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General Information about This Document

What's in this document:

The California Department of Transportation (Department), with cooperation from the County of Riverside and the cities of Eastvale and Jurupa Valley, has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Riverside County, California. The proposed project would improve the existing freeway interchange at Interstate 15 (I-15) and Limonite Avenue. The Department is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document.
- Additional copies of the document are available for review at: Riverside County Transportation Department (3525 14th Street, Riverside 92501), Eastvale Library (7447 Scholar Way, Eastvale 92880), and Glen Avon Library (9244 Galena Street, Jurupa Valley 92509)
- This document may be downloaded at the following website: <http://www.dot.ca.gov/dist8/I-15Limonite.htm>.
- Attend the public meeting on August 6, 2015 from 6:30 p.m. to 8:30 p.m. at Dr. Augustine Ramirez Intermediate School located at 6905 Harrison Avenue, Eastvale 92880.
- We'd like to hear what you think. If you have any comments regarding the proposed project, please send your written comments to the Department by the deadline.

Send comments via postal mail to:

California Department of Transportation, District 08
Kurt Heidelberg, M.S., M.A.
Senior Environmental Planner
Environmental Studies "D"
464 West 4th Street, MS-820
San Bernardino, California 92401-1400

Send comments via email to: D8I15Limonite@dot.ca.gov

Please use "I-15/Limonite Avenue Interchange Project" in the subject line of the email.

- Be sure to send comments by the deadline: August 19, 2015.

What happens next:

After comments are received from the public and reviewing agencies, the Department 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, the Department could design and construct all or part of the project.

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 County of Riverside, Attn: John Marcinek, County Project Manager, 3525 14th Street, Riverside 92501, or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

FHWA Highway ID No.

SCH # _____
08-RIV-15-PM 46.7/49.7
PN 08-0002-0201/EA 0E150

Improve the I-15/Limonite Avenue Interchange (Postmile 46.7 to Postmile 49.7) within the Cities of Eastvale and Jurupa Valley, Riverside 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

Responsible Agencies: County of Riverside, City of Eastvale, and City of Jurupa Valley

7/8/2015
Date of Approval



DAVID BRICKER
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

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PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

PN 0800020201

SCH: _____

Project Description

The County of Riverside (County), in cooperation with the California Department of Transportation (Department) and the cities of Eastvale and Jurupa Valley, proposes to improve the existing freeway interchange at Interstate 15 (I-15) and Limonite Avenue. Limonite Avenue is an existing four-lane facility traveling in an east-west direction. Within the project limits, I-15 is currently a six-lane access-controlled freeway with three mixed-flow lanes in each direction. The Limonite Avenue Overcrossing is an east-west roadway, and currently provides two traffic lanes in each direction and two left-turn lanes at the I-15/Limonite Avenue on- and off-ramp intersections. To the west of I-15 (approximately 700 feet west of the intersection of the I-15 southbound ramps and Limonite Avenue), Limonite Avenue widens to three lanes in each direction. The I-15 median is currently unimproved and depressed with Type K barriers along the northbound outer edge of the median shoulder and south along the southbound outer edge of the median shoulder. Commercial and retail land uses are located to the northwest, southwest, and southeast of the interchange area. A Park and Ride facility is located along Limonite Avenue near the existing I-15 northbound on-ramp and residential land uses are also located in the vicinity of the interchange.

The project extends along Limonite Avenue between Hamner Avenue and Wineville Avenue. Along I-15, improvements are proposed from approximately 1.5 miles south to 1.4 miles north of the existing Limonite Avenue Overcrossing. The proposed project would replace the existing Limonite Avenue Overcrossing and would widen the roadway from four lanes to six lanes. Specifically, the project would widen the existing northbound and southbound on-and off-ramps, widen Limonite Avenue to three lanes in each direction through the interchange area, and replace the existing Limonite Avenue Overcrossing structure.

Determination

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

The Department has prepared an Initial Study for this 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:

- Land Use and Planning;
- Mineral Resources; and
- Recreation.

In addition, the proposed project would have less than significant effects on:

Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; Population and Housing; Public Services; Transportation and Traffic; Utilities and Service Systems; Mandatory Findings of Significance; and Cumulative Impacts.

The proposed project would have a less than significant effect with mitigation on Cultural Resources because the following mitigation measure would reduce potential effects on Paleontological Resources:

- **PALEO-1:** A Paleontological Mitigation Plan (PMP) shall be developed and implemented prior to commencement of project construction. The PMP shall follow the guidelines of the Department and the Society of Vertebrate Paleontology (SVP). The PMP shall include the following:
 - Attendance by a qualified paleontologist at the preconstruction meeting to consult with the grading and excavation contractors.
 - On-site presence of a paleontological monitor to inspect for paleontological resources on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential and on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resource potential.
 - Salvage and recovery of paleontological resources by the qualified paleontologist or paleontological monitor.
 - Collection of stratigraphic data by the qualified paleontologist and/or paleontological monitor to provide a stratigraphic context for recovered paleontological resources.
 - Preparation (repair and cleaning), sorting, and cataloguing of recovered paleontological resources.
 - Donation of prepared fossils, field notes, photographs, and maps to a scientific institution with permanent paleontological collections, such as the San Bernardino County Museum (SBCM).
 - Completion of a final summary report that outlines the results of the mitigation program.

The PMP shall also incorporate the general guidelines for conformable impact mitigation to significant nonrenewable paleontological resources as developed by the Society of Vertebrate Paleontology (1995). A PMP shall be prepared and submitted to the Department for review during the Plans, Specifications, and Estimates (PS&E) phase of the project.

DAVID BRICKER
Deputy District Director
District 08 Division of Environmental Planning
California Department of Transportation

Date

Table of Contents

	<u>Page</u>
Chapter 1	Proposed Project1-1
1.1	Project Location1-1
1.2	Project Description.....1-1
1.3	Project Maps.....1-5
1.4	Permits and Approvals Needed.....1-29
Chapter 2	CEQA Checklist.....2-1
2.1	Aesthetics2-3
2.2	Agricultural Resources2-5
2.3	Air Quality2-7
2.4	Biological Resources2-11
2.5	Cultural Resources2-22
2.6	Geology and Soils.....2-26
2.7	Greenhouse Gas Emissions2-29
2.8	Hazards and Hazardous Materials2-41
2.9	Hydrology and Water Quality2-47
2.10	Land Use and Planning.....2-56
2.11	Mineral Resources2-58
2.12	Noise2-59
2.13	Population and Housing2-75
2.14	Public Services2-79
2.15	Recreation2-81
2.16	Transportation and Traffic.....2-82
2.17	Utilities and Service Systems.....2-86
2.18	Mandatory Findings of Significance2-89
Chapter 3	Coordination and Comments3-1
3.1	Coordination with Resource Agencies.....3-1
3.2	Coordination with Property Owners.....3-1
3.3	Circulation.....3-2
Chapter 4	List of Preparers4-1
4.1	California Department of Transportation, District 08.....4-1
4.2	Riverside County.....4-1
4.3	City of Eastvale.....4-2

4.4	Dokken Engineering.....	4-2
4.5	ICF International	4-2
Chapter 5	Distribution List	5-1
Chapter 6	References	6-1

APPENDICES

Appendix A	Title VI Policy Statement
Appendix B	Environmental Commitment Record
Appendix C	Acronyms
Appendix D	USFWS Species List

List of Tables

Table 1-1	Existing, Opening Year, and Design Year LOS (No-Build)	1-3
Table 1-2	Permits, Reviews, and Approvals.....	1-29
Table 2-1	Summary of Permanent and Temporary Impacts on Jurisdictional Waters	2-16
Table 2-2	Summary of CT-EMFAC-Modeled CO ₂ Emissions	2-35
Table 2-3	Climate Change/CO ₂ Reduction Strategies	2-38
Table 2-4	Recognized Environmental Conditions.....	2-43
Table 2-5	NEPA Noise Abatement Criteria	2-60
Table 2-6	Project Future Worst Hour Noise Levels	2-65
Table 2-7	Predicted Future Noise Levels and Noise Barrier Analysis.....	2-67
Table 2-8	Summary of Barrier Cost for SB-1.....	2-71
Table 2-9	Right of Way Acquisitions	2-77
Table 2-10	Existing, Opening Year, and Design Year LOS	2-84
Table 2-11	Cumulative Projects List.....	2-93

List of Figures

Figure 1	Regional Vicinity Map	1-7
Figure 2	Project Location	1-9
Figure 3	Build Alternative Index Page	1-11
Figure 4	California Greenhouse Gas Forecast.....	2-33
Figure 5	Possible Effect of Traffic Operation Strategies in Reducing On-Road CO ₂ Emission	2-34
Figure 6	Mobility Pyramid.....	2-36
Figure 7	Noise Levels of Common Activities	2-61
Figure 8	Analysis Area, Noise Monitoring and Modeling Locations and Locations of Evaluated Noise Barriers	2-63

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Chapter 1 Proposed Project

1.1 Project Location

The County of Riverside, in cooperation with the California Department of Transportation (Department) and the cities of Eastvale and Jurupa Valley, proposes to improve the existing freeway interchange at Interstate 15 (I-15) and Limonite Avenue, located within the cities of Eastvale and Jurupa Valley in Riverside County, California. The project extends along Limonite Avenue between Hamner Avenue and Wineville Avenue. Along I-15, improvements are proposed from approximately 1.5 miles south to 1.4 miles north of the existing Limonite Avenue Overcrossing (OC). Commercial and retail land uses are located to the northwest, southwest, and southeast of the interchange area. A Park and Ride facility is located along Limonite Avenue near the existing I-15 northbound on-ramp. Vacant land and residential land uses are also located in the vicinity of the interchange. Figures 1 and 2 in Section 1.3 show the project vicinity and location maps.

1.2 Project Description

This section describes the proposed action and the design alternatives that were developed to meet the identified need through accomplishing the defined purpose(s), while avoiding or minimizing environmental impacts.

Limonite Avenue is an existing four-lane facility traveling in an east-west direction. Within the project limits, I-15 is currently a six-lane access-controlled freeway with three mixed-flow lanes in each direction. The Limonite Avenue Overcrossing is an east-west roadway, and currently provides two traffic lanes in each direction and two left-turn lanes at the I-15/Limonite Avenue on- and off-ramp intersections. To the west of I-15 (approximately 700 feet west of the intersection of the I-15 southbound ramps and Limonite Avenue), Limonite Avenue widens to three lanes in each direction. The I-15 median is currently unimproved and depressed with Type K barriers along the northbound outer edge of the median shoulder and south along the southbound outer edge of the median shoulder.

The project extends along Limonite Avenue between Hamner Avenue and Wineville Avenue. Along I-15, improvements are proposed from approximately 1.5 miles south to 1.4 miles north of the existing Limonite Avenue OC. The proposed project would replace the existing Limonite Avenue OC and would widen the roadway from four lanes to six lanes. Specifically, the project would widen the existing northbound and southbound on- and off-ramps, widen Limonite Avenue to three lanes in each direction through the interchange area, and replace the existing Limonite Avenue Overcrossing structure. The Limonite Avenue OC, an east-west roadway, currently provides two traffic lanes in each direction and two left-turn lanes at the ramp intersections.

Two viable alternatives have been selected for consideration. The Build Alternative, consisting of a Partial Clover Leaf (Type L-9) configuration, proposes replacing the existing OC structure

and constructing loop ramps in the southeast and northwest quadrants. The No-Build Alternative proposes to maintain the existing interchange configuration.

1.2.1 Purpose and Need

Purpose

The purpose of the proposed project is to:

- reduce projected traffic congestion at the I-15/Limonite Avenue interchange, and
- improve traffic flow on the regional transportation system.

Need

The proposed project is needed to reduce traffic congestion at the I-15/Limonite Avenue interchange. Based on the most recent update of the Riverside County General Plan, the cities of Eastvale and Jurupa Valley plan to add a substantial number of residences and businesses in the coming years, which is anticipated to result in substantial traffic and would require a number of transportation and circulation improvements to accommodate this increased volume of traffic, including improvements to the I-15/Limonite Avenue Interchange. According to the California Department of Finance, Riverside County is projected to have the largest population growth of any county in California between 2010 and 2016, almost doubling during this period from 2.2 million to an estimated 4.0 million residents (California Department of Finance, January 2013). According to the Western Riverside Council of Governments forecasts, Eastvale is projected to grow from 53,670 residents in 2010 to 68,300 by 2035, and Jurupa Valley is projected to grow from 95,004 residents in 2010 to 126,000 by 2035, an increase of 27 percent and 33 percent, respectively. Employment in these cities is projected to grow even more rapidly, with employment in Eastvale rising from 3,113 in 2010 to an estimated 10,100 and in Jurupa Valley from 23,641 in 2010 to 53,500, an increase of 224 percent and 126 percent, respectively (Western Riverside Council of Governments 2011).

Although the I-15/Limonite Avenue interchange ramp intersections currently operate at an acceptable level of service (LOS)¹, by design year 2040, the ramp intersections at the I-15/Limonite Avenue interchange will have insufficient capacity to accommodate the forecasted traffic demand. Operation of the I-15/Limonite Avenue Interchange ramps are anticipated to worsen by opening year (2018) and to continue to degrade as traffic volumes increase unless improvements are made to the transportation system. Without the proposed project, it is projected that the northbound and southbound I-15 on- and off-ramp intersections with Limonite Avenue will function at an unacceptable LOS (F) during both the AM and PM peak hours in design year 2040.

An analysis of the merge/diverge traffic operations at the I-15 on- and off-ramps indicate that in year 2018 the northbound I-15 off-ramp to Limonite Avenue will function at an unacceptable LOS (F) during the PM peak hour and the northbound I-15 on-ramp from Limonite Avenue will function at an unacceptable LOS F during the AM peak hour; the southbound I-15 on-ramp from

¹ The ability of a highway to accommodate traffic is typically measured in terms of LOS. Traffic flow is classified by LOS, ranging from LOS A (free-flow traffic with low volumes and high speeds) to LOS F (traffic volume exceeds design capacity with forced flow and substantial delays).

Limonite Avenue is also predicted to operate at an unacceptable LOS (E). In 2040 the I-15 off-ramp to Limonite Avenue is projected to operate at an unacceptable LOS during the AM and PM peak hours.

The existing, opening year, and design year LOS without the project for intersections and merge/diverge locations are presented in Table 1-1.

Table 1-1. Existing, Opening Year, and Design Year LOS (No-Build)

Location	Existing Year (2011)		Opening Year (2018)		Design Year (2040)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Intersection						
I-15/Limonite Avenue Southbound On/Off-Ramps	C	C	B	C	F	F
I-15/Limonite Avenue Northbound On/Off-Ramps	B	C	C	D	F	F
Merge/Diverge						
Limonite Avenue Off-Ramp (northbound)	D	D	D	F	E	F
Limonite Avenue On-Ramp (northbound)	E	D	F	D	D	D
Limonite Avenue Off-Ramp (southbound)	D	D	D	D	C	C
Limonite Avenue On-Ramp (southbound)	E	D	E	D	D	D

Shaded entries exceed acceptable levels of service

1.2.2 Alternatives

Build Alternative (Partial Clover Leaf Interchange Alternative)

The proposed project would replace the existing Limonite Avenue Overcrossing and would widen the roadway from four lanes to six lanes (see Figure 3 in Section 1.3). Specifically, the project would widen the existing northbound and southbound on-and off-ramps, widen Limonite Avenue to three lanes in each direction through the interchange area, and replace the existing Limonite Avenue OC structure. The interchange would be reconstructed as a partial clover leaf layout with loop on-ramps in the northwest and southeast quadrants. The three-lane direct on-ramps in the northeast and southwest quadrants would have California Highway Patrol (CHP) enforcement areas and maintenance pads, and would be metered with one lane on each ramp dedicated to high occupancy vehicles (HOV). The three-lane loop on-ramps would also include one dedicated HOV lane. The off-ramps in the northwest and southeast quadrants would consist of two lanes at the freeway diverge point and would widen to four lanes at the ramp intersections with Limonite Avenue. Each of the on- and off-ramps would have increased acceleration and deceleration lane lengths at the freeway merge/diverge points. The OC structure, a proposed two-span cast-in-place pre-stressed concrete box girder bridge, would accommodate the six through lanes, 4-foot bike lanes, 8-foot shoulders, 8-foot sidewalks, a 14-foot median, and two 12-foot right turn lanes, and would also accommodate the future ultimate widening of I-15 to a 12-lane facility. To accommodate the new interchange and widened Limonite Avenue, the Park and Ride facility located along the north side of Limonite Avenue and east of the interchange would be

reconfigured within its currently allotted space. The driveway for the Park and Ride lot would remain in approximately the same location where it currently exists. Sidewalks along Limonite Avenue outside of the OC limits would vary from 6 to 8 feet in width. Potholing and utility relocations would also occur as part of the project. Existing walls are located within the project impact area along the south side of Limonite Avenue between Pats Ranch Road and Wineville Avenue, to the south of Limonite Avenue along the west side of I-15, and along Daybreak Drive along the west side of I-15. These existing walls would not be removed or relocated as part of the Build Alternative. Temporary construction easements in these areas would provide construction access only. Temporary construction signage would be installed prior to construction and would remain in place throughout the construction period. Striping would also occur and the locations for the construction signage and striping are identified on Figure 3, in Section 1.3.

The project is proposed for funding from the County of Riverside (County Road and Bridge Benefit District funds) and the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Zone Transportation Improvement Program. Additional future funding will likely be from local City funds and federal funding sources. The proposed project is included in the Southern California Association of Government's 2015 Federal Transportation Improvement Program (FTIP) and 2012 Regional Transportation Plan (RTP) (Project ID RIV011233).

The total estimated cost for the project, escalated for the year of construction, is \$47,010,159, which includes right of way and construction costs. The breakdown includes \$38,390,159 for current capital outlay construction estimate and \$8,620,000 as the current capital outlay right of way estimate.

No-Build Alternative

Under the No-Build Alternative, no interchange improvements would be constructed at the I-15/Limonite Avenue Interchange. The I-15/Limonite Avenue Interchange would remain as is without any improvements. This alternative, however, does not preclude the construction of future improvements. The No-Build Alternative would not meet the project purpose, which is to reduce projected traffic congestion at the I-15/Limonite Avenue interchange, and to improve traffic flow on the regional transportation system. As shown in Table 1-1, the I-15 on- and off-ramp intersections with Limonite Avenue are projected to operate at an unacceptable LOS (F) in the design year (2040), which is not consistent with the project purpose and need.

1.3 Project Maps

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Figure 1
Regional Vicinity
Interstate 15/Limonite Avenue Interchange Improvements

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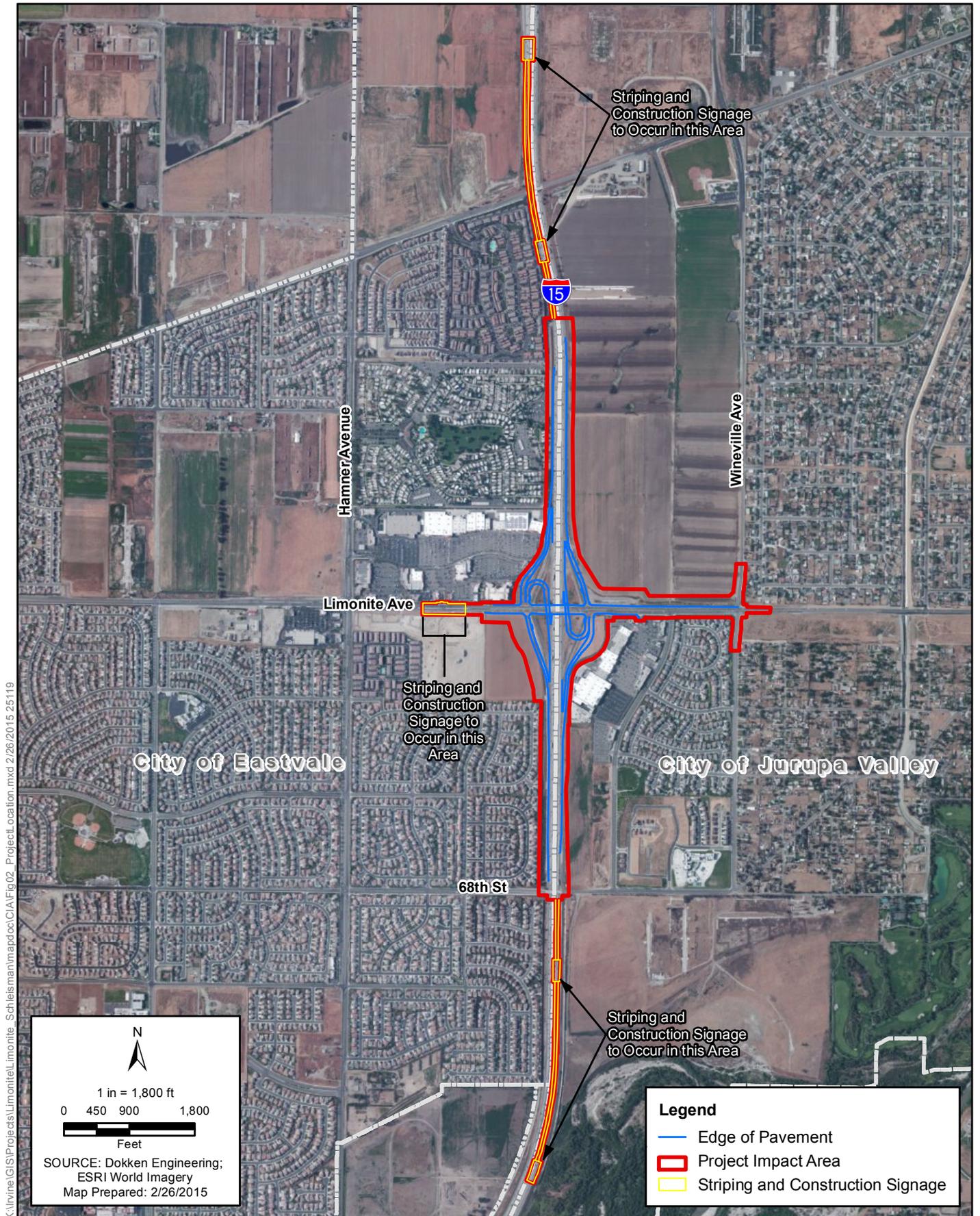


Figure 2
Project Location
Interstate 15/Limonite Avenue Interchange Improvements

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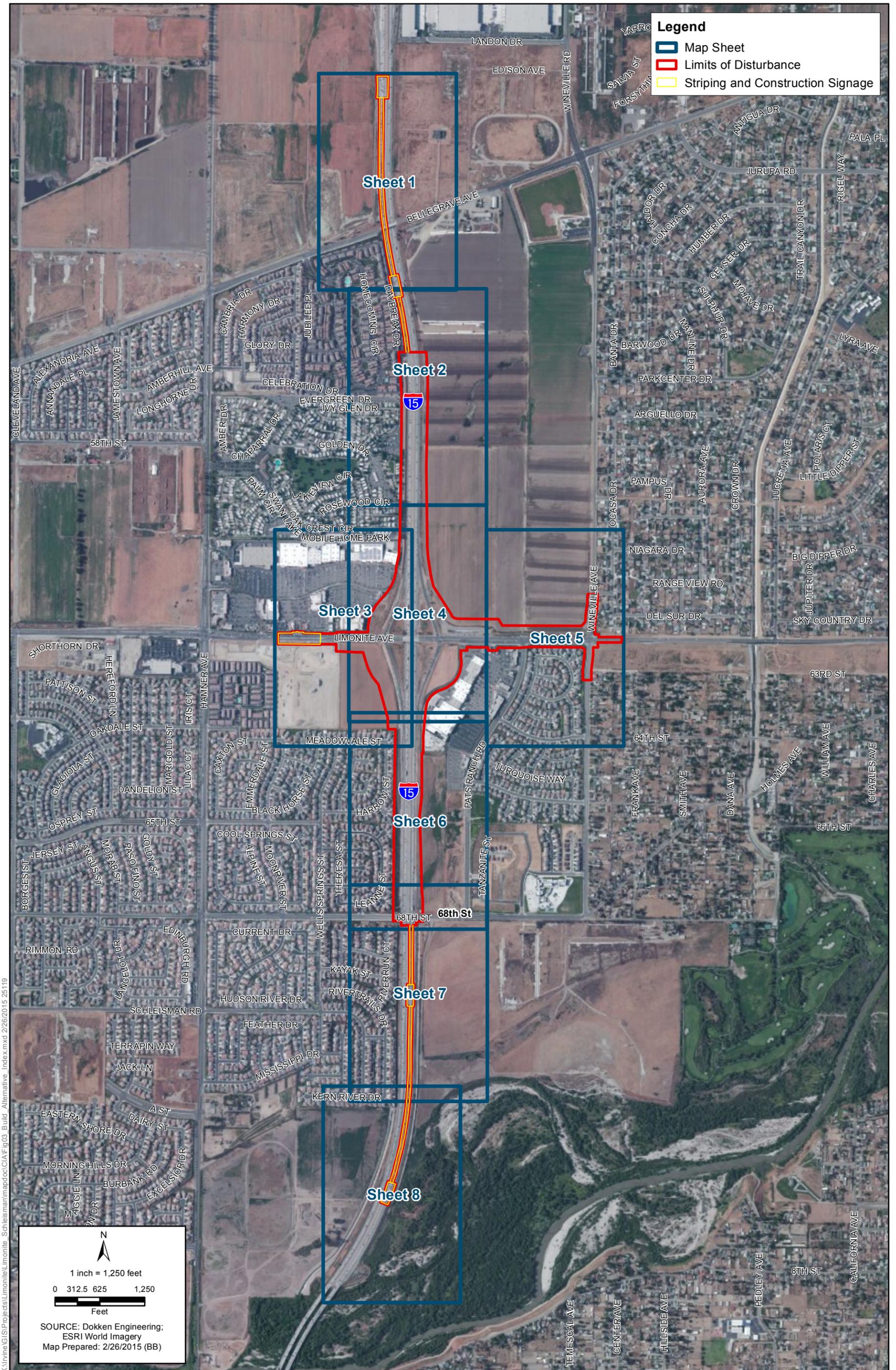


Figure 3 - Index
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements

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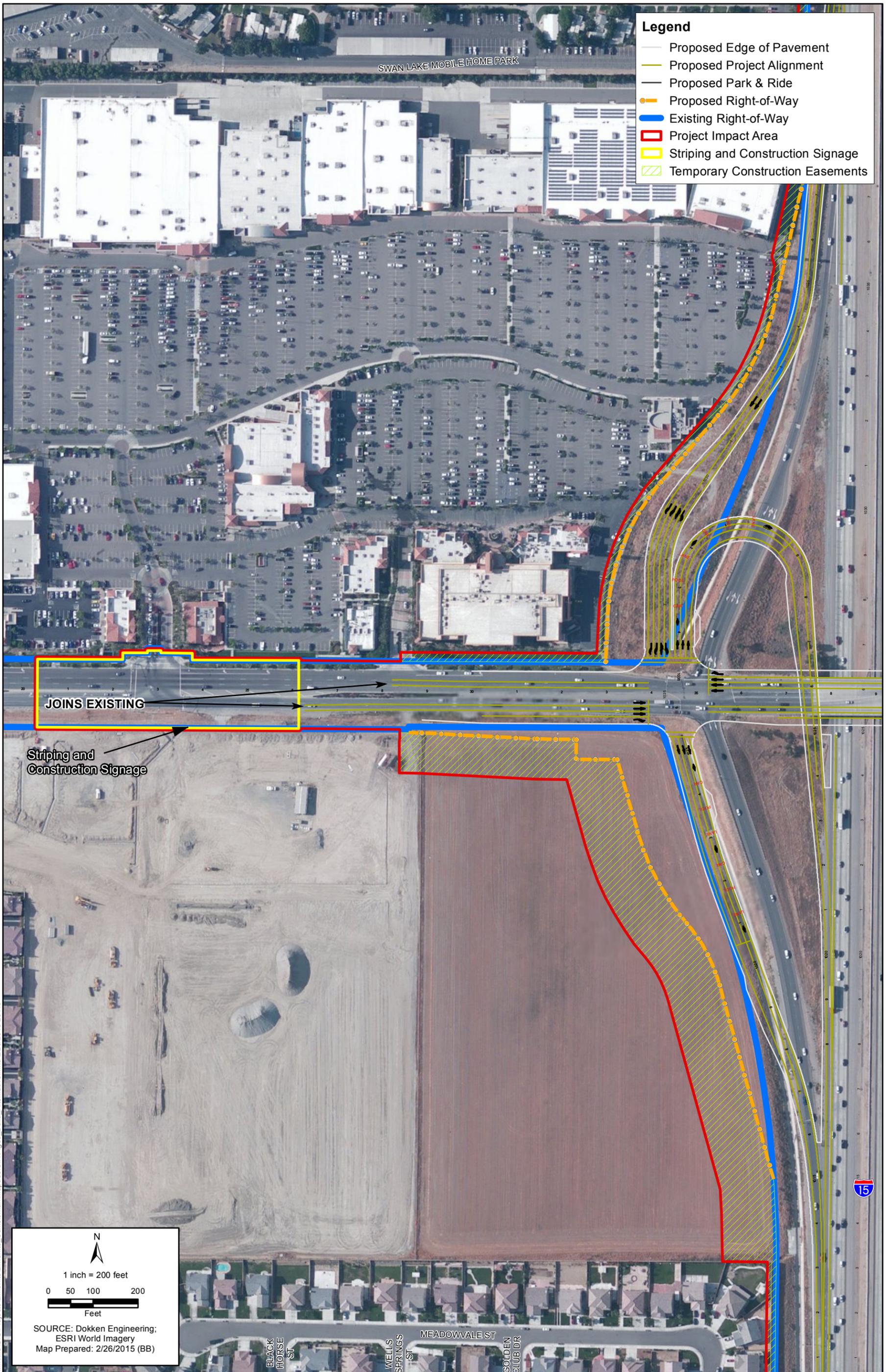
Figure 3 - Sheet 1 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements

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Figure 3 - Sheet 2 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements

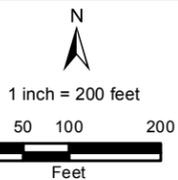
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- Legend**
- Proposed Edge of Pavement
 - Proposed Project Alignment
 - Proposed Park & Ride
 - Proposed Right-of-Way
 - Existing Right-of-Way
 - ▭ Project Impact Area
 - ▨ Striping and Construction Signage
 - ▨ Temporary Construction Easements

JOINS EXISTING

Striping and Construction Signage

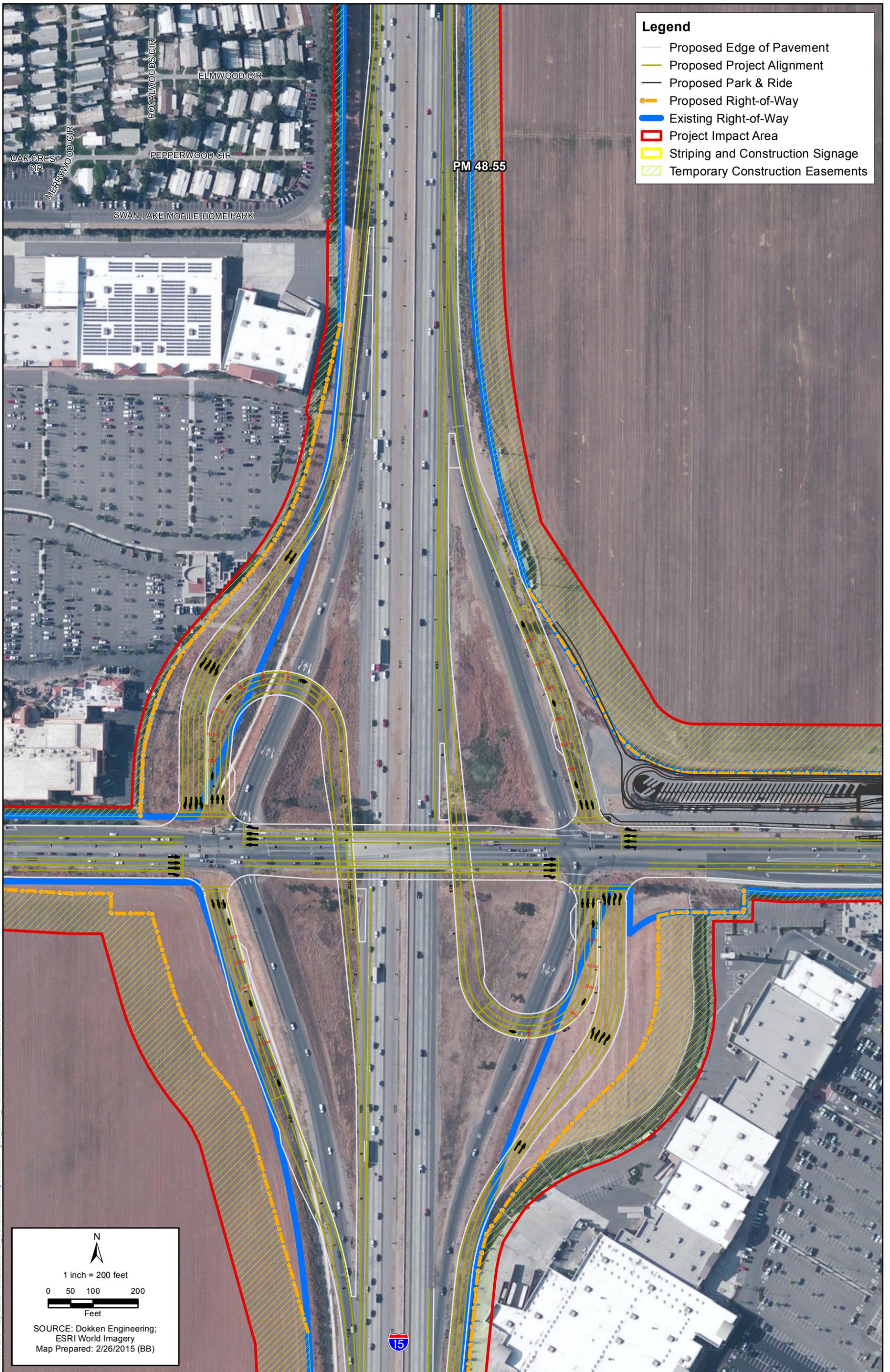


SOURCE: Dokken Engineering;
ESRI World Imagery
Map Prepared: 2/26/2015 (BB)

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Figure 3 - Sheet 3 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements

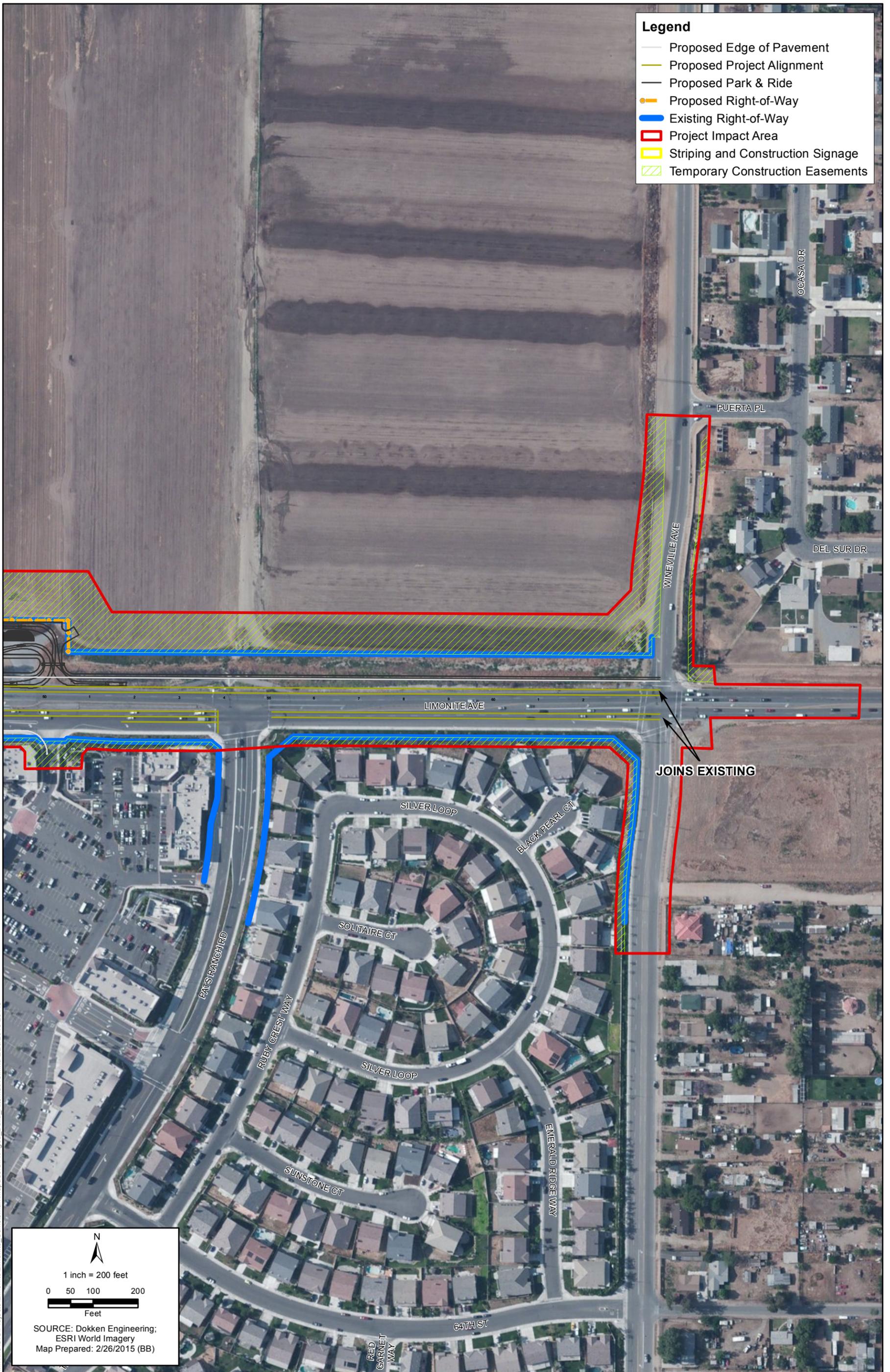
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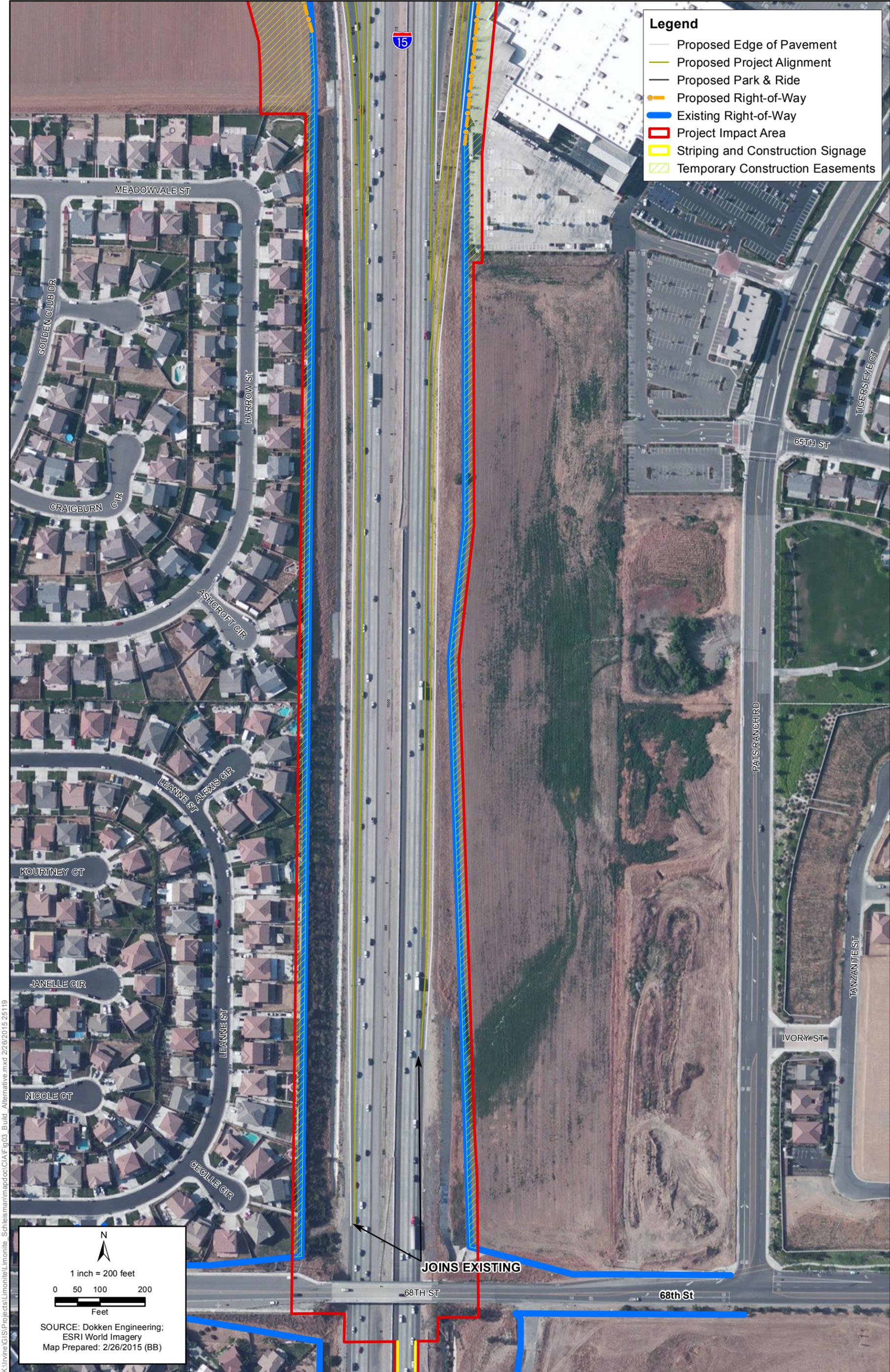
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**Figure 3 - Sheet 5 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements**

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- Legend**
- Proposed Edge of Pavement
 - Proposed Project Alignment
 - Proposed Park & Ride
 - Proposed Right-of-Way
 - Existing Right-of-Way
 - Project Impact Area
 - Striping and Construction Signage
 - Temporary Construction Easements


 1 inch = 200 feet
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Build Alternative
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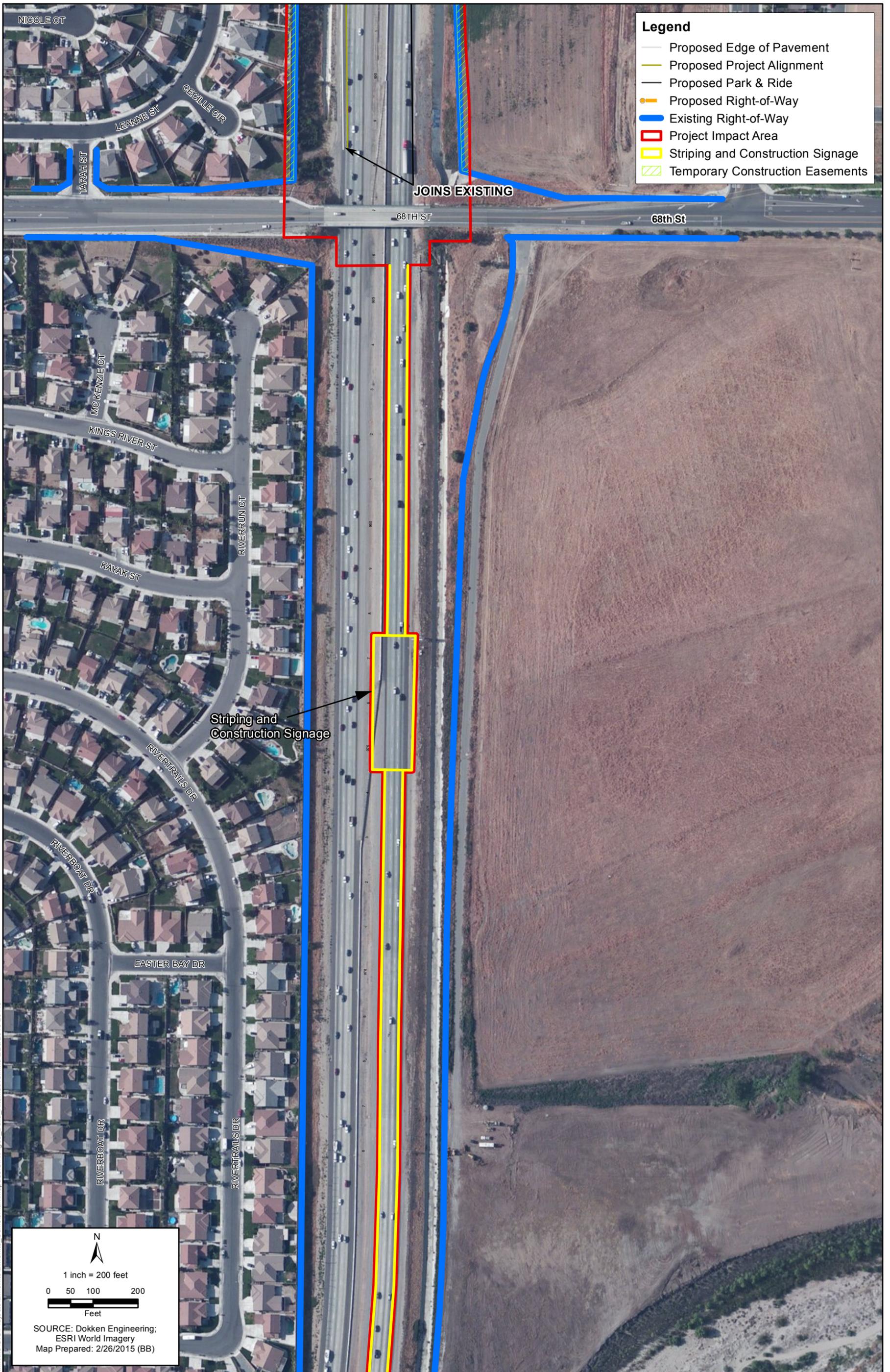


Figure 3 - Sheet 7 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements

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**Figure 3 - Sheet 8 of 8
Build Alternative
Interstate 15/Limonite Avenue Interchange Improvements**

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1.4 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Table 1-2. Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Application to be submitted after approval of Environmental Document. Permit anticipated to be obtained February 2016.
State Water Resources Control Board	Clean Water Act Section 402—National Pollutant Discharge Elimination System (NPDES)	SWPPP to be submitted after approval of Environmental Document. Permit anticipated to be obtained February 2016.
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	Application to be submitted after approval of Environmental Document. Permit anticipated to be obtained February 2016.
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit 14	Permit application to be submitted after approval of Environmental Document. Permit anticipated to be obtained February 2016.
U.S. Fish and Wildlife Service	Section 7 Consultation, MSHCP Consistency Determination	Anticipated submittal after approval of Environmental Document.

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Chapter 2 CEQA Checklist

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology/Water Quality
Land Use/Planning	Mineral Resources	Noise
Population/Housing	Public Services	Recreation
Transportation/Traffic	Utilities/Service Systems	Mandatory Findings of Significance

This CEQA checklist identifies physical, biological, social and economic factors of the human environment that might be affected by the proposed project. The checklist achieves the important statutory goal of integrating the requirements of CEQA with the environmental requirements of other laws.

In many cases, background studies performed in connection with proposed projects indicate no environmental impacts. A “NO IMPACT” answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included directly after the cited environmental resource. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts.

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.		
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.		
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.		
<input type="checkbox"/>	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.		
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.		
<table border="1" style="width: 100%;"> <tr> <td style="width: 60%; vertical-align: top;"> _____ Signature _____, Senior Environmental Planner District 08 Division of Environmental Planning California Department of Transportation </td> <td style="width: 40%; vertical-align: top;"> _____ Date </td> </tr> </table>		_____ Signature _____, Senior Environmental Planner District 08 Division of Environmental Planning California Department of Transportation	_____ Date
_____ Signature _____, Senior Environmental Planner District 08 Division of Environmental Planning California Department of Transportation	_____ Date		

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2.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities” (CA Public Resources Code [PRC] Section 21001[b]).

2.1.1 Discussion of Environmental Evaluation Question 2.1 – Aesthetics

The information used in this section is from the January 2014 *I-15/Limonite Avenue Interchange Improvement Project Visual Impact Assessment (VIA)* (Caltrans 2014a).

- a) **No Impact:** The proposed project site is located within a mix of residential, commercial, and vacant land. According to the *VIA*, there are no scenic vistas within the project area.
- b) **No Impact:** The proposed project is not located within an officially designated National Scenic Byway, or State or County Scenic Highway. Therefore, the proposed project would not damage scenic resources within a scenic highway.
- c) **Less than Significant Impact:** The effects of the proposed project on the existing setting and viewshed are analyzed in the *VIA* (January 2014). The visual quality of four Key Views (A, B, C, and D) were rated based on viewer response. Any changes as a result of the proposed project to visual resources within these key views were evaluated. It was concluded that the visual quality of Key View A and Key View B would not change as a result of the proposed project and the visual quality of Key View C and Key View D would slightly improve with the inclusion of aesthetic treatment/landscaping or hardscaping at the medians along Limonite Avenue. The proposed project would not block views of visual resources and the overall visual quality of the area would not decrease.

During construction of the proposed project, temporary activities such as grading, asphalt laying, construction vehicle movement and construction material vehicle shipments, and other routine construction activities within the I-15 right of way and project area would be

visible by motorists traveling along I-15 and adjacent roadways, and from adjacent residential and commercial properties. Construction-related materials, such as road-building materials, staging areas, stockpiles, temporary traffic barriers, and construction equipment would also be visible to these viewer groups. Viewer groups would experience a change in their physical view of the interchange; however, the change would be temporary and construction would be subject to local ordinances regarding construction. The construction area would be kept clean in regards to trash and standard special provisions regarding site maintenance would be implemented.

- d) **Less than Significant Impact:** As detailed in the *VIA*, the addition of lighting features, retaining walls, and additional paved surfaces are potential sources of light, glare, and heat. However, while additional paved surfaces may cause additional reflective heat, light, and glare, this is not anticipated to be substantially different from the existing condition and would be minimized with fractured rib texture or similar aesthetic texture. In addition, lighting for the project would be shielded away from adjacent uses.

Areas may need to be lighted during construction. This additional lighting would be temporary and would be subject to local ordinances regarding construction time periods of lighting.

2.1.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following minimization measures will be implemented to minimize potential impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

- **AES-1:** Per the Department’s standards regarding erosion control, exposed slopes will be revegetated.
- **AES-2:** Lighting for the project will be shielded.
- **AES-3:** The design and implementation of aesthetic elements shall be coordinated between local agencies and the Department and incorporated during final design.
- **AES-4:** Aesthetic treatments shall be coordinated during final design. At a minimum, decorative railing shall be used at the Overcrossing, medians shall be aesthetically treated with hardscaping and wall treatments for the Overcrossing and retaining walls shall include fractured rib texture (or other similarly aesthetic texture).
- **AES-5:** Existing landscaping will be replaced in-kind (Ratio of 1:1) (24-inch box), or if smaller plant material is chosen, then a 5:1 plant replacement ratio and one type of ground cover (grass) will be installed.
- **AES-6:** Plant material will be installed with irrigation in a meandering design within the interchange.

2.2 Agricultural Resources

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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II. AGRICULTURE 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:

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

2.2.1 Discussion of Environmental Evaluation Question 2.2 – Agricultural Resources

The information used in this section is from the October 2013 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2013c).

a) Less than Significant Impact: According to the *CIA Memorandum*, portions of the proposed project would be located on soils mapped as “Prime Agriculture,” “Farmland of

Statewide Importance,” and “Unique Farmland,” by data from the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). However, according to the California Department of Conservation (DOC), the designated farmland areas are not subject to the provisions of the Farmland Protection Policy Act (FPPA) because they are committed to urban use

The 2012 City of Eastvale and 2011 Jurupa Valley General Plan Land Use maps have designated these areas for future non-agricultural land uses with a time horizon of at least 20 years. Some of the area has recently been developed with retail land uses, such as the Eastvale Gateway South Center located at Limonite Avenue and Hamner Avenue. The western portion of the proposed project is located within the City of Eastvale General Plan Land Use designations of Freeway and Commercial Retail. The eastern portion of the proposed project is located within the City of Jurupa Valley General Plan Land Use designations of Industrial Park (I-P), Single Family Dwellings (R-1), and General Plan Community Overlay (CCO). Therefore, according to local plans, the area is committed for non-agricultural urban uses. As such, this area is not subject to FPPA and the project would result in a less than significant impact on agricultural resources. Therefore, less than significant impacts on designated farmlands would occur.

- b) **No Impact:** As indicated in the *CIA Memorandum*, the proposed project area is zoned for non-agricultural uses and is not subject to the provisions of the FPPA. In addition, there are no agricultural preserves or parcels under Williamson Act contract within the project area. Therefore, the proposed project would not conflict with existing zoning for agricultural use or Williamson Act contracts.
- c) **No Impact:** As detailed in response (a), the project area is zoned for urban uses; therefore, no impacts would occur on forest land, timberland, or Timberland Production.
- d) **No Impact:** The proposed project would not result in the loss or conversion of forest land.
- e) **No Impact:** The proposed project would improve the existing interchange at I-15 and Limonite Avenue and would not involve changes that would result in the conversion of Farmland to non-agricultural use or forest land to non-forest use.

2.2.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM₁₀) and particles of 2.5 micrometers and smaller (PM_{2.5}), and sulfur dioxide (SO₂). In addition, national and state standards exist for lead (Pb) and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

2.3.1 Discussion of Environmental Evaluation Question 2.3 – Air Quality

The information used in this section is from the October 2013 *I-15/Limonite Avenue Interchange Improvement Project Final Air Quality Report* (Caltrans 2013a).

- a) **No Impact:** A project would conflict with or obstruct implementation of a regional air quality plan if it would be inconsistent with the growth assumptions of the plan, in terms of population, employment, or regional growth in vehicle miles traveled (VMT). The

proposed project is included in the regional emission analysis conducted by the Southern California Association of Governments (SCAG) for the conforming 2012–2035 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (adopted by SCAG on April 4, 2012), as Project ID RIV011233 and the Federal Transportation Improvement Program (FTIP). Therefore, the proposed project would not conflict or obstruct implementation of an air quality plan.

- b) **Less than Significant Impact:** As detailed in the *Air Quality Report*, when compared with Baseline/Existing 2011 conditions, the proposed project would result in decreases of reactive organic gas (ROG), carbon monoxide (CO), nitrogen oxide (NO_x), PM₁₀, and PM_{2.5} emissions at the project's opening year in 2015. Because VMT increases when compared with existing conditions (due to ambient traffic growth), these emissions reductions are attributable to the retirement of older, higher emitting vehicles.

The proposed project would result in an increase in CO₂ emissions compared with Baseline/Existing 2011 conditions and is further discussed in Chapter 3. These impacts would be less than significant.

Temporary construction emissions would occur for approximately 16 months during construction of the proposed project. Pollutant emissions would vary daily based on the level of activity, specific operations, and prevailing weather operations. Short-term air quality degradation may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO_x, ROG, directly emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants, such as diesel exhaust particulate matter. As detailed in the *Air Quality Report*, construction-period criteria pollutant emissions were estimated using the Sacramento Metropolitan Air Quality Management District's Roadway Construction Emissions Model version 7.1.3. This model is considered adequate by the South Coast Air Quality Management District (SCAQMD) for estimating road construction emissions for the purpose of CEQA analysis. The analysis concluded that the only pollutant to exceed the SCAQMD Regional Emissions Daily Significance Threshold would be NO_x during grading/excavation activities. However, this exceedance would be temporary and would be minimized through the implementation of exhaust and fugitive dust emission control measures listed below in Section 2.3.2. Therefore, there would be a less than significant impact on air quality.

- c) **Less than Significant Impact:** As detailed in the *Air Quality Report*, the proposed project would result in a decrease in all criteria pollutants at Opening Year 2015 when compared with the Baseline/Existing Year 2011 condition. However, the SCAQMD Regional Emissions Daily Significance Threshold would be exceeded for NO_x during grading/excavation activities. This exceedance would be temporary and would be minimized through the implementation of exhaust and fugitive dust emission control measures listed below in Section 2.3.2. Therefore, the proposed project would result in a less than significant temporary increase of a criteria pollutant.
- d) **Less than Significant Impact:** As discussed above in Responses (b) and (c), sensitive receptors adjacent to the project would be exposed to pollutants during construction from grading and construction equipment. These pollutants would dissipate rapidly, and would

be minimized through the implementation of exhaust and fugitive dust emission control measures listed below in Section 2.3.2. Therefore, there would be a less than significant impact.

- e) **Less than Significant Impact:** Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site. Such odors would be quickly dispersed below detectable thresholds as distance from the site increases. Therefore, the impacts due to objectionable odors would be less than significant.

2.3.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, implementation of the following Department Standard Specifications, SCAQMD Rule 403 requirements, and standard Department measures would minimize potential impacts:

- **AQ-1:** The construction contractor shall comply with the Department’s Standard Specifications in Section 14 (2010).
 - o Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
 - o Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- **AQ-2:** Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emission or at the right of way line, depending on local regulations.
- **AQ-3:** Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.
- **AQ-4:** Wash off trucks as they leave the right of way as necessary to control fugitive dust emissions.
- **AQ-5:** Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment, as provided in California Code of Regulations, Title 17, Section 93114.
- **AQ-6:** Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts on existing communities.
- **AQ-7:** Locate equipment and material storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.
- **AQ-8:** Establish Environmentally Sensitive Areas (ESAs) or their equivalent near sensitive air receptors where construction activities involving extended idling of diesel equipment would be prohibited, to the extent feasible.
- **AQ-9:** Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.

- **AQ-10:** Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emissions of dust (particulate matter) during transportation.
- **AQ-11:** Promptly and regularly remove dust and mud on paved public roads from construction activity and traffic to decrease particulate matter.
- **AQ-12:** Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.
- **AQ-13:** Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues; controls, such as dampened straw, may be needed.
- **AQ-14:** To control the generation of construction-related fugitive dust emissions, the Department will require contractors to comply with SCAQMD Rule 403 requirements.
- **AQ-15:** Use of lighter colored pavement where feasible.

2.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Wetlands and Other Waters

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded. The Section 404

permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as the FHWA and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCB) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue

water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for additional details.

Plants

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA).

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), CA Public Resources Code, Sections 2100-21177.

Animal Species

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.4.1 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Threatened and Endangered Species

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits “take” of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by the CDFW. For species listed under both the FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

2.4.1 Discussion of Environmental Evaluation Question 2.4 – Biological Resources

Information used in this section is from the April 2014 *I-15/Limonite Avenue Interchange Improvement Project Natural Environment Study (Minimal Impacts) (NES [MI])* (Caltrans 2014e).

- a) **Less than Significant Impact:** There are approximately 66.74 acres of potentially suitable habitat within the project impact area for the special-status burrowing owl. One burrowing owl was documented occupying the project impact area during the winter of 2012 and the species was present in December 2013. Although a breeding season focused survey was performed and burrowing owls were not found in the project impact area, there is potential for the species to occur. Measures **BIO-1** through **BIO-3** would ensure the project would not result in direct or indirect impacts on burrowing owl during construction of the proposed project.

There is a potential for impacts on special-status bats (California western mastiff bat) due to the removal of mature trees used as roosting sites in the biological study area (BSA). Measure **BIO-5** would ensure bats potentially roosting in the project area are not affected. Improvements to the Limonite Overcrossing would not affect potential bat roosts, as there are no suitable crevices for bats to roost in under the bridge. In addition, three special-status bats (pallid bat, California western mastiff bat, and big free-tailed bat) that are common to the region have a potential to forage within suitable habitat (ruderal and remnant Riversidian Sage Scrub [RSS]) in the BSA. The number of individuals that could potentially forage in the BSA is expected to be low.

There was also potential for several other special-status species to occur in the BSA, but they do not pose a constraint to the project because they were either confirmed to be absent by a focused survey or the species is already fully covered under the Multiple Species Habitat Conservation Plan (MSHCP) (i.e., take authorization is already provided to Permittees). Therefore, any potential direct impacts or impacts due to habitat modification (if the species was present) would be fully mitigated. No special-status fairy shrimp or MSHCP Narrow Endemic Plant Species were found during focused surveys within the project impact area and 100-foot buffer.

There is a potential for construction activities associated with the proposed project to directly affect nesting birds and their habitat (including raptors) during the bird breeding season (March 1 through August 31 for birds and January 15 through June 30 for raptors). Measures **BIO-2** through **BIO-4** would ensure there are no constraints to the project under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Although affecting a nesting bird would be an adverse impact, given the species potentially affected, it would be less than significant under CEQA.

- b) No Impact:** As detailed in the NES (MI), the BSA is heavily disturbed and consists primarily of non-native and invasive plant species. Five vegetation classifications or communities were identified in the BSA and include: remnant RSS, mature tree, ruderal, agricultural, and developed. The term “remnant” has been applied to the RSS community as there are only noncontiguous patches of RSS that are too small to be considered a viable community. The four other remaining vegetation groups are not considered sensitive natural communities.

No wetlands or riparian vegetation are present in the 25-foot jurisdictional study area. No MSHCP riparian/riverine, vernal pools, and federally designated Critical Habitat are present within the BSA. The drainage features have been artificially created to capture surface runoff from the I-15 and to support existing and past agricultural activities. “With the exception of wetlands created for the purpose of providing mitigation or resulting from human actions to create open waters or from the alteration of natural stream courses, water features artificially created are not riparian/riverine resources under the MSHCP” (Dudek 2003). Therefore, the proposed project would have no impact on riparian or other sensitive natural communities.

- c) Less than Significant Impact:** No federally protected wetlands as defined by Section 404 of the CWA were identified in the BSA; therefore, the project would not affect federally protected wetlands. However, there are approximately 0.68 acre of non-wetland Waters of the U.S. (WoUS) and Waters of the State (WoS) and 2.14 acres of unvegetated streambed

present within the BSA. The proposed project would affect a total of 0.67 acre (0.28 acre permanent, and 0.39 acre temporary) of non-wetland WoUS and WoS, and approximately 2.11 acres (0.76 acre permanent and 1.35 acres temporary) of CDFW unvegetated streambeds. Table 2-1 provides a summary of permanent and temporary impacts on jurisdictional waters by water feature.

Table 2-1. Summary of Permanent and Temporary Impacts on Jurisdictional Waters

Feature	WoUS/WoS*		CDFW Unvegetated Streambed*	
	Permanent (acres/ linear feet)	Temporary (acres/ linear feet)	Permanent (acres/linear feet)	Temporary (acres/linear feet)
Drainage 1	<1/100 ac (27.7 l.f.)	--	0.01 ac (27.7 l.f.)	--
Drainage 2	--	--	--	0.14 ac (582.6 l.f.)
Drainage 3	0.01 ac (151 l.f.)	--	0.01 ac (151 l.f.)	--
Drainage 4	--	<1/100 ac (51.67 l.f.)	--	0.08 ac (338.1 l.f.)
Drainage 5	--	0.01 ac (209.8 l.f.)	--	0.02 ac (209.8 l.f.)
Drainage 6	<1/100 ac (32.51 l.f.)	--	<1/100 ac (32.51 l.f.)	--
Drainage 7	--	0.03 ac (614 l.f.)	--	0.08 ac (614 l.f.)
Drainage 8	<1/100 ac (18.9 l.f.)	--	<1/100 ac (18.9 l.f.)	--
Drainage 9	<1/100 ac (26.4 l.f.)	--	<1/100 ac (26.4 l.f.)	--
Drainage 10	0.07 ac (743.7 l.f.)	--	0.23 ac (743.7 l.f.)	--
Drainage 11	0.16 ac (1,127 l.f.)	0.34 ac (2,497 l.f.)	0.47 ac (1,127 l.f.)	1.03 ac (2,497 l.f.)
Drainage 12	<1/100 ac (30.2 l.f.)	--	<1/100 ac (30.2 l.f.)	--
Drainage 13	<1/100 ac (12 l.f.)	--	<1/100 ac (12 l.f.)	--
Drainage 14	--	<1/100 (100 l.f.)	--	<1/100 ac (100 l.f.)
Drainage 15	--	<1/100 (23 l.f.)	--	<1/100 ac (23 l.f.)
Drainage 16	--	<1/100 (31 l.f.)	--	<1/100 (31 l.f.)
Depression 1	0.03 ac	--	0.03 ac	--
Depression 2	0.01 ac	--	0.01 ac	--
	0.28 ac (2,169.41 l.f.)	0.39 ac (3,526.47 l.f.)	0.76 ac (2,169.41 l.f.)	1.35 ac (4,395.50 l.f.)
Total	0.67 ac (5,695.88 l.f.)		2.11 ac (6,564.90 l.f.)	

*No USACE wetlands or riparian vegetated streambeds would be affected by the project.
Source: NES (MI), 2014.

A permit under Section 404 of the federal CWA would be required and obtained through USACE for encroachment into federal non-wetland WoUS. Because this is a transportation project and the permanent project impacts would be less than 0.5 acre, it is anticipated that a Nationwide Permit 14 would meet the requirements under Section 404 of the CWA. The fill of WoS would also trigger the need for Section 401 CWA Water Quality Certification through the RWQCB. In addition, the impact on 2.11 acres of CDFW unvegetated streambeds requires a Streambed Alteration Agreement under Section 1600 of the California Fish and Game Code. These jurisdictional waters lack biological/hydrological functions and values and there would be no net loss of wetlands. Therefore, removal of these features would not represent a significant impact under CEQA. Mitigation for permanent loss of WoUS, WoS, and CDFW jurisdictional waters would likely be 1:1 or less, such as through the purchase of mitigation bank credits through the Riverside-Corona Resources Conservation District in-lieu-fee program; however, this would be negotiated during the permitting process.

- d) **No Impact:** As discussed in the NES (MI), there are no riparian-riverine areas or linkages/cores within the BSA. Therefore, the proposed project would not interfere with the movement of any native or migratory wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) **No Impact:** The proposed project would not conflict with any local policies or ordinances protecting biological resources.
- f) **Less than Significant Impact:** The proposed project occurs within the Western Riverside County MSHCP, within the Eastvale Plan area. It does not occur within an MSHCP Criteria Area or within an MSHCP corridor or linkage area. The project is not located in a criteria cell or on Public/Quasi-Public (PQP) lands. As discussed in the NES (MI), the proposed project is a Covered Activity and take authorization for MSHCP fully Covered Species is afforded under the Plan. Improvements to the interchange are identified in the MSHCP as falling under the jurisdiction of the Department, as described in the MSHCP text for Covered Activities. The proposed project would be subject to the requirements of the MSHCP and therefore would not be in conflict with the MSHCP.

2.4.2 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will be implemented to minimize potential impacts:

- **BIO-1: Burrowing Owl Preconstruction Survey and Avoidance.** A preconstruction presence/absence survey for burrowing owl following MSHCP protocol must be conducted within 30 days prior to construction. The preconstruction survey will include the project impact area and a 300-foot buffer if between March 1 and August 31 (nesting season), and a 100-foot buffer if outside of this window. Passive relocation by a qualified ornithologist will be conducted if it has been confirmed that burrowing owl is not nesting (MSHCP Vol. 1, Section 6.3.2). If the species is found nesting, construction will not occur within a designated buffer determined by a biologist until either (1) a qualified ornithologist has confirmed that the pair is no longer nesting and all young (if present) are independently foraging or (2) active relocation by a properly permitted biologist will be performed with concurrence

from CDFW and USFWS. This measure would be superseded by any burrowing owl preconstruction survey protocol required in an aquatic permit (CWA 401, 404; CDFW 1602) as long as no mortality occurs to burrowing owl.

- **BIO-2: MSHCP Construction Guidelines.** The project will implement the construction guidelines in MSHCP Volume I, Section 7.5.3, as applicable. These will be incorporated in conjunction with the BMP measures in **BIO-3**.
 - Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the County of Riverside and participating jurisdiction prior to construction.
 - Clearing of natural vegetation will be performed outside of the active breeding season for birds as defined in the MSHCP (March 1 through June 30). If work needs to occur during this window, BIO-4 (below) will be implemented.
 - When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities.
 - Training of construction personnel will be provided. A qualified biologist will conduct a training session for project personnel prior to grading. The training will include a description of the species of concern and its habitats, the general provisions of the FESA and the MSHCP, the need to adhere to the provisions of the FESA and the MSHCP, the penalties associated with violating the provisions of the FESA, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
 - The qualified project biologist will monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint (MSHCP Vol. I, Section 7.5.3). Additionally, ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices (BMPs).
 - Construction employees will strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) will be the minimal area necessary to complete the project and will be specified in the construction plans. Construction limits will be demarcated using environmentally sensitive area fencing (e.g., orange snow screen). Exclusion fencing should be maintained until the completion of all construction activities.

- Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
- Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
- Short-term stream diversions will be accomplished by use of sand bags or other methods that will result in minimal instream impacts. Short-term diversions will consider effects on wildlife.
- Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off site.
- No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
- The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
- The limits of disturbance, including the upstream, downstream, and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.
- During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint will be avoided.
- Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices.
- Active construction areas shall be watered regularly to control dust and minimize impacts on adjacent vegetation (MSHCP Vol. I, Section 7.5.3).
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain runoff.
- **BIO-3: Standard Best Management Practices.** MSHCP BMPs will be implemented during construction (MSHCP Volume I, Appendix C), as applicable. Some of the measures in **BIO-2** would also be considered BMPs and would apply in conjunction with the measures below.
 - Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
 - The footprint of disturbance shall be minimized to the maximum extent feasible. Employees will be instructed that their activities are restricted to the construction areas. Access to sites shall be via pre-existing access routes to the greatest extent possible.
 - When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream.

- Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
- The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
- The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.
- **BIO-4: Preconstruction Nesting Bird Survey.** A pre-construction nesting bird survey will be conducted no more than 30 days prior to vegetation clearing, ground disturbance, or construction activities (including staging) during the breeding season (March 1 to August 31 for non-raptors, January 15 to June 30 for raptors). The survey will occur within the 300-foot buffer area for raptors and within the 200-foot buffer area for other birds. If nesting birds (or raptors) are found, an avoidance buffer will be established by a qualified biologist and will remain until a qualified biologist has determined that young have fledged or nesting activities have ceased. This measure will be superseded by any preconstruction nesting bird survey measure(s) required in an aquatic permit (CWA 401, 404; CDFW 1602).
- **BIO-5: Preconstruction Bat Survey.** To prevent impacts on daytime bat roosts and maternity roosts, a qualified biologist will conduct bat and bat roosting site surveys prior to removal of mature trees. This preconstruction survey will be conducted at any mature tree proposed for removal and within 100 feet of the project impact area/limits of disturbance (PIA/LOD). If roosting sites or bats are not found, a report confirming their absence will be sent to the CDFW and no further mitigation will be required.

If the preconstruction survey determines bats are roosting, and tree removal is scheduled to occur between October 1 and March 30 (outside of the maternity season of April 1 through September 30), the following two-step cutting process would occur to the tree roost:

1. Surrounding branches that do not house bats at the time that the eviction would occur would be removed. This would alter the condition of the roost tree, causing bats to abandon the roost.
2. The tree can then be fully removed. A visual inspection of the roost tree would be required prior to removal to verify that all bats have been successfully excluded. This work will be completed by a bat exclusion professional.

If the preconstruction survey finds bats to be roosting and tree removal is scheduled to occur during the maternity season (April 1 through September 30), a qualified biologist will monitor the roost to determine if the roost site is a maternal roost. This may be determined by either visual inspection of the roost for bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described above. If the roost is determined to be a maternal roost, eviction cannot occur during the nursery season, as bat pups cannot leave the roost until they have reached maturity. In this case, a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will be established around the roosting site, within which no construction-related impacts will occur until the bat pups are mature enough to permanently leave the roost.

2.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation [36 Code of Federal Regulations (CFR) 800]. On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, the Federal Highway Administration (FHWA), State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as CA Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way.

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

2.5.1 Discussion of Environmental Evaluation Question 2.5 – Cultural Resources

The information used in this section is from the November 2013 *I-15/Limonite Avenue Interchange Improvement Project Historic Property Survey Report (HPSR)* (Caltrans 2013d), *I-15/Limonite Avenue Interchange Improvement Project Archaeological Survey Report (ASR)* (Caltrans 2013b), and October 2013 *I-15/Limonite Avenue Interchange Improvement Project Combined Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER)* (Caltrans 2013e).

- a) **No Impact:** According to the HPSR, the Department has determined that a finding of no impact is appropriate for the project because there are no historical resources within the project area limits, pursuant to CEQA Guidelines §15064.5(b)(3). As assigned by FHWA, the Department has determined a Finding of No Historic Properties Affected according to Section 106 PA Stipulation IX.A and 36 CFR 800.4(d)(1) is appropriate for this undertaking, and is hereby notifying the SHPO of this finding. The Department has determined that there are no State-owned cultural resources within the project area of potential effect (APE).
- b) **No Impact:** According to the ASR, there is a low likelihood of encountering subsurface archaeological material during activities associated with the proposed project. This was concluded because there has been past disturbance of the project area by construction and agricultural activities and the records search showed that no resources have been recorded within the APE and a field survey yielded no archaeological resources within the APE. Therefore, the proposed project would not cause a change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.

The results of the literature and records search indicate that no cultural resources have been identified within the APE and one historic power line (Site #33-16681/13627/30-179857) is recorded adjacent to the APE. In addition to the literature and records search, the Native American Heritage Commission (NAHC) was contacted on October 17, 2012. The NAHC stated that a search of their Sacred Lands Database did not yield any sacred lands or traditional cultural properties within the project area.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

- c) **Less than Significant Impact with Mitigation:** Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. Under California law, paleontological resources are protected by CEQA. The project will be in compliance with CEQA Guidelines regarding paleontological resources.

As detailed in the PIR/PER, the proposed project is located in an area of high paleontological sensitivity. The young eolian deposits (Qye) and very old alluvial channel deposits (Qoa) within the project site have the potential to contain paleontological resources. It is possible that construction of the proposed project, in particular excavation for widening and replacement of the Overcrossing structure, would potentially result in negative impacts on these deposits, which have been assigned a high paleontological resource sensitivity. In order

to reduce these impacts, a Paleontological Mitigation Plan (PMP) (Measure **PALEO-1**) will be prepared and implemented.

- d) **No Impact:** Based on the results of the cultural resource record searches, surveys, and Native American Consultation detailed in the HPSR and ASR, there are no human remains within the project APE that would be affected by the proposed project.

If human remains are discovered, the provisions of **CR-2** below will be followed.

2.5.2 Avoidance, Minimization, and/or Mitigation Measures

The following standard avoidance and/or minimization measures will be implemented to minimize potential cultural resource impacts:

- **CR-1:** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- **CR-2:** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 08 Division of Environmental Planning; Gabrielle Duff, DEBC: (909) 383-6933 and Gary Jones, DNAC: (909) 383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.

The following mitigation measure will be implemented to address potential paleontological resource impacts:

- **PALEO-1:** A PMP shall be developed and implemented prior to commencement of project construction. The PMP shall follow the guidelines of the Department and the recommendations of the Society of Vertebrate Paleontology (SVP). These recommendations include:
 - Attendance by a qualified paleontologist at the preconstruction meeting to consult with the grading and excavation contractors.
 - On-site presence of a paleontological monitor to inspect for paleontological resources on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential and on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resource potential.
 - Salvage and recovery of paleontological resources by the qualified paleontologist or paleontological monitor.
 - Collection of stratigraphic data by the qualified paleontologist and/or paleontological monitor to provide a stratigraphic context for recovered paleontological resources.

- Preparation (repair and cleaning), sorting, and cataloguing of recovered paleontological resources.
- Donation of prepared fossils, field notes, photographs, and maps to a scientific institution with permanent paleontological collections, such as the San Bernardino County Museum (SBCM).
- Completion of a final summary report that outlines the results of the mitigation program.

The PMP shall also incorporate the general guidelines for conformable impact mitigation to significant nonrenewable paleontological resources as developed by the SVP (1995). A PMP shall be prepared and submitted to the Department for review during the Plans, Specifications, and Estimates (PS&E) phase of the project.

2.6 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

Earthquakes are prime considerations in the design and retrofit of structures. The Department’s Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. Structures are designed using the Department’s Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge’s category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department’s Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

2.6.1 Discussion of Environmental Evaluation Question 2.6 – Geology and Soils

The information used in this section is from the September 2013 Preliminary Geotechnical Design Report for the I-15/Limonite Avenue Interchange Improvement Project (GEOCON 2013) and the January 2014 Preliminary Materials Report for the I-15/Limonite Avenue Interchange Improvement Project (GEOCON 2014).

- a. i) **No Impact:** The proposed project area is not within or adjacent to an Alquist-Priolo Earthquake Fault Zone. In addition, the project area is not located on any known “active” earthquake fault trace. Therefore, the potential to expose people or structures to adverse effects from ground rupture due to on-site active faulting is considered to be low, and no impacts are anticipated.
- a. ii) **Less than Significant Impact:** The project area is within a seismically active region of Southern California and would therefore experience the effects of seismic ground shaking. The nearest known active fault to the project area is the Chino fault, which is part of the Elsinore Fault Zone and extends from the City of Corona to Chino Hills. The Chino fault is capable of generating a magnitude 6.0 to 7.0 earthquake². Fill slopes associated with the project would be graded and compacted in accordance with the Department’s standard specifications to ensure avoidance of unstable earth surfaces. Compliance with the most current Department procedures regarding seismic design, which is standard practice on all Department projects, is anticipated to prevent any adverse effects related to seismic ground shaking. Seismic design would also meet County requirements under the Uniform Building Code (UBC). Therefore, through the incorporation of standard seismic design practices, the proposed project would result in a less than significant impact.
- a. iii) **No Impact:** Liquefaction is a destructive secondary effect of strong seismic shaking. It occurs primarily in loose, saturated, fine- to medium-grained soils in areas where the groundwater table is within approximately 50 feet of the ground surface. Shaking causes the soils to lose strength and behave as liquid. Based on a review of as-built information, groundwater was not encountered within 65 feet of the ground surface and site soils were found to be dense to very dense. Groundwater at the project site is expected to be approximately 75 feet below ground surface. Therefore, the risk for liquefaction at the site is low. Since the potential for liquefaction is low, the potential for lateral spreading and other secondary effects, such as seismic-induced settlement, is also low. To confirm these preliminary conclusions, a comprehensive geotechnical study, including a field investigation and laboratory soil testing, would be performed during the PS&E phase of the proposed project. Any recommendations arising from that study would be implemented into the proposed project. No impact as a result of liquefaction is anticipated.
- a. iv) **No Impact:** The project area is relatively flat and there would be a low probability for a landslide. Therefore, the proposed project would result in no impact.

² Southern California Earthquake Data Center. www.data.scec.org/significant/chino.html.

- b) **Less than Significant Impact:** Approximately 51.4 acres of land would be cleared and grubbed, and an additional 3 acres of soil would be disturbed due to removal of existing pavement, under the proposed project. As a result of these activities, soil could be exposed to rain and wind, potentially causing accelerated erosion and loss of topsoil from the project site. Federal and state jurisdictions require that an approved Storm Water 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 Department's Standard Specifications, the project SWPPP, and the requirements of applicable government agencies, thereby minimizing impacts to less than significant levels under the proposed project.
- c) **No Impact:** The project would not be located on a geologic unit that is unstable or that would become unstable as a result of the project. As discussed above under Responses (a.iii) and (a.iv), the project is in an area that has low potential for liquefaction and subsidence and low probability of a landslide. Since the potential for liquefaction is low, the potential for lateral spreading and other secondary effects, such as seismic-induced settlement and collapse, is also low. A comprehensive geotechnical study, including a field investigation and laboratory soil testing, would be performed during the PS&E phase of the proposed project to confirm these findings. Any recommendations arising from that study would be implemented into the proposed project. Therefore, there would be no impact as a result of unstable geologic units.
- d) **Less than Significant Impact:** Soils within the project area are generally sandy loams, which show little change as moisture changes. Therefore, it is anticipated that the proposed project would not be constructed on expansive soils. However, a comprehensive geotechnical study, including a field investigation and laboratory soil testing, would be performed during the PS&E phase of the proposed project. Any recommendations arising from that study would be implemented into the proposed project. Therefore, the project would result in less than significant impacts.
- e) **No Impact:** The proposed project is an interchange improvement project and would not require septic tanks or water disposal systems.

2.6.2 Avoidance, Minimization, and/or Mitigation Measures

Measures **WQ-1** through **WQ-4** (from Section 2.9.2) would be implemented to minimize soil erosion.

2.7 Greenhouse Gas Emissions

VII. GREENHOUSE GAS EMISSIONS: Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

While the Department has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is the Department's determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. The Department does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined below.

2.7.1 Discussion of Environmental Evaluation Question 2.7 – Greenhouse Gas Emissions

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 has 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 (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles make up the largest source of GHG-emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change: "Greenhouse Gas Mitigation" and "Adaptation." "Greenhouse Gas Mitigation" is a term for reducing GHG emissions to reduce or "mitigate" the impacts of climate change. "Adaptation" refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)³.

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing travel activity, 3) transitioning to lower GHG-emitting fuels, and 4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued cooperatively.⁴

³ http://climatechange.transportation.org/ghg_mitigation/

⁴ http://www.fhwa.dot.gov/environment/climate_change/mitigation/

Regulatory Setting

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

State

With the passage of several pieces of legislation including State Senate and Assembly Bills and Executive Orders, California launched an innovative and pro-active approach to dealing with GHG emissions and climate.

Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order (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 the 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.”

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by 2020.

Senate Bill 97 (SB 97), Chapter 185, 2007, Greenhouse Gas Emissions: required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board (CARB) to set regional emissions reduction targets from 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 for the achievement of the emissions target for their region.

Senate Bill 391 (SB 391) Chapter 585, 2009 California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Federal

Although climate change and GHG reduction are a concern at the federal level; currently no regulations or legislation have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level GHG analysis.⁵ FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process, from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the state is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and EO 13514 - *Federal Leadership in Environmental, Energy and Economic Performance*.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.⁶

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced

⁵ To date, no national standards have been established regarding mobile source GHGs, nor has U.S. EPA established any ambient standards, criteria or thresholds for GHGs resulting from mobile sources.

⁶ <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>

GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, U.S. EPA and NHTSA issued a joint Final Rulemaking to extend the National Program for fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model year 2017-2025 standards this program is projected to save approximately four billion barrels of oil and two billion metric tons of GHG emissions.

The complementary U.S. EPA and NHTSA standards that make up the Heavy-Duty National Program apply to combination tractors (semi trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama's 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

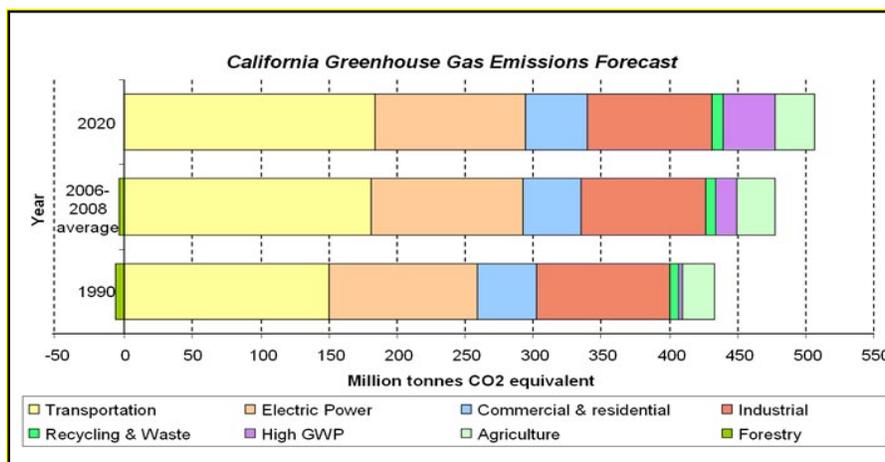
Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.⁷ 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. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 includes the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, the ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

⁷ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

Figure 4. California Greenhouse Gas Forecast

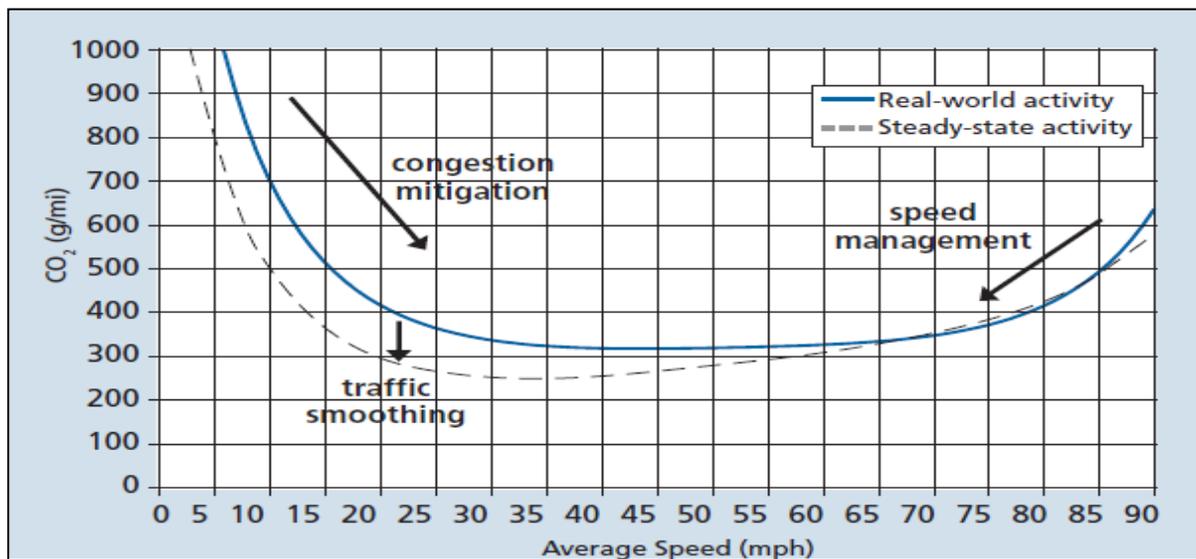


Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

The Department and its parent agency, the Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.⁸

One of the main strategies in the Department’s Climate Action Program to reduce GHG emissions is to make California’s transportation system more efficient. The highest levels of carbon dioxide (CO₂) from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 5 below). To the extent that a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors GHG emissions, particularly CO₂, may be reduced.

⁸ Caltrans Climate Action Program is located at the following web address:
http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

Figure 5. Possible Effect of Traffic Operation Strategies in Reducing On-Road CO₂ Emission⁹

Using EMFAC2011 emission factors within CT-EMFAC and traffic data provided by the traffic engineer (Dokken Engineering 2011), CO₂ emissions were forecast based on Baseline/Existing Year 2011, Opening Year 2018, and Horizon Year 2040 traffic conditions. The forecast of CO₂ emissions under the Build Alternative and No-Build Alternative is provided in Table 2-2. As shown in Table 2-2, the modeled CO₂ emissions at Opening Year 2018 and Horizon Year 2040 are higher than those for the Baseline/Existing Year 2011, which is attributed to the growth in VMT. When compared to the No-Build Alternative, CO₂ emissions are predicted to be less under the Build Alternative at Opening Year 2018 and Horizon Year 2040. It is important to note that these modeled CO₂ emission estimates are useful only for comparison between project alternatives. These estimates are not necessarily an accurate reflection of what the true CO₂ emissions will be because CO₂ emissions are dependent on other factors that are not part of the model, such as the fuel mix,¹⁰ rate of acceleration, and the aerodynamics and efficiency of the vehicles.

The 2012–2035 RTP/SCS includes strategies to reduce VMT and associated per capita energy consumption from the transportation sector as well as mitigation measures related to energy that are designed to reduce consumption and increase the use and availability of renewable sources of energy in the region (Southern California Association of Governments 2012a). Potential mitigation programs identified in the 2012–2035 RTP/SCS to reduce GHG emissions include increased construction of infrastructure and automobile fuel efficiency to accommodate increased use of alternative-fuel motor vehicles as well as coordinating transportation, land use, and air quality planning to reduce VMT, energy use, and GHG emissions (Southern California Association of Governments 2012a).

⁹ Traffic Congestion and Greenhouse Gases: Matthew Barth and Kanok Boriboonsomsin (TR News 268 May-June 2010) <<http://onlinepubs.trb.org/onlinepubs/trnews/trnews268.pdf>>

¹⁰EMFAC model emission rates are only for direct engine-out CO₂ emissions, not full fuel cycle. Fuel cycle emission rates can vary dramatically, depending on the amount of additives like ethanol and the source of the fuel components.

Table 2-2. Summary of CT-EMFAC-Modeled CO₂ Emissions

Scenario	Tons per Year CO ₂ Emissions
Baseline/Existing 2011	25,358
2018 No-Build Alternative	30,556
2018 Build Alternative	30,353
2040 No-Build Alternative	62,758
2040 Build Alternative	59,749
Build Alternative Increase/(Decrease) Compared to Baseline/Existing Year 2011	
2018 Build Alternative vs. Baseline/Existing	4,996
2040 Build Alternative vs. Baseline/Existing	34,391
Build Alternative Increase/(Decrease) Compared to No-Build Alternative	
2018 Build Alternative vs. 2015 No-Build Alternative	(202)
2040 Build Alternative vs. 2035 No-Build Alternative	(3,009)
Source: Compiled by ICF International using traffic data provided by Dokken Engineering 2013 Calculation worksheets provided in Appendix F of the Air Quality Report.	

The EIR for the 2012–2035 RTP/SCS performed a GHG emission reduction strategy consistency analysis to evaluate impacts related to climate change associated with the 2012–2035 RTP/SCS. This consistency analysis evaluated consistency with the ARB; Public Utilities Commission; Business, Transportation, and Housing Agency; State and Consumer Services Agency; and EPA GHG reduction strategies and found that impacts on climate change are considered significant even with implementation of mitigation measures. To help mitigate impacts associated with the 2012–2035 RTP/SCS, SCAG identified mitigation measures to mitigate the impacts of growing transportation energy demand associated with the RTP (Southern California Association of Governments 2012a). Measures identified in the RTP that are applicable to the project are reflected under Air Quality (Section 2.3), Measures **AQ-6** and **AQ-15**; Biological Resources (Section 2.4), Measure **BIO-2**; and Public Services (Section 2.14), Measures **PS-2** through **PS-8**.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will 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 mitigated to some degree by longer intervals between maintenance and rehabilitation events.

A qualitative analysis of construction-related emissions was provided in Section 3.2.2.1 of the Air Quality Report. As stated in Section 3.2.2.1, construction emissions of criteria pollutants are considered temporary emissions. This is not the case with GHGs because of the cumulative nature of GHGs, which remain in Earth's atmosphere long after the time of emission. As detailed in the construction emissions calculation worksheet provided in Appendix F of the Air Quality

Report, approximately 1,444 metric tons of CO₂ emissions associated with proposed project construction would be emitted into the atmosphere with construction of the Build Alternative.

CEQA Conclusion

While the project would result in an increase in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. When compared with the No-Build Alternative, CO₂ emissions are predicted to be less under the Build Alternative at Opening Year 2018 and Horizon Year 2040. While it is the Department's determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, the Department is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following sections.

Greenhouse Gas Reduction Strategies

AB 32 Compliance

The Department continues to be involved on the Governor's Climate Action Team as the ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from Former Governor Arnold Schwarzenegger's Strategic Growth Plan for California. The Strategic Growth Plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in GHG emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 6: The Mobility Pyramid.

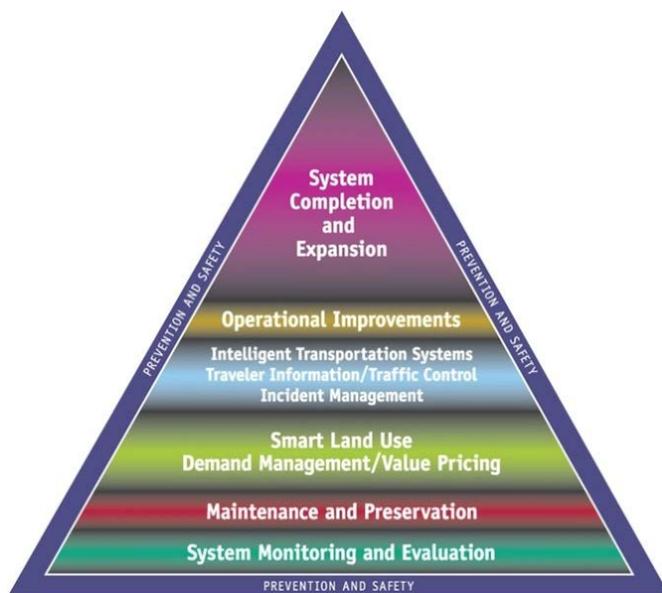


Figure 6. Mobility Pyramid

The Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. The Department works closely with local jurisdictions on planning activities, but does not have local land use planning authority. The Department also assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Department is doing this by supporting on-going research efforts at universities, by

supporting legislative efforts to increase fuel economy, and by participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and ARB.

The Department is also working towards enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill (SB) 375 (Steinberg 2008), SB 391(Liu 2009) requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill (AB) 32.

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas (GHG) emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future, statewide, integrated, multimodal transportation system.

The purpose of the CTP is to provide a common policy framework that will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. Through this policy framework, the CTP 2040 will identify the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the State's transportation needs.

Table 2-3 summarizes the Department and statewide efforts that it is implementing to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

Table 2-3. Climate Change/CO₂ Reduction Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	.0045	0.0065 0.045 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix	1.2	4.2
				25% fly ash cement mix	0.36	3.6
				> 50% fly ash/slag mix		
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013)¹¹ provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

The following measures will be implemented as benefits under other sections in this Initial Study to reduce the GHG emissions and potential climate change impacts from the project:

1. The Department and the California Highway Patrol are working with regional agencies to implement intelligent transportation systems (ITS) to manage the efficiency of the existing highway system. ITS is commonly referred to as electronics, communications, or information processing, used singly or in combination, to improve the efficiency or safety of a surface transportation system. This is included under Public Services (Section 2.14) in Measure **PS-2**.
2. Landscaping reduces surface warming and, through photosynthesis, decreases CO₂. The project proposes planting in the intersection slopes and drainage channels and seeding in areas adjacent to frontage roads. Planting a variety plant material and scattered skyline trees of different sizes, where appropriate, would not obstruct views of the mountains. This is included under Aesthetics (Section 2.1) in Measure **AES-5**.
3. The project would incorporate the use of energy-efficient lighting, such as LED traffic signals. LED bulbs—or balls, in the stoplight vernacular—cost \$60 to \$70 apiece but last five to six years compared with the one-year average lifespan of the incandescent bulbs that were previously used. The LED balls themselves consume 10 percent of the electricity of traditional lights, which will also help reduce the project’s CO₂ emissions.¹² This is included under Public Services (Section 2.14) in Measure **PS-2**.
4. According to the Department’s Standard Specification Provisions, the contractor must comply with all local Air Pollution Control District’s (APCD) rules, ordinances, and regulations regarding air quality restrictions. This is included under Air Quality (Section 2.3) in Measures **AQ-1, AQ-2, AQ-4, and AQ-6**.

Adaptation Strategies

“Adaptation strategies” refer to how the Department and others can 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 intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

¹¹ http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

¹² Knoxville Business Journal, “LED Lights Pay for Themselves,” May 19, 2008 at <http://www.knoxnews.com/news/2008/may/19/led-traffic-lights-pay-themselves/>.

Climate change adaptation must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data

All projects that have filed a Notice of Preparation (NOP) as of the date of the EO S-13-08, and/or are programmed for construction funding through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines.

The proposed project is programmed for construction funding after 2013. As such, it is not exempt at this time from requirements to analyze the impacts of sea-level rise directed in Executive Order S-13-08. The Vulnerability of Transportation Systems to Sea-Level Rise (Caltrans 2009) report suggests that by 2100, sea-level rise along the California coast could be as much as 55 inches. Given the proposed project's distance from the coastal zone, impacts related to sea-level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. The Department continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

2.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires; including where wildlands are adjacent to urbanized areas, or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of CERCLA, often referred to as “Superfund,” is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992

- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires clean up of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

2.8.1 Discussion of Environmental Evaluation Question 2.8 – Hazards and Hazardous Materials

The information used in this section is from the August 2013 *Hazardous Waste Initial Site Assessment (ISA) for the I-15/Limonite Avenue Interchange Improvement Project* (Dokken 2013a), August 2013 *Final Aerially Deposited Lead Report* (Dokken 2013e), *City of Eastvale General Plan* (June 2012), and *Riverside County General Plan* (2013)¹³. Note: There are Hazardous Waste studies currently under review and any findings will be included in the Final Initial Study Document.

- a) Less than Significant Impact:** According to the ISA, several Recognized Environmental Conditions (RECs) are located within the proposed project boundaries, as described in Table 2-4. None of the RECs within the project area have Activity and Use Limitations (AULs).

¹³ The Riverside County General Plan was officially adopted in October 2003, and is currently undergoing revisions. For purposes of this IS, the online version of the General Plan, which has an effective date of August 20, 2013, was utilized and referenced.

Table 2-4. Recognized Environmental Conditions

Location	Description of REC Evidence Found
Limonite Avenue bridge structure over I-15	Potential for Asbestos Containing Materials (ACM). New uses of ACM were banned by the EPA in 1989. Revisions to regulations issued by the Occupational Safety & Health Administration (OSHA) on June 30, 1995, require that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered Presumed Asbestos Containing Materials (PAC) and treated accordingly. In order to rebut the designation as PAC, OSHA requires that these materials be surveyed, sampled, and assessed in accordance with 40 CFR 763 (Asbestos Hazard Emergency Response Act [AHERA]). ACM have also been documented in the rail shim sheet packing, bearing pads, support piers, and expansion joint material of bridges.
Existing roadways within project boundaries including I-15 and associated on- and off-ramps to Limonite Avenue, Hamner Avenue, Wineville Avenue, and the Park & Ride facility within the project boundaries.	Potential lead and heavy metals associated with pavement striping. Implementation of improvements may require the removal and disposal of yellow traffic stripe and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape). Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations, and require disposal in a Class I disposal site.
Various pole- and pad-mounted electrical transformers within or immediately adjacent to the project boundaries.	Potential polychlorinated biphenyls (PCB)'s in pole- or pad-mounted electrical transformers. As of the date of the ISA, the existence and/or levels of PCB's associated with the pole- or pad-mounted electrical transformers, which may be encountered within the planned construction area, had not been determined.
The Gas Company high pressure gas pipeline located adjacent to, and parallel to the north side of Limonite Avenue (just west of I-15 and eastward) and crossing to Limonite to parallel the south side of Limonite Avenue westward beyond Hamner Avenue.	Potential explosive hazard associated with The Gas Company pipeline should construction activities extend into the pipeline easement.
Chevron gas station (located at the southwest quadrant of the intersection of Eastvale Gateway and Limonite Avenue), Ralphs gas station (located in the southwest quadrant of the intersection of Limonite Avenue and Hamner Avenue), and Vons gas station (located off the east side of Hamner Avenue approximately 700 feet north of Limonite Avenue).	Potential for underground fuel storage tank leaks from existing gas stations and other businesses that store fuel within or near to the project boundaries. At the time of the ISA, there was no documented evidence of soil or groundwater contamination associated with the existing gas stations adjacent to, or near the project study area.
Source: Dokken Engineering 2013.	

Soil samples from the project area were collected and analyzed for aerially deposited lead (ADL) and agricultural chemicals. None of the soil samples within the Limonite Interchange Project area were found to contain lead concentrations that exceeded the total threshold limit concentrations (TTLC) of 50 milligrams per kilogram (mg/kg). It was concluded that the soil does not represent significant environmental or health hazards, and according to the Department of Toxic Substances Control (DTSC) variance issued to the Department, can be classified as soil type X, non-hazardous, and can be reused on site. Based on a site reconnaissance, potential RECs within the project boundaries included potential pesticide and herbicide residuals in soils at agricultural properties. Soil samples were acquired from

the affected agricultural parcels and analyzed in the laboratory for the presence and levels of agricultural chemicals. Four soil samples were acquired and sent to the laboratory. No agricultural chemicals were detected at or above the reporting limit from the four samples acquired from the agricultural parcels (Assessor's Parcel Numbers [APNs] 160-050-031, 160-050-050, and 160-050-049). Results of the laboratory analysis of the soil samples utilized U.S. EPA or other Environmental Laboratory Accreditation Program (ELAP) approved methodologies.

The proposed project would not include the routine use, transport, or disposal of hazardous materials unless ACM, lead-based paint from pavement striping, and/or potential PCBs required removal during construction. Any transport of hazardous materials to the site and removal of hazardous wastes from the site would comply with state and federal regulations and therefore would result in a less than significant impact. Standard measures and recommendations to address hazardous waste/materials are included in Section 2.8.2 below. Additional hazardous waste studies are currently under review and the findings from any studies under review will be included in the Final Environmental Document.

- b) **Less than Significant Impact:** As discussed under Response (a), the proposed project would not involve hazardous materials, and no hazard to the public or environment is foreseen. However, during construction, impacts could result from potential lead and ACM in the Limonite Bridge, removal of yellow striping and pavement markers potentially containing lead, removal/relocation of electrical transformers, potential explosive hazard associated with gas pipelines, and potential for encountering contamination from an unknown leaking underground fuel storage tank and/or unknown contaminated soils or groundwater. Compliance with state and federal regulations would make this a less than significant impact. Standard measures and recommendations to address hazardous waste/materials are included in Section 2.8.2 below.
- c) **No Impact:** There are no schools within one mile of the proposed project; therefore, the proposed project would not emit or handle hazardous substances within one-quarter mile of a school site.
- d) **No Impact:** Government Code 65962.5 is known as the Cortese List. The Cortese database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with Underground Storage Tanks (USTs) having a reportable release and all solid waste disposal facilities from which there is known migration. A review of the Environmental Data Resources (EDR) report listing known hazardous substance sites within one mile of the project area was conducted as part of the ISA preparation. Two Cortese sites were reported within a one-mile radius of the project area. Neither of these sites is located within or adjacent to the project area. The first was a gasoline spill at 5800 Hamner Avenue (Swan Lake Texaco). The case has since been cleaned up and closed and is not considered a REC. The second site is at 6500 Hamner Avenue (Western Sky Dairy). No release or cleanup information was reported. The site is not considered an REC for the proposed project. Therefore, the proposed project is not located on a site included on a list compiled pursuant to Government Code 65962.5, and no impact would result.
- e) **No Impact:** The proposed project is located outside of the easternmost boundary of the

Chino Airport Influence Area. The proposed project would not result in a safety hazard for people residing or working in the area.

- f) **No Impact:** The proposed project is not within the vicinity of a private airstrip; therefore, no impact would occur.
- g) **Less than Significant Impact:** The proposed project would improve the ability of emergency service providers to serve the community as it would reduce congestion in the interchange area, which would likely reduce response times for these services. Therefore, it would not interfere with an emergency response or evacuation plan. However, emergency response times could increase temporarily during construction of the proposed project due to increased congestion in the area of the Limonite Interchange, which could interfere with emergency response and evacuation plans. This impact would be temporary and would be less than significant with the implementation of a Traffic Management Plan (TMP).
- h) **No Impact:** The proposed project would improve an existing interchange and would not expose people to a greater risk of loss, injury, or death due to wildland fires than presently exists.

2.8.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following avoidance and/or minimization measures will be implemented to minimize potential impacts:

- **HAZ-1:** To avoid impacts from pavement striping during construction, testing and removal requirements for yellow striping and pavement marking materials shall be performed in accordance with the Department’s Standard Special Provision 15-2.02C(2) “REMOVE TRAFFIC STRIPES AND PAVEMENT MARKINGS CONTAINING LEAD – this Standard Special Provision requires a lead compliance plan for removal when residue is definitely non-hazardous. Used for new yellow paints and all other colors of paint.”
- **HAZ-2:** Any leaking transformers observed during the course of the project shall be considered a potential PCB hazard. Should leaks from electrical transformers (that will either remain within the construction limits or will require the removal and/or relocation) be encountered during construction, the transformer fluid shall be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer shall be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCBs shall also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.
- **HAZ-3:** Based on preliminary plans, right of way acquisition is not expected at the Chevron Gas Station, which is immediately adjacent to the project on the southwest corner of Limonite Avenue and Eastvale Gateway. Should final plans indicate that a portion of this parcel will be acquired for new right of way, a preliminary environmental screening (limited subsurface sampling and laboratory analysis) shall be performed for potentially elevated levels of petroleum hydrocarbons and methyl tertiary butyl ether (MTBE) contamination within the limits of proposed construction, and/or right of way acquisition, adjacent to the existing Chevron Gas Station. Should the preliminary screening encounter elevated levels of

petroleum hydrocarbons and/or MTBE, a limited Phase II ISA shall be performed. The Phase II ISA shall consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction activities adjacent to the existing Chevron Gas Station. The Phase II ISA shall also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.

- **HAZ-4:** Should any previously unknown hazardous waste/material be encountered during construction, the Department's *Hazards Procedures for Construction* shall be followed.
- **HAZ-5:** In accordance with Section 112 of the Clean Air Act, which established the National Emission Standards for Hazardous Air Pollutants (NESHAP), specific work practices will be followed during demolitions and renovations of all facilities. The regulations require a thorough inspection where the demolition or renovation operation will occur and requires the owner or the operator of the demolition or renovation to notify the appropriate delegated entity (often a state agency) before any demolition, or renovations that contain a certain threshold amount of regulated asbestos-containing material. The rule also requires work practice standards that control asbestos emissions. The project shall comply with all asbestos demolition and removal measures outlined in SCAQMD Rule 403 based on the results of the additional hazardous waste studies are currently under review. Refer to SCAQMD Rule 1403 that specifically addresses asbestos demolition and removal at <http://www.aqmd.gov/home/regulations/compliance/asbestos-demolition-removal>.

2.9 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area, structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding; including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunamis, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹⁴ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of

¹⁴ A point source is any discrete conveyance such as a pipe or a man-made ditch.

storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the USACE’s Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent¹⁵ standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition, every

¹⁵ The U.S. EPA defines “effluent” as “wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall.”

permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

State Requirements: Porter-Cologne Water Quality Control Act

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of “waste” as defined, and this definition is broader than the CWA definition of “pollutant.” Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

- National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department’s MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The

SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department's MS4 Permit (Order No. 2012-0011-DWQ) was adopted on September 19, 2012 and became effective on July 1, 2013. The permit has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);
2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the Maximum Extent Practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

For the project area outside the Department's right of way, the post-construction stormwater requirements will be in compliance with the NPDES No. CAS61806, Order No. R8-2010-0036.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with the Department's Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

2.9.1 Discussion of Environmental Evaluation Question 2.9 – Hydrology and Water Quality

The information used in this section is from the June 2013 *Location Hydraulic Study for the I-15/Limonite Avenue Interchange Improvement Project* (Dokken 2013c) and the July 2013 *Final Scoping Questionnaire for Water Quality Issues for the I-15/Limonite Avenue Interchange Improvement Project* (Dokken 2013b).

- a) **No Impact:** Under the proposed project, Limonite Avenue would be widened, thereby increasing impervious surface area. The additional 10.5 acres of impervious surface area would increase stormwater runoff, which could contain various visible, floating, suspended, and/or petroleum product pollutants. Construction activities associated with the proposed project could result in sediment or other construction-related pollutants from contaminated runoff.

The conceptual roadway drainage system would continue to direct stormwater runoff in a north to south direction as it does currently. Along I-15, water would be captured by inlets and overside drains and conveyed to roadside ditches. These ditches would direct water to the south where it discharges to the Santa Ana River, which is the receiving water body. Similarly, along Limonite Avenue, runoff would be collected by inlets and conveyed via storm drain pipes south to the Santa Ana River. Permanent treatment BMPs such as biofiltration strips or swales and infiltration and/or detention basins are anticipated to be located within the available areas provided by the loop ramps, or as the interchange configuration would allow, and would be used to improve water quality and reduce the peak flow runoff from the project site. In order to ensure that no water quality standards or discharge requirements are violated, the proposed project would be required to implement temporary construction BMPs (refer to Measures **WQ-1**, **WQ-2**, and **WQ-4**), which are standard practices for erosion and water quality control. The BMPs would be included in the project-specific SWPPP and would provide adequate protection against water quality degradation during construction.

The construction activities of the proposed project would also be required to comply with the California Construction General Permit, NPDES Number CAS000002, Order No. 2009-0009-DWQ. Additionally, for the post-construction stormwater runoff requirements, the proposed project area within the Department's right of way would be required to comply with NPDES No. CAS000003, Order No. 2012-0011-DWQ, and the proposed project area outside the Department's right of way would comply with NPDES No. CAS618036, Order No. R8-2010-0036. Implementation of Measures **WQ-1** through **WQ-4**, which are standard practice on all Department projects, would ensure that potential water quality impacts are minimized or avoided. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements, and no impacts are anticipated.

- b) **No Impact:** The Department of Water Resources (DWR) database of groundwater elevations identifies groundwater at an elevation of approximately 575 feet at the two closest monitoring wells to the project site, less than 2 miles away. Ground elevations at the project site are generally around 650 feet. Therefore, it is expected that groundwater is approximately 75 feet below ground surface. Groundwater was not observed in any of the borings performed at the project site. Borings were made to a maximum of 70 feet. The

proposed project would not require the use of groundwater, nor would it deplete the recharge of groundwater. Therefore, the proposed project would have no impact on groundwater or groundwater supplies.

- c) **Less than Significant Impact:** The widening of Limonite Avenue would contribute to an increase in impervious surface area, which would result in additional stormwater runoff. The drainage system would continue to direct stormwater runoff in a north/south direction as it does currently. It is not anticipated that this project would result in hydrologic impacts on the Santa Ana River—the downstream receiving body—because the anticipated proposed infiltration and/or detention basins would reduce the post-project peak flows, and any increase in roadway contaminants that could ultimately affect surface water quality would be minimized with implementation of Measures **WQ-1** through **WQ-4**. With implementation of Measures **WQ-1** through **WQ-4**, the project would not result in substantial erosion or silt, on- or off-site. Therefore, the proposed project would have a less than significant impact on the drainage pattern of the area, and would not result in substantial siltation or erosion on or off site.
- d) **Less than Significant Impact:** The proposed project would result in an increase in impervious surface area and runoff. However, due to the implementation of detention or infiltration basins and implementation of Measures **WQ-1** through **WQ-4**, it is not anticipated that the project would result in hydrologic impacts, such as flooding, on the Santa Ana River or project area because of the increased runoff. As a result, the proposed project would have a less than significant impact on the drainage pattern of the area and would not result in substantial flooding on or off site due to runoff.
- e) **Less than Significant Impact:** The proposed project would result in an increase in impervious surface area (10.5 acres), which would result in an increase in stormwater runoff. As mentioned earlier in Response (a), the conceptual roadway drainage system would continue to direct stormwater runoff in a north to south direction as it does currently. Along I-15, water would be captured by existing inlets and overside drains and conveyed to roadside ditches that direct water to the south where it discharges to the Santa Ana River. Along Limonite Avenue, runoff would be collected by inlets and conveyed via storm drain pipes south to the Santa Ana River. Permanent treatment BMPs such as biofiltration strips or swales and infiltration and/or detention basins are anticipated to be located within the available areas provided by the loop ramps, or as the interchange configuration would allow, and would be used to improve water quality and reduce the peak flow runoff from the project site. Therefore, the project would result in less than significant impacts related to the capacity of existing and planned stormwater drainage systems. In addition, an NPDES General Construction permit and a SWPPP (Measure **WQ-4**) would be required to address sediment control during construction activities. Impacts related to polluted runoff would be less than significant.
- f) **Less than Significant Impact:** As described above under Responses (a) through (e), the proposed project would result in less than significant short-term construction and long-term operational impacts on water quality. Construction impacts would be reduced through the implementation of Measures **WQ-1** through **WQ-4**. Water quality impacts would be less than significant.

- g) **No Impact:** The proposed project is an interchange improvement project and no housing is proposed. Therefore, no housing would be placed within a 100-year flood hazard area.
- h) **Less than Significant Impact:** The Federal Emergency Management Agency (FEMA) has performed a detailed study of the Santa Ana River, which is approximately 2 miles south of the project area. According to FEMA Flood Insurance Rate Map (FIRM) number 06065C0681G, the majority of the project area is located in Zone X, which is defined as an area within the 0.2% annual chance floodplain (500-year flood), but outside the 1.0% annual chance floodplain (100-year flood). The segment of the Limonite Avenue widening between Pats Ranch Road and Wineville Avenue is approximately 20 feet south of Zone A, which is defined as an area with a 1% chance of flooding in any given year (100-year frequency) with no base flood elevations determined. FEMA has also classified this area as a special flood hazard area. The floodplain within the project area is the result of backwater from the storm drain system known as Line J. This system runs south under Pats Ranch Road and ultimately conveys flows to the Santa Ana River.

The floodplain in the vicinity of the project covers an area of approximately 135 acres with a volume of approximately 365 acre-feet. The proposed project would widen Limonite Avenue 30 feet to the north. Although the roadway itself would not encroach on the floodplain, an existing ditch and berm adjacent to Limonite Avenue would be shifted to the north as required by the widening. This ditch and berm would encroach 0.8 acre into the floodplain, displacing the base flood volume by 0.6% chance (2.2 acre-feet). The incremental increase in water surface elevation over the entire floodplain is 0.2 inch, which will continue to be contained on the vacant agricultural parcel currently occupied by the floodplain. The change in water surface elevation is not anticipated to create an increased risk of potential damage to the surrounding areas or create flooding that would result in loss of life or property and there is no significant risk associated with implementation of the proposed project. Therefore, the proposed project would have a less than significant impact.

- i) **Less than Significant Impact:** As discussed above, under Response (h), the proposed project would place a ditch and berm within the floodplain. The incremental increase in surface water elevation would be inconsequential and would result in a less than significant impact. No roadways or other structures used or inhabited by people would be placed in the floodplain or any area that would expose them to significant loss or death involving flooding.
- j) **No Impact:** The proposed project is located in an area where there is no risk of tsunami or seiche. The topography of the area is flat; therefore, the risk of mudflow is low.

2.9.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following avoidance and/or minimization measures will be implemented to minimize potential impacts:

- **WQ-1:** Construction site BMPs shall be implemented during construction for controlling potential pollutants on construction sites. The following BMP categories shall be considered and implemented, where feasible: Soil Stabilization Practices; Sediment Control Practices; Tracking Control Practices; Wind Erosion Control; Non-Storm Water Controls; and Waste Management and Material Pollution Controls.

- **WQ-2:** Implement Design Pollution Prevention, Low Impact Development (LID), source control, and treatment control BMPs (where feasible and applicable) in compliance with NPDES permit requirements.
- **WQ-3:** Construction will be scheduled to minimize soil-disturbing work during the rainy season.
- **WQ-4:** A Notice of Intent will be filed with the Santa Ana RWQCB for coverage under the state-wide NPDES permit for construction-related discharges. The contractor will prepare a SWPPP that sets forth the BMPs that will be implemented on site. The BMPs will be implemented to minimize spills and keep potentially contaminated materials used during construction out of the drainage waterways as documented in the SWPPP.

2.10 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project’s effects.

Environment Justice

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2014, this was \$23,850 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. The Department’s commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix A of this document.

2.10.1 Discussion of Environmental Evaluation Question 2.10 – Land Use and Planning

The information used in this section is from the March 2014 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2014c).

- a) **No Impact:** As described in Section 1.2 and the *CIA Memorandum*, improvements would be made to the existing interchange at I-15 and Limonite Avenue. An established community would not be divided by the proposed project.

No minority or low-income populations that would be adversely affected by the proposed project have been identified as determined above. Therefore, this project is not subject to the provisions of EO 12898.

- b) **No Impact:** As discussed in the *CIA Memorandum*, the proposed project is located within the City of Eastvale Land Use designation of Freeway and Commercial Retail, and the City of Jurupa Valley Land Use designations of Commercial Retail and General Plan Community Overlay (CCO), which includes a combination of small lot single-family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreation open space. The proposed project is consistent with these land use designations.

The proposed project is needed to alleviate traffic congestion associated with approved area development. Based on the update to the Riverside County General Plan, the cities of Eastvale and Jurupa Valley will be adding numerous residences and businesses in the coming years, resulting in substantial increases in traffic.

The Build Alternative of the proposed project is also consistent with the relevant transportation planning documents with jurisdiction over the plan area. The proposed improvements to the I-15/Limonite Avenue Interchange are included in SCAG's 2015 Federal Transportation Improvement Program (2015 FTIP) and 2012 Regional Transportation Plan (2012 RTP). The current description in the FTIP and RTP are consistent with the proposed project.

- c) **No Impact:** The project area is located within the Western Riverside County MSHCP. As discussed in the NES (MI), the proposed project is a Covered Activity and take authorization for MSHCP Fully Covered Species is afforded under the plan. Improvements to the interchange are identified in the MSHCP as falling under the jurisdiction of the Department, as described in the MSHCP text for Covered Activities. Therefore, the proposed project would not conflict with the MSHCP. Further discussion of the MSHCP is included in Section 2.4.1 (Biological Resources).

2.10.2 Avoidance, Minimization, and/or Mitigation Measures

As a Covered Project under the MSHCP, avoidance and minimization Measures **BIO-2**, MSHCP Construction Guidelines, and **BIO-3**, Standard Best Management Practices, will be implemented.

2.11 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.11.1 Discussion of Environmental Evaluation Question 2.11 – Mineral Resources

The information used in this section is from the *Riverside County General Plan* (County of Riverside 2013) and *City of Eastvale General Plan* (City of Eastvale 2012).

- a) No Impact:** According to the Riverside County General Plan (<http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx>), the project area and vicinity are classified as Mineral Resource Zone (MRZ) 3: “area[s] where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.” The Riverside County General Plan provides no specific policies for property identified as MRZ-3. Furthermore, the City of Eastvale General Plan EIR determined that Mineral Resources was one of several environmental resources determined to have no impact or less than significant impacts in the City. The City of Eastvale General Plan also does not designate the project site for mineral resource related uses nor does it indicate that past recovery of minerals have occurred at the project site. The project study area has been previously used as a roadway and for agricultural uses and has not been mined for mineral resources. The areas immediately adjacent to the project site are planned for commercial, residential, and transit-related development. Mineral resources are not expected to be located within the anticipated direct impact area associated with the proposed project due to the developed nature of the project site and surrounding areas. Therefore, no impacts on mineral resources are anticipated.
- b) No Impact:** The proposed project is not located in an area delineated as a locally important mineral resource recovery site. Therefore, there would be no impact.

2.11.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.12 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The CEQA noise analysis is included at the end of this section.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with FHWA (and the Department, as assigned) involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use

under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA 23 CFR 772 analysis.

Table 2-5. NEPA Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ¹	67 (Exterior)	Residential.
C ¹	67 (Exterior)	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.
¹ Includes undeveloped lands permitted for this activity category.		

Figure 7 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Figure 7. Noise Levels of Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

According to the Department’s *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department’s *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 7 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources, and safety considerations. The reasonableness determination

is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents' acceptance and the cost per benefited residence.

2.12.1 Discussion of Environmental Evaluation Question 2.12 – Noise

Information used in this section is from the May 2014 *I-15/Limonite Avenue Interchange Improvement Project Noise Study Report (NSR)* (Caltrans 2014b) and the August 2014 *Noise Abatement Decision Report (NADR)* (Caltrans 2014d).

a) Less than Significant Impact: A field investigation was conducted to identify land uses that could be subjected to traffic and construction noise impacts. Land uses identified in the project area included residential, commercial, agricultural, and undeveloped land uses with corresponding Activity Categories B, C, F, and G. Noise-sensitive receptors in the project area consist of residential land uses. The residential land uses are located primarily along the west side of I-15 to the north and south of Limonite Avenue. Temporary changes in noise levels in the vicinity of the project site are anticipated due to construction activities and permanent changes are anticipated due to operation of the proposed project. According to the Department's *Traffic Noise Analysis Protocol*, there is potential for a project to cause a significant adverse environmental effect due to noise if the project is predicted to result in a substantial noise increase (i.e., 12 decibel [dB] increase) over the existing noise level or when future predicted design-year noise levels with the project approach or exceed NAC. To determine if the substantial noise increase is a significant adverse environmental effect, consideration is given to the context and intensity of the substantial noise increase. Context refers to the project setting and uniqueness, or sensitive nature of the noise receiver(s). Intensity refers to the project-induced substantial noise increase (i.e., the increase over the "no-build" condition); it also refers to the number of residential units affected and to the absolute noise levels.

As part of the project, the realigned southbound off-ramp from I-15 would remove a portion of a 12- to 14-foot berm that provides shielding for residences located in the Swan Lake Mobile Home Park (Receivers M22-ST4, M23, and M24-ST5) (refer to Figure 8, Analysis Area, Noise Monitoring and Modeling Locations and Locations of Evaluated Noise Barriers). As shown in Table 2-6, these residences would experience a 0 dBA to 9 dBA (A-weighted decibel) $L_{eq(h)}$ (hourly equivalent energy noise level) increase in noise. These increases are well below the 12 dB increase and would not result in a substantial noise increase of the Department's *Traffic Noise Analysis Protocol*. However, because the predicted noise levels in the design year would approach or exceed the NAC of 67 dBA $L_{eq(h)}$, traffic noise impacts are predicted at residential land uses in this area and noise abatement was analyzed in the NADR. Under 23 CFR 772.11, noise abatement must be considered for Type I projects if the project is predicted to result in a traffic noise impact. Type I projects are defined as a proposed federal or federal-aid highway project for the construction of a highway at a new location, the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment, or an increase in the number of through traffic lanes. Type I projects include those that create a completely new noise source as well as those that increase the volume of speed of traffic or move the traffic closer to a receptor. Type I projects include those that add an interchange, ramp, auxiliary lane, or truck-climbing lane to an existing highway or widen an existing ramp by a full lane width for its entire length.

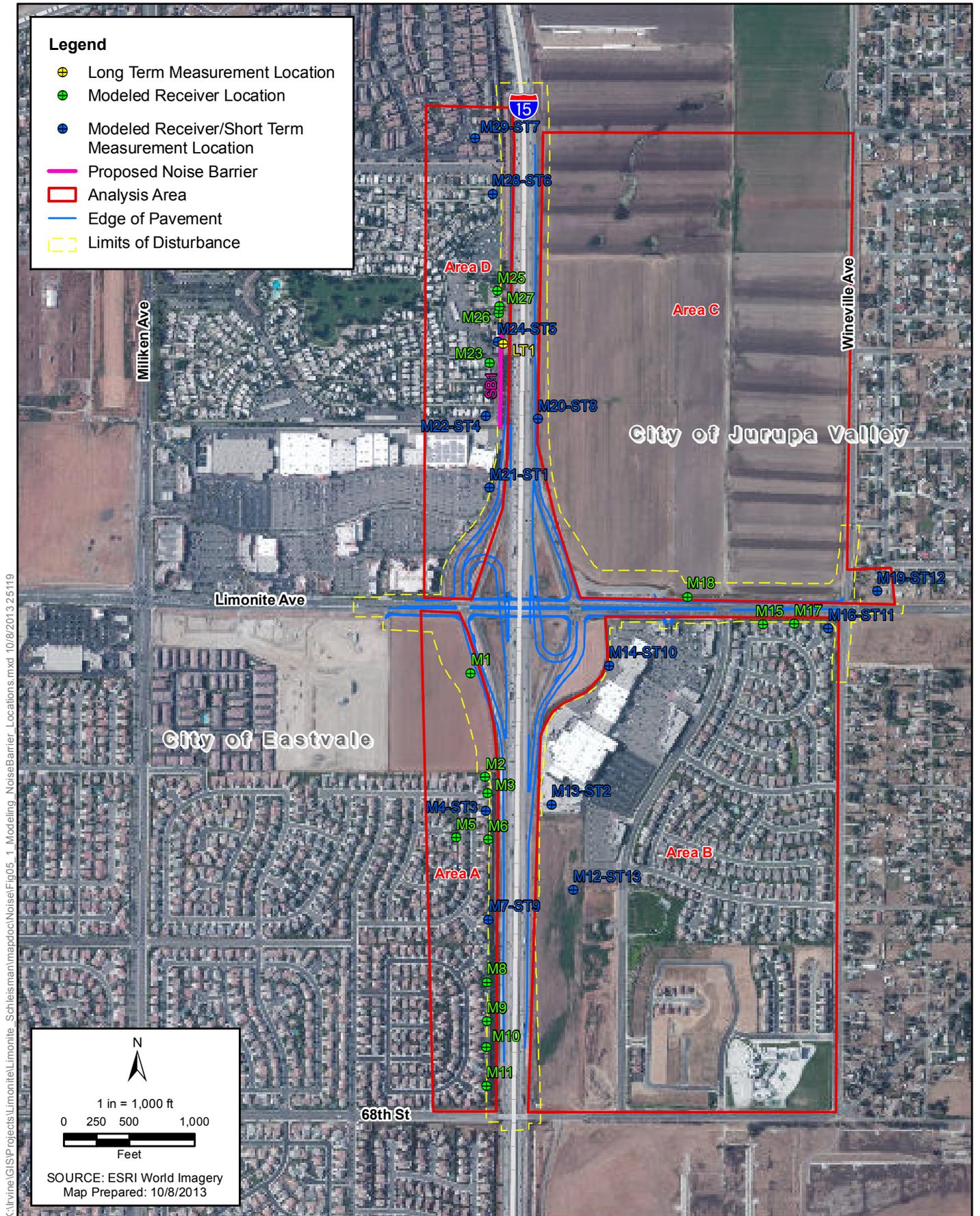


Figure 8
Analysis Area, Noise Monitoring and Modeling Locations and Locations of Evaluated Noise Barriers Interstate 15/Limonite Avenue Interchange Improvements

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Table 2-6. Project Future Worst Hour Noise Levels

Receiver	Land Use/Number of Dwelling Units	Existing Noise Level $L_{eq(h)}$, dBA	Design Year Noise Level with Project $L_{eq(h)}$, dBA	Design Year Noise Level with Project minus Existing Conditions $L_{eq(h)}$, dBA
M1	Undeveloped /0	68	72	4
M2	Residential /2	60	61	1
M3	Residential/ 2	61	63	2
M4-ST3	Residential /3	62	63	1
M5	Residential /8	54	56	2
M6	Residential /6	60	62	2
M7-ST9	Residential /5	58	60	2
M8	Residential /5	60	61	1
M9	Residential /4	59	60	1
M10	Residential /4	59	60	1
M11	Residential /3	58	59	1
M12-ST13	Commercial /0	59	62	3
M13-ST2	Commercial /0	67	76	9
M14-ST10	Commercial /0	62	65	3
M15	Residential /4	58	62	4
M16-ST11	Residential /3	59	63	4
M17	Residential /2	58	62	4
M18	Agricultural /0	64	68	4
M19-ST12	Residential /3	60	65	5
M20-ST8	Agricultural /0	78	81	3
M21-ST1	Commercial /0	67	70	3
M22-ST4	Residences /3	63	71	8
M23	Residences /2	64	69	5
M24-ST5	Residences /2	63	66	3
M25	Residential /1	63	64	1
M26	Residential /2	63	65	2
M27	Residential/2	63	64	1
M28-ST6	Residential /4	60	61	1
M29-ST7	Recreation /0	52	52	0

Overall, as shown in Table 2-6, noise levels associated with project operations at all receiver sites are predicted to increase approximately 0 to 9 dB above existing levels by the Year 2040 in the project area. The barrier evaluated in the NADR is identified as Barrier SB-1 (refer to Table 2-7, Predicted Future Noise Levels and Noise Barrier Analysis). Noise reductions were calculated and a reasonable allowance for each feasible barrier height ranging from 8 feet to 16 feet in height were analyzed for Barrier SB-1. As seen in Table 2-8, Barrier SB-1 is acoustically feasible for a height between 12 and 16 feet. Seven benefited residences yields a total reasonable allowance of \$385,000 for each barrier height considered. Based on the engineer's cost estimate to construct the barrier, the 12-, 14-, and 16-foot barriers are estimated to cost between \$303,660 and \$404,880 to construct. Comparing the total reasonable allowances to the estimated construction costs, all of the soundwalls are determined to be fiscally reasonable within 10%.

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Receiver I.D.	Area	Barrier I.D.	Land Use / Activity Category	Number of Dwelling Units or Equivalent	Address	Existing Noise Level $L_{eq}(h)$, dBA	I-15/Limonite Interchange Improvements Project Future Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																					
							Design Year Noise Level without Project, $Leq(h)$, dBA	Design Year Noise Level with Project, $Leq(h)$, dBA	Design Year Noise Level without Project minus Existing Conditions $Leq(h)$, dBA	Design Year Noise Level with Project minus No Project Conditions $Leq(h)$, dBA	Design Year Noise Level with Project minus Existing Conditions $Leq(h)$, dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)														
														8 feet			10 feet			12 feet			14 feet			16 feet		
														$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M16-ST11	B	n/a	Residential / B	3	6220 Black Pearl Court	59	63	63	4	0	4	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M17	B	n/a	Residential / B	2	11962 Silver Loop	58	62	62	4	0	4	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M18	C	n/a	Agricultural / F	0	NA	64	68	68	4	0	4	NA	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M19-ST12	C	n/a	Residential / B	3	11756 Del Sur Drive	60	65	65	5	0	5	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M20-ST8	C	n/a	Agricultural / F	0	NA	78	81	81	3	0	3	NA	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M21-ST1	D	n/a	Commercial / F	0	12281 Limonite Avenue	67	69	70	2	1	3	NA	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M22-ST4	D	SB1	Residential / B	3	5800 Hamner Avenue	63	64	71	1	7	8	B(67)	A/E	66	5	3	65	6	3	64	7	3	63	8	3	63	8	3
M23	D	SB1	Residential / B	2	5800 Hamner Avenue	64	64	69	0	5	5	B(67)	A/E	64	5	2	63	6	2	63	6	2	63	6	2	62	7	2
M24-ST5	D	SB1	Residential / B	2	5800 Hamner Avenue	63	64	66	1	2	3	B(67)	A/E	60	6	2	60	6	2	60	6	2	60	6	2	60	6	2
M25	D	n/a	Residential / B	1	5800 Hamner Avenue	63	63	64	0	1	1	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M26	D	n/a	Residential / B	2	5800 Hamner Avenue	63	64	65	1	1	2	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M27	D	n/a	Residential / B	2	5800 Hamner Avenue	63	64	64	1	0	1	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M28-ST6	D	n/a	Residential / B	4	5800 Hamner Avenue	60	61	61	1	0	1	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M29-ST7	D	n/a	Residential / B	0	5464 W Homecoming Circle	52	52	52	0	0	0	B(67)	None	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: A/E= Future noise conditions approach or exceed the Noise Abatement Criteria.

^a Minimum height needed to break the line of sight between 11.5 foot truck stack and first row receivers.

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Table 2-8. Summary of Barrier Cost for SB-1

Height (feet)	Location	Station	Breaks Line of Sight?	Acoustically Feasible?	Number of Benefited Residence	Total Reasonable Allowance	Estimated Construction Cost	Cost Less Than Allowance?
12	Along right of way	1039+69 to 1046+87	Yes	Yes	7	\$385,000	\$303,660	Yes
14	Along right of way	1039+69 to 1046+87	Yes	Yes	7	\$385,000	\$354,270	Yes
16	Along right of way	1039+69 to 1046+87	Yes	Yes	7	\$385,000	\$404,880	Yes

Source: Noise Abatement Decision Report, August 2014.

Several non-acoustical factors were also considered relating to the feasibility of the proposed sound barrier, including geometric standards, safety, maintenance, security, geotechnical considerations, and utility relocations. The sound barrier was considered in accordance with required geometric safety standards and to minimize or avoid utility and geotechnical considerations.

Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of a barrier at SB-1, with respective lengths and average heights of 723 feet in length at a height of 12 feet. Calculations based on preliminary design data show that the barrier will reduce noise levels by 7 dBA for seven residences at a cost of \$303,660. If during final design conditions have substantially changed, noise abatement may not be necessary. The final decision on noise abatement will be made prior to completion of the project design and the public involvement processes.

As detailed in the *Noise Study Report*, there would be two types of short-term construction noise under the Build Alternative. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site, which would incrementally raise noise levels on access roads leading to the site. A high single-event noise exposure potential at a maximum level of 87 dBA L_{max} (maximum sound level) from trucks passing at 50 feet would exist. However, the projected construction traffic would be minimal when compared to existing traffic volumes on I-15 and other affected streets, and the associated long-term noise level change would not be perceptible. Therefore, construction-related worker commutes and equipment transport noise impacts would be short term and less than significant.

The second type of short-term noise impact would be from construction activities. Construction of the proposed project is expected to require the use of earthmovers, bulldozers, paving machines, water trucks, dump trucks, concrete trucks, rollers, and pickup trucks. Noise associated with the use of construction equipment is estimated between 79 and 89 dBA L_{max} at a distance of 50 feet from the active construction area for the grading phase. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 91 dBA L_{max} (at a distance of 50 feet from an active construction area). In addition to the

standard construction equipment, the project may require the use of pile drivers; however, the use of pile drivers is not anticipated at this time. Pile driving generates noise levels of up to 96 dBA L_{max} at 50 feet.

Construction would be conducted in accordance with applicable local noise standards and the Department's provisions in Section 14-8.02, "Noise Control," of the 2010 Standard Specifications and Special Provisions (**NOI-1**). Therefore, construction noise impacts would be less than significant.

- b) **Less than Significant Impact:** Any groundborne noise or vibration would be limited to the construction period and would be short in duration. Compliance with local jurisdiction noise restrictions and the Department's Standard Specifications as outlined in **NOI-1** would minimize vibration effects. Therefore, vibration and noise effects are considered less than significant.

The proposed project does not involve changes that would result in noticeable increases in groundborne vibration or groundborne noise levels from use or maintenance of the roadway when compared with the No-Build Alternative. Once the project is complete, long-term increases in groundborne noise levels from use or maintenance of the roadway would be less than significant.

- c) **Less than Significant Impact:** As shown in Table 2-6, Receivers M22-ST4, M23, and M24-ST5 would experience a 0 dBA to 9 dBA increase in noise above existing levels by the Year 2040. These increases are well below the 12 dB increase and would not result in a substantial noise increase of the Department's *Traffic Noise Analysis Protocol*. However, because the predicted noise levels in the design year would approach or exceed the NAC of 67 dBA $L_{eq(h)}$, traffic noise impacts are predicted at residential land uses in this area and noise abatement was analyzed in the NADR. The barrier evaluated in the NADR is identified as Barrier SB-1 (refer to Table 2-7, Predicted Future Noise Levels and Noise Barrier Analysis). Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of a barrier at SB-1, with respective lengths and average heights of 723 feet in length at a height of 12 feet. Calculations based on preliminary design data show that the barrier will reduce noise levels by 7 dBA for seven residences at a cost of \$303,660. If during final design conditions have substantially changed, noise abatement may not be necessary. The final decision on noise abatement will be made prior to completion of the project design and the public involvement processes. Therefore, with the inclusion of the recommended Barrier SB-1, impacts would be less than significant.

- d) **Less than Significant Impact:** Construction of the proposed project could potentially result in a temporary increase in ambient noise levels in the project vicinity. Noise associated with the use of construction equipment is estimated between 79 and 89 dBA L_{max} at a distance of 50 feet from the active construction area for the grading phase. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 91 dBA L_{max} (at a distance of 50 feet from an active construction area). In addition to the standard construction equipment, the project may require the use of pile drivers; however, the use of pile drivers is not anticipated at this time. Pile driving generates noise levels of up to 96 dBA L_{max} at 50 feet. In

order to ensure noise effects are minimized during the construction period, construction activities would be conducted in accordance with applicable local noise standards and the Department's provisions in Section 14-8.02, "Noise Control," of the 2010 Standard Specifications and Special Provisions (**NOI-1**). Temporary ambient noise increases due to construction would be considered less than significant.

- e) **No Impact:** The proposed project is located outside of the easternmost boundary of the Chino Airport Influence Area and no habitable structures are proposed as part of the proposed project. Therefore, no noise impacts related to air traffic would occur.
- f) **No Impact:** The proposed project is not located within the vicinity of a private airstrip and no habitable structures are proposed as part of the proposed project. Therefore, no noise impacts related to air traffic would occur.

2.12.2 Avoidance, Minimization, and/or Mitigation Measures

The following measure will be implemented to minimize potential impacts:

- **NOI-1:** As directed by the Department, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.

SSP-14-8.02

1. Use with 2010 Standards.
2. Use for work in a residential or urban area (1) at night or (2) if night or Sunday noise restrictions exist.

5-1. NOISE CONTROL

1. General

This section applies to equipment on the project or associated with the project, including trucks, transit mixers, stationary equipment, and transient equipment.

2. Edit to include (1) specific local noise ordinances that the project manager has agreed to comply with or (2) work needing noise level restrictions that differ from those specified in Section 14. List exceptions in the table. Delete "except....table" and the table if exceptions are not needed. Delete paragraph 3.

The following are examples of work that exceed 86 dBA at 50 feet.

- a. Removing concrete
- b. Cold planing pavement
- c. Grooving and grinding concrete pavement
- d. Sawcutting PCC

e. Driving piles

Do not exceed 86 dBA L_{max} at 50 feet from the job site activities from ____ p.m. to ____ a.m. except you may perform the following activities during the hours and for the days shown in the following table:

Noise Restriction Exceptions

Activity	Hours		Days	
	From	To	From	Through

3. Use if night or Sunday noise restrictions exist. Delete par. 1.

Do not operate construction equipment or run the equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays except you may operate equipment within the project limits during these hours to:

1. Service traffic control facilities
2. Service construction equipment
3. Use if a sound meter is required.

Noise Monitoring

Provide one Type 1 sound level meter and 1 acoustic calibrator to be used by the Department until Contract acceptance. Provide training by a person trained in noise monitoring to 1 Department employee designated by the Engineer. The sound level meter must be calibrated and certified by the manufacturer or other independent acoustical laboratory before delivery to the Department. Provide annual recalibration by the manufacturer or other independent acoustical laboratory. The sound level meter must be capable of taking measurements using the A-weighting network and the slow response settings. The measurement microphone must be fitted with a windscreen. The Department returns the equipment to you at Contract acceptance. Work specified in this paragraph is paid for as noise monitoring.

4. Use if a sound meter is required.

The contract lump sum price paid for noise monitoring includes full compensation for furnishing all labor, material, tools, equipment, and incidentals and for doing all work involved in noise monitoring.

2.13 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 United States Code [USC] 2000d, et seq.). Please see Appendix A for a copy of the Department's Title VI Policy Statement.

2.13.1 Discussion of Environmental Evaluation Question 2.13 – Population and Housing

Information used in this section is from the March 2014 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2014c).

a) Less than Significant Impact: The I-15/Limonite Avenue Interchange ramps are projected to operate at an unacceptable LOS by 2040 unless improvements are made to the transportation system. Furthermore, some merge/diverge areas associated with the on- and off-ramps currently operate at an unacceptable LOS and some are also projected to operate at an unacceptable LOS in 2040 unless improvements are made (refer to Table 2-10 in Section 2.16.1). As such, the proposed project would provide relief for current and anticipated future traffic congestion associated with the projected population increases and planned development in the study area.

The proposed project is consistent with SCAG's 2015 FTIP and 2012 RTP/SCS and the goals and policies of the applicable planning documents of the various jurisdictions that compose the proposed project study area. The proposed project would not provide access to any developable lands that are currently inaccessible and would not lead to changes in already planned land use and density.

Several land uses are present within the project area. Portions of the Build Alternative would be located on soils mapped as "Prime Agriculture", Farmland of Statewide Importance", and "Unique Farmland" by data from the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). However, the 2012 City of Eastvale and 2011 Jurupa Valley General Plan Land Use maps have designated these areas for future non-agricultural land uses with a time horizon of at least 20 years. Some of the area has recently been developed with retail land uses, such as the Eastvale Gateway South Center located at Limonite Avenue and Hamner Avenue. The western portion of the proposed project is located within the City of Eastvale General Plan Land Use designations of Freeway and Commercial Retail. The eastern portion is located within the City of Jurupa Valley General Plan Land Use designations of Industrial Park (I-P), One Family Dwellings (R-1), and General Plan Community Center Overlay (CCO). The CCO allows for development of a community center which includes a combination of small lot single family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreational open space within a unified planned development area.

Based on the most recent update of the Riverside County General Plan, the City of Eastvale and City of Jurupa Valley would potentially add residences and businesses in the coming years, resulting in additional traffic. Operation of the I-15/Limonite Avenue interchange ramps are projected to operate at an unacceptable LOS by 2040 unless improvements are made to the transportation system. Furthermore, some merge/diverge areas associated with the on-and off-ramps currently operate at an unacceptable LOS and some are also projected to operate at an unacceptable LOS in 2040 unless improvements are made (refer to Table 2-10 in Section 2.16.1). As such, the proposed project would provide relief for current and anticipated future traffic congestion associated with the projected population increases and planned development in the study area. However, this increase in population as a result of development has been planned previously and therefore would not represent the inducement of unplanned population growth. This additional development is planned regardless of the improvements to the I-15/Limonite Avenue interchange. Because the proposed project is anticipated to accommodate existing and future travel demand in the corridor related to existing and planned growth approved by local jurisdictions and not contribute to unplanned growth in the area, the proposed project is not considered growth-inducing. The proposed

project is needed to reduce anticipated future traffic congestion at the interchange, as such, the project has been a part of the overall planning within the project area, which includes any anticipated growth in the area that is projected to occur. Therefore, no direct or indirect long-term impacts on growth are anticipated with the implementation of the proposed project.

- b) **No Impact:** The proposed project would result in partial acquisitions of properties adjacent to the project area. Table 2-9 lists the properties and the amount of temporary and/or permanent right of way needed from each.

These partial acquisitions consist of commercial parcels and a Park and Ride facility. However, none of these partial acquisitions would necessitate the relocation of people or any existing developments. Implementation of the proposed project would not result in the acquisition of any existing residences. The Park and Ride facility is being reconfigured within its currently allotted space so that it would remain viable and would contain, at minimum, the same number of parking spaces as currently exists. Furthermore, the proposed project would not prevent the construction of any future residences. No existing housing would be displaced as a result of the proposed project; therefore, no replacement housing would be needed.

Table 2-9. Right of Way Acquisitions

APN	Permanent Impact (acres)	Temporary Impact (acres)
152-630-001	-	0.1
152-630-007	-	0.1
152-630-008	2.3	1.8
152-630-017	-	0.2
152-630-018	-	0.1
152-630-019	-	0.1
152-630-028	0.1	0.3
152-630-029	0.1	0.4
152-640-001	2.1	1.1
160-030-055	2.7	-
160-030-070	-	0.1
160-050-021	-	0.5
160-050-023	0.3	1.7
160-050-027	-	0.3
160-050-031	-	0.4
160-050-049	-	0.4
160-050-050	-	0.3
Source: CIA, 2014.		

- c) **No Impact:** The proposed project would result in partial acquisitions of properties adjacent to the project area. These partial acquisitions consist of commercial parcels and a Park and Ride facility. However, none of these partial acquisitions would necessitate the relocation of people or any existing developments. Implementation of the proposed project would not

result in the acquisition of any existing residences. The Park and Ride facility is being reconfigured within its currently allotted space so that it would remain viable and would contain, at minimum, the same number of parking spaces as currently exists. Furthermore, the proposed project would not prevent the construction of any future residences. The proposed project would not require the acquisition of residential right of way. No persons would be displaced as a result of the proposed project; therefore, no replacement housing would be needed.

2.13.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.14 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES:				
a) 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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.14.1 Discussion of Environmental Evaluation Question 2.14 – Public Services

Information used in this section is from the March 2014 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2014c).

a) **Less than Significant Impact:** According to the *CIA Memorandum*, the Build Alternative would improve the ability of fire, medical, and police service providers to serve the community, as the Build Alternative would reduce congestion in the interchange area, which would likely reduce response times for these services when compared to the No-Build condition. There are no schools within 0.5 mile of the project area that would be disrupted by construction activities or operation of the Build Alternative. Although congestion would increase during construction of the Build Alternative, a Traffic Management Plan (TMP) would be prepared that would ensure that disruptions are minimized.

Furthermore, the existing Park and Ride facility frontage located to the east of the I-15/Limonite interchange and along the north side of Limonite Avenue would be affected by the Build Alternative. The widening of Limonite Avenue to three lanes in each direction would require the Park and Ride facility footprint to be reconfigured within its currently allotted space. However, the adjusted footprint of the Park and Ride facility would not reduce the number of existing parking spaces. The Park and Ride facility would be closed for a period of time, anticipated to be several months, and inaccessible to patrons during construction. Closure of the Park and Ride facility would be short term and properly noticed in advance to reduce any inconvenience to patrons of the Park and Ride facility.

No schools are located within one mile of the project area. Home to school busing services for Harada Elementary School or Sky Country Elementary School are not provided by the Norco-Corona Unified School District or the Jurupa Unified School District, and therefore would not be affected by the proposed project.

The Riverside Transit Agency operates public bus routes 29 and 3 along Limonite Avenue, Hamner Avenue, and Pats Ranch Road. Bus stops and routes along Limonite Avenue would not be removed as a result of the proposed project, but may experience temporary delays during construction, which would be addressed through the implementation of the TMP.

No parks are located within the project area and none are anticipated to be directly or indirectly affected by the proposed project.

2.14.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following standard measures will be implemented to minimize potential impacts:

- **PS-1:** A TMP shall be developed by the Department to minimize potential impacts on emergency services and commuters during construction.
- **PS-2:** As of November 7, 2014, the Department has adopted the California Manual on Uniform Traffic Control Devices (California MUTCD), 2014 edition, to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Vehicle Code Section 21400 and the recommendation of the California Traffic Control Devices Committee. The Department requested and has received a letter to confirm substantial conformance from the FHWA for California MUTCD 2014 edition. The California MUTCD 2014 edition includes FHWA's MUTCD 2009 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 also includes all policies on traffic control devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents.
- **PS-3:** Use lighting systems that are energy efficient, such as LED technology.
- **PS-4:** Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts on traffic flow.
- **PS-5:** Development of circulation and detour plans to minimize impacts on local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. This should be implemented in coordination with Measure **PS-1**.
- **PS-6:** Limiting of lane closures during peak hours to the extent possible.
- **PS-7:** Inclusion of detours for bicycles and pedestrians in all areas potentially affected by construction. This should be implemented in coordination with Measure **PS-1**.
- **PS-8:** Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. This should be implemented in coordination with Measure **PS-1**.

2.15 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.15.1 Discussion of Environmental Evaluation Question 2.15 – Recreation

- a) **No Impact:** There are no parks located within the project area and none are anticipated to be directly or indirectly affected by the proposed project. The nearest park to the project site is Limonite Meadows Park, approximately 0.4 mile southeast of the project site. As detailed in the project description (Chapter 1), improvements would be made to the existing interchange at I-15 and Limonite Avenue. Neither alternative would result in the increased use of existing parks or recreational facilities.
- b) **No Impact:** The project proposes improvements to the I-15/Limonite Avenue Interchange only and does not propose the construction or expansion of any park or recreational facility.

2.15.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.16 Transportation and Traffic

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The Department, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

2.16.1 Discussion of Environmental Evaluation Question 2.16 – Transportation and Traffic

Information used in this section is from the October 2011 *Traffic Operations Analysis for the I-15/Limonite Avenue Interchange Improvement Project* (Dokken 2011), the *Traffic Validation Data Values Memorandum* (Dokken 2013d), the March 2014 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2014c), and the *Riverside County General Plan* (County of Riverside 2013).

- a) **No Impact:** The proposed project is needed to reduce traffic congestion at the I-15/Limonite Avenue interchange. Based on the most recent update of the Riverside County General Plan, the cities of Eastvale and Jurupa Valley plan to add a substantial number of residences and businesses in the coming years, which is anticipated to result in traffic and would require a number of transportation and circulation improvements to accommodate this increased volume of traffic, including improvements to the I-15/Limonite Avenue interchange.

Although the I-15/Limonite Avenue interchange ramp intersections currently operate at an acceptable LOS, by design year 2040, the ramp intersections at the I-15/Limonite Avenue interchange would have insufficient capacity to accommodate the forecasted traffic demand¹⁶. Operation of the I-15/Limonite Avenue Interchange ramps are anticipated to worsen by opening year (2018) and to continue to degrade as traffic volumes increase unless improvements are made to the transportation system. Without the proposed project, it is projected that the northbound and southbound I-15 on- and off-ramp intersections with Limonite Avenue will function at an unacceptable LOS (F) during both the AM and PM peak hours in design year 2040. An analysis of the merge/diverge traffic operations at the I-15 on- and off-ramps indicate that in year 2018 the northbound I-15 off-ramp to Limonite Avenue will function at an unacceptable LOS (LOS F) during the PM peak hour and the northbound I-15 on-ramp from Limonite Avenue will function at an unacceptable LOS F during the AM peak hour; the southbound I-15 on-ramp from Limonite Avenue is also predicted to operate at an unacceptable LOS (E). In 2040 the I-15 off-ramp to Limonite Avenue is projected to operate at an unacceptable LOS during the AM and PM peak hours. This would conflict with the generally accepted Department minimum LOS threshold of LOS D for peak hour freeway operations.

Under the Build Alternative, in 2018, the northbound I-15 off-ramp to Limonite Avenue would function at an acceptable LOS A and B during the AM and PM peak hours, respectively, and the northbound I-15 on-ramp from Limonite Avenue would function at an acceptable LOS C and B during the AM and PM peak hours, respectively. In 2040, the northbound I-15 off-ramp to Limonite Avenue would function at an acceptable LOS A for both AM and PM peak hours, and the northbound on-ramp would function at an acceptable LOS B for both AM and PM peak hours. This would be consistent with the generally accepted Department minimum LOS threshold of LOS D for peak hour freeway operations. Therefore, the Build Alternative would not conflict with the standards established for the effectiveness of circulation. Furthermore, the proposed project would provide relief for

¹⁶ For traffic purposes, the design year is typically 20 years beyond the opening year, rounded to the nearest multiple of 5, as such, 2040 is utilized instead of 2038. This provides consistency with the regional models, which are typically updated every 5 years.

anticipated future traffic congestion associated with future growth in the area. This increase in population as a result of development has been planned and would not represent the inducement of unplanned growth. The proposed project is consistent with applicable state, regional, and local planning documents and is needed to reduce projected traffic congestion, and improve traffic flow on the regional transportation system.

Table 2-10 identifies the existing (2011), opening year (2018), and design year (2040)¹⁷ LOS.

Table 2-10. Existing, Opening Year, and Design Year LOS

Location	Existing Year (2011)		Opening Year (2018)		Design Year (2040)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
			(No-Build/Build)		(No-Build/Build)	
Intersection						
I-15/Limonite Avenue Southbound On/Off-Ramps	C	C	B/A	C/C	<u>F</u>/C	<u>F</u>/D
I-15/Limonite Avenue Northbound On/Off-Ramps	B	C	C/B	D/B	<u>F</u>/B	<u>F</u>/D
Merge/Diverge						
Limonite Avenue Off-Ramp (northbound)	D	D	D/A	<u>F</u>/B	<u>E</u>/A	<u>F</u>/A
Limonite Avenue On-Ramp (northbound)	<u>E</u>	D	<u>F</u>/C	D/B	D/B	D/B
Limonite Avenue Off-Ramp (southbound)	D	D	D/A	D/A	C/A	C/A
Limonite Avenue On-Ramp (southbound)	<u>E</u>	D	<u>E</u>/B	D/B	D/B	D/B

Bolded, underlined, entries exceed acceptable levels of service

- b) **No Impact:** The proposed project would not conflict with the County’s congestion management program as established by the county congestion management agency, Riverside County Transportation Commission (RCTC). In fact, the Build Alternative is consistent with relevant transportation planning documents as the proposed improvements to the I-15/Limonite Avenue Interchange are included in SCAG’s 2015 FTIP and 2012 RTP/SCS. Therefore, there would be no impact.
- c) **No Impact:** The proposed project would not cause a change in air traffic patterns, as it is outside of the easternmost boundary of the Chino Airport Influence Area. Therefore, there would be no impact.
- d) **No Impact:** The proposed project would not substantially increase hazards due to a design feature or incompatible uses. In general, the Build Alternative would improve traffic safety at the I-15/Limonite Interchange, as it would improve future traffic congestion. It would also improve safety by having increased acceleration and deceleration lane lengths at the freeway merge/diverge points for each of the on- and off-ramps.

¹⁷ *ibid.*

- e) **Less than Significant Impact:** The Build Alternative would improve emergency access, as it would reduce congestion in the interchange area, which would likely reduce response times for emergency services. During construction, roads would remain open and access would be maintained. However, emergency response times could increase temporarily during construction of the Build Alternative due to increased congestion in the area of the Limonite Interchange. A TMP would be prepared to reduce potential construction-related traffic conflicts, detours, and delays. The TMP would include identification of detour routes within the construction area, placement of appropriate signs, cones, and barricades in the vicinity of construction, scheduling of construction activities during off-peak hours, and development of plans that ensure emergency access and entry to existing residences and businesses within the construction areas. Traffic control during construction may include off-peak lane closures and nighttime traffic detours to allow falsework construction. Long-term ramp closures and extensive congestion are not anticipated as a result of construction operations. A staged construction plan would be implemented to keep the existing bridge and ramps open to traffic. This impact would be temporary and would be less than significant with the implementation of Measure **PS-1** in Section 2.14.2.
- f) **No Impact:** The proposed project is not anticipated to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. In fact, the new proposed Limonite Avenue Overcrossing would accommodate 4-foot bike lanes, 8-foot shoulders, and 8-foot sidewalks in each direction, which would be consistent with the policies in the County of Riverside General Plan (2013) and City of Eastvale General Plan (2012). The Build Alternative would affect the existing Park and Ride facility frontage located to the east of the interchange. The Park and Ride layout would need to be reconfigured within its currently allotted space. This minor adjustment would not affect or change the current capacity or use of the facility. However, there would be temporary impacts during construction that would be addressed by the TMP. The Park and Ride facility would be closed for a period of time, anticipated to be several months, and inaccessible to patrons during construction. Closure of the Park and Ride facility would be short term and properly noticed in advance to reduce any inconvenience to patrons of the Park and Ride facility. Furthermore, the proposed project includes enhancement of non-motorized and pedestrian features along Limonite Avenue. Standard sidewalks and curb returns, in compliance with the ADA and all applicable provisions of the Department's Design Information Bulletin 82, titled "Pedestrian Accessibility Guidelines for Highway Projects," will be constructed along the widened portions of Limonite Avenue and the proposed Overcrossing structure. Bicycle lanes will also be provided along Limonite Avenue and on the proposed Overcrossing structure. The widths of these facilities on Limonite Avenue will be consistent with Department standards.

2.16.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required. Measure **PS-1** in Section 2.14.2 addresses impacts on emergency response.

2.17 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.17.1 Discussion of Environmental Evaluation Question 2.17 – Utilities and Service Systems

Information used in this section is from the October 2011 *Traffic Operations Analysis for the I-15/Limonite Avenue Interchange Improvement Project* (Dokken 2011), the March 2014 *I-15/Limonite Avenue Interchange Improvement Project Community Impact Assessment (CIA) Memorandum* (Caltrans 2014c), and the Riverside County General Plan (County of Riverside 2013).

Existing utilities in the project area include the following: AT&T, AT&T Cellular, Jurupa Community Services District, Metro PCS, Southern California Edison, Southern California Gas Company, Sprint Cellular, Time Warner Telecom, T-Mobile, and Verizon Wireless. There are three existing cell towers directly adjacent to the existing Department right of way along the northbound I-15 on-ramp. All three towers would be avoided; however, underground utility lines that serve the towers would be affected and relocated. Southern California Gas Company owns and operates a high-pressure gas line that runs parallel to and north of Limonite Avenue. The line runs under the existing Park and Ride facility and crosses under the I-15 within Department right of way, north of the Overcrossing structure. Due to the sensitivity of the line, no relocation of the line would be allowed. Additionally, special precautions would be required during construction to ensure there are no impacts on the line. Furthermore, Riverside Public Utilities (RPU) is

analyzing the Riverside Transmission Reliability Project (RTRP), which proposes to construct a new 230 kilovolt transmission line in order to meet RPU's current and projected load growth. Southern California Edison will own the new transmission lines. The proposed alignment for the transmission tower corridor parallels the eastern edge of I-15 within the project area and will cross Limonite Avenue. The Project Team for the I-15/Limonite Interchange Improvements Project has continuously coordinated closely with Southern California Edison to identify potential conflicts between the proposed interchange and the transmission tower alignment.

The proposed project would also require potholing to determine if the underground utilities within the project limits would require relocation. The design profile of Limonite Avenue would be raised; as such, the existing underground utility lines are anticipated to be located below the proposed structural sections, and potholing would confirm any potential conflicts.

- a) **No Impact:** The proposed project is needed to reduce projected traffic congestion at the I-15/Limonite Interchange and would not generate the need for additional wastewater treatment. Therefore, there would be no impact.
- b) **No Impact:** The proposed project is needed to reduce projected traffic congestion at the I-15/Limonite Interchange and would not require or result in the construction of new water treatment facilities. Therefore, there is no impact.
- c) **Less than Significant Impact:** Storm water runoff in the project area generally flows from north to south and is currently conveyed through a series of roadside ditches/channels, culverts, inlets/storm drain pipes, and overside drains. As described in the July 2013 *Final Scoping Questionnaire for Water Quality Issues for the I-15/Limonite Avenue Interchange Improvement Project*, the proposed project would require the modification of existing storm water drainage facilities. The proposed roadway drainage system would continue to direct stormwater runoff in a north to south direction. However, the proposed roadway improvements along I-15 and in the interchange area itself would require that existing culverts be extended or realigned in order to accommodate the new roadway widths and geometry. Similarly, existing roadside ditches/channels would be re-established along the widened roadway or converted to underground pipes where there is no longer space for the roadside ditch. Along Limonite Avenue, where new curb, gutter, and sidewalk would be installed, the existing roadside ditches would be converted to an underground storm drain system. Ultimately, the stormwater runoff from the project area would continue to discharge to the Santa Ana River, which is the current receiving water body. Therefore, modification of the stormwater facilities under the proposed project would result in a less than significant impact.
- d) **No Impact:** The proposed project is needed to reduce projected traffic congestion at the I-15/Limonite Interchange and would not need new or expanded entitlements. Therefore, there would be no impact.
- e) **No Impact:** The proposed project would not require wastewater treatment. As a result, there would be no impact.

- f) **Less than Significant Impact:** The proposed project would require the use of a local landfill, if applicable, to dispose of demolition materials. The use of local landfills would be temporary during construction. It is the Department's policy to recycle materials whenever possible. It is not anticipated that the amount of construction waste would exceed the capacity of local landfills; therefore, impacts would be considered less than significant.
- g) **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.

2.17.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required. Measures **WQ-1** through **WQ-4** in Section 2.9.2 address impacts on drainage facilities.

2.18 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to 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, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.18.1 Discussion of Environmental Evaluation Question 2.18 – Mandatory Findings of Significance

a) **Less than Significant Impact.** As discussed in Section 2.4 (Biological Resources), the project area is heavily disturbed and consists primarily of non-native and invasive plant species. Of the five vegetation communities identified in the BSA, only one, RSS, is considered sensitive. However, the RSS in the BSA is classified as “remnant,” meaning there are only noncontiguous patches of RSS that are too small to be considered a viable community.

There is potential for three special status bat species (pallid bat, California western mastiff bat, and big free-tailed bat) to forage within suitable habitat (ruderal and remnant RSS) in the BSA. The number of individuals that could potentially forage in the BSA is expected to be low. There is also a potential for impacts on the special-status California western mastiff bat roosting within mature trees in the BSA. Potential temporary indirect effects from the proposed project on special-status bats would be avoided by implementing avoidance Measures **BIO-3** through **BIO-5**.

There is low quality suitable habitat within the project impact area for the special-status burrowing owl. However, burrowing owls were only found outside the project impact area during focused surveys. Avoidance Measures **BIO-1** through **BIO-3** would ensure direct and indirect impacts on burrowing owl would not occur during construction of the proposed project.

There is also potential for several other special-status species to occur in the BSA, but they do not pose a constraint to the project because they were either confirmed to be absent by a focused survey or the species is already fully Covered under the MSHCP (i.e., take authorization is already provided to Permittees); therefore, any potential impacts (if the species is present) would be fully mitigated.

Nesting birds and raptors could be affected by the proposed project during the bird breeding season (March 1 through August 31 for birds and January 15 through June 30 for raptors). Avoidance and minimization Measures **BIO-2** through **BIO-4** would ensure there are no constraints to the project under the MBTA and the California Fish and Game Code.

The proposed project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Through the incorporation of avoidance and minimization measures, the proposed project would result in a less than significant impact on biological resources.

As discussed in Section 2.5 (Cultural Resources), Response (c), the proposed project is located in an area with soil deposits that have the potential to contain paleontological resources, thereby making it an area of high paleontological sensitivity. It is likely that construction of the proposed project, in particular excavation for widening and replacement of the Overcrossing structure, would potentially result in negative impacts on these deposits. In order to reduce these impacts, a PMP (Measure **PALEO-1**) will be prepared. Therefore, the proposed project would have a less than significant impact on a period of California prehistory through the incorporation of mitigation.

- b) Less than Significant Impact with Mitigation.** Planned recent and future projects within the vicinity of the proposed project are listed in Table 2-11. Due to distance and location from the proposed project, not all planned and future projects listed would result in cumulative impacts and are therefore not analyzed. There are several projects in the immediate vicinity of the project: the I-15 Express Lanes Project, the San Antonio Medical Plaza, RTRP, and the William Lyon Homes Residential Project. The Eastvale San Antonio Medical Plaza and the Lodge have already been constructed. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available. RTRP involves the construction of electrical transmission lines. Specifically, portions of a 230 kilovolt transmission line are proposed to be routed near the I-15/Limonite interchange area. According to the Final EIR prepared for the project, significant unavoidable environmental impacts would result for aesthetics, agricultural, air quality, and hydrological resources. In the area of the I-15/Limonite Avenue interchange, RTRP's incremental effect to visual resources would not be cumulatively considerable or significant given the urban character of the study area. Construction of RTRP, if it occurs at the same time as the proposed project, would meet the cumulative project criteria for air quality. However, cumulative impacts, should they occur, would be minor and temporary, as adherence to SCAQMD Rule 403 by each project in the vicinity would be required. The IS/MND for the Eastvale San Antonio Medical Plaza concluded that the project's incremental effect on visual resources would not be cumulatively considerable or significant because the medical

buildings were all designed to satisfy the guidelines of the Eastvale I-15 Corridor Specific Plan and the design goals and polices of the Design Elements of the City of Eastvale's General Plan (City of Eastvale 2013). Furthermore, because the I-15 Express Lanes Project has been designed to be consistent with the Department's highway landscape and design policies and BMPs, the added express lanes would be consistent in form and scale with the visual character of the surrounding existing urban landscape. As detailed in Section 2.18.2 (Cumulative Impacts), the proposed project would potentially result in cumulatively considerable effects when combined with past, present, and reasonable foreseeable future projects; however, the proposed project includes measures to avoid and minimize potential impacts. Therefore, the proposed project would not contribute to cumulative impacts in combination with the planned and programmed projects listed in Table 2-11.

- c) **Less than Significant Impact.** Operation of the project would not result in the exposure of persons to any substantially adverse natural or human-made hazards that could directly or indirectly cause substantial adverse effects on human beings, such as geologic hazards, air emissions, noise, hazardous materials, or flooding. All potential effects that could result in substantial exposure of persons to hazards during construction of the project are fully addressed with recommended avoidance and minimization measures, and no permanent impacts have been identified as significant in this Initial Study. Avoidance and minimization measures would be incorporated into the project in order to reduce and control the effects the project would have on the environment.

2.18.2 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR), Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

The cumulative study area includes projects within vicinity of the project site. Table 2-11 summarizes recent and currently planned developments, as obtained from the city planning and development departments.

Table 2-11. Cumulative Projects List

Name	Jurisdiction	Description	Status
I-15 Express Lanes Project (EA 0J080)	RCTC	The project would construct one to two tolled express lanes between Cajalco Road to SR-60, post miles (PM) 36.8 and 51.4 in Riverside County, for a distance of 14.6 miles	It is anticipated that the Draft Environmental Document would be available for public review in early to mid-2015.
Riverside Transmission Reliability Project (RTRP)	City of Riverside	Proposed Project includes the construction, operation, and maintenance of a new approximately 10-mile double-circuit 230,000-volt (230 kV) transmission line, a new 230 kV substation (Wildlife Substation), a new 230/69 kV substation (Wilderness substation), and five new 69 kV subtransmission line segments integrated into Riverside Public Utilities' existing subtransmission system. The project is bordered to the north by SR-60, to the west by I-15, and to the south by SR-91.	Construction to start in 2017 and be completed in 2019.
Silverlakes Equestrian and Sports Park—5555 Hamner Avenue	Norco	Development of a 122-acre equestrian center and sports facility that would be used for various recreational uses, such as equestrian events, soccer, football, lacrosse, etc.	Project is pending, not yet constructed.
William Lyon Homes—southwest corner of Limonite Avenue and Hamner Avenue	Eastvale	Construction of 224 multi-family dwelling units.	Applied for proposal in late 2014.
The Lodge—north of Limonite Avenue, east of Sumner Avenue, west of Scholar Way	Eastvale	Construction of 350 single-family attached residential dwellings.	Homes are under construction and being sold.
Eastvale Business Park—southwest corner of Limonite Avenue and Archibald Avenue	Eastvale	Construction of 11 industrial and warehouse buildings totaling 694,770 square feet.	Approved in April 2014.
Estancia—southeast corner of Sumner Avenue and Citrus Street	Eastvale	Construction of 196 single-family residential development.	Homes are under construction and being sold.
The Trails at Eastvale by Richmond Communities (TR 36423)	City of Eastvale	A housing project located at the corner of Archibald Ave. and 65 th Street. Consists of 224 single family lots on 49 gross acres.	Approved by the City in May 2013. Homes are under construction and being sold.

Name	Jurisdiction	Description	Status
Copper Sky by DR Horton	City of Eastvale	40.01-acre development located at Schleisman Rd. and Scholar Way. Consists of 224 condo units including a tot lot, 2 community facilities, park, one detention basin, 448 garaged parking spaces, 47 off street spaces, and 87 on street spaces.	Approved by Riverside County in 2007. Homes are under construction and being sold.
Eastvale San Antonio Medical Plaza	City of Eastvale	Located on the south side of Limonite Ave as part of Eastvale Gateway South. The project consists of two, two-story medical buildings totaling 69,562 square feet and 327 parking spaces to be constructed in two phases on a 5.4-acre project site. Phase II is anticipated to begin one to two years after completion of Phase I. No emergency services or ambulances on site.	Construction underway. Opening in early 2015.
Limonite Widening From Etiwanda Avenue to Bain Street	Riverside County Transportation Department	Widening along Limonite Avenue from Etiwanda Avenue to Bain Street.	Construction to start in mid- to late-2015
Note: Not all projects on this table are within the cumulative/resource study area of the proposed project for all resources addressed. Please refer to each resource area discussion in Section 2.18.2 for the resource study area associated with each resource.			

The following analysis evaluates the project’s potential to contribute considerably to a cumulative impact.

As discussed previously, the proposed project would have no effect on land use, mineral resources, and recreation, and would not contribute either directly or indirectly to a cumulatively considerable impact in these resource areas. The potential for the proposed project to result in cumulative impacts that would be considered significant in the above mentioned resource areas is considered low, and the proposed project does not have the potential to result in cumulative impacts that would affect the health or sustainability of any of these resource areas.

For resources identified as having a less than significant impact with mitigation or a less than significant impact, a preliminary review of the potential impacts identified was conducted to determine if a reasonably foreseeable cumulative impact could occur. Based on this review, it was determined that the resources that could potentially contribute to significant cumulative impacts to a considerable degree when combined with past, present, and reasonably foreseeable future projects are: aesthetics, agricultural resources, air quality, biological resources, cultural resources, paleontological resources, hazards/hazardous materials, hydrology and water quality, geology/soils, land use and planning, noise, transportation/traffic, and public services and utilities. A cumulative evaluation for these environmental resource topic areas is provided below.

Aesthetics

The resource study area (RSA) for aesthetics is considered to be the area within one mile of the project. The typical land uses within this area include residential, commercial, agricultural, and undeveloped land. Cumulative projects within the visual study area include the San Antonio

Medical Plaza, I-15 Express Lanes Project, William Lyon Homes Residential Project, the Lodge Residential Project, and the Silverlakes Equestrian Project, and RTRP. The EIR for RTRP concluded that the project's incremental effect on visual resources would not be cumulatively considerable or significant given the urban character of the study area and because the facilities that are being introduced are not uncommon in urban areas and would not result in a noticeable change to the area's overall visual resource (City of Riverside 2012). The IS/MND for the Eastvale San Antonio Medical Plaza also concluded that the project's incremental effect on visual resources would not be cumulatively considerable or significant because the medical buildings were all designed to satisfy the guidelines of the Eastvale I-15 Corridor Specific Plan and the design goals and polices of the Design Elements of the City of Eastvale's General Plan (City of Eastvale 2013). The Lodge Residential Project would also comply with the zoning and land use designations for residential development in the area. The I-15 Express Lanes Project has been designed to be consistent with the Department's highway landscape and design policies/BMPs. The added express lanes would be consistent in form and scale with the visual character of the existing urban landscape that surrounds the existing I-15 corridor. Furthermore, the express lanes would have continuity with the existing I-15, which is the dominant feature along the majority of the project corridor. The overall visual character of the project corridor is considered to be low; visual resources would not be altered by the project (ICF 2014). Although the project is pending, the Silverlakes Equestrian Project Final EIR indicates that the project is not expected to have significant cumulative aesthetic impacts, and would not make a significant contribution to cumulatively considerable visual impacts or impacts related to light and glare.

For this project, it has been determined that the cumulative visual impacts would not be significant. By constructing an improved interchange and incorporating aesthetic medians, hardscape, and aesthetic railing on the Overcrossing, the project would have a slightly improved visual resource change and cumulative effects on the surrounding area would be less than significant.

Agricultural Resources

Agricultural resources are present throughout Riverside County; however, through the years there has been a reduction in agricultural resources as a result of development and urbanization in the County. Cumulative projects within the study area include the San Antonio Medical Plaza, I-15 Express Lanes Project, The Lodge Residential Project, William Lyon Homes Residential Project, the Silverlakes Equestrian Project, and RTRP. The San Antonio Medical Plaza is being constructed on an existing retail center location and conforms to the requirements of the City of Eastvale General Plan and Zoning Code. The Lodge Residential Project would comply with the City's General Plan and Zoning Code and compatible with the land use designation for residential units. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available. RTRP, as indicated in the Final EIR, would contribute incrementally to the decline of agricultural resources and permanently affect 1.5 acres of Farmland. Implementation of measures by the RTRP project to reduce these impacts, such as locating access roads, spur roads, staging areas, and construction sites to areas that minimize impacts on agricultural operations, would minimize impacts on agricultural resources but would not, however, reduce impacts related to the permanent reduction of agricultural land, which would be a significant and unavoidable impact. Furthermore, the Silverlakes Equestrian Project also contains prime agricultural soil; however, the project uses are consistent with agricultural

uses in the City of Norco and the project would not construct substantial permanent buildings on the site. As such, the Silverlakes Equestrian Project would not make a significant cumulative contribution to agricultural resources, as the site could be used in the future for agriculture other than the equestrian uses. The proposed I-15/Limonite Avenue Interchange project would not result in the conversion of farmland, nor would it contribute to the cumulative impact on agricultural resources, as the area is committed for non-agricultural urban uses as designated in the City of Eastvale and City of Jurupa Valley General Plans.

Air Quality

The Resource Area for the project is within the South Coast Air Basin (SCAB), which includes the western portion of Riverside County, as well as all of Orange County, and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The nearest monitoring station to the proposed project is the Mira Loma-Van Buren Station, which is approximately 3.5 miles northeast of the project site. Criteria pollutants monitored at this station include ozone, NO₂, CO, PM₁₀, and PM_{2.5}. The ARB has classified the SCAB as an extreme nonattainment area for the state one-hour ozone standard and as a nonattainment area for the state eight-hour ozone standard. For the state CO standard, ARB has classified the SCAB as an attainment area. ARB has classified the SCAB as a nonattainment area for the state PM₁₀ and PM_{2.5} standards. U.S. EPA has classified the SCAB as an extreme nonattainment area for the federal eight-hour ozone standard. For both the one-hour and eight-hour federal CO standard, U.S. EPA has classified the SCAB as an attainment/maintenance area. U.S. EPA has classified the SCAB as a serious nonattainment area for the federal PM₁₀ standard and as a nonattainment area for the federal PM_{2.5} standard.

The construction schedule for some of the projects in Table 2-11 is uncertain, or some of the projects will be completed prior to or after completion of the proposed project. Therefore, there is the potential that construction of some of these projects would occur at the same time and would meet the cumulative project criteria for air quality. Measures for dust control during construction, as stipulated by SCAQMD Rule 403, would be implemented to ensure that the proposed project would not substantially contribute to potential cumulative impacts on air quality. Adherence to these regulations by each project in the project vicinity would also be required. Cumulative impacts, should they occur, would be minor and temporary.

The project is listed in the conforming 2015 FTIP and 2012–2035 RTP/SCS as well as the 2015 draft FTIP. The design concept and scope proposed are the same as the design concept and scope in the RTP and FTIP listings, and the project meets the regional and project-level air quality conformity requirements. The air quality analysis is based on future traffic conditions in 2040. This accounts for future development in the project area and the region, as envisioned in local general plans; SCAG projections, amendments, and 2012–2035 RTP/SCS; and the roadway improvements listed in the 2015 FTIP. As a result, the analysis contained in Section 2.3 constitutes the operational cumulative analysis for the project. The analysis concluded that the proposed project would not conflict with or obstruct implementation of the applicable air quality management plan, violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment status under an applicable federal or state ambient air quality standard.

Biological Resources

The cumulative study area for biological resources includes Western Riverside County. This part of the county is primarily developed, with undeveloped areas planned for future development. The proposed project is located within a mix of residential, commercial, and agricultural lands, which are also planned for future development. Implementation of the projects listed in Table 2-11 will facilitate new growth and development on undeveloped lands that contain sensitive habitat or species. Increased population growth as permitted by the City and County's General Plans would increase disturbance on open space lands from human use, vehicle travel, and domestic and opportunistic animals.

The preservation of land through the MSHCP would limit any cumulatively considerable regional disruption of wildlife. Given that sensitive species currently occur within the cumulative study area, development proposals will be required to adequately mitigate impacts on wildlife and habitat before development is permitted. Participation and enforcement of the MSHCP will reduce cumulative impacts on sensitive species, and its implementation will protect habitat for these species. These activities would reduce cumulative impacts on biological resources to less than significant levels. In addition, present and future projects would comply with requirements of the MBTA to avoid, minimize, and /or mitigate potential impacts on protected nests and, pursuant to existing federal and state regulations, would be required to implement restoration and replacement efforts for any impacts on special-status plants and wildlife. After the incorporation of measures provided in this IS related to biological resources, the proposed project's incremental contribution would not result in a cumulatively considerable impact.

Cultural Resources

The project vicinity represents an area of high paleontological sensitivity. In particular, the young eolian deposits (Qye) and very old alluvial channel deposits (Qoa) within the project site have the potential to contain paleontological resources. Project-related excavations and ground disturbance activities could potentially result in impacts in areas with high paleontological resource sensitivity. Mitigation measures have been proposed to reduce these impacts. Cumulative project impacts on cultural and paleontological resources would vary based on the footprint of each project. All projects that could potentially affect cultural and paleontological resources would be required to evaluate and assess impacts and, if necessary, provide mitigation measures.

Paleontological Resources

The RSA includes the project site and the areas immediately surrounding the project site. As detailed in the PIR/PER, the proposed project is located in an area of high paleontological sensitivity. The young eolian deposits (Qye) and very old alluvial channel deposits (Qoa) within the project site have the potential to contain paleontological resources. It is possible that construction of the proposed project, in particular excavation for widening and replacement of the Overcrossing structure, would potentially result in negative impacts on these deposits, which have been assigned a high paleontological resource sensitivity. In order to reduce these impacts, a PMP (Measure **PALEO-1**) will be prepared and implemented.

There are several other projects in the immediate vicinity of the project that were reviewed for paleontological impacts: the I-15 Express Lanes Project, the San Antonio Medical Plaza, the

Lodge, RTRP, and the William Lyon Homes Residential Project. The San Antonio Medical Plaza and the Lodge Residential Project are being built on previously approved retail center site and land use designated for residential development. The EIR for RTRP concluded that impacts on paleontological resources would be less than significant with mitigation. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available. It is expected that the William Lyon Homes Residential project and I-15 Express Lanes Project could disturb nonrenewable paleontological resources due to their proximity to the project site. However, because the projects would be discretionary actions and subject to CEQA, the project would be required to incorporate measures to reduce impacts on unknown, nonrenewable paleontological resources. Therefore, construction activities associated with the project, in conjunction with other projects, would not result in cumulative impacts related to unknown and nonrenewable paleontological resources.

Once the proposed project and other projects are operational, they would not have the potential to affect unknown and nonrenewable paleontological resources. Therefore, operation of the proposed project, in conjunction with other projects, would not result in significant cumulative impacts under CEQA related to unknown and nonrenewable paleontological resources.

Hazards/Hazardous Materials

The RSA for hazards/hazardous materials includes the area within 0.5 mile of each side of the proposed project. The cumulative projects in the RSA for hazards/hazardous materials include the San Antonio Medical Plaza, I-15 Express Lanes Project, , the Lodge, RTRP, and the William Lyon Homes Residential Project. As a condition of approval for the San Antonio Medical Plaza the owner and tenant are required to store, handle, and dispose of any hazardous or medical waste in a manner that is in accordance with all applicable federal, state, County, and City laws, regulations, and rules. Furthermore, prior to issuance of a certificate of occupancy, copies of medical waste transportation permits issued by the County of Riverside Department of Environmental Health shall be provided to the City of Eastvale Planning and Building departments. The Lodge Residential Project would not result in the storage, handling, or transport of hazards or hazardous materials. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017.

According to the ISA prepared for the proposed project, several RECs are located within the proposed project boundaries (see Table 2-4). These include ACM, potential lead, and heavy metals associated with pavement striping; potential PCBs in pole- or pad-mounted electrical transformers; and a potential explosive hazard associated with the Gas Company pipeline should construction activities extend into the pipeline easement adjacent and parallel to the north side of Limonite Avenue. The EIR for RTRP concluded that the project would have less than significant impacts because it includes measures to ensure that hazardous wastes and materials are stored in a responsible manner and meet all regulatory requirements.

The proposed project, in conjunction with other projects, could expose the public to ACMs, LBP, PCBs, medical wastes, and pesticides during construction activities, should these materials be present. If construction of the William Lyon Homes were to occur at the same time, the potential would exist for additional exposure. However, adherence to project-specific requirements and measures would limit the potential for simultaneous exposure. Cumulative effects, should they

occur, would be minor and temporary. Therefore, the proposed project, when combined with other projects, would not result in significant cumulative impacts under CEQA related to ACMs, LBP, PCBs, medical wastes, and pesticides.

Hydrology and Water Quality

The cumulative study area for hydrology and water quality is the Middle Santa Ana Hydrologic Area (HA), which encompasses approximately 520 square miles and includes portions of San Bernardino and northwestern Riverside County and is within the Santa Ana Hydrologic Basin Planning Area of the Santa Ana RWQCB. The Santa Ana River is the major drainage course in the Santa Ana Hydrologic Basin Planning Area.

The proposed project and other planned projects within the watershed are subject to compliance with the RWQCB's Santa Ana River Basin Plan, NPDES Permits, Riverside County codes, and pertinent city codes. Compliance with these plans and regulations would help minimize impacts on surface water runoff, groundwater recharge, groundwater elevations, and water quality impacts. As stated in the Final EIR for RTRP, with implementation of Environmental Protection Elements, BMPs as required by the SWPPP, and conformance to the standard Best Available Control Measures of both SCE and RPU, impacts on water resources would be less than significant and no mitigation measures would be required. Furthermore, the Final EIR for the Silverlakes Equestrian Project, which is pending, indicated that the project would not result in cumulatively considerable impacts on water resources, flood control, or water quality. Continued development in the project area is a continuation of the existing pattern of urban development that has resulted in extensive modifications to watercourses. The area's watercourses have been channelized, and drainage systems have been constructed in response to the urbanization and associated impervious surface area that has been created. The projects being considered for the cumulative analysis related to hydrology and water quality include all planned developments that would discharge to the Santa Ana River Hydrologic Unit. Because cumulative hydrology and water quality impacts are caused by the buildout of projects that increase the amount of impervious areas as well as pollutant loads, cumulative development is considered to be the development of all available parcels with plans for development within the Santa Ana River Hydrologic Unit over an extended period of time.

New development and redevelopment can increase urban pollutants in dry weather as well as stormwater runoff from project sites in wet weather. Each project must comply with NPDES permitting requirements and include BMPs to minimize impacts on water quality and local hydrology in compliance with local ordinances and plans adopted to comply with the MS4 Permit, Drainage Area Master Plan (DAMP), and Local Implementation Plan (LIP) as well as other applicable regulatory permits (e.g., De Minimus Permit, Construction General Permit, Section 404 Permit, 401 Water Quality Certification, CDFW Section 1600 Streambed Alteration Agreement). Each project must consider impaired receiving waters and the annual TMDL. The TMDL program identifies all constituents that adversely affect the beneficial uses of water bodies. It also identifies appropriate reductions in pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses found in the Basin Plan. Thus, by complying with TMDLs, the project's contribution to overall water quality improvement in the watershed, in context of the regulatory program, accounts for cumulative impacts.

The proposed project would include BMPs that would reduce pollutant concentrations in runoff from the roadway. In addition, the proposed storm drains would include longitudinal drainage systems and inlets and/or graded line drains that would be sized to accommodate runoff in the tributary watershed under buildout conditions.

Regional programs and BMPs, such as TMDL programs, the DAMP/LIP, and the MS4 Permit, have been designed in anticipation of future urbanization within the region. The regional control measures contemplate the cumulative effects of proposed development. The proposed project would be required to comply with the regulations in effect at the time the grading permits are issued. Compliance with these regional programs and the Construction General Permit constitutes compliance with programs to address cumulative water quality impacts. Therefore, the proposed project's contribution to cumulative hydrology and water quality impacts would not be substantial. The proposed project would not contribute to cumulative hydrology, floodplain, water quality, and/or stormwater runoff impacts in combination with the planned and programmed projects listed in Table 2-11.

Geology/Soils

The RSA includes the area within 0.5 mile of each side of the project. The cumulative projects in the RSA for geology and soils include the I-15 Express Lanes Project, San Antonio Medical Plaza, the Lodge, RTRP, and the William Lyon Homes Residential Project. Based on adoption of an Initial Study/Mitigated Negative Declaration, the San Antonio Medical Plaza would not have a significant effect on the environment, including geology and soils. The Lodge Residential Project would not result in significant effects on the environment, as the project would be built on land that is approved for residential development and built to standard engineering requirements. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. Construction of RTRP and the proposed project have the potential to overlap. The EIR for RTRP concluded that the project would result in less than significant impacts on geology and soils.

The proposed project, in conjunction with other planned projects in the vicinity, may result in short-term increases in erosion due to grading activities. Increased development density in the surrounding areas could expose persons and property to potential impacts due to seismic activity. However, construction in accordance with the accepted engineering standards and building codes, on a project-by-project basis, will reduce the potential for structural damage due to seismic activity to the maximum extent feasible.

Noise

The RSA for noise includes the area within 0.5 mile of each side of the project. The cumulative projects in the noise RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, the Lodge, RTRP, and the William Lyon Homes Residential Project. The San Antonio Medical Plaza is being constructed within a retail center and complies with the City of Eastvale General Plan and Zoning Code and consistent with the development of the vicinity. Based on adoption of an Initial Study/Mitigated Negative Declaration, significant noise impacts are not anticipated to occur. The Lodge Residential Project would comply with applicable City construction noise standards to limit noise exposure to surrounding sensitive receptors. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet

available, and RTRP is scheduled for construction in 2017. The Final EIR for RTRP concludes less than significant impacts related to noise impacts, and no significant unavoidable impacts associated with noise. The timing of construction and potential alignment of RTRP and the proposed project could overlap. Compliance with city and county municipal codes would place restrictions and time limits on construction activities. Due to adherence to these codes, the cumulative impact associated with the two projects' construction noise would be less than significant. In addition, because construction-related noise generated under the proposed project would be addressed by implementation of the noise control measures provided in **NOI-1**, construction-related impacts from the proposed project would not result in a cumulatively considerable impact.

Cumulative noise impacts were considered for the future design year 2040, which accounts for future development in the project area. As a result, the analysis contained in Section 2.12 constitutes the operational noise cumulative analysis for the project.

Traffic/Transportation

The RSA for construction traffic includes the area within 0.5 mile of each side of the project. The cumulative projects in the RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, RTRP, and the William Lyon Homes Residential Project. Construction of the San Antonio Medical Plaza conforms to the requirements of the City of Eastvale General Plan and Zoning Code for its permitted use and was designed to meet and exceed the minimum development standards of the zoning district. The San Antonio Medical Plaza project would not conflict with on-street vehicular traffic of adjacent land uses. The Lodge Residential Project would comply with the General Plan and Zoning Code for residential development and be subjected to fair share improvements to lessen any impacts related to traffic. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. The Final EIR for RTRP states that mitigation measures would reduce all potential transportation-related impacts to less than significant levels and a statement of overriding considerations would not be required. Construction of RTRP and the proposed project could occur at the same time. The proposed project includes the preparation of a TMP to reduce potential construction-related traffic conflicts, detours, and delays. The TMP would include identification of detour routes within the construction area, placement of appropriate signs, cones, and barricades in the vicinity of construction, scheduling of construction activities during off-peak hours, and development of plans that ensure emergency access and entry to existing residences and businesses within the construction areas. Traffic control during construction may include off-peak lane closures and nighttime traffic detours to allow falsework construction. A staged construction plan would be implemented to keep the existing bridge and ramps open to traffic. This impact would be temporary and would be less than significant with the implementation of Measure **PS-1** in Section 2.14.2. Construction-related impacts from the proposed project would not result in a cumulatively considerable traffic impacts.

The traffic analysis for the proposed project is based on future traffic conditions in the Year 2040, which accounts for future development in the project area. As a result, the analysis in Section 2.16 constitutes the operational cumulative analysis for the proposed project. In 2040, without the proposed project, the northbound I-15 off-ramp to Limonite Avenue would function at an unacceptable LOS (E and F) during both the AM and PM peak hours. With the proposed

project, the northbound I-15 off-ramp to Limonite Avenue would function at an acceptable LOS A for both AM and PM peak hours, and the northbound on-ramp would function at an acceptable LOS B for both AM and PM peak hours in 2040. The proposed project would generally reduce vehicle delays and improve LOS in the project area. Therefore, the proposed project is not anticipated to contribute to permanent cumulative impacts that affect mobility in the project area.

Other projects in the area may be under construction in the same timeframe as the proposed project. To the extent that construction periods overlap, there is a potential for cumulative local level traffic impacts from multiple project detours and lane reductions occurring simultaneously in and adjacent to the project area, potentially resulting in deterioration of traffic operations on local roadways. The Cities and County would coordinate the timing of project detours and lane closures for all projects in the area in order to minimize traffic impacts. With minimization Measure **PS-1**, the proposed project would have no adverse short-term impacts on traffic/transportation; therefore, the project would not contribute either directly or indirectly to a cumulatively considerable impact.

Public Services and Utilities

The RSA for the project includes the project site and properties immediately adjacent to the project. The cumulative projects in the RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, RTRP, and the William Lyon Homes Residential Project. Based on adoption of an Initial Study/Mitigated Negative Declaration, the San Antonio Medical Plaza would not result in significant impacts to public service and utilities. As a condition of approval, the developer would be required to submit a plan of water and sewer service to determine connection points. The Jurupa Community Services District will provide services contingent upon approval of an availability letter by the Board of Directors, compliance with Jurupa Community Service District rules, regulations, and payment of appropriate fees. The Lodge Residential Project would require approval and service agreements from utilities prior to permitting approval. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. As stated in the Final EIR for RTRP, significant impacts on public services and utilities are not anticipated to occur. Furthermore, RTRP would not result in any significant unavoidable impacts on public services or utility systems. Construction of RTRP and the proposed project could occur at the same time. Construction activities of one or more projects at the same time in the project area could result in temporary, localized, site-specific disruptions, including partial and/or complete street and lane closures, and detours. This could lead to an increase in delay times for emergency response vehicles during construction. The potential for disruption or obstruction of emergency services access in the project area to occur as a result of construction activities would be avoided with Measure **PS-1**. Cumulative effects of construction, if they occur, would be minor and temporary.

2.18.3 Avoidance, Minimization, and/or Mitigation Measures

No additional avoidance, minimization, or mitigation measures are needed beyond those proposed under the individual resource discussions.

Chapter 3 Coordination and Comments

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this proposed project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings, and coordination with resource agencies and Native American individuals and organizations. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Consultation with several agencies occurred in conjunction with preparation of the proposed project technical reports and this Initial Study. These agencies are identified in the various technical reports and include CDFW, USFWS, and NAHC.

Members of the local government agencies have also attended monthly Project Development Team (PDT) meetings. The PDT meetings involve discussions, status, and progress of the proposed project. The representative attendees included the Department, the County of Riverside, City of Jurupa Valley, the City of Eastvale, and various consultants.

3.1 Coordination with Resource Agencies

The Department, as a State Permittee to the MSHCP, is responsible for following the State Permittee Project Review process (MSHCP pages 6-84). The Department will submit the NES (MI) to CDFW and USFWS for MSHCP consistency review. Following review and consultation, the Wildlife Agencies will provide the Department with a concurrence letter documenting MSHCP consistency.

The NAHC was contacted on October 17, 2012 and was sent a letter and map depicting the project location. A Sacred Lands Data Files search and list of potentially interested Native American Groups and Individuals was requested. The NAHC responded on October 18, 2012. They stated that a search of their Sacred Lands Database did not yield any sacred lands or traditional cultural properties within the APE. In addition, the NAHC provided a list of Native American contacts in the region. On February 25, 2013, the Department sent letters and maps showing the project location, and a project layout map, to the contact received from the NAHC. Follow-up phone calls and emails were sent on April 10, 2013 and May 6, 2013. As of November 19, 2014, no additional responses have been received.

3.2 Coordination with Property Owners

3.2.1 Park and Ride

Coordination Meetings have also occurred to discuss the Park and Ride Facility. These meetings occurred on January 8, 2013 and March 26, 2013. The layout of the Park and Ride Facility was

also presented and discussed during multiple PDT meetings. All stakeholders were in agreement with the proposed reconstruction of the Park and Ride Facility. A summary of the coordination meeting discussion is included below.

January 8, 2013 Park and Ride Facility Coordination Meeting

This meeting was attended by the property owner's representative, consultants, and the County of Riverside. Due to the impacts of the interchange project, a discussion took place to either relocate or reconfigure the Park and Ride Facility. . Two options were presented for review. Option 1 places the Park and Ride Facility in a similar footprint to existing conditions, but moved slightly northerly. Option 2 places the Park and Ride Facility under the proposed utility corridor easement with an access road along the Limonite Avenue frontage. As a result of current or planned land uses, relocation would not be feasible.

March 26, 2013 Park and Ride Coordination Meeting

This meeting was attended by the property owner's representative, consultants, and the County of Riverside. A status update meeting between the Department and the project team indicated a willingness to incorporate the Park and Ride Facility parking spaces into the adjacent planned commercial development. An interim condition would be required until the adjacent commercial development is built. A preliminary interim layout was presented and discussed. The preliminary interim layout discussion topics included bus access, entrance driveways, cell tower access, grading, parking spaces, retaining wall, sidewalks, and the development proposed for the northwest quadrant of the Wineville Avenue/Limonite Avenue intersection.

3.2.2 Request for Documents

Two adjacent property owners requested copies of the technical reports that have been prepared for the project. These documents were provided to the property owners in August 2014 and November 2014, respectively.

3.3 Circulation

This draft IS or an NOP will be circulated to property owners and agencies to provide opportunity for their comments. The document will also be available for review at local area libraries and at the Department's District 08 Office.

Chapter 4 List of Preparers

4.1 California Department of Transportation, District 08

Rafih Achy	Project Manager
Kerrie Hudson	Senior Environmental Planner
Candice Hughes	Associate Environmental Planner
Tony Calvillo	Landscape Architect/Visual
Will Kuo	Storm Water
Mohammed Rahman	Design Oversight
Bahram Karimi	Associate Environmental Planner/Paleontology
Laura Chaffin	Associate Environmental Planner/Cultural Studies
Gabrielle Duff	Senior Environmental Planner/Cultural Studies
Kyle Myrick	Associate Environmental Planner/Biology
Scott Quinnell	Senior Environmental Planner/Biology
Farhana Islam	Environmental Engineering Oversight
Donald Cheng	Environmental Engineering Oversight
Olufemi Odufalu	Senior Environmental Planner/Environmental Engineering
Roy King	Floodwater

4.2 Riverside County

Marcia Frances Rose	Riverside County Transportation Department, Environmental Project Manager
John Marcinek	Riverside County, Project Manager
Susan Vombaur	Riverside County, Project Manager

4.3 City of Eastvale

Ruben Castaneda Assistant Engineer

4.4 Dokken Engineering

Pamela Dalcin-Walling Project Manager

Juann Ramos Project Engineer

4.5 ICF International

Brian Calvert Project Director

Christy Corzine Principal Environmental Planner/Document Reviewer

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Mari Piantka Environmental Planner

Daniela Sanaryan Environmental Planner

Keith Cooper Environmental Specialist/Air Quality

Peter Hardie Environmental Specialist/Noise

Tricia Campbell Fellow Technical Director/Biology

Marisa Flores Environmental Planner/Biologist

Zackry West Senior Regulatory Specialist/Biologist

Soraya Swiontek GIS Analyst

Chapter 5 Distribution List

The IS or an NOP will be distributed to local and regional agencies; and utility providers affected by the proposed project. In addition, property owners directly affected by the project will also be provided with Notice of Availability of the document.

Federal and State Agencies

U.S. Fish & Wildlife Service
2800 Cottage Way
Room W-2605
Sacramento CA 95825

U.S. Army Corps of Engineers
Los Angeles District
P.O. Box 532711
Los Angeles CA 90053-2325

U.S. Fish & Wildlife Service
777 E. Tahquitz Canyon Way, Suite 208
Palm Springs California 92262

California Dept. of Fish & Wildlife, Region 6
3602 Inland Empire Boulevard, Suite C-220
Ontario CA 91764

California Department of Conservation
Director
801 K Street, 24th Floor
Sacramento CA 95814

California Highway Patrol
Inland Division (801)
847 East Brier Drive
San Bernardino CA 92408-2820

California Department of Water Resources
1416 9th Street
Sacramento CA 95814

Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento CA 95814

California Air Resources Board
1001 I Street
Sacramento CA 95812

State Clearinghouse
Executive Officer
Office of Planning and Research
1400 Tenth Street
Sacramento CA 95814

State Water Resources Control Board
1001 I Street
Sacramento CA 95814

California Transit Association
Director
1415 L Street, Suite 200
Sacramento CA 95814

Regional/County/Local Agencies

Southern California Association of
Governments
3600 Lime Street, Suite 216
Riverside CA 92501

Riverside County Fire Department
2300 Market Street, Suite 150
Riverside CA 92501

Water Quality Control Board
Santa Ana Region
3737 Main Street #500
Riverside CA 92501

Cal Fire/Riverside County Fire Department
210 West San Jacinto Ave,
Perris CA 92570

South Coast AQMD
IGR Coordinator
21865 East Copley Drive
Diamond Bar CA 91765

Riverside County Sheriff’s Department
Jurupa Valley Station
Danny Feltenberger, Captain
7477 Mission Blvd
Riverside CA 92509

City of Eastvale
Public Works Department
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Riverside County Flood Control and Water
Conservation District
Warren Williams
1995 Market Street
Riverside CA 92501

City of Eastvale
Planning Department
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Riverside County Planning Department
P.O. Box 1409
Riverside CA 92502-1409

Eastvale Branch Library
7447 Scholar Way
Eastvale CA 92880

Riverside County Building and Safety
4080 Lemon St. 2nd Floor
Riverside CA 92502

City of Jurupa Valley
Planning Department
8304 Limonite Avenue, Suite “M”
Jurupa Valley CA 92509

Riverside Transit Agency
1825 Third Street
P.O. Box 59968
Riverside CA 92517-1968

City of Jurupa Valley
Public Works Department
8304 Limonite Avenue, Suite “M”
Jurupa Valley CA 92509

Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Riverside CA 92501

Glen Avon Library
9244 Galena
Jurupa Valley CA 92509

Regional Water Quality Control Board (8)
3737 Main Street, Suite 500
Riverside CA 92501

Jurupa Community Services District
8621 Jurupa Rd
Riverside CA 92509

City of Norco
City Clerk's Office
2870 Clark Ave
Norco CA 92860

Louis Rubidoux Library
5840 Mission Blvd
Jurupa Valley CA 92509

Local Elected Officials

Hon. Ike Bootsma, Mayor
City of Eastvale
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Hon. Laura Roughton, Council Member
City of Jurupa Valley
8304 Limonite Avenue, Suite "M"
Jurupa Valley CA 92509

Hon. Adam Rush, Mayor Pro Tempore
City of Eastvale
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Hon. John Tavaglione, Supervisor
Riverside County Board of Supervisors,
Second District
4080 Lemon Street
P.O. Box 1646
Riverside CA 92502-1646

Hon. Jeff DeGrandpre., Council Member
City of Eastvale
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Eastvale CA 91752

Hon. Verne Lauritzen, Council Member
City of Jurupa Valley
8304 Limonite Avenue, Suite "M"
Jurupa Valley CA 92509

Hon. Ric Welch, Council Member
City of Eastvale
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Hon. William Link, Council Member
City of Eastvale
12363 Limonite Ave., Suite 910
Eastvale CA 91752

Hon. Frank Johnston, Mayor
City of Jurupa Valley
8304 Limonite Avenue, Suite "M"
Jurupa Valley CA 92509

Hon. Michael Goodland, Mayor Pro-Tem
City of Jurupa Valley
8304 Limonite Avenue, Suite "M"
Jurupa Valley CA 92509

Hon. Brad Hancock, Council Member
City of Jurupa Valley
8304 Limonite Avenue, Suite "M"
Jurupa Valley CA 92509

Interested Groups, Organizations, and Individuals

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource
Department
P.O. Box 487
San Jacinto CA 92581

Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
P.O. Box 68
Valley Center CA 92082

Morongio Band of Mission Indians
Michael Contreras
Cultural Heritage Program Manager
13000 Field Road
Cabazon CA 92230

Ramona Band of Cahuilla Indians
John Gomez, Jr., Cultural Resources
P.O. Box 391670
Anza CA 92539

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P.O. Box 2183
Temecula CA 92593

Utilities, Services, Businesses, and Other Property Owners

AT&T Communications
Susan Blackwell
1265 N. Van Buren, Room 180
Anaheim CA 92807

Southern California Gas Company
Albert Cardoza
Planning Department
P.O. Box 3003
Redlands CA 92373-0306

AT&T Cellular
Matt Kang
Cable Engineering Services
10640 Sepulveda Blvd., Suite 1
Mission Hills CA 91345

Sprint Cellular
George Hice
CPM for Riverside Area
330 Commerce, Suite 110
Irvine CA 92602

Charter Communications
Patrick Mecal
7337 Central Avenue
Riverside CA 92504

Time Warner Telecom
Mike Long
1340 Treat Blvd, Suite 100
Walnut Creek CA 94597

Jurupa Community Services District
Keith Backus
11201 Harrel Street
Mira Loma CA 91752

T Mobile
Robert Norton
2008 McGaw Ave
Irvine CA 92614

Burrtec
Corporate Office Manager
9890 Cherry Avenue
Fontana CA 92335

Mr. Rick Bondar
McCune & Associates, Inc.
12080 Bellegrave Ave.
Jurupa Valley-Mira Loma, CA 91752

Metro PCS
John Beke
350 Commerce, Suite 200
Irvine CA 92602

APV INV PA 16
C/O Anthony P Vernola
P.O. Box 217
Upland CA 91784

Riverside Transmission Reliability Project
City of Riverside, Public Utilities Dept.
George Hanson
3901 Orange Street
Riverside CA 92522

Kohls Department Stores Inc
C/O Accting
1156 N Mountain Avenue
Upland CA 91786

Corona Norco Unified School District
C/O Ted E. Rozzi
28213 Clark Avenue
Norco CA 92860

WLPX Eastvale
C/O Accounting
P.O. Box 670
Upland CA 91785

Hamner Park Assoc.
924 Westwood Blvd. Ste 910
Los Angeles CA 90024

Michael Jason Hull
P.O. Box 292102
Phelan CA 92329

Homecoming III at Eastvale
C/O Kimball Tirey St John
1156 N Mountain Ave
Upland CA 91786

MGP X Vernola
C/O Merlone Geir Management
425 California St 11th Fl
San Francisco CA 94104

McDonalds USA
C/O Jim Mnouian
P.O. Box 661238
Arcadia CA 91066

Eastvale Gateway II
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1156 N Mountain Ave
Upland CA 91786

County of Riverside
C/O Assistant Director Real Estate
P.O. Box 1180
Riverside CA 92502

Eastvale Gateway III
C/O Lewis Operating Corp
P.O. Box 670
Upland CA 91785

Mira Loma JC
C/O Farmers & Merchants Bank
302 Pine Ave
Long Beach CA 90802

Eastvale Gateway I
C/O Lewis Operating Corp
P.O. Box 670
Upland CA 91785

Eastvale San Antonio Mob
C/O San Antonio Comm Hospital
999 San Bernardino Rd
Upland CA 91786

Tarpon Prop Ownership 2
C/O Brandon Birtcher
18021 Von Karman Ste 1170
Irvine CA 92612

Nu Way Industries Inc
C/O Jim Mnouian
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Arcadia CA 91066

Southern California Edison
Orestes Boborques
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Fontana CA 92336

Ter Maaten Family Partnership
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Escalon CA 95320

RHKIDS
410 S Beverly Dr
Beverly Hills CA 90212

Jurupa Area Recreation Park Dist
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Lindley Terrace
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600 Spring Rd
Moorpark CA 93021

Lewis Inv Co
C/O Legal Dept
P.O. Box 670
Upland CA 91785

County of Riverside
C/O Real Estate Division
P.O. Box 1180
Riverside CA 92502

Jurupa Area Recreation & Park Dist
C/O Brehm Comm
2714 Loker Ave W Ste 300
Carlsbad CA 92008

Eastvale San Antonio Land Co
C/O San Antonio Comm Hospital
999 San Bernardino Rd
Upland CA 91786

Santa Ana River Water Co
10530 54th ST
Mira Loma CA 91752

Walgreen Co
C/O Jim Mnouian
P.O. Box 661238
Arcadia CA 91066

Homecoming III at Eastvale
C/O Kimball Tirey St John
1156 N Mountain Ave
Upland CA 91786

County of Riverside
C/O Real Estate Division
P.O. Box 1180
Riverside CA 92502

Homecoming IV at Eastvale
C/O Lewis Operating Corp
P.O. Box 670
Upland CA 91785

Regal Cinemas Inc
C/O Real Estate Dept
7132 Regal Ln
Knoxville TN 37918

Cloverdale Marketplace
C/O Richard Teaman
P.O. Box 6317
Norco CA 92860

Chino Basin Desalter Authority
C/O Jurupa Comm Services Dist
11201 Harrell St
Mira Loma CA 91752

CFT Dev
C/O Legal Dept
1683 Walnut Grove Ave
Rosemead CA 91770

James C McGrew
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Lowes HIW Inc
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P.O. Box 1111
North Wilkesboro NC 28659

Serafina Community Assn
C/O Euclid Mgmt Co
195 N Euclid Ave Ste 100
Upland CA 91786

Homecoming II at Eastvale
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P.O. Box 670
Upland CA 91785

Eastvale San Antonio Land Co
C/O San Antonio Hospital
999 San Bernardino Rd
Upland CA 91786

HD Dev of Maryland Inc
C/O Home Depot USA Inc Prop Tax De
P.O. Box 105842
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J & R Hock Enterprises Inc
C/O Jim Mnouian
P.O. Box 661238
Arcadia CA 91066

Chino Basin Desalter Authority
C/O Jurupa Comm Services Dist
11201 Harrel St
Mira Loma CA 91752

Vons Companies Inc
C/O Donn Matsuzaki
1371 Oakland Blv No 200
Walnut Creek CA 94596

12071 Bellegrave Ave
C/O IDI Inc
3424 Peachtree Rd No 1500
Atlanta GA 30326

Eastvale Gateway
C/O Lewis Operating Corp
P.O. Box 670
Upland CA 91785

Target Corp
RE Existing Purchase Agreement Ca
1000 Nicollet Mall TPN 12
Minneapolis MN 55403

Mira Loma Smiles Dentistry
Evelyn Lindley, Office Manager
6445 Pats Ranch Rd
Mira Loma CA 91752

BevMo!
Jamie Wojick
6477 Pats Ranch Rd
Mira Loma CA 91752

Jojo's Pizza Kitchen
Miguel Hernandez
6237 Pats Ranch Rd
Mira Loma CA 91752

Denny's
General Manager
6285 Pats Ranch Rd
Mira Loma CA 91752

Del Taco
Store Manager
6269 Pats Ranch Rd
Mira Loma CA 91752

Lowe's Home Improvement
Tim Overon
6413 Pats Ranch Rd
Mira Loma CA 91752

Fitness 19
Store Manager
6429 Pats Ranch Rd
Mira Loma CA 91752

Eastvale Gateway South
C/O Lewis Retail Centers
12471 Limonite Ave
Mira Loma CA 91752

Yogurtland Mira Loma
Store Manager
12530 Limonite Ave
Eastvale CA 91752

Starbucks
Karl Smith
6170 Hamner Ave
Riverside CA 92505

Petco Animal Supplies
Roger P.
6301 Pats Ranch Rd
Mira Loma CA 91752

Vernola Marketplace
Katy Noel, Property Contact
6237 Pats Ranch Rd
Jurupa CA 91752

Ross Dress for Less
Rosie, Store Manager
6317 Pats Ranch Rd
Mira Loma CA 91752

Five Guys Burgers and Fries
Store Manager
6285 Pats Ranch Rd
Jurupa Valley CA 91752

Michaels
Store Manager
6381 Pats Ranch Rd
Mira Loma CA 91752

Kristie Vo Optometrist: Vo Kristie OD
Kristie Vo
6445 Pats Ranch Rd
Mira Loma CA 91752

Walgreens Store Eastvale
Suya Xie
12574 Limonite Ave
Eastvale CA 91752

Vons
Marwan Dababanh
6170 Hamner Ave
Eastvale CA 91752

The Home Depot
A Qiang
6140 Hamner Ave
Mira Loma CA 91752

Starbucks
Store Manager
6170 Hamner Avenue
Mira Loma CA 91752

T.J. Maxx
Julia P.
12387 Limonite Ave
Mira Loma CA 91752

Sport Chalet
Michael Berlock
12399 Limonite Ave
Mira Loma CA 91752

Buffalo Wild Wings
Store Manager
12411 Limonite Ave #650
Mira Loma CA 91752

Kohl's Mira Loma
Nancy Neal
12315 Limonite Ave
Mira Loma CA 91752

Edwards Theaters Eastvale Gateway
Stadium 14 Movie Theater
Store Management
12285 Limonite Ave
Mira Loma CA 91752

Little Caesars Pizza
Store Manager
12552 Limonite Ave #100
Eastvale CA 91752

DV Urgent Care & Family Practice
Office Manager
6080 Hamner Ave #100
Mira Loma CA 91752

Tutor Time in Eastvale CA
Tammie, Director
6020 Hamner Ave
Eastvale CA 91752

One Touch Beauty
Store Manager
12552 Limonite Ave
Mira Loma CA 91752

Hair Elegance
Monique or Store Manager
12523 Limonite Ave
Mira Loma CA 91752

GNC
Jerome Watts
12523 Limonite Ave
Mira Loma CA 91752

Bank of America
Branch Manager
12511 Limonite Ave.
Mira Loma CA 91752

The UPS Store
Robert Wang
12523 Limonite Ave
Mira Loma CA 91752

Banfield Pet Hospital
Office Manager
12483 Limonite Ave
Mira Loma CA 91752

Target
Store Manager
12471 Limonite Ave
Mira Loma CA 91752

Carino's Italian Grill
Tad Stockery
12447 Limonite Ave,
Mira Loma CA 91752

Sunrise Optometry
Dr. Vinnie Tieu, OD
12435 Limonite Ave #560
Mira Loma CA 91752

Party City
Marie Hidalgo
12339 Limonite Ave
Mira Loma CA 91752

Styles For Less
Amanda Gomez
12363 Limonite Ave
Eastvale CA 91752

Pinkberry
Store Manager
12257 Limonite Ave
Mira Loma CA 91752

Tilly's
Store Manager
12327 Limonite Ave
Mira Loma CA 91752

Nutrishop
Store Manager
12303 Limonite Ave
Mira Loma CA 91752

On the Border
Heather Colburn
12269 Limonite Ave
Mira Loma CA 91752

Best Buy
Jimmy Morris
12281 Limonite Ave
Eastvale CA 91752

Game Stop
Chris Acker
12303 Limonite Ave
Mira Loma CA 91752

Staples
Tom Johnson
12495 Limonite Ave
Mira Loma CA 91752

Chase Bank
Branch Manager
6060 Hamner Ave
Eastvale CA 91752

Applebee's
Rafael Vasquez
12375 Limonite Ave
Mira Loma CA 91752

Chapter 6 References

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Appendix A – Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
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*Flex your power!
Be energy efficient!*

March 2013

**NON-DISCRIMINATION
POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

Appendix B – Environmental Commitment Record

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)	Remarks	Environmental Compliance	
									YES	NO
Visual/Aesthetics										
AES-1 Per Department standards regarding erosion control, exposed slopes will be revegetated.	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Construction						
AES-2 Lighting for the project will be shielded.	p. 2-4	VIA	Resident Engineer / Contractor	Construction						
AES-3 The design and implementation of aesthetic elements shall be coordinated between local agencies and the Department and incorporated during final design.	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Final Design						
AES-4 Aesthetic treatments shall be coordinated during final design. At a minimum, decorative railing shall be used at the overcrossing, medians shall be aesthetically treated with hardscaping and wall treatments for the overcrossing and retaining walls shall include fractured rib texture (or other similarly aesthetic texture).	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Final Design						
AES-5 Existing landscaping will be replaced in-kind (ratio of 1:1) (24-inch box), or if smaller plant material is chosen, then a 5:1 plant replacement ratio and one type of ground cover (grass) will be installed.	p. 2-4	VIA	Resident Engineer/ Contractor, Landscape Architect	Construction						
AES-6 Plant material will be installed with irrigation in a meandering design within the interchange.	p. 2-4	VIA	Resident Engineer/ Contractor, Landscape Architect	Construction						

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 Construction

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EA 0E-150
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									YES	NO
Air Quality										
AQ-1 The construction contractor shall comply with Caltrans' Standard Specifications in Section 14 (2010). <ul style="list-style-type: none"> Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18. 	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction	Standard Specification 14-9					
AQ-2 Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right of way line, depending on local regulations.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction	Standard Specification 19-9.03A					
AQ-3 Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						
AQ-4 Wash off trucks as they leave the right of way as necessary to control fugitive dust emissions.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						
AQ-5 Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment, as provided in California Code of Regulations Title 17, Section 93114.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						
AQ-6 Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						

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										YES	NO
slopes as needed to minimize construction impacts on existing communities.											
AQ-7 Locate equipment and material storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction							
AQ-8 Establish Environmentally Sensitive Areas (ESAs) or their equivalent near sensitive air receptors where construction activities involving extended idling of diesel equipment would be prohibited, to the extent feasible.	p. 2-9	Air Quality Report	Resident Engineer/ Contractor/ District Air Quality	Prior to Construction							
AQ-9 Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.	p. 2-9	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction							
AQ-10 Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emissions of dust (particulate matter) during transportation.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction							
AQ-11 Promptly and regularly remove dust and mud on paved public roads from construction activity and traffic to decrease particulate matter.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction							
AQ-12 Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor, County	Prior to/ During Construction							
AQ-13 Install mulch or plant vegetation as soon as practicable following completion of all site disturbance activities to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	During/ After Construction							

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 Construction

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EA 0E-150
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										YES	NO
and visible emission issues; controls, such as dampened straw, may be needed.											
AQ-14 To control the generation of construction-related fugitive dust emissions, the Department will require construction contractors to comply with SCAQMD's Rule 403 requirements.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	During Grading/ Construction							
AQ-15 Use of lighter colored pavement where feasible.	p. 2-10	Initial Study	Resident Engineer/ Contractor	Include during Final Design/ Implement during construction							
Biological Resources											
BIO-1 Burrowing Owl Preconstruction Survey and Avoidance. A preconstruction presence/absence survey for burrowing owl following MSHCP protocol must be conducted within 30 days prior to construction. The preconstruction survey will include the project impact area and a 300-foot buffer if between March 1 and August 31 (nesting season), and a 100-foot buffer if outside of this window. Passive relocation by a qualified ornithologist will be conducted if it has been confirmed that burrowing owl is not nesting (MSHCP Vol. 1, Section 6.3.2). If the species is found nesting construction will not occur within a designated buffer determined by a biologist until either (1) a qualified ornithologist has confirmed that the pair is no longer nesting and all young (if present) are independently foraging or (2) active relocation by a properly permitted biologist will be performed with concurrence from CDFW and the U.S. Fish and Wildlife Service (USFWS).	p. 2-17	NES/MI	Qualified Biologist	30 days prior to construction. During owl breeding season (March 1 – August 31)	Standard Special Provision 14-6.03A						

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PM 46.7 / 49.7

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							YES	NO		YES	NO
This measure would be superseded by any burrowing owl preconstruction survey protocol required in an aquatic permit (Clean Water Act [CWA] 401, 404; CDFW 1602) as long as no mortality occurs to burrowing owl.											
<p>BIO-2 MSHCP Construction Guidelines. The project will implement the construction guidelines in MSHCP Volume I, Section 7.5.3, as applicable. These will be incorporated in conjunction with the BMP measures in BIO-3.</p> <ul style="list-style-type: none"> o Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the County of Riverside and participating jurisdiction prior to construction. o Clearing of natural vegetation will be performed outside of the active breeding season for birds as defined in the MSHCP (March 1 through June 30). If work needs to occur during this window, BIO-4 (below) will be implemented. o When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall 	p. 2-18	NES/MI	Resident Engineer/ Contractor/ Qualified Biologist	Construction							

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PS&E Submittal

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

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										YES	NO
<p>Avoidance, Minimization, and/or Mitigation Measures</p> <p>be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities.</p> <ul style="list-style-type: none"> o Training of construction personnel will be provided. A qualified biologist will conduct a training session for Project personnel prior to grading. The training will include a description of the species of concern and its habitats, the general provisions of the Federal Endangered Species Act (FESA) and the MSHCP, the need to adhere to the provisions of the FESA and the MSHCP, the penalties associated with violating the provisions of the FESA, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project site boundaries within which the Project activities must be accomplished. o The qualified Project biologist will monitor construction activities for the duration of the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint (MSHCP Vol. I, Section 7.5.3). Additionally, ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices (BMPs). o Construction employees will strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project footprint and designated staging areas and 											

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08-RIV-15
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										YES	NO
<p>routes of travel. The construction area(s) will be the minimal area necessary to complete the Project and will be specified in the construction plans. Construction limits will be demarcated using environmentally sensitive area fencing (e.g., orange snow screen). Exclusion fencing should be maintained until the completion of all construction activities.</p> <ul style="list-style-type: none"> o Exotic species removed during construction will be properly handled to prevent sprouting or regrowth. o Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized. o Short-term stream diversions will be accomplished by use of sand bags or other methods that will result in minimal instream impacts. Short-term diversions will consider effects on wildlife. o Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site. o No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. o The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible. o The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the 											

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Construction

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										YES	NO
<p>Avoidance, Minimization, and/or Mitigation Measures</p> <p>limits of disturbance prior to initiation of construction activities.</p> <ul style="list-style-type: none"> o During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint will be avoided. o Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices. o Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation (MSHCP Vol. I, Section 7.5.3). o All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off. 											
<p>BIO-3 Standard Best Management Practices. MSHCP best management practices (BMPs) will be implemented during construction (MSHCP Volume I, Appendix C), as applicable. Some of the measures in BIO-2 would also be considered BMPs and would apply in conjunction with the measures below.</p> <ul style="list-style-type: none"> o Water pollution and erosion control plans shall be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements. o The footprint of disturbance shall be minimized to the maximum extent feasible. Employees will be instructed that 	p. 2-19	NES/MI	Resident Engineer/ Contractor/ Qualified Biologist	Construction							

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										YES	NO
<p>their activities are restricted to the construction areas. Access to sites shall be via pre-existing access routes to the greatest extent possible.</p> <ul style="list-style-type: none"> o When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. o Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream. o Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas. o The qualified project biologist shall monitor construction 											

Date: (MONTH YEAR
of approved ED)

Project Phase:
 PA/ED (DED/FED)

PS&E Submittal

Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
							YES	NO		YES	NO
<p>activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.</p> <ul style="list-style-type: none"> o The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species. o To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s). o The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs. 											
<p>BIO-4 A pre-construction nesting bird survey will be conducted no more than 30 days prior to vegetation clearing, ground disturbance, or construction activities(including staging) during the breeding season (March 1 to August 31 for nonraptors, January 15 to June 30 for raptors). The survey will occur within the 300-foot buffer area for raptors and within the 200-foot buffer area for other birds. If nesting birds (or raptors) are found, an avoidance buffer will be established by a qualified biologist and will remain until a qualified biologist has determined that young have fledged or nesting activities have ceased. This measure will be superseded by any preconstruction nesting bird survey</p>	p. 2-20	NES/MI	Qualified Biologist	Prior to Construction (30 days prior to vegetation clearing, ground disturbance, or construction if work would occur	Standard Special Provision 14-6.03A						

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
							YES	NO		YES	NO
measure(s) required in an aquatic permit (CWA 401, 404; CDFW 1602).				between January 15 to August 31 [remainder of measure would apply only if nesting birds or raptors are found]							
<p>BIO-5 Preconstruction Bat Survey. To prevent impacts on daytime bat roosts and maternity roosts, a qualified biologist will conduct bat and bat roosting site surveys prior to removal of mature trees. This preconstruction survey will be conducted at any mature tree proposed for removal and within 100 feet of the PIA. If roosting sites or bats are not found, a report confirming their absence will be sent to the CDFW and no further mitigation will be required.</p> <p>If the preconstruction survey determines bats are roosting, and tree removal is scheduled to occur between October 1 and March 30 (outside of the maternity season of April 1 through September 30), the following two-step cutting process would occur:</p> <ol style="list-style-type: none"> 1. Surrounding branches that do not house bats at the time that the eviction would occur would be removed. This would alter the condition of the roost tree, causing bats to abandon the roost. 	p. 2-20	NES/MI	Qualified Biologist	Prior to Construction (Surveys to be conducted prior to removal of any mature trees [remainder of measure would be implemented if any bats are found])							

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
Avoidance, Minimization, and/or Mitigation Measures											
2. The tree can then be fully removed. A visual inspection of the roost tree would be required prior to removal to verify that all bats have been successfully excluded. This work will be completed by a bat exclusion professional. If the preconstruction survey finds bats to be roosting and tree removal is scheduled to occur during the maternity season (April 1 through September 30), a qualified biologist will monitor the roost to determine if the roost site is a maternal roost. This may be determined by either visual inspection of the roost for bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described above. If the roost is determined to be a maternal roost, eviction cannot occur during the nursery season, as bat pups cannot leave the roost until they have reached maturity. In this case, a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will be established around the roosting site, within which no construction-related impacts will occur until the bat pups are mature enough to permanently leave the roost.											
Cultural Resources											
CR-1 If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archeologist can assess the nature and significance of the find.	p. 2-24	HPSR/ASR	Resident Engineer / Contractor	All ground disturbing activities/ Construction	Standard Specification 14-2.02A						
CR-2 In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of	p. 2-24	HPSR/ASR	Resident Engineer /	All ground disturbing							

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
							YES	NO		YES	NO
the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Gabrielle Duff, DEBC: (909)383-6933 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.			Contractor	activities/ Construction							
Paleontology											
PALEO-1 A Paleontological Mitigation Plan (PMP) shall be developed and implemented prior to commencement of project construction. The PMP shall follow the guidelines of the Department and the recommendations of the Society of Vertebrate Paleontology (SVP). These recommendations include: <ul style="list-style-type: none"> Attendance by a qualified paleontologist at the preconstruction meeting to consult with the grading and excavation contractors. On-site presence of a paleontological monitor to inspect for paleontological resources on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential and on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resource potential. Salvage and recovery of paleontological resources by 	p. 2-24	PIR/PER	Qualified Paleontologist	During PS&E							

Date: (MONTH YEAR
of approved ED)

Project Phase:
 PA/ED (DED/FED)

PS&E Submittal

Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance		
							YES	NO		YES	NO	
<p>the qualified paleontologist or paleontological monitor.</p> <ul style="list-style-type: none"> Collection of stratigraphic data by the qualified paleontologist and/or paleontological monitor to provide a stratigraphic context for recovered paleontological resources. Preparation (repair and cleaning), sorting, and cataloguing of recovered paleontological resources. Donation of prepared fossils, field notes, photographs, and maps to a scientific institution with permanent paleontological collections, such as the San Bernardino county Museum (SBCM). Completion of a final summary report that outlines the results of the mitigation program. <p>The PMP shall also incorporate the general guidelines for conformable impact mitigation to significant nonrenewable paleontological resources as developed by the SVP (1995). A PMP shall be prepared and submitted to the Department for review during the Plans, Specifications, and Estimates (PS&E) phase of the project</p>												
Hazards and Hazardous Materials												
HAZ-1 To avoid impacts from pavement striping during construction, testing and removal requirements for yellow striping and pavement marking materials shall be performed in accordance with Caltrans Standard Special Provision 15 2.02C(2) "REMOVE TRAFFIC STRIPES AND PAVEMENT MARKINGS CONTAINING LEAD – this Standard Special Provision requires a lead compliance plan for removal when residue is definitely non-hazardous. Used for new yellow paints and all other colors	p. 2-45	ISA	Resident Engineer/ Contractor	Prior to Construction								

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
of paint.”											
HAZ-2 Any leaking transformers observed during the course of the project shall be considered a potential PCB hazard. Should leaks from electrical transformers (that will either remain within the construction limits or will require the removal and/or relocation) be encountered during construction, the transformer fluid shall be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer shall be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCBs shall also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.	p. 2-45	ISA	Resident Engineer/ Contractor	During Construction							
HAZ-3 Based on preliminary plans, right-of-way acquisition is not expected at the Chevron Gas Station, which is immediately adjacent to the project on the southwest corner of Limonite Avenue and Eastvale Gateway. Should final plans indicate that a portion of this parcel will be acquired for new right-of-way, a preliminary environmental screening (limited subsurface sampling and laboratory analysis) shall be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition, adjacent to the existing Chevron Gas Station. Should the preliminary screening encounter elevated levels of petroleum hydrocarbons and/or MTBE a	p. 2-45	ISA	Resident Engineer	Prior to Construction							

Date: (MONTH YEAR
of approved ED)

Project Phase:
 PA/ED (DED/FED)

PS&E Submittal

Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
Avoidance, Minimization, and/or Mitigation Measures											
limited Phase II ISA shall be performed. The Phase II ISA shall consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction activities adjacent to the existing Chevron Gas Station. The Phase II ISA shall also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction.											
HAZ-4 Should any previously unknown hazardous waste/material be encountered during construction, Caltrans Hazards Procedures for Construction shall be followed.	p. 2-46	ISA	Resident Engineer/ Contractor	During Construction							
HAZ-5: In accordance with Section 112 of the Clean Air Act, which established the National Emission Standards for Hazardous Air Pollutants (NESHAP), specific work practices will be followed during demolitions and renovations of all facilities. The regulations require a thorough inspection where the demolition or renovation operation will occur and requires the owner or the operator of the demolition or renovation to notify the appropriate delegated entity (often a state agency) before any demolition, or renovations that contain a certain threshold amount of regulated asbestos-containing material. The rule also requires work practice standards that control asbestos emissions. Refer to SCAQMD Rule 1403 that specifically addresses asbestos demolition and removal at http://www.aqmd.gov/home/regulations/compliance/asbestos-demolition-removal .	P 2-46	ED	Resident Engineer/ Contractor	Prior to demolition							

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)	Remarks	Environmental Compliance	
									YES	NO
Hydrology and Water Quality										
WQ-1 Construction site BMPs shall be implemented during construction for controlling potential pollutants on construction sites. The following BMP categories shall be considered and implemented, where feasible: Soil Stabilization Practices; Sediment Control Practices; Tracking Control Practices; Wind Erosion Control; Non-Storm Water Controls; and Waste Management and Material Pollution Controls.	p. 2-54	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor	Final Design (incorporate BMPs into project), Prior to/ during grading and construction (implement BMPs)	Standard Specification 13-4.01					
WQ-2 Implement Design Pollution Prevention, Low Impact Development (LID), source control, and treatment control BMPs (where feasible and applicable) in compliance with NPDES permit requirements.	p. 2-55	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor	Final Design (incorporate BMPs into Project), Prior to/ during grading and construction (implement BMPs)						
WQ-3 Construction will be scheduled to minimize soil-disturbing work during the rainy season.	p. 2-55	Location Hydraulic Study, Water Quality	Resident Engineer / Contractor	During ground-disturbing activities and						

Date: (MONTH YEAR
of approved ED)

Project Phase:
 PA/ED (DED/FED)

PS&E Submittal

Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
		Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.		construction							
WQ-4 A Notice of Intent will be filed with the Santa Ana Regional Water Quality Control Board (SARWQCB) for coverage under the state-wide NPDES permit for construction-related discharges. The contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that sets forth the BMPs that will be implemented on site. The BMPs will be implemented to minimize spills and keep potentially contaminated materials used during construction out of the drainage waterways as documented in the SWPPP.	p. 2-55	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor/ District Stormwater, NPDES	Final Design(incorp orate BMPs into project), Prior to/ during grading and construction (implement BMPs)							
Noise											
NOI-1 As directed by the Department, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	p. 2-73	NSR, NADR	Resident Engineer / Contractor	Post PS&E	Standard Special Provision 14-8.02						

Date: (MONTH YEAR
of approved ED)
Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal
 Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)	Remarks	Environmental Compliance	
									YES	NO
Public Services, Transportation and Traffic										
PS-1 A Transportation Management Plan (TMP) shall be developed by the Department to minimize potential impacts to emergency services and commuters during construction.	p. 2-79	CIA	Resident Engineer/ Contractor, County	Final Design/ Prior to construction	Standard Specification 12-4.01					
PS-2 As of November 7, 2014 California Department of Transportation has adopted the California Manual on Uniform Traffic Control Devices (California MUTCD) 2014 edition to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Vehicle Code Section 21400 and the recommendation of the California Traffic Control Devices Committee (CTCDC). The Department requested and has received a letter to confirm substantial conformance from the Federal Highway Administration (FHWA) for California MUTCD 2014 edition. The California MUTCD 2014 edition includes FHWA's MUTCD 2009 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 also includes all policies on traffic control devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents.	p. 2-79	Initial Study	Resident Engineer / Contractor	Final Design/ During construction						
PS-3 Use lighting systems that are energy efficient, such as LED technology.	p. 2-79	Initial Study	Resident Engineer / Contractor	Final Design/ During construction						
PS-4 Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.	p. 2-79	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction						

Date: (MONTH YEAR
of approved ED)

Project Phase:
 PA/ED (DED/FED)

PS&E Submittal

Construction

ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

08-RIV-15
PM 46.7 / 49.7

EA 0E-150
PN 0800020201

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	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	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
PS-5 Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. This should be implemented in coordination with Measure PS-1 .	p. 2-79	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction							
PS-6 Limiting of lane closures during peak hours to the extent possible.	p. 2-79	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction							
PS-7 Inclusion of detours for bicycles and pedestrians in all areas potentially affected by construction. This should be implemented in coordination with Measure PS-1 .	p. 2-79	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction							
PS-8 Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. This should be implemented in coordination with Measure PS-1 .	p. 2-79	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction							

PERMITS AND AGREEMENTS:

AGENCY	Type	Issue Date	Expiration Date
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Application to be submitted after approval of Environmental Document.	
State Water Resources Control Board	Clean Water Act Section 402 – National Pollutant Discharge Elimination System (NPDES)	SWPPP to be submitted after approval of Environmental Document.	
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	Application to be submitted after approval of Environmental Document	
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit 14	Permit application to be submitted after approval of Environmental Document	
U.S. Fish and Wildlife Service	Section 7 Consultation, MSHCP Consistency Determination	Anticipated submittal after approval of Environmental Document	

Appendix C – Acronyms

AB	Assembly Bill
ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AHERA	Asbestos Hazard Emergency Response Act
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	California Air Resources Board
ASR	Archaeological Survey Report
AULs	Activity and Use Limitations
BMPs	best management practices
BSA	biological study area
Cal/EPA	California Environmental Protection Agency
CARB (ARB)	California Air Resources Board
CCO	Community Overlay
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
CHP	California Highway Patrol
CIA	Community Impact Assessment
CO	carbon monoxide
CO ₂	carbon dioxide
County	County of Riverside
CTP	California Transportation Plan
CWA	Clean Water Act
DAMP	Drainage Area Master Plan
dB	decibel
dBA	A-weighted decibel
Department (Caltrans)	California Department of Transportation
DOC	California Department of Conservation
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
ELAP	Environmental Laboratory Accreditation Program
EPA (U.S. EPA)	U.S. Environmental Protection Agency
EO	Executive Order
FCAA	Federal Clean Air Act

FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
Guidelines	Section 404(b)(1) Guidelines
H ₂ S	hydrogen sulfide
HA	Hydrologic Area
HOV	high occupancy vehicles
HPSR	Historic Property Survey Report
I-15	Interstate 15
IGR	Intergovernmental Review
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISA	Initial Site Assessment
ITS	Intelligent Transportation System
kV	kilovolt
LEDPA	least environmentally damaging practicable alternative
L _{eq(h)}	hourly equivalent energy noise level
LID	Low Impact Development
LIP	Local Implementation Plan
L _{max}	maximum sound level
LOS	level of service
MBTA	Migratory Bird Treaty Act
mg/kg	milligrams per kilogram
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4s	municipal separate storm sewer systems
MSHCP	Multiple Species Habitat Conservation Plan
MTBE	methyl tertiary butyl ether
MUTCD	Manual on Uniform Traffic Control Devices
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NADR	Noise Abatement Decision Report
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NES (MI)	Natural Environment Study (Minimal Impacts)
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act

NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NOP	Notice of Preparation
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NSR	Noise Study Report
O ₃	ozone
OC	Overcrossing
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
PAC	Presumed Asbestos Containing Materials
PB	lead
PCB	polychlorinated biphenyls
PDT	Project Development Team
PIA/LOD	project impact area/limits of disturbance
PIR/PER	Paleontological Identification Report/Paleontological Evaluation Report
PM	particulate matter
PM	post mile
PM ₁₀	particles of 10 micrometers or smaller
PM _{2.5}	particles of 2.5 micrometers and smaller
PMP	Paleontological Mitigation Plan
PQP	Public/Quasi-Public
PRC	Public Resources Code
PS&E	Plans, Specifications, and Estimates
Qoa	very old alluvial channel deposits
Qye	young eolian deposits
RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act of 1976
RCTC	Riverside County Transportation Commission
REC	Recognized Environmental Condition
ROG	reactive organic gas
RPU	Riverside Public Utilities
RSA	resource study area
RSS	Riversidian Sage Scrub
RTP	Regional Transportation Plan
RTRP	Riverside Transmission Reliability Project
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCM	San Bernardino County Museum
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments

SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDC	Seismic Design Criteria
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
SSP	Standard Special Provision
SVP	Society of Vertebrate Paleontology
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
TSCA	Toxic Substances Control Act
TTLC	total threshold limit concentrations
TUMF	Transportation Uniform Mitigation Fee
U.S.	United States
U.S. EPA	United States Environmental Protection Agency
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VIA	Visual Impact Assessment
VMT	vehicle miles traveled
WDR	Waste Discharge Requirement
WoS	Waters of the State
WoUS	Waters of the U.S.
WPCP	Water Pollution Control Plan

Appendix D – USFWS Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008

PHONE: (760)431-9440 FAX: (760)431-5901

URL: www.fws.gov/carlsbad/

Consultation Tracking Number: 08ECAR00-2015-SLI-0036

October 20, 2014

Project Name: I-15 Limonite IC

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: I-15 Limonite IC

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
<http://www.fws.gov/carlsbad/>

Consultation Tracking Number: 08ECAR00-2015-SLI-0036

Project Type: Transportation

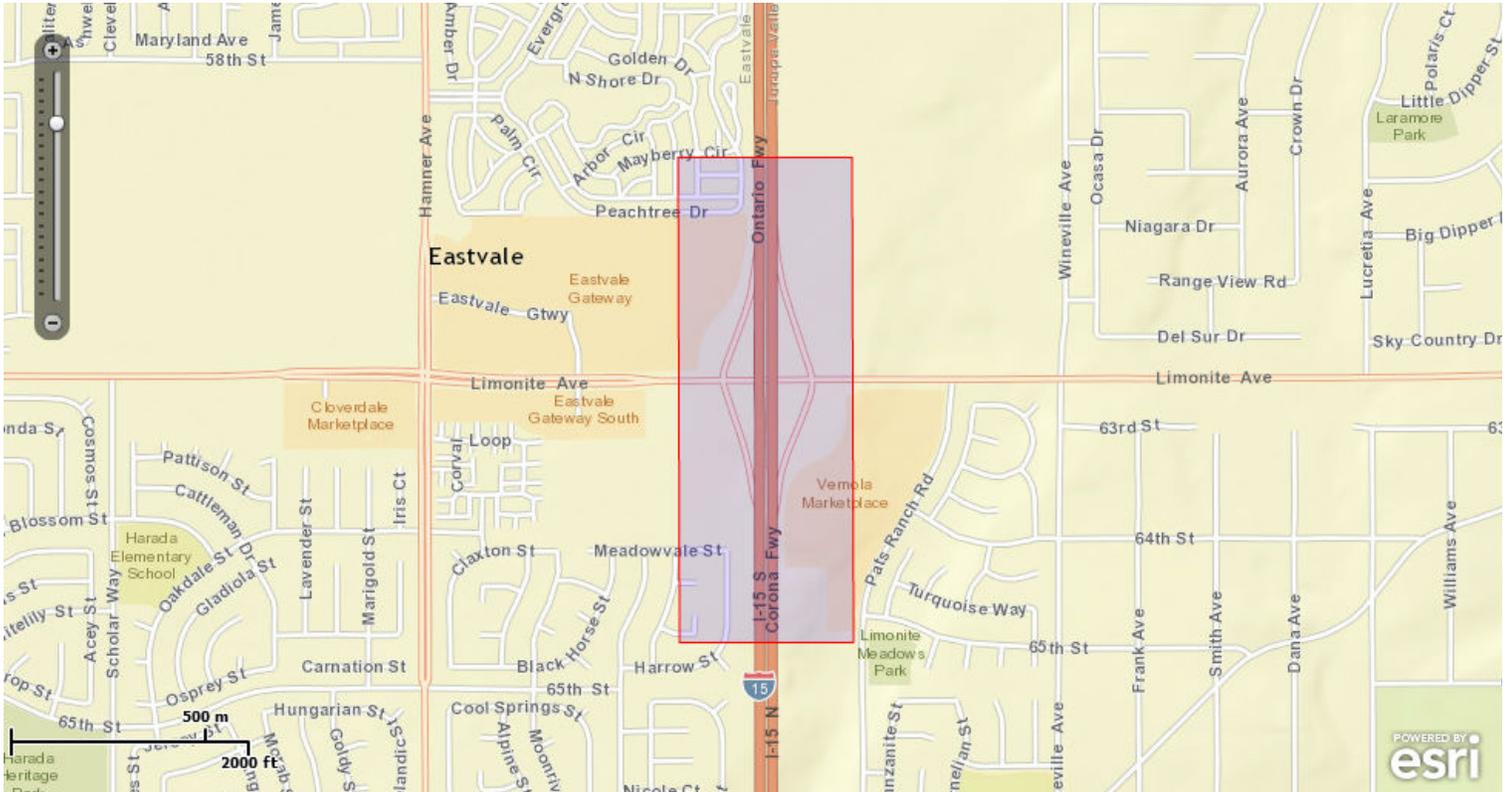
Project Description: This project will expand the I-15 Limonite IC.



United States Department of Interior
Fish and Wildlife Service

Project name: I-15 Limonite IC

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-117.5512511 33.9803607, -117.5464016 33.9803625, -117.5463587 33.969152, -117.5512082 33.9691537, -117.5512511 33.9803607)))

Project Counties: Riverside, CA



United States Department of Interior
Fish and Wildlife Service

Project name: I-15 Limonite IC

Endangered Species Act Species List

There are a total of 7 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Coastal California gnatcatcher <i>(Polioptila californica californica)</i> Population: Entire	Threatened	Final designated	
Least Bell's vireo <i>(Vireo bellii pusillus)</i> Population: Entire	Endangered	Final designated	
Southwestern Willow flycatcher <i>(Empidonax traillii extimus)</i> Population: Entire	Endangered	Final designated	
Fishes			
Santa Ana sucker <i>(Catostomus santaanae)</i> Population: 3 CA river basins	Threatened	Final designated	
Flowering Plants			
Santa Ana River woolly-star <i>(Eriastrum densifolium ssp. sanctorum)</i>	Endangered		
Insects			



United States Department of Interior
Fish and Wildlife Service

Project name: I-15 Limonite IC

Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>) Population: Entire	Endangered		
Mammals			
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>) Population: Entire	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: I-15 Limonite IC

Critical habitats that lie within your project area

There are no critical habitats within your project area.