a Caltrans Biologist analysis for potential impacts and authorization. Prior to beginning of construction, the temporary staging areas would be fenced with temporary construction fence and maintained throughout the construction of the project. The temporary staging area would be appropriately fenced in order to accurately delineate the work areas and to prevent the work areas from extending beyond the approved temporary staging area.	4	NESMI	RE/Contractor	Pre-construction						
<b>BIO-2 Pre-construction botanical surveys</b> would be conducted by the Caltrans Biologist prior to mobilization to ensure the construction areas, including the temporary staging areas do not support any listed or special-status flora as described in Table 2 of the NESMI. If listed or special-status flora are identified, then all flora within the project impact area would be flagged in order to ensure they are visible to construction personnel and are avoided.	4	NESMI	RE/Contractor	Pre-construction	Standard Special Provisions 2018: Section 14-6.03A					
<b>BIO-3 Equipment Staging.</b> Equipment, vehicles, and materials must be staged and stored in	4	NESMI	RE/Contractor	Pre-construction /Construction	Standard Special					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Caltrans right-of-way and in areas previously paved or previously disturbed. No work would require native vegetation removal.					Provisions 2018: Section 14-6.03					
<b>BIO-4 Materials and Spoils Control.</b> Project materials would not be cast from the project site into surrounding areas and project related debris, spoils, and trash would be contained and removed to a proper disposal facility. Additionally, the project would prevent material, equipment, and debris from falling into the desert washes, streams, and drainages by containing all work to the designated temporary staging area and within the paved roadway	4	NESMI	RE/Contractor	Pre-construction/ Construction/ Post-construction	Standard Special Provisions 2018: Section 14-10					
<b>BIO-5 Migratory Bird Treaty Act.</b> The project would consider construction windows for seasonal requirements for breeding birds and migratory non-resident species. In addition, habitat clearing, if applicable, would be avoided during species active breeding season defined as February 15 to September 1. The project footprint of disturbance shall be minimized to the maximum extent feasible and access into the project site would be through pre-existing access routes. Please follow the Standard Special Provisions Section 14-6.03B	9	NESMI	RE/Contractor	Pre-construction/ Construction	Standard Special Provisions 2018: 14-6.03B					
<b>BIO-6 Vegetation Removal.</b> Would occur outside of the migratory bird	10	NESMI	RE/Contractor	Pre-construction/	Standard Special					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<p>nesting season, February 15 to September 1. If proposed project activities cannot be avoided during nesting period from February 15 to September 1, a Caltrans Biologist would complete pre-construction bird nesting surveys for the entire project site and within the CDFW recommended 500 foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The Surveys would be conducted by a Caltrans Biologist at the appropriate time(s) of day, no more than two-weeks prior to commencement of project activities. If active avian nest is located, the biologist would:</p> <ul style="list-style-type: none"> <li>implement a 300 foot buffer for passerine birds and</li> </ul> <p>implement a 500 foot buffer for raptors until nesting is complete or the young have fledged.</p>			Authorized Biologist/Caltrans Biologist	Construction	Provisions 2018: 14-6.03B, 14-6.03D					
<p><b>BIO-7 Species protection for Desert Tortoise.</b></p> <p>1. Desert Tortoise Fence would be repaired, replaced, and maintained throughout the construction project.</p> <p>2. Clearance surveys for the Desert Tortoise conducted by the contractor supplied biologist OR the Caltrans Biologist would take</p>	11	NESMI	RE/Contractor Contractor Supplied Biologist/ Caltrans Biologist	Pre-construction/ Construction	Standard Special Provisions 2018: 14-6.03A, 14-6.03D(1)					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<p>place immediately prior to the start of any ground-disturbing activities AND prior to the installation of any fencing.</p> <p>3. Entire project area would be surveyed for desert tortoise and their burrows by an authorized biologist before the start of any ground-disturbing activities following the 2010 Field Survey Protocol. If burrows are found they would be examined by the authorized biologist to determine if desert tortoises are present.</p> <p>If desert tortoises are found at the project site, Caltrans would then consult with US Fish and Wildlife Service to determine appropriate protective measures.</p>										
<p><b>BIO-8 Work Environmental Awareness Training.</b> A Contractor-Supplied biologist or Caltrans Biologist would present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They would be advised of proper identification of the desert tortoise, the steps to avoid impacts to the species and the potential penalties</p>	11	NESMI	RE/Contractor/ Authorized Biologist	Pre-construction/ Construction	Standard Special Provisions 2018: 14-6.03(D)					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<p>for the taking of such species. At a minimum, the program would include the following topics:</p> <ul style="list-style-type: none"> <li>• Occurrence of the listed and sensitive species in the project area and their general ecology,</li> <li>• Sensitivity of the species to human activities,</li> <li>• Legal protection afforded these species,</li> <li>• Penalties for violations of Federal and State laws,</li> <li>• Reporting requirements, and project features designed to reduce the impact area.</li> </ul> <p>If at any time a desert tortoise is observed in the project area, the Resident Engineer would cease operations immediately and would contact the Caltrans Environmental Stewardship &amp; Monitoring Unit</p>										
<p><b>BIO-9 Desert Tortoise Avoidance and Vehicles.</b> Whenever project vehicles are parked outside of a fence that is intended to preclude entry by desert tortoises, workers would check under the vehicle before moving it. If a desert tortoise is beneath the vehicle, the worker would notify the Contractor-Supplied biologist. If an authorized biologist is not present on-site, the Resident</p>	11	NESMI	RE/Contractor	Pre-construction/ construction	Standard Special Provisions 2018: Section <ul style="list-style-type: none"> <li>• 14-6.03A,</li> <li>• 14-6.03D</li> <li>• 80-4</li> </ul>					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Engineer or supervisor must notify the Caltrans Biologist. Workers would not be allowed to capture, handle, or relocate tortoises										
<b>BIO-10 Litter Control.</b> Litter control measures would be implemented. Litter would be contained in containers to prevent attracting common ravens or other potential predators of the desert tortoise. Workers are prohibited from feeding all wildlife.	11	NESMI	RE/Contractor	Pre-construction/ Construction	Standard Special Provisions 2018: Section 14-10					
<b>BIO-11 Desert Tortoise Finding.</b> If a desert tortoise is found in the work area, work would stop immediately, if possible the desert tortoise would be allowed to leave on its own accord. Caltrans Biologist and workers are not allowed to capture, handle, or relocate tortoises. If it is necessary to relocate a desert tortoise consultation and coordination with USFWS and CDFW would be initiated.	11	NESMI	RE/Contractor	Pre-construction/ Construction	Standard Special Provisions 2018: Section 14-6.03					
<b>BIO-12: Rock Slope Protection</b> must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.	2	NES Update Memo	RE/Contractor	Pre-construction/ Construction	Standard Special Provisions 2018: Section 14-6.03					
<b>BIO-13: Pre-construction clearance surveys</b> for burrowing owl and nesting bird surveys would be conducted by the District Biologist prior to mobilization to ensure ESA does not have the nesting bird species. Bird nesting season is from	2	NES Update Memo	RE/Contractor	Pre-construction	Standard Special Provisions 2018: Section 14-6.03B					

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
February 1 to September 30. And, Preconstruction clearance surveys for burrowing owls are required and should follow CDFW's Burrowing Owl 2012 Staff Report on Burrowing Owl Mitigation.										
<b>BIO-14: If burrowing owls or nesting birds are identified</b> , the nest(s) would be flagged by the District Biologist. CDFW recommended 500-foot to 1500-foot buffer surrounding the project site for both diurnal and nocturnal nesting birds, including burrowing owl, prior to commencing project related activities. The surveys would be conducted by the District Biologist at the appropriate time(s) of day, no more than 30-days prior to commencement of project activities. If an active nest is located, the biologist would implement a 500-foot buffer for raptors and 1500-foot buffer for burrowing owls until nesting is complete or the young have fledged.	2	NES Update Memo	RE/Contractor	Pre-construction/ Construction	Standard Special Provisions 2018: Section 14-6.03B					
<b>TRAFFIC AND TRANSPORTATION/BICYCLE AND PEDESTRIAN FACILITIES</b>										
<b>TRF-1:</b> Prior to construction, a Traffic Management Plan would be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.		TMP	District Design / District Traffic Management / District	Pre- Construction						

Date of ECR: 11/16/2021  
 Date: 11/25/2021

# ENVIRONMENTAL COMMITMENTS RECORD (SBd I-15 Rehabilitate Existing Mainline and Ramp Pavement)

08-SBd-015  
 PM R28.6/37.5

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E 100%  
 Construction

EA 08-0K122  
 PN 0815000244  
 Generalist: Rachel Darney-Lane  
 ECL: Josif Pelayo

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
			Environmenta l Planning / Resident Engineer / Contractor							