

# I-10 Bypass: Banning to Cabazon

RIVERSIDE COUNTY, CALIFORNIA  
DISTRICT 8 – RIV – 00  
FEDERAL PROJECT NO. DEMO03L 5956 (210)

## Final Environmental Impact Report / Environmental Assessment with Finding of No Significant Impact



Prepared by the  
**State of California Department of Transportation  
and the County of Riverside**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.



October 2021

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## **General Information about This Document**

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Final Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the Project located in Riverside County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Riverside County is the lead agency under the California Environmental Quality Act (CEQA). The document explains why the Project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Draft Environmental Impact Report/Environmental Assessment circulated to the public for 122 days between December 29, 2017, and April 30, 2018, and was recirculated to the public for 45 days between August 12, 2019, and September 25, 2019. Comments previously provided from the December 2017 circulation of the Draft EIR/EA have been reviewed and will be included in the administrative record for the Project. Comments from the December 2017 circulation of the Draft EIR/EA were not individually responded to in this Final EIR/EA unless they were resubmitted during the recirculation of the Draft EIR/EA. However, for those comments that were not responded to individually, if warranted, changes were made to the Recirculated Draft EIR/EA to address them. Public comments on the Recirculated Draft EIR/EA are addressed in Appendix L of this Final EIR/EA. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document recirculation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document and the related technical studies are available for review at:

- The California Department of Transportation, District 8  
464 West Fourth Street, MS 760, San Bernardino, CA 92401
- Riverside County Transportation Department  
3525 14<sup>th</sup> Street, Riverside, CA 92501
- This document may be downloaded at the following website: [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/).

### **Alternative formats:**

To accommodate persons with disabilities, this document is available in alternate formats upon request. To obtain a copy in one of these alternate formats, please call or write to Riverside County, Attn: Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14<sup>th</sup> Street, Riverside, CA 92501; (951) 955-6759 (Voice), or use the California Relay Service (909) 383-6300 (TTY).

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Construction of the I-10 Bypass from Banning to Cabazon

**FINAL ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT WITH  
FINDING OF NO SIGNIFICANT IMPACT**

Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA  
Department of Transportation  
and  
Riverside County

Cooperating Agencies: Bureau of Indian Affairs

Responsible Agencies: City of Banning, California Department of Fish and Wildlife

10/6/2021

Date of Approval



David Bricker  
Deputy District Director, District 8  
Division of Environmental Planning  
California Department of Transportation (Caltrans)  
NEPA Lead Agency

9.24.2021

Date of Approval



Mary Zambon  
Environmental Project Manager  
Riverside County Transportation Department (RCTD)  
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**CALIFORNIA DEPARTMENT OF TRANSPORTATION  
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

FOR

1-10 Bypass: Banning to Cabazon Project

The California Department of Transportation (Caltrans) and the County of Riverside have determined that Build Alternative 12 (Preferred Alternative) will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA), which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed Project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.



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David Bricker  
Deputy District Director, District 8  
Division of Environmental Planning  
California Department of Transportation (Caltrans)  
NEPA Lead Agency

10/6/2021

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Date

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# Summary

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## **S.1 Introduction/Project Description**

### **S.1.1 NEPA Assignment**

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 United States Code Section 327 (23 USC 327), for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the California Department of Transportation (Caltrans) entered into a Memorandum of Understanding (MOU) pursuant to 23 USC 327 (National Environmental Policy Act [NEPA] Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016 for a term of five years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 Categorical Exclusion Assignment MOU, projects excluded by definition, and specific project exclusions.

### **S.1.2 Project Description**

Caltrans and the County of Riverside (County) propose to construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Apache Trail<sup>1</sup> in the unincorporated community of Cabazon, California. The Project is located in the San Gorgonio Pass area of Southern California, partially within the jurisdiction of the County, the City, and the Morongo Band of Mission Indians Tribal Land (depending on the alternative selected). The new roadway and bridges would cross undeveloped land south of Interstate 10 (I-10).

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<sup>1</sup> Apache Trail becomes Morongo Trail north of the Union Pacific Railroad (UPRR).

Refer to Figure 1.1-1 in Chapter 1, Project Description, for the regional location of the Project and the Project vicinity.

Two alternative alignments are under consideration along with a No Action/No Project Alternative. Caltrans is the Lead Agency for environmental review under the National Environmental Policy Act (NEPA). The County is the Lead Agency under the California Environmental Quality Act (CEQA).

Traffic forecast volumes estimate the need for four lanes approximately 20 years after completion of the initial two-lane roadway; therefore, a phased approach will be used, with two lanes constructed initially as part of the Project and two additional lanes constructed approximately 20 years later (the four-lane roadway would require additional environmental documentation). If feasible, the ultimate 129-foot (ft) right-of-way for the future four-lane roadway will be acquired as part of the Project, even though the Project would only construct a two-lane facility. Portions of the ultimate grading for the four-lane improvements may also be completed depending on the funds available. The extent of such grading will not be determined until preparation of final Project plans and specifications. This document includes evaluation of impacts resulting from right-of-way acquisition and grading for the ultimate four-lane facility for the portion of the Project east of existing Westward Avenue to the intersection with Apache Trail and Bonita Avenue. For the portions of the Project utilizing existing Westward Avenue in the City of Banning from Hathaway Street to approximately 4,000 ft to the east, improvements to the existing two-lane facility within existing right-of-way are evaluated.

## **S.2 Purpose and Need**

### **S.2.1 Project Purpose**

The purpose of the Project is to provide a local roadway connecting Banning and Cabazon that would:

- Accommodate local trips on a local roadway;
- Provide an alternate route between Banning and Cabazon in the event of a closure on I-10;
- Provide a safe route for bicyclists;
- Provide a safe route for pedestrians;
- Provide a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks;



- Improve the transportation facilities connecting Banning and Cabazon to address growth and mobility needs as identified in the 2015 County General Plan policy cited in Section 1.3.2.4, as well as in the Banning General Plan Circulation Element, and;
- Improve the transportation facilities connecting Banning and Cabazon consistent with the 2016–2040 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and the 2019 Federal Transportation Improvement Program (FTIP).

## **S.2.2 Project Need**

No local roadway connects Banning and Cabazon. The two communities are located approximately 3 mi apart, with I-10 providing the only roadway connection. All travel between Banning and Cabazon, whether local or through traffic, must be accommodated on I-10, and this creates several problems for both local and regional travelers, as well as for bicyclists and pedestrians. The Project will accomplish the following: provide a local roadway connecting Banning and Cabazon (that does not require an at-grade crossing of the railroad tracks), provide a safe route for pedestrians and bicyclists, improve transportation facilities connecting Banning and Cabazon, provide an alternate route between Banning and Cabazon in the event of a closure on I-10, and address the growth and mobility needs of the surrounding region. The Project is needed to address the following:

- Deficiencies in Local Circulation
- Deficiencies in Regional Circulation
- Deficiencies in Pedestrian and Bicyclist Circulation
- System Linkages and Regional Planning Consistency
- Consistency with Legislation
- Traffic Level of Service (LOS)

The following discussion demonstrates existing and forecast demand for the Project.

### **S.2.2.1 Existing Deficiencies**

#### ***Deficiencies in Regional Circulation***

The lack of a local road connecting Banning and Cabazon creates adverse effects on regional circulation during emergency situations. When the segment of I-10 between the Morongo Trail and Ramsey Street interchanges is fully or partially closed, the freeway is subject to lengthy traffic backups. Given the unplanned and unusual

circumstances associated with such closures, there is no existing traffic data for these situations except for observations of previous instances.

While actual predictions of traffic congestion during full/partial closures are impractical, based on assumptions, it is possible to roughly estimate the length of the queue of vehicles that could be caused by a full I-10 closure in one direction.

Assuming that I-10 is carrying its average hourly volume (based on average daily volumes), a full closure of the freeway in one direction could generate a 4 mi to 5 mi backup in approximately 1 hour, and the backup could easily reach 10 mi or more after 2 or 3 hours. This corresponds with reports of 10 mi or more backups during recent closures of I-10.

Even under normal conditions, adding local trips to traffic flows on I-10 interchanges creates additional congestion. The Malki Road and Morongo Trail interchanges are observed to be highly congested during the major retail shopping seasons at the Desert Hills Premium Outlets mall and the Cabazon Outlets mall. The congestion at these interchanges can extend onto I-10, which can then adversely affect freeway traffic. In the long term (2038), the LOS at the I-10/Morongo Trail interchange is forecast to be LOS F in both directions. By diverting some local traffic away from that interchange and onto the new roadway, the LOS at the Morongo Trail interchange could be improved.

### ***Deficiencies in Local Circulation***

The lack of a local roadway connection adversely impacts the area's livability for its residents, as shown in the following examples:

- As a small community, Cabazon does not have any supermarkets, drug stores, or hospitals; therefore, residents must access I-10 to reach the closest services in Banning. Conversely, Banning residents must use the freeway to access the regional commercial facilities in north Cabazon, including the Desert Hills Premium Outlets Mall, Cabazon Outlets Mall, and the Morongo Casino Resort and Spa.
- High school students from Cabazon attend Banning High School, which is located in Banning at the intersection of Westward Avenue and San Gorgonio Avenue. Students must use vehicular transport (i.e., personal cars or transit) on I-10 to reach the campus.
- Cabazon residents who live south of the Union Pacific Railroad (UPRR) must access I-10 via Apache Trail or Broadway using at-grade railroad crossings for

both local and long-range trips. These crossings are subject to lengthy delays caused by long, slow trains that also delay emergency vehicles, thus compounding emergency response times.

### ***Deficiencies in Pedestrian and Bicycle Circulation***

There are no sidewalks or trails for pedestrian travel. Any pedestrians walking between the adjacent communities must travel overland on private property or trespass along the railroad right-of-way.

The lack of a local street connection or trail between Banning and Cabazon forces bicyclists to use the I-10 shoulders between the two communities. Caltrans allows bicyclists to use these shoulders, which are immediately adjacent to big-rig trucks in the right lane. I-10 is one of the nation’s key freight-hauling routes. According to Caltrans 2015 Truck Traffic Data, the truck volumes on I-10 were approximately 21,600 trucks per day (18 percent of the total traffic volume) at the Ramsey Street interchange. Also, trucks must cross the shoulders to reach the truck scales located between the Ramsey Street interchange and the Malki Road interchange. Any bicyclist using the shoulder on I-10 must compete with freight-hauling trucks crossing their paths to reach the scales.

### ***Projected Deficiencies***

The Project is needed to implement certain elements of the County and City General Plans, as well as the circulation plans of the Riverside County Transportation Commission (RCTC) and SCAG, as follows:

- The Project is necessary to address long-range (post-2035) circulation needs identified in the 2015 County General Plan Circulation Element, Policy 1.5: “Evaluate the planned circulation system as needed to enhance the arterial highway network to respond to anticipated growth and mobility needs” (AI 49).
- The Project will implement a roadway link shown in the 2015 County General Plan Circulation Element.
- The Project will implement a roadway link shown in the City’s General Plan Circulation Element.
- The Project is listed in the Measure A Expenditure Plan adopted by the RCTC.
- The Project is listed in both the 2016–2040 RTP/SCS and 2019 FTIP adopted by SCAG.

## **S.3 Regulatory Setting**

### **S.3.1 Federal, State, and Local Agency Roles and Responsibilities**

The Project is subject to federal, as well as Riverside County, and state environmental review requirements because Riverside County proposes the use of federal funds from the FHWA and/or the Project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Riverside County is the Project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by Caltrans pursuant to 23 USC 327 and the MOU dated December 23, 2016, and executed by FHWA and Caltrans. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the USDOT Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

### **S.3.2 Environmental Document – Joint CEQA/NEPA Document**

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the Project as a whole, often a “lower level” document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

The Draft EIR/EA was circulated to the public and interested agencies on December 29, 2017, for an extended public review period that ended on April 30, 2018. The Recirculated Draft EIR/EA was recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. In accordance with Section 15088.5(f)(1) of the CEQA Guidelines, responses were not prepared for comments received on the Draft EIR/EA during the review period that ended on April 30, 2018. Comments received during the December 2017 circulation of the Draft EIR/EA have been reviewed and will be included in the administrative record for the Project. Comments from the December 2017 circulation of the Draft EIR/EA were not individually responded to in this Final EIR/EA unless they were resubmitted during the recirculation of the Draft EIR/EA. However, for those comments that were not

responded to individually, changes were made to the Recirculated Draft EIR/EA to address them, if warranted. This Final EIR/EA includes additional information in response to comments received through April 30, 2018, as discussed below, and these comments will be included in the Administrative Record for the Project. Key sections of this Final EIR/EA that include supplemental information are as follows: Chapter 1 (Alternatives Considered but Eliminated from Further Discussion), Chapter 2.5 (Traffic and Transportation), 2.14 (Natural Communities), and 2.15 (Wetlands and Other Waters). Chapter 1 was updated to include additional information to explain why other previously considered alternatives were eliminated from consideration during the screening process; Chapter 2.5 was updated to address how truck traffic on residential streets would be monitored and controlled under the Build Alternatives; Chapter 2.14 was updated to include a more detailed discussion of wildlife corridors; and Chapter 2.15 was updated to include a more detailed discussion of potential impacts at stream crossings. The Recirculated Draft EIR/EA was recirculated to the public and interested agencies for a 45-day public review period from August 12, 2019, through September 25, 2019. Additionally, some comments received on the Draft EIR/EA circulated in December 2017 may no longer apply as a result of changes to the Recirculated Draft EIR/EA. Therefore, comments received on the Recirculated Draft EIR/EA have been considered and responded to in this Final EIR/EA. The No Build Alternative also remains under consideration in this Final EIR/EA for comparison purposes.

The revisions made to the Recirculated Draft EIR/EA are summarized below:

- A Locally Preferred Alternative was identified in the Recirculated Draft EIR/EA. The May 3, 2019, letter from the Riverside County Transportation Department identifies Alternative 12 (now the Preferred Alternative) as the Locally Preferred Alternative and is included in Chapter 4, Comments and Coordination of this Draft EIR/EA. The Preferred Alternative is described in Chapter 1 and evaluated in the environmental analyses presented in Chapters 2 and 3 of the Recirculated Draft EIR/EA.
- The following sections of the Recirculated Draft EIR/EA were updated to address the following concerns raised in the public comments received on the Draft EIR/EA:
  - Chapter 1, Alternatives Considered but Eliminated from Further Discussion
  - Section 2.5, Traffic and Transportation
  - Section 2.15, Natural Communities
  - Section 2.16, Wetlands and Other Waters

After receiving comments from the public and reviewing agencies on the Recirculated Draft EIR/EA, this Final EIR/EA has been prepared. The County and Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA includes responses to comments received on the Recirculated Draft EIR/EA in Appendix L and identifies the Preferred Alternative. If the decision is made to approve the Project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a FONSI or require an Environmental Impact Statement (EIS) for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order 12372.

The designation of a Locally Preferred Alternative in the Recirculated Draft EIR/EA was intended to convey the County's preference for a specific alternative based on the information available prior to public review of the Recirculated Draft EIR/EA, including potential impacts and reasonable mitigation measures. After comparing and weighing the benefits of the Build Alternatives and considering comments received during the public review period of the Recirculated Draft EIR/EA, the Project Development Team (PDT) has identified Alternative 12 as the Preferred Alternative, which is further described in this Final EIR/EA.

## **S.4 Proposed Action/Alternatives**

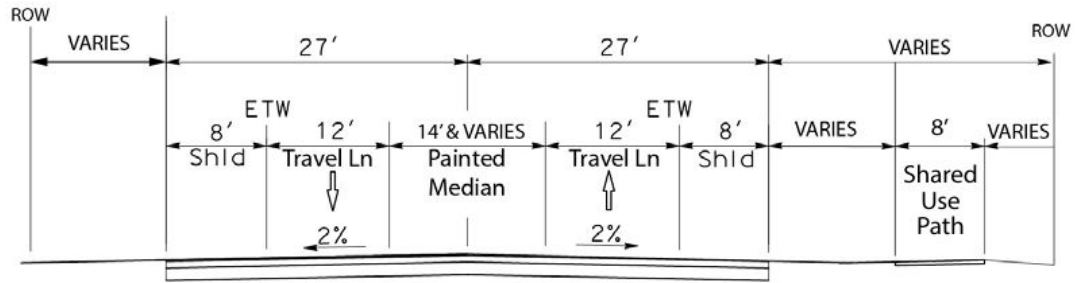
### **S.4.1 Build Alternative 5 and Alternative 12 (Preferred Alternative)**

The following discussion includes a summary of features common to and specific to the alternatives under consideration, broken down by segment. Refer to Figure 1.1-2, Build Alternatives under Consideration, in Chapter 1, Project Description.

#### **S.4.1.1 Common Features of the Build Alternative 5 and Alternative 12 (Preferred Alternative)**

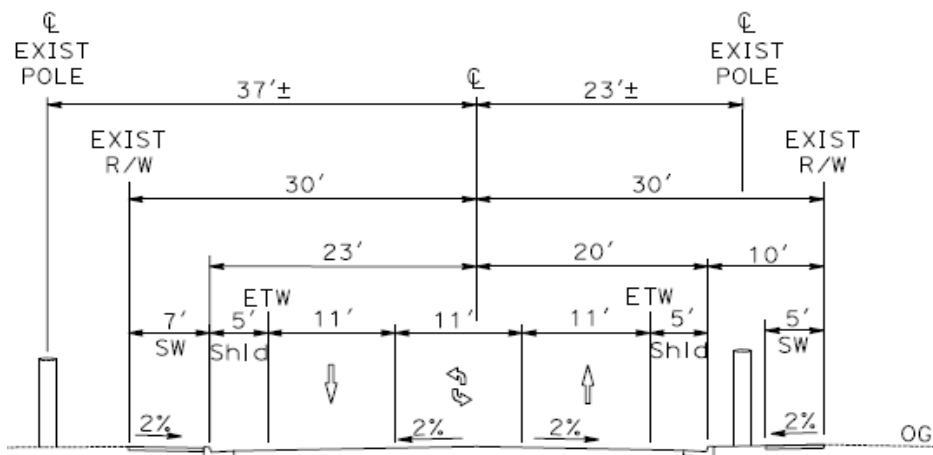
Common features of Alternative 5 and Alternative 12 (Preferred Alternative) include improvements to existing roadways and new roadway improvements that would occur in the City of Banning and Unincorporated Riverside County (including the Community of Cabazon). Improvements and new roadway common to Alternative 5 and Alternative 12 (Preferred Alternative) are shown on Figure 1.1-2

The following Figures S-1 and S-2 provide an overview of features common to Alternative 5 and Alternative 12 (Preferred Alternative). Appendix F, Concept Plan, contains more detailed typical cross sections.



Source: Kimley-Horn and Associates, Inc. (April 2015).

**Figure S-1 Typical Cross-Section of the I-10 Bypass on Westward Avenue from 4,000 Feet East of Hathaway Street to Bonita Avenue**



Source: Kimley-Horn and Associates, Inc. (April 2015).

**Figure S-2 Typical Cross-Section on Westward Avenue East of Hathaway Street**

Alternative 5 and Alternative 12 (Preferred Alternative) have the following common features:

- One 12 ft lane in each direction, with a 14 ft painted median and 8 ft paved shoulders.
- An 8 ft wide multi-use path.
- Drainage ditches/swales approximately 10 to 20 ft wide running parallel to the roadway with inlets.
- Cross culverts under the roadway ranging in size from approximately 36 inches in diameter to a 10x10 ft box.
- Inlet protection and/or debris settling basins at the upstream end of cross culverts. These will range in size from approximately 15 ft to 100 ft in diameter (or similar length/width combination).

- Water quality basins within the designated roadway right-of-way to encourage infiltration. These will run linear and parallel to the roadway, ranging in width from approximately 10 ft to 75 ft.
- Rock slope protection along roadway slopes where adjacent to Smith Creek, ranging in length from a few hundred feet to approximately 2,000 ft.
- Cut slopes graded to blend in with the adjacent foothills.
- Erosion control to re-establish the natural vegetation within disturbed areas.
- Fencing along the entire length of the Project on both sides of the roadway.
- Wildlife crossings (three bridges with wildlife crossings for Alternative 12 [Preferred Alternative] and two bridges with wildlife crossings for Alternative 5).
- One California Highway Patrol pullout area in each direction consisting of entrance/exit ramps connecting to a paved area measuring approximately 60 ft wide by 600 ft long.
- Limited roadway lighting only where needed, such as at intersections. Lighting in these areas will be designed using County/City lighting standards up to 35 ft in height to only light areas of the roadway right-of-way.
- Additional safety lighting along the proposed multi-use path will be considered during final design. All lighting will be designed and installed so as to prevent light spillover into natural areas and direct light away from areas proposed for wildlife crossings. Proposed lighting may incorporate newer technologies associated with lower brightness levels, user activation (motion sensing), and/or designated hours of operation.

**S.4.1.2 Unique Features of Build Alternative 5**

Features unique to Alternative 5 (refer to Figure 1.1-2) include:

- A 650 ft long by 102 ft wide bridge over Smith Creek (with sufficient room under the bridge for wildlife undercrossing, flood flows, a planned equestrian trail, sand flows, and a path for Smith Creek)
- Five cut-and-fill slopes
- Drainage improvements
- Utility relocations are summarized in Table S.1

**Table S.1 Utility Relocations Required under Alternative 5**

Alt. No.	Type/No. of Utility Relocation	Utility Company
5	Two overhead electric transmission lines, including up to six power poles	Southern California Edison
5	One electric distribution line, including up to three power poles	Southern California Edison

Source: Community Impact Assessment (April 2017).



### S.4.1.3 Unique Features of Build Alternative 12 (Preferred Alternative)

Features unique to Alternative 12 (Preferred Alternative) (refer to Figure 1.1-2) include:

- An easement to build on approximately 14 acres of Morongo Band of Mission Indians Tribal Land
- A 1,100 ft long by 101 ft wide bridge over Smith Creek (with sufficient room under the bridge for wildlife undercrossing, flood flows, a planned equestrian trail, sand flows, and a path for Smith Creek)
- One cut slope, including contour grading, land forming, and slope rounding to lessen the effect of the cut
- Utility relocations are summarized in Table S.2

**Table S.2 Utility Relocations Required under Alternative 12 (Preferred Alternative)**

Alt. No.	Type/No. of Utility Relocation	Utility Company
12	Two overhead electric transmission lines, including up to eight power poles	Southern California Edison
12	Two electric distribution lines, including up to seven power poles	Southern California Edison
12	One 16-inch natural gas line	Questar
12	Two 36-inch high-pressure natural gas lines	Southern California Gas
12	One fiber optics line	Level 3
12	Two segments of an abandoned fiber optics line (leased by Level 3)	Kinder Morgan

Source: Community Impact Assessment (April 2017).

### S.4.2 Preferred Alternative

After comparing and weighing the benefits of the Build Alternatives and considering potential impacts and reasonable mitigation measures and comments received during the public review periods for the Draft EIR/EA and the Recirculated Draft EIR/EA, the Project Development Team (PDT) identified Alternative 12 (Preferred Alternative) as the Preferred Alternative at a PDT meeting held at Caltrans District 8 on December 17, 2019. Alternative 12 (Preferred Alternative) was identified as the Preferred Alternative because it would result in fewer environmental impacts to biological resources, cultural resources, and visual/aesthetic resources. Alternative 12 (Preferred Alternative) would also be consistent with the draft land use plans prepared by the Morongo Band of Mission Indians. In addition to superior environmental performance, the Preferred Alternative meets the Purpose and Need of the Project.

The Morongo Band of Mission Indians has also expressed support for the Preferred Alternative.

#### **S.4.3 No Build Alternative**

The No Build Alternative would not include the Project. Therefore, the No Build Alternative would not alleviate deficiencies in local, regional, pedestrian, and bicycle circulation. Additionally, the No Build Alternative would be inconsistent with the 2015 County General Plan documents, the Measure A Expenditure Plan adopted by the RCTC, the 2016–2040 RTP/SCS, and the 2019 FTIP adopted by SCAG.

### **S.5 Unresolved Issues**

This Final EIR/EA identifies a No Build Alternative and two Build Alternatives that are addressed at an equal level of detail. Under Alternative 12 (Preferred Alternative), the County would negotiate a roadway easement with the Morongo Band of Mission Indians so that the County would be able to maintain and operate the Project, as is done for other County roads. This roadway easement would allow the County to access the new roadway to ensure the roadway is safe and maintained. Additionally, a Cooperative Agreement is needed between the County and the City so the County can lead efforts associated with right-of-way acquisitions and construction of the Project within City limits.

### **S.6 Alternatives Considered but Eliminated from Further Discussion**

Alternative project alignments were developed by County and consultant staff after an extensive coordination process with local, regional, and resource agencies, along with the Morongo Band of Mission Indians, property owners, and members of the public. Initial alternatives were developed and preliminary engineering and environmental review was conducted. Fourteen alternatives (Figure S-3) were developed and preliminary engineering and environmental review was conducted.

The preliminary engineering and environmental studies determined that the 14 alternatives differed in their ability to address the Project purpose, their feasibility to be implemented, and their environmental impacts. Alternatives that failed to meet the Project purpose, cannot be feasibly implemented, and/or have greater environmental impacts than others were removed from consideration in a process called “alternative screening.”

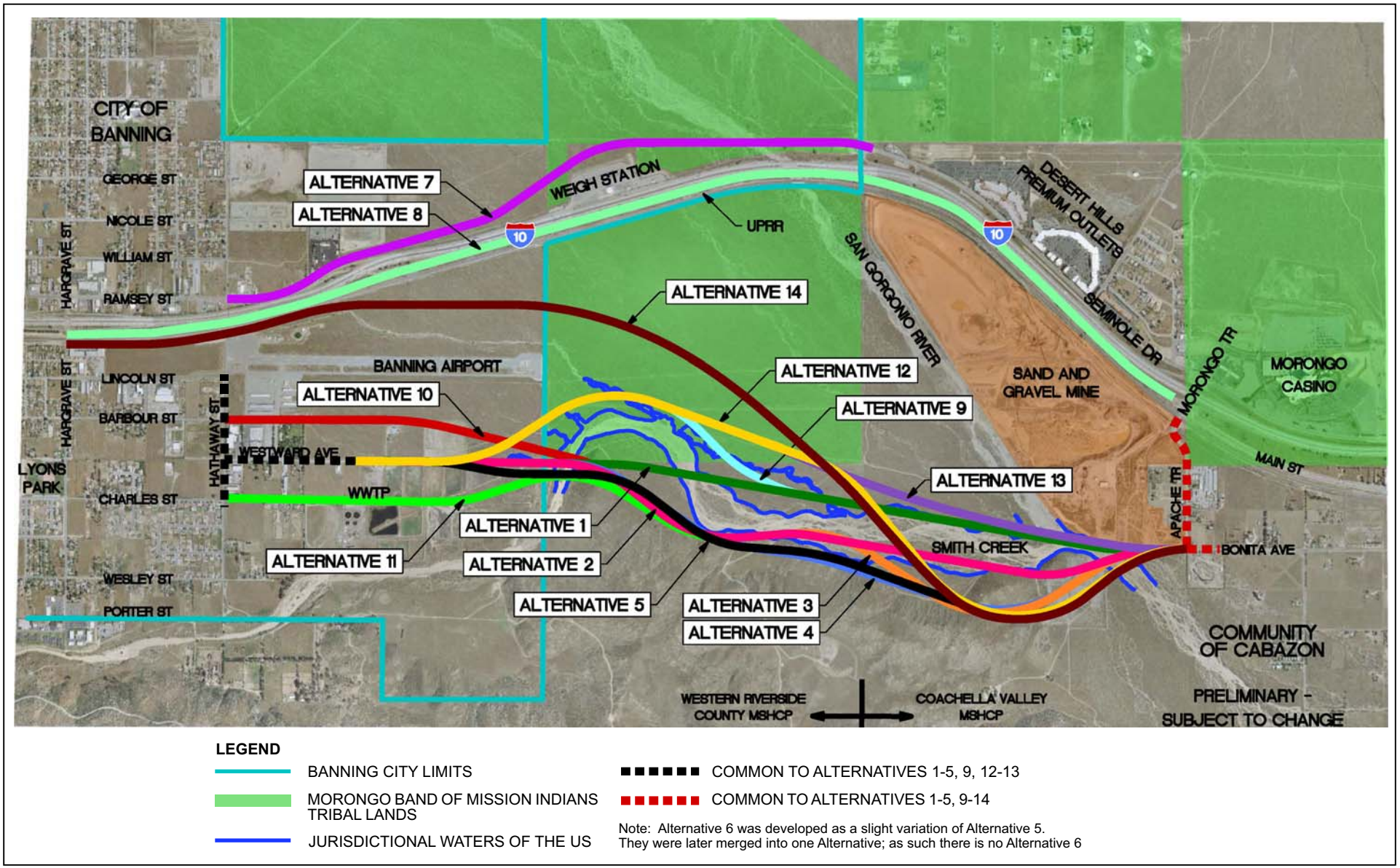
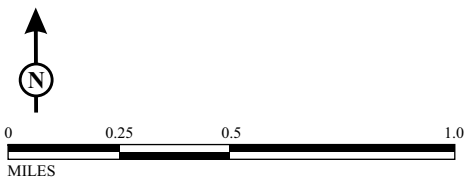


FIGURE S-3



SOURCE: Kimley-Horn and Associates, Inc.

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*I-10 Bypass: Banning to Cabazon*  
Preliminary Alternatives Considered

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### S.6.1 Summary of Alternatives Screening Criteria

Alternative screening was conducted by establishing a set of alternative screening criteria consistent with the guidelines of NEPA and CEQA. The three basic criteria used to screen alternatives are:

- **Purpose and Need:** Does the alternative meet the Project Purpose and Need? If not, then the alternative may be removed from consideration.
- **Feasibility:** Is the alternative feasible (i.e., does the Project sponsor have the ability to implement the alternative)? If the alternative is infeasible, then the alternative may be removed from consideration.
- **Environmental Factors:** Does the alternative have greater environmental impacts than another alternative without offsetting advantages? If so, then the alternative may be removed from consideration.

Table S.3 provides an overall summary of the environmental screening process.

**Table S.3 Summary of Alternative Screening**

Alternative	Meets Purpose	Feasible	Environmental	Carry Forward?
1	Yes	No		Screen Out
2	Yes	No		Screen Out
3	Yes	No		Screen Out
4	Yes	No		Screen Out
5	Yes	Yes	Moderate	Yes
7	No	No		Screen Out
8	No	No		Screen Out
9	Yes	No		Screen Out
10	Yes	Yes	Adverse Effect	Screen Out
11	Yes	Yes	Adverse Effect	Screen Out
12 (Preferred Alternative)	Yes	Yes	Limited	Yes
13	Yes	No	Adverse Effect	Screen Out
14	No	No		Screen Out

The following alternatives are recommended to be carried forward into the next phase of environmental review:

- Alternative 5
- Alternative 12 (Preferred Alternative)
- No Build/No Action Alternative

## **S.7 Summary of Potential Impacts by Alternative**

Table S.4 summarizes the potential adverse impacts of the No Build and the Build Alternatives, based on the findings of this Final EIR/EA.

## **S.8 Circulation of the Draft Environmental Document**

The Recirculated Draft EIR/EA for the Project was recirculated and made available to the public for a minimum 45-day review and comment period as required by CEQA. Responses to comments received during the public review period are included in this Final EIR/EA in Appendix L.

## **S.9 Permits and Approvals Needed**

Table S.5 lists permits, reviews, and approvals required prior to the construction of the Project.

**Table S.4 Summary of Impacts of Alternatives**

<b>Potential Impact</b>	<b>No Build Alternative</b>	<b>Alternative 5</b>	<b>Alternative 12 (Preferred Alternative)</b>	<b>Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)</b>	<b>Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)</b>
Land Use	Not consistent with the County's 2015 General Plan.	<p>34 temporary construction easements (subject to change during final design).</p> <p>Consistent with the 2015 Pass Area Plan Circulation Map (Riverside County General Plan) and policies in the Pass Area Plan.</p> <p>Will not impact existing parks.</p> <p>Consistent with the 2016–2040 SCAG RTP/SCS and the 2017 FTIP.</p> <p>Inconsistent with Policy 6 of the Banning General Plan Circulation Element.</p>	<p>37 temporary construction easements (subject to change during final design).</p> <p>Requires an easement to build on approximately 14 acres of Morongo Band of Mission Indians Tribal Land.</p> <p>Consistent with the 2015 Pass Area Plan Circulation Map (Riverside County General Plan) and policies in the Pass Area Plan.</p> <p>Will not impact existing parks.</p> <p>Consistent with the 2016–2040 SCAG RTP/SCS and the 2017 FTIP.</p> <p>Inconsistent with Policy 6 of the Banning General Plan Circulation Element.</p>	No feasible measures (refer to Traffic and Transportation, below).	Potentially Significant Impact.
Growth	No impact.	Potential minor growth impact.	Potential minor growth impact, although greater than Alternative 5.	None required.	Less than Significant Impact.
Community Impacts/ Population and Housing	No impact.	<p>Temporary, partial access to residences and businesses.</p> <p>No impact to population or housing. Impact to rural community character.</p>	<p>Temporary, partial access to residences and businesses.</p> <p>No impact to population or housing. Impact to rural community character.</p>	None required.	Less than Significant Impact.
Community Impacts/ Economics	No impact.	No economic impact.	No economic impact.	None required.	No Impact.



**Table S.4 Summary of Impacts of Alternatives**

<b>Potential Impact</b>	<b>No Build Alternative</b>	<b>Alternative 5</b>	<b>Alternative 12 (Preferred Alternative)</b>	<b>Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)</b>	<b>Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)</b>
Community Impacts/ Community Facilities and Services	No impact.	Temporary, partial access to Community Facilities or Services. Improve access to Community Facilities or Services.	Temporary, partial access to Community Facilities or Services. Improve access to Community Facilities or Services.	None required.	No Impact.
Community Impacts/ Community Character and Cohesion	No impact.	Temporary, minor impacts to community character and cohesion. Improve access for community members.	Temporary, minor impacts to community character and cohesion. Improve access for community members.	None required.	No Impact.
Community Impacts/ Relocation	No impact.	19 partial acquisitions and 18 easements (number and location subject to change during final design). No relocations.	20 partial acquisitions and 19 easements (number and location subject to change during final design). No relocations.	None required.	No Impact.
Utilities and Emergency Services	Permanent adverse impacts to emergency services reaching Cabazon or other destinations when I-10 is congested or closed.	Would require protecting utilities in-place and relocating three overhead utility lines (two may require new poles; one involves locating part of the line underground for a short distance across the San Gorgonio River Bridge). Temporary minor delays in emergency response times. Improve long-term emergency response times.	Would require protecting utilities in-place and relocating utilities in nine locations (two new poles, two overhead electric distribution lines with one likely placed underground for a short distance across the San Gorgonio River Bridge, three natural gas lines, and two fiber optic communication lines). Temporary minor delays in emergency response times. Improve long-term emergency response times.	TR-1.	Less than Significant Impact.



**Table S.4 Summary of Impacts of Alternatives**

<b>Potential Impact</b>	<b>No Build Alternative</b>	<b>Alternative 5</b>	<b>Alternative 12 (Preferred Alternative)</b>	<b>Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)</b>	<b>Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)</b>
Traffic and Transportation	Would not improve roadways that would be improved as part of the Project.	<p>Temporary detours and delays.</p> <p>Reduce overall vehicle miles traveled in the study area.</p> <p>Generally improve LOS in the study area. Reduce the number of local trips on I-10.</p> <p>Unacceptable LOS at the intersections of I-10 eastbound ramps at South 8<sup>th</sup> Street (Opening Year 2022), Charles Street at Hargrave Street, and Barbour Street at Hathaway Street (Build-Out Year 2038).</p>	<p>Temporary detours and delays.</p> <p>Reduce overall vehicle miles traveled in the study area.</p> <p>Generally improve LOS in the study area. Reduce number of local trips on I-10.</p> <p>Unacceptable LOS at the intersections of I-10 eastbound ramps at South 8<sup>th</sup> Street (Opening Year 2022), Charles Street at Hargrave Street, and Barbour Street at Hathaway Street (Build-Out Year 2038).</p>	<p>TR-1.</p> <p>No feasible measures to reduce impacts at the intersections of I-10 eastbound ramps at South 8<sup>th</sup> Street (Opening Year 2022), Charles Street at Hargrave Street, and Barbour Street at Hathaway Street (Build-Out Year 2038).</p>	Potentially Significant Impact.
Pedestrian and Bicycle Facilities	Would not improve pedestrian or bicycle facilities that would be included as part of the Project.	<p>Temporary detours and delays.</p> <p>Provide a pedestrian/bicycle connection between Banning and Cabazon.</p>	<p>Temporary detours and delays.</p> <p>Provide a pedestrian/bicycle connection between Banning and Cabazon.</p>	TR-1.	No Impact.

**Table S.4 Summary of Impacts of Alternatives**

Potential Impact	No Build Alternative	Alternative 5	Alternative 12 (Preferred Alternative)	Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)	Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)
Visual and Aesthetics	No Impact.	<p>Short-term visual impacts.</p> <p>Grading/removal of vegetation.</p> <p>Addition of bridge over San Gorgonio River in Cabazon (900 ft long by 101 ft wide, with the road surface crossing approximately 12 ft over the 100-year water surface) and bridge over Smith Creek (650 ft long by 102 ft wide, with a road surface elevation of approximately 40 ft over the 100-year water surface).</p> <p>Adverse change in visual quality/ character of foothills No substantial light or glare impacts.</p>	<p>Short-term visual impacts.</p> <p>Grading/removal of vegetation.</p> <p>Addition of bridge over San Gorgonio River in Cabazon (900 ft long by 101 ft wide, with the road surface crossing approximately 12 ft over the 100-year water surface) and bridge over Smith Creek (1,100 ft long by 101 ft wide, with a road surface elevation of approximately 16 ft over the 100-year water surface).</p> <p>Adverse change in visual quality/ character of foothills No substantial light or glare impacts.</p>	<p>V-1, V-2, and V-3.</p> <p>No feasible measures to reduce impacts to single-family residence in Key View 6.</p>	Potentially Significant Impact.
Cultural Resources	No Impact.	<p>No temporary cultural resource impacts.</p> <p>Potential to discover cultural materials and/or human remains and potential impacts to eight bedrock milling features during construction.</p>	<p>No temporary cultural resource impacts.</p> <p>Potential to discover cultural materials and/or human remains and potential impacts to eight bedrock milling features during construction.</p>	<p>CR-1, CR-2, and CR-3.</p>	Less than Significant Impact with Mitigation.

**Table S.4 Summary of Impacts of Alternatives**

<b>Potential Impact</b>	<b>No Build Alternative</b>	<b>Alternative 5</b>	<b>Alternative 12 (Preferred Alternative)</b>	<b>Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)</b>	<b>Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)</b>
Hydrology and Floodplains	No Impact.	<p>One longitudinal encroachment on Smith Creek.</p> <p>Increase 100-year water surface elevation (less than 6 inches).</p> <p>Bridges meet applicable FEMA and RCFCWCD minimum freeboard requirements.</p> <p>Potential for erosion during construction.</p> <p>No substantial floodplain encroachment; not incompatible with floodplain development; no substantial impacts to natural and beneficial floodplain values.</p> <p>No risk to life and property.</p>	<p>Bridges meet applicable FEMA and RCFCWCD minimum freeboard requirements.</p> <p>Potential for erosion during construction.</p> <p>No substantial floodplain encroachment; not incompatible with floodplain development; no substantial impacts to natural and beneficial floodplain values.</p> <p>No risk to life and property.</p>	WQ-1, WQ-2, WQ-3, HYD-1, and HYD-2.	Less than Significant Impact with Mitigation.
Water Quality and Storm Water Runoff	No Impact.	<p>No substantial water quality impacts.</p> <p>Increased potential for erosion pollutant discharge.</p>	<p>No substantial water quality impacts.</p> <p>Increased potential for erosion pollutant discharge.</p>	WQ-2 and WQ-3.	Less than Significant Impact with Mitigation.
Geology, Soils, Seismicity and Topography	No Impact.	<p>Requires approximately 1.2 million cubic yards of cut and 6,200 cubic yards of fill.</p> <p>Temporary increased potential for worker safety hazards (ground motion and other seismic effects).</p> <p>Requires blasting if hard rock conditions are presented.</p>	<p>Requires approximately 412,200 cubic yards of cut and 533,100 cubic yards of fill.</p> <p>Temporary increased potential for worker safety hazards (ground motion and other seismic effects).</p> <p>Requires blasting if hard rock conditions are presented.</p>	GEO-1, GEO-2, GEO-3, GEO-4, and GEO-5.	Less than Significant Impact with Mitigation.

**Table S.4 Summary of Impacts of Alternatives**

Potential Impact	No Build Alternative	Alternative 5	Alternative 12 (Preferred Alternative)	Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)	Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)
Paleontology	No Impact.	<p>No temporary impacts to paleontological resources.</p> <p>Potential to excavate into geologic units and formations that contain paleontologically relevant vertebrate fossils.</p> <p>A portion of the alignment passes through deposits with high paleontological sensitivity</p> <p>The majority of the alignment passes through deposits with low or no paleontological sensitivity.</p>	<p>No temporary impacts to paleontological resources.</p> <p>Potential to excavate into geologic units and formations that contain paleontologically relevant vertebrate fossils.</p> <p>The majority of the alignment passes through deposits with high paleontological sensitivity.</p> <p>A portion of the alignment passes through deposits with low or no paleontological sensitivity.</p>	PAL-1.	Less than Significant Impact with Mitigation.
Hazardous Waste and Materials	No Impact.	Conduct Site Investigations of the four areas of potential contamination.	No known areas of potential soil contamination identified.	HAZ-1.	Less than Significant Impact with Mitigation.
Air Quality	No Impact.	<p>Temporary increase in air pollutant emissions during construction.</p> <p>Alternative 5 is not a project of air quality concern.</p>	<p>Temporary increase in air pollutant emissions during construction.</p> <p>Alternative 12 (Preferred Alternative) is not a project of air quality concern.</p>	AQ-1, AQ-2, AQ-3, AQ-4, and AQ-5.	Less than Significant Impact with Mitigation.
Noise	No Impact.	<p>Short-term construction noise increase.</p> <p>Substantial, unavoidable noise increase at residences in Cabazon at Magnolia Avenue and Bonita Avenue.</p>	<p>Short-term construction noise increase.</p> <p>Substantial, unavoidable noise increase at residences in Cabazon at Magnolia Avenue and Bonita Avenue.</p>	<p>N-1, NOI-1, and NOI-2.</p> <p>None feasible for noise increases at Magnolia Avenue and Bonita Avenue.</p>	Potentially Significant Impact.

**Table S.4 Summary of Impacts of Alternatives**

<b>Potential Impact</b>	<b>No Build Alternative</b>	<b>Alternative 5</b>	<b>Alternative 12 (Preferred Alternative)</b>	<b>Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)</b>	<b>Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)</b>
Natural Communities	No Impact.	<p>Approximately 12.51 acres of temporary effects to Riversidean alluvial fan sage scrub.</p> <p>Short-term impacts on wildlife connectivity.</p> <p>Permanent improvement to habitat connectivity.</p> <p>An approximately 0.55-acre removal of Riversidean alluvial fan sage scrub.</p> <p>Negligible effect on the WRMSHCP Special Linkage Area in the BSA.</p> <p>Negligible effect on the CVMSHCP Conservation Areas or fluvial sand transport systems in the BSA.</p>	<p>Approximately 12.43 acres of temporary effects to Riversidean alluvial fan sage scrub.</p> <p>Short-term impacts on wildlife connectivity.</p> <p>Permanent improvement to habitat connectivity.</p> <p>An approximately 0.04-acre removal of Riversidean alluvial fan sage scrub.</p> <p>Negligible effect on the WRMSHCP Special Linkage Area in the BSA.</p> <p>Negligible effect on the CVMSHCP Conservation Areas or fluvial sand transport systems in the BSA.</p>	NC-1, NC-2, NC-3, WC-1, and WC-2.	Less than Significant Impact with Mitigation.
Wetlands and Other Waters	No Impact.	<p>7.62 acres of non-wetland waters and 8.36 acres of CDFW streambeds temporarily impacted.</p> <p>Permanent impacts to 0.31 acre of non-wetland jurisdictional waters and 0.32 acre of CDFW streambeds. Requires compensatory mitigation to offset the loss of jurisdictional waters.</p>	<p>8.24 acres of non-wetland waters and 10.8 acres of CDFW streambeds temporarily impacted.</p> <p>Permanent impacts to 0.12 acre of non-wetland jurisdictional waters and 0.12 acre of CDFW streambeds. Requires compensatory mitigation to offset the loss of jurisdictional waters.</p>	WET-1, WET-2, WET-3, and WET-4.	Less than Significant Impact with Mitigation.
Plant Species	No Impact.	No likely impacts to the Yucaipa onion and many-stemmed dudleya or any other special-status plant species.	No likely impacts to the Yucaipa onion and many-stemmed dudleya or any other special-status plant species.	NC-1, NC-2, and NC-3.	Less than Significant Impact with Mitigation.

**Table S.4 Summary of Impacts of Alternatives**

Potential Impact	No Build Alternative	Alternative 5	Alternative 12 (Preferred Alternative)	Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)	Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)
Animal Species	No Impact.	18.82 acres of temporary effects and 30.20 acres of permanent effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.  No substantial impact to the burrowing owl or migratory birds.	3.07 acres of temporary effects and 4.24 acres of permanent effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.  No substantial impact to the burrowing owl or migratory birds.	LAPM-1, LAPM-2, LAPM-3, LAPM-4, LAPM-5, LAPM-6, BO-1, MB-1, and MB-2.	Less than Significant Impact with Mitigation.
Threatened and Endangered Species	No Impact.	May temporarily or permanently impact the desert tortoise and Coastal California Gnatcatcher.	May temporarily or permanently impact the desert tortoise and Coastal California Gnatcatcher.	DT-1, DT-2, DT-3, DT-4, DT-5, DT-6, DT-7, DT-8, DT-9, and NC-1.	Less than Significant Impact with Mitigation.
Invasive Species	No Impact.	May spread invasive species.	May spread invasive species.	INV-1.	Less than Significant Impact with Mitigation.
Climate Change <sup>1</sup>	Increase in regional GHG emissions.	Reduce GHG emissions.	Reduce GHG emissions.	GHG-1 and GHG-2.	Less than Significant Impact with Mitigation (as determined by Riverside County).

**Table S.4 Summary of Impacts of Alternatives**

Potential Impact	No Build Alternative	Alternative 5	Alternative 12 (Preferred Alternative)	Avoidance, Minimization, and Mitigation Measures (Applicable to both Build Alternatives)	Build Alternative 5 and Alternative 12 (Preferred Alternative) Level of Significance (CEQA only)
Cumulative Impacts		<p>Improve circulation; unacceptable LOS at three intersections.</p> <p>Impacts to the desert tortoise.</p> <p>When considered with the effects of other cumulative projects, would contribute incrementally to changes in the visual environment, potential for substantial impacts to noise, and cumulative impacts to natural communities and wildlife corridors, in the vicinity of the Project.</p>	<p>Improve circulation; unacceptable LOS at three intersections.</p> <p>Impacts to the desert tortoise.</p> <p>When considered with the effects of other cumulative projects, would contribute incrementally to changes in the visual environment, potential for substantial impacts to noise, and cumulative impacts to natural communities and wildlife corridors, in the vicinity of the Project.</p>	<p>N-1, NOI-1, NOI-1, NC-1, NC-2, NC-3, WC-1, WC-2, WET-1, WET-2, WET-3, WET-4, DT-1, DT-2, DT-3, DT-4, DT-5, DT-6, DT-7, DT-8, and DT-9.</p>	Potentially Significant Impact.
Construction Costs		Preliminary Construction Cost Estimate is approximately \$75,100,000	Preliminary Construction Cost Estimate is approximately \$73,700,000	Not Applicable	Not Applicable
Total Footprint		Total footprint is 131.99 acres	Total footprint is 133.16 acres	Not Applicable	Not Applicable

<sup>1</sup> Climate Change is a CEQA-only analysis, considered with Riverside County methodology, and does not reflect Caltrans policies or analysis.

BSA = biological study area  
 CDFW = California Department of Fish and Wildlife  
 County = County of Riverside  
 CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan  
 ESA = Environmental Site Assessment  
 FEMA = Federal Emergency Management Agency  
 FHWA = Federal Highway Administration  
 FTIP = Federal Transportation Improvement Program

GHG = greenhouse gas  
 I-10 = Interstate 10  
 LOS = level of service  
 RCFCWCD = Riverside County Flood Control and Water Conservation District  
 RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy  
 SCAG = Southern California Association of Governments  
 WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

**Table S.5 Permits and Approvals Required**

<b>Agency</b>	<b>Permit/Approval</b>	<b>Status</b>
California Department of Transportation (Caltrans)	As assigned by the FHWA, approval of a Finding of No Significant Impact; approval of Preferred Alternative	Caltrans, as assigned by the FHWA, approved the Preferred Alternative and the Finding of No Significant Impact in 2021.
Bureau of Indian Affairs	Approval of any lease for Morongo Band of Mission Indians Tribal lands (Alternative 12 [Preferred Alternative] only)	The County and Caltrans, (as assigned by the FHWA), approved Alternative 12 as the Preferred Alternative. The County will coordinate with the BIA regarding approval of the lease for Morongo Band of Mission Indians lands during the right-of-way acquisition phase of the Project.
Riverside County Airport Land Use Commission (RCALUC)	RCALUC review and approval	The County and Caltrans (as assigned by the FHWA), approved Alternative 12 as the Preferred Alternative. The January 30, 2020 RCALUC letter included in Chapter 4 of this Final EIR/EA documents the ALUC's and the Federal Aviation Administration's (FAA) determination that the I-10 Bypass Project is conditionally consistent with the Banning Municipal Airport Land Use Plan.
United States Fish and Wildlife Service (USFWS)	Streamlined Section 7 Consultation for the California gnatcatcher (CAGN) on WRMSHCP lands and desert tortoise on CVMSHCP lands. Two Section 7 Consultations for the following: desert tortoise and CAGN on tribal lands; and Section 7 Consultation for CAGN on CVMSHCP lands. All consultations are for Alternative 12 (Preferred Alternative) only.	Public review of the Recirculated Draft EIR/EA is complete and the PDT identified Alternative 12 as the Preferred Alternative for construction. The January 8, 2021 Biological Opinion (BO) prepared by the USFWS determined the Project is not likely to adversely affect gnatcatcher within the CVMSHCP based on historic occurrence information, quality of potentially suitable habitat, and the proposed conservation measures. The USFWS BO determined the Project is consistent with the WRMSHCP and the USFWS does not anticipate any adverse effects to the gnatcatcher that were not previously addressed by the WRMSHCP. The USFWS BO also determined the Project is not likely to jeopardize the continued existence of gnatcatcher on Tribal Lands. The USFWS withdrew their request for consultation on desert tortoise due to the lack of suitable habitat.
United States Army Corps of Engineers (USACE)	Section 404 Nationwide Permit	Application to be submitted during final design. The Navigable Waters Protection Rule (NWPR), effective June 22, 2020, has reduced federal jurisdiction of waters of the US to exclude previously considered waters, such as ephemeral waters that only flow in direct response to precipitation drainages. It is uncertain whether USACE would issue a 404 permit even if requested. However, if all



**Table S.5 Permits and Approvals Required**

Agency	Permit/Approval	Status
		features do not meet NWPR criteria for jurisdiction, some form of waters permit will be needed.
Federal Highway Administration (FHWA)	Air Quality Conformity Analysis Determination Letter	FHWA issued the Air Quality conformity determination on August 19, 2020.
California Department of Fish and Wildlife (CDFW)	1602 Agreement for Streambed Alteration; also part of the Project review process for the WRMSHCP and the CVMSHCP	Application to be submitted during final design
Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application to be submitted during final design. If USACE declines to issue a 404, the project would need to apply for Waste Discharge Requirements (WDRs) from RWQCB. The WDRs would serve as authorization under Porter-Cologne.
State Historic Preservation Officer (SHPO)	Concurrence with cultural resource findings	SHPO concurrence received May 4, 2017
Riverside County Regional Conservation Authority	Consistency with the WRMSHCP	The Final DBESP was approved on October 1, 2020
Riverside County Board of Supervisors	Certification of the Final EIR, Findings, and Statement of Overriding Considerations; approval of the Preferred Alternative	Public review of the Recirculated Draft EIR/EA and Response to Comments are complete, and the PDT identified Alternative 12 as the Preferred Alternative. The County of Riverside approved the Final EIR along with the Findings, Statement of Overriding Considerations, and the Preferred Alternative in 2021.
Coachella Valley Conservation Authority	Consistency with the CVMSHCP	Public review of the Recirculated Draft EIR/EA is complete and the PDT identified Alternative 12 as the Preferred Alternative for construction. The Coachella Valley Conservation Authority confirmed the Project is consistent with the CVMSHCP on June 11, 2020.
City of Banning	Approval for modification of streets in the City of Banning	Execute a Cooperative Agreement between the County and City after the environmental document phase
Riverside County Transportation Department	Approval of plans for modification of Riverside County roadways	To be obtained prior to construction

Caltrans = California Department of Transportation  
 CDFW = California Department of Fish and Wildlife  
 CEQA = California Environmental Quality Act  
 City = City of Banning  
 County = County of Riverside  
 CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan  
 DBESP = Determination of Biologically Equivalent or Superior Preservation  
 EA = Environmental Assessment

EIR = Environmental Impact Report  
 FHWA = Federal Highway Administration  
 RCALUC = Riverside County Airport Land Use Commission  
 RWQCB = Regional Water Quality Control Board  
 SHPO = State Historic Preservation Officer  
 USACE = United States Army Corps of Engineers  
 USFWS = United States Fish and Wildlife Service  
 WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

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# Chapter 1 Project Description

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## 1.1 Introduction

The County of Riverside (County) proposes to construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning east to the intersection of Bonita Avenue and Apache Trail<sup>1</sup> in the unincorporated community of Cabazon. Two alternative alignments are under consideration along with a No Action/No Project Alternative. The California Department of Transportation (Caltrans) is the Lead Agency for environmental review under the National Environmental Policy Act (NEPA). The County is the Lead Agency under the California Environmental Quality Act (CEQA). As CEQA Lead Agency, the County has assessed the significance of potential impacts of implementing either of the alternatives under consideration using the Environmental Checklist, provided in Appendix A, and the County's analyses of project impacts is discussed in detail in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures.

The Project is included in the Southern California Association of Government's (SCAG) 2019 Federal Transportation Improvement Program (FTIP). Additionally, funding will be received from the 2013 County of Riverside approved Cabazon Community Revitalization Act Infrastructure and Public Safety Fund.

The Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) (December 2017), the Recirculated Draft EIR/EA (August 2019), and this Final EIR/EA identify two build alternatives, and each alternative is addressed at an equal level of detail. The May 3, 2019, letter from the Riverside County Transportation Department (included in Chapter 4, Comments and Coordination) identifies Alternative 12 as the Locally Preferred Alternative. Therefore, Alternative 12 was identified as the Locally Preferred Alternative in the Recirculated Draft EIR/EA. The designation of a Locally Preferred Alternative in the Recirculated Draft EIR/EA was intended to convey the County's preference for a specific alternative based on the information available prior to public review of the Recirculated Draft EIR/EA, including potential impacts and reasonable mitigation measures.

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<sup>1</sup> Apache Trail becomes Morongo Trail north of the Union Pacific Railroad (UPRR).

After comparing and weighing the benefits of the Build Alternatives and considering comments received during the public review periods for the Draft EIR/EA and the Recirculated Draft EIR/EA, the Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative at a PDT meeting held at Caltrans District 8 on December 17, 2019, which is discussed in further detail in Section 1.5.1. The PDT includes Caltrans, the City of Banning, the County of Riverside, the Bureau of Indian Affairs (BIA), the Morongo Band of Mission Indians, the California Highway Patrol (CHP), and environmental and engineering consultants.

This Final EIR/EA analyzes the Project pursuant to the 2015 General Plan.

Under Alternative 12, the County would negotiate a roadway easement with the Morongo Band of Mission Indians so that the County would be able to maintain and operate the Project, as per any other County Road. Additionally, a Cooperative Agreement is needed between the County of Riverside and the City of Banning in order for the County to lead efforts associated with right-of-way acquisitions and construction of the Project within City limits.

### **1.1.1 Project Location and Overview**

Figure 1.1-1 shows the regional location, the Project location, and the existing local roadway network. “Existing” refers to conditions at the time that the Notice of Preparation was filed and the public notified of the preparation of the Draft EIR/EA (November 2013). The Project is located partially within the jurisdiction of the County, partially within the City of Banning (Banning), and partially within land owned by the Morongo Band of Mission Indians, depending on the alternative selected.

The Project would improve 0.5 mi of existing Westward Avenue from the Westward Avenue/Hathaway Street intersection in Banning east to the current end of the paved road. The improved roadway in this section includes one travel lane in each direction, a striped median, paved roadway shoulders, sidewalks on each side of the street, and curbs and gutters (see Section 1.4, Alternatives). The Project would extend Westward Avenue approximately 2.8 mi farther east to the existing intersection of Apache Trail and Bonita Avenue in Cabazon, including one travel lane in each direction, a striped median, 8-foot (ft) paved shoulders that could be used by bicyclists, and a shared-use pathway. Two Build Alternative alignments are under consideration, as shown on Figure 1.1-2. The new two-lane roadway from the eastern end of existing Westward Avenue to the existing Apache Trail/Bonita Avenue intersection would be constructed consistent with a future four-lane roadway.



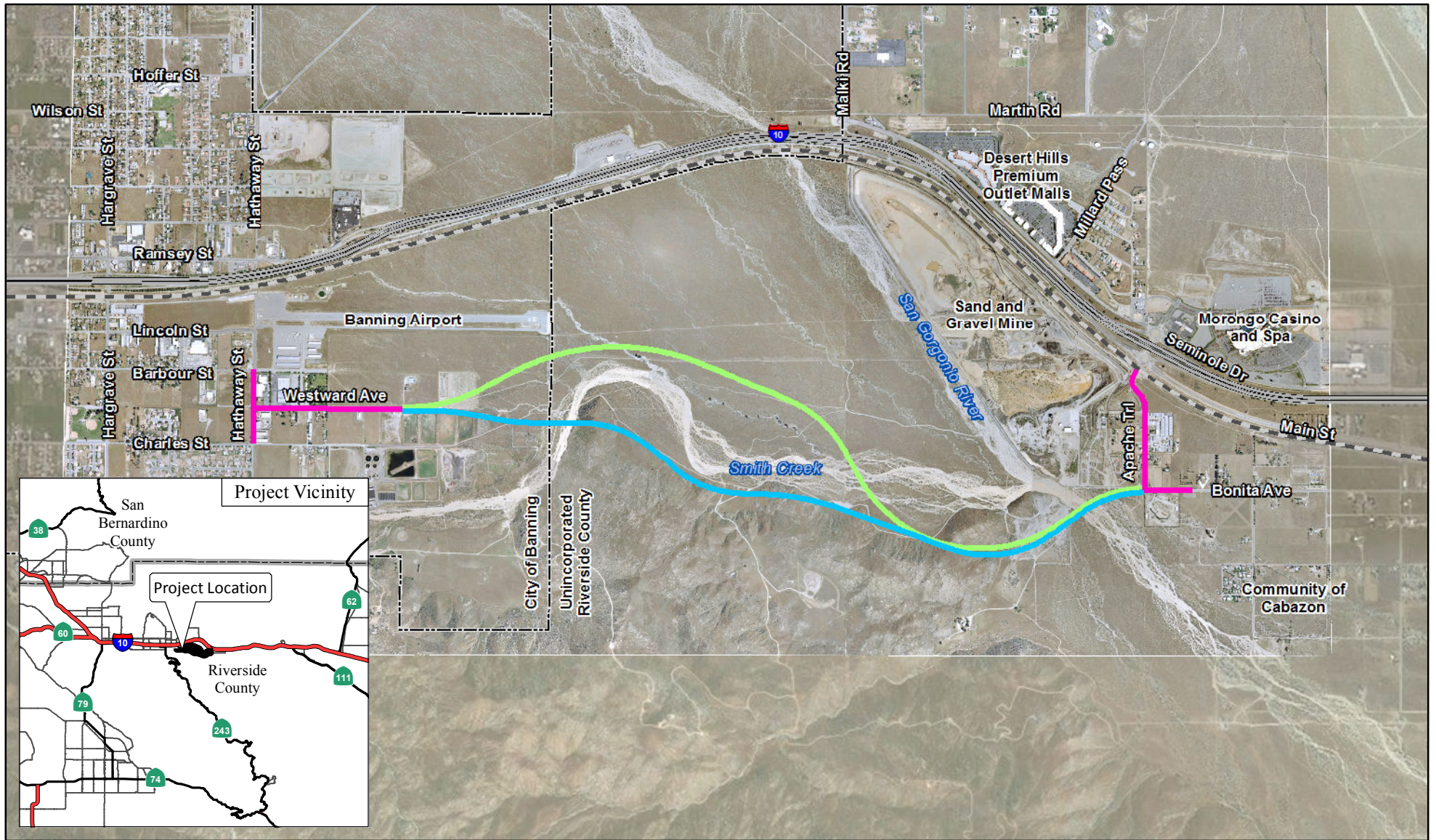
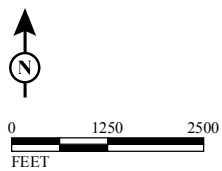


FIGURE 1.1-1

LEGEND

- Alternatives 5 and 12
- Alternative 5
- Alternative 12
- City/County Boundary
- Interstate 10
- Union Pacific Railroad



I-10 Bypass: Banning to Cabazon  
Project Location

SOURCE: Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2015)

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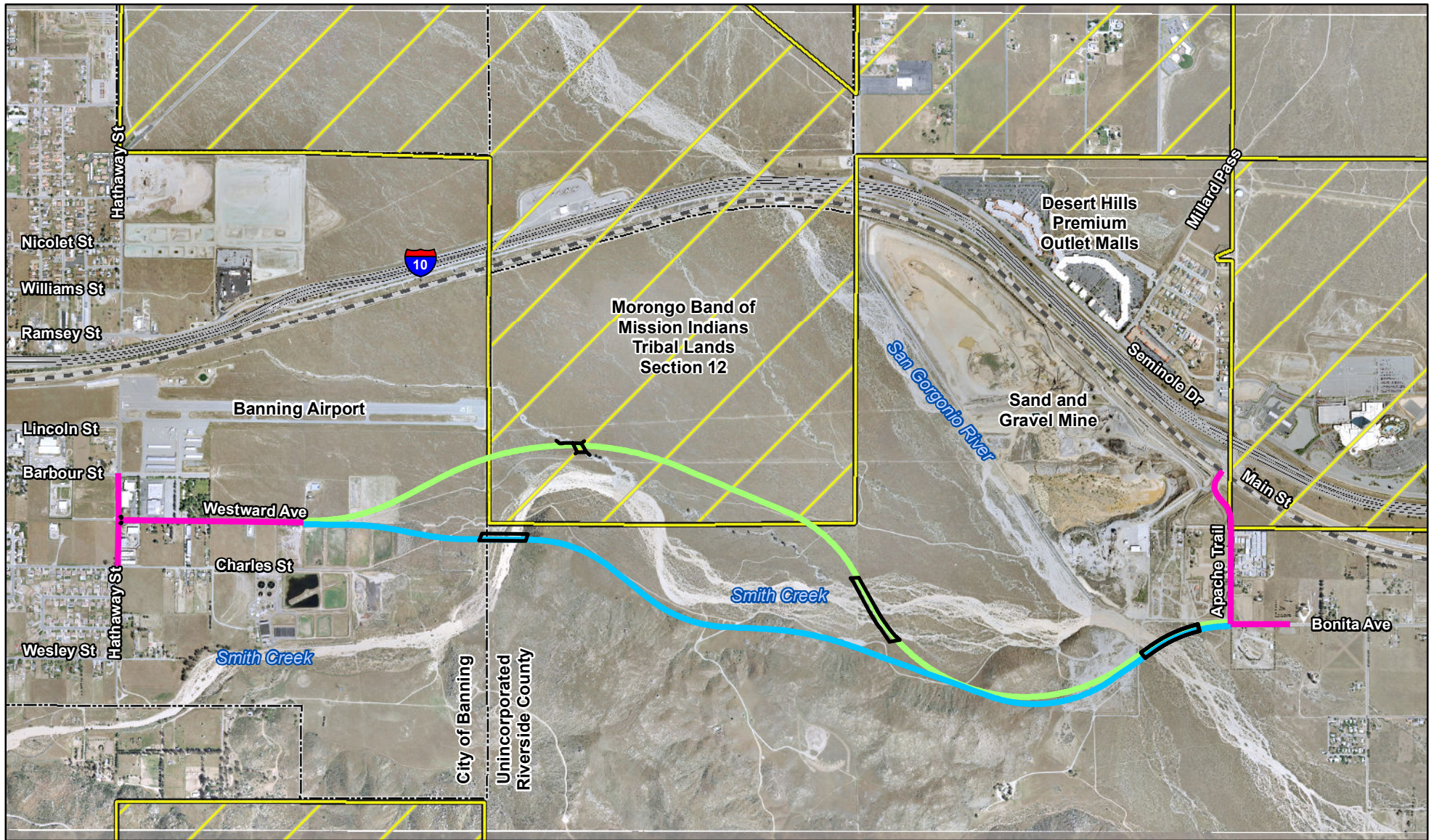
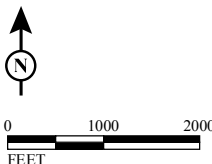


FIGURE 1.1-2

LEGEND

- Alternatives 5 and 12
- Alternative 5
- Alternative 12
- Proposed Bridges
- Morongo Band of Mission Indians Tribal Lands
- City/County Boundary
- Interstate 10
- Union Pacific Railroad



SOURCE: Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2015)  
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Please note that this document discusses both of the two Build Alternatives – Alternative 5 and Alternative 12 (Preferred Alternative). When there are differences between the two Build Alternatives, the specific alternative is referenced.

The Project would also improve the Westward Avenue/Hathaway Street intersection in Banning and the Bonita Avenue/Apache Trail intersection in Cabazon to accommodate project-related traffic. It would add 8 ft paved shoulders that could be used by bicyclists along Apache Trail, between Bonita Avenue and the Union Pacific Railroad (UPRR), just south of the eastbound I-10/Morongito Trail interchange roundabouts.

Please refer to Section 1.4, Alternatives, for a complete description of the proposed improvements. Additionally, refer to Appendix F of this Final EIR/EA for an overview of proposed improvements.

The Project is included as Project No. RIV031202 in the 2019 Federal Transportation Improvement Program (FTIP), which was prepared by the Southern California Association of Governments (SCAG) and approved by the Federal Highway Administration (FHWA).

## **1.2 Project Background**

### **1.2.1 Geographic/Geologic Setting**

The Project is located in the narrowest part of the San Gorgonio Pass, which is also known as the Banning Pass, or simply “the Pass.” Created by the movement of the San Andreas Fault, the San Gorgonio Pass is one of the deepest mountain passes in the 48 contiguous states. With a floor elevation of 1,591 ft in the Project area, the Pass provides a gap between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. Mount San Gorgonio (the tallest peak in Southern California at 11,503 ft) is located 11 mi north of the Pass, while Mount San Jacinto (10,834 ft), is located 6 mi south of the Pass. The steep mountain ranges on either side of the Pass preclude the development of parallel roadways near the Pass.

### **1.2.2 Transportation Facilities in the Pass**

The San Gorgonio Pass provides the only low-elevation crossing of the mountains between the Greater Los Angeles Basin and destinations to the east, including the Coachella Valley, the Colorado River, the State of Arizona, and states farther east. As such, two key transportation facilities are located in the Pass: the UPRR and I-10.

The first roadways were pioneered through the Pass in the late 1800s/early 1900s. The roadway through the Pass was co-designated United States Route 60/United States Route 70/United States Route 99 (US-60/US-70/US-99) in the 1930s, and was upgraded to a mostly four-lane expressway in 1952, connecting Ramsey Street in Banning with Main Street in Cabazon in the Project area.

### 1.2.3 I-10 Construction

With the approval of the Interstate Highway System in 1956, the road through the Pass was designated I-10 and needed to be upgraded to freeway status per the requirements of the Interstate system. The segment of I-10 between Banning and Cabazon was completed in 1964.

I-10, also known as the Christopher Columbus Transcontinental Highway, extends from Santa Monica, California, to Jacksonville, Florida, linking Los Angeles with the desert resorts in Palm Springs and the Coachella Valley, and with the States of Arizona, New Mexico, Texas, Louisiana, Mississippi, Alabama, and Florida. Within the Project vicinity, I-10 provides four travel lanes in each direction and carries approximately 115,000 average daily trips west of Malki Road.<sup>1</sup> Both I-10 and the UPRR carry a substantial amount of freight traffic from the Ports of Los Angeles and Long Beach. In addition, I-10 carries extensive commuter and recreational traffic through the Pass.



### 1.2.4 Lack of Local Roadway Connection

Most of the I-10 construction in Riverside County between Beaumont and Palm Springs preserved the previous roadway or constructed a new parallel roadway to serve local traffic. However, a portion of I-10 that was built in 1964 between Banning and Cabazon was constructed on top of the old roadway near the Ramsey Street interchange without a new parallel route, as shown on Figure 1.2-1.

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<sup>1</sup> California Department of Transportation (Caltrans). 2015. *2014 Traffic Volumes on State Highways*.

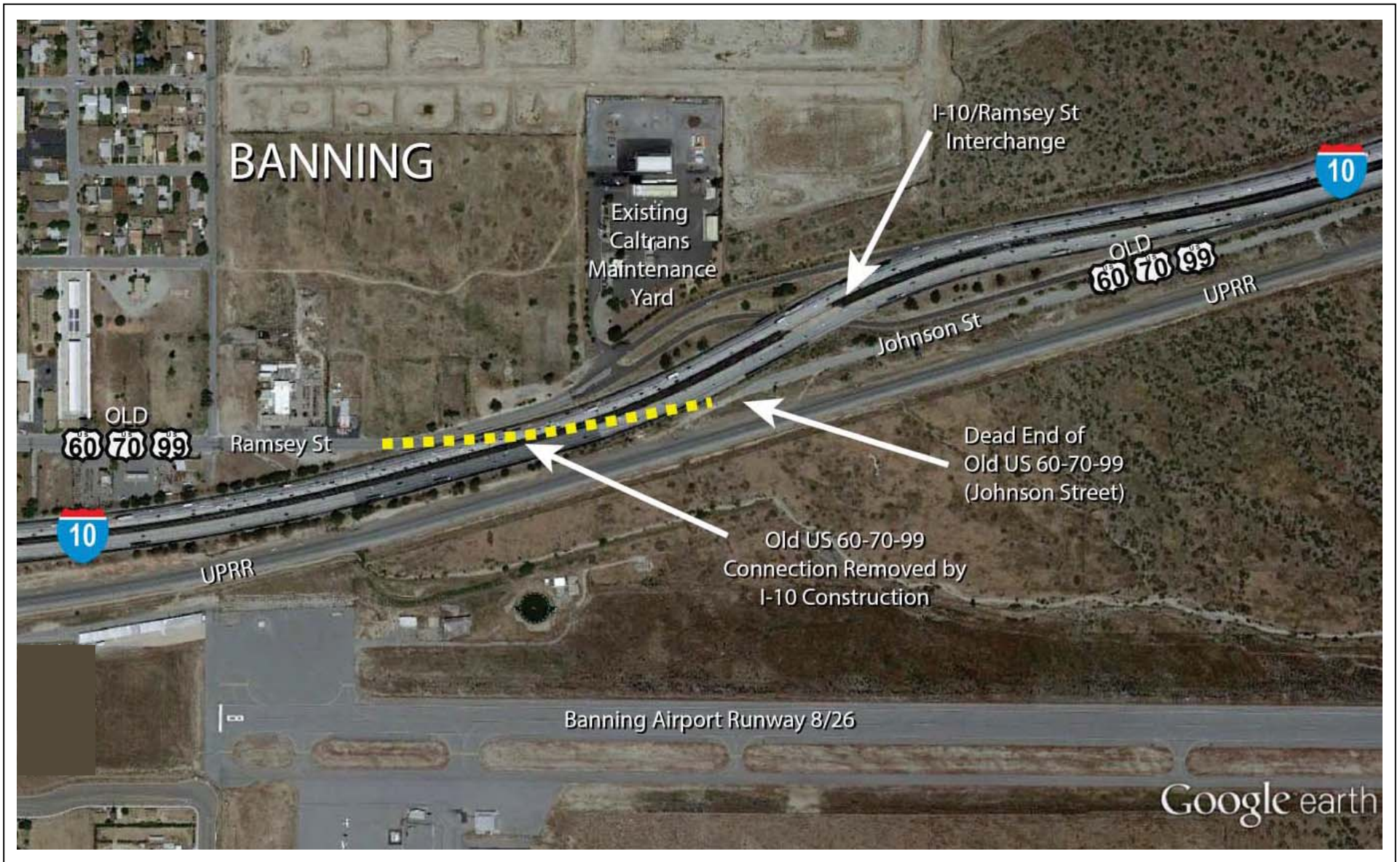


FIGURE 1.2-1



NO SCALE  
 SOURCE: Google Earth (2016)

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*I-10 Bypass: Banning to Cabazon*  
 Old U.S. 60-70-99 Connection Removed by I-10 Construction  
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As a result, although Banning and Cabazon are just 3 mi apart, no local roadways connect them. All travelers, including motorists, truckers, and bicyclists, must use I-10 (a transcontinental freeway) to travel between the two communities. Figure 1.2-2 shows the existing circulation system between Banning and Cabazon.

The lack of a local roadway connecting Cabazon and Banning adversely affects the area's livability for its residents. The list below provides a few examples of these impacts to local residents, which are described in greater detail in Section 1.3, Purpose and Need, for the Project:

- For Cabazon residents, the freeway must be used for daily trips such as grocery shopping.
- High school students from Cabazon must use the freeway to access Banning High School.
- Local transit systems must use circuitous routings via I-10 to provide service to the local communities.
- The lack of local street connections or trails forces bicyclists to travel between the two communities using I-10. Bicycle travel is normally banned on freeways but Caltrans allows it on this segment of I-10 because there are no parallel roadways to accommodate bicyclists.
- There are no sidewalks or trails for pedestrian travel connecting the two communities.
- Emergency Services must use the freeway to access Cabazon.

### **1.2.5 Extreme Congestion during Emergencies**

The above-listed issues primarily affect local residents and businesses. However, the lack of a local connection parallel to I-10 has the potential to create major problems on a regional scale whenever I-10 through the Pass is fully or partially closed for an extended period. When the freeway is fully or partially closed due to an emergency in the segment between the I-10/Hargrave Street interchange in Banning and the I-10/Morong Trail interchange in Cabazon, the only available detour routes are lengthy.

Westbound vehicles traveling along I-10 from the Palm Springs area to Ontario have two detour options: the northerly detour route or the southerly detour route (as shown on Figure 1.2-3). Each detour route involves extensive travel on two-lane mountain or desert roadways that would become congested if a substantial portion of I-10 traffic is diverted to these routes.

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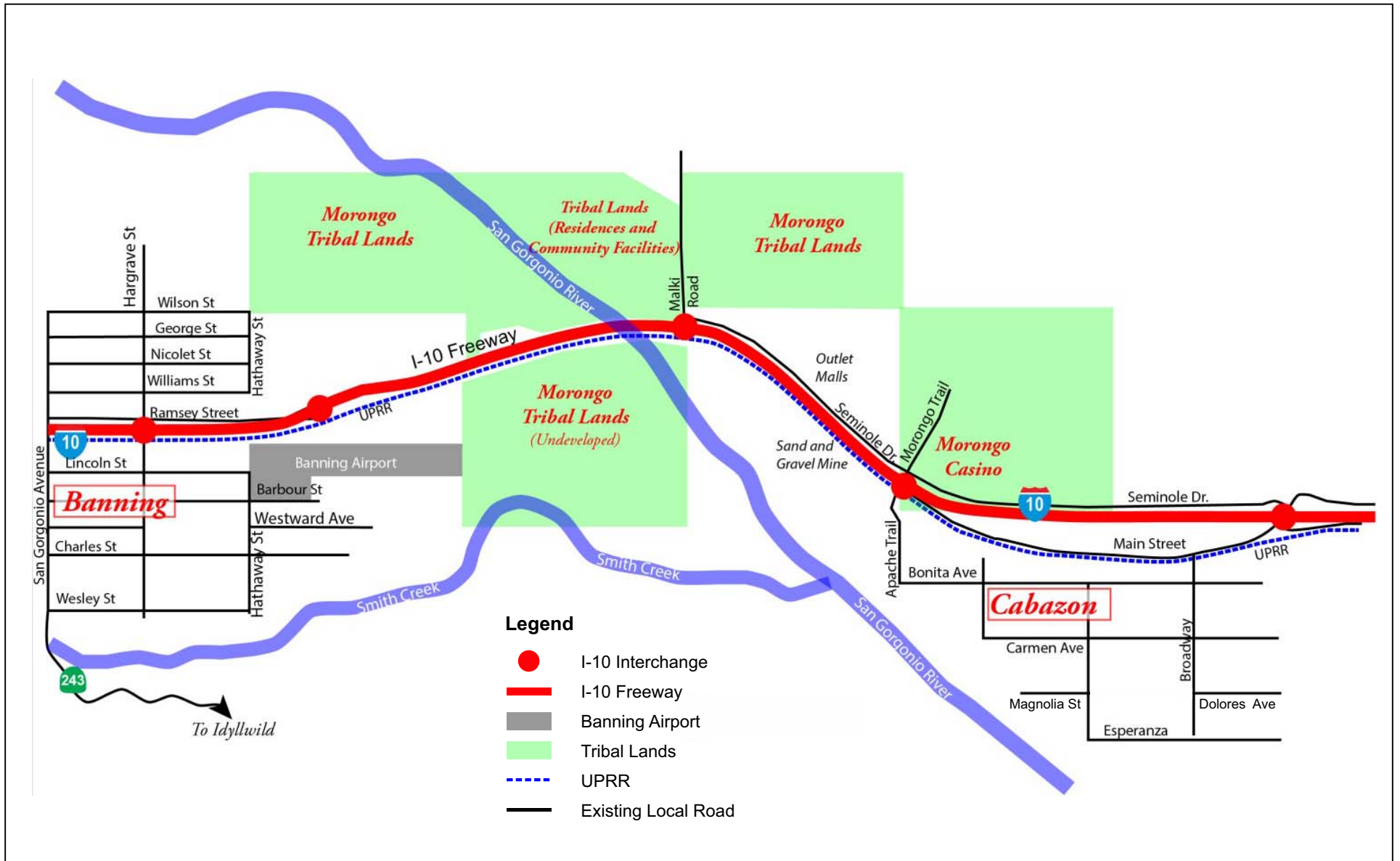
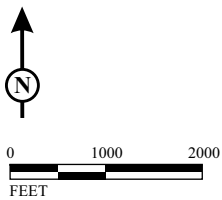


FIGURE 1.2-2



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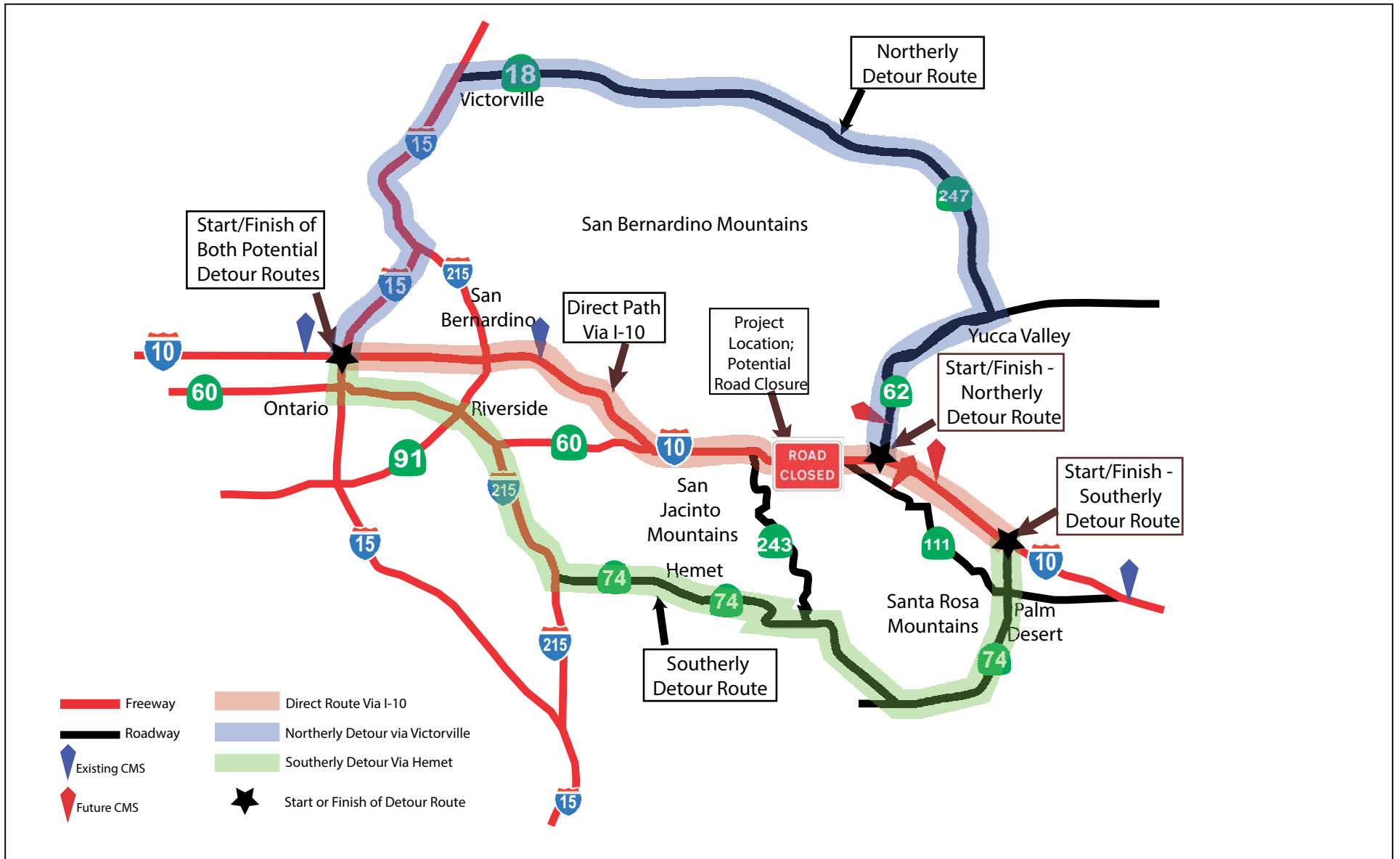


FIGURE 1.2-3



NO SCALE  
 SOURCE: LSA (2015)

*I-10 Bypass: Banning to Cabazon*  
 Detour Routes with I-10 Closed at Project Location

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- The northerly detour route is between the I-10/State Route 62 (SR-62) interchange and the Interstate 15 (I-15)/I-10 interchange near Ontario via State Route 247 (SR-247), State Route 18 (SR-18) through Victorville, and I-15.
- The southerly detour route is between the I-10/Monterey Avenue interchange in Palm Desert and the Interstate 215 (I-215)/I-10 interchange in San Bernardino via State Route 74 (SR-74), I-215, and I-15. Alternatively, State Route 243, a two-lane winding mountain road, could be taken between SR-74 and I-10 in Banning.

Since 2004, the entire 19 mi segment of I-10 between Banning and Palm Springs has experienced multiple major traffic incidents that have partially or fully closed the freeway, creating major congestion and delays with backups extending 10 mi or more in each direction. In some cases, travelers using I-10 have been stranded for hours behind closed sections of the freeway with no way to exit or access restrooms, water, or basic services. Between 2005 and 2014, the approximately 3 mi segment of I-10 between Banning and Cabazon was fully or partially closed three times due to major accidents, police activity, and construction. These closures resulted in travel delays exceeding 10 hours in some instances and potentially impacted 100,000 or more travelers. Additionally, such partial or full freeway closures can have severe adverse impacts to emergency services in Cabazon because I-10 provides the only access route to the community from the west.

### **1.2.6 I-10 “Lifeline” Emergency Action Plan**

The I-10 closures referenced above resulted in the development of a multi-agency I-10 “Lifeline” Emergency Action Plan (EAP) to address closures on I-10 between Hargrave Street in Banning and Indian Canyon Drive in Palm Springs. The EAP is a joint effort among Caltrans District 8; the County of Riverside; the Coachella Valley Association of Governments; the Cities of Beaumont, Banning, and Palm Springs; the Morongo Band of Mission Indians; the California Highway Patrol (CHP); and local emergency service providers. Each element of the EAP can be implemented separately by the agencies responsible. The components of the EAP are shown on Figure 1.2-4 and include the following:

- Improved communication with the public via the recently installed changeable message signs at the locations shown on Figure 1.2-4 and by establishing standard communication protocols among emergency service providers and local media.

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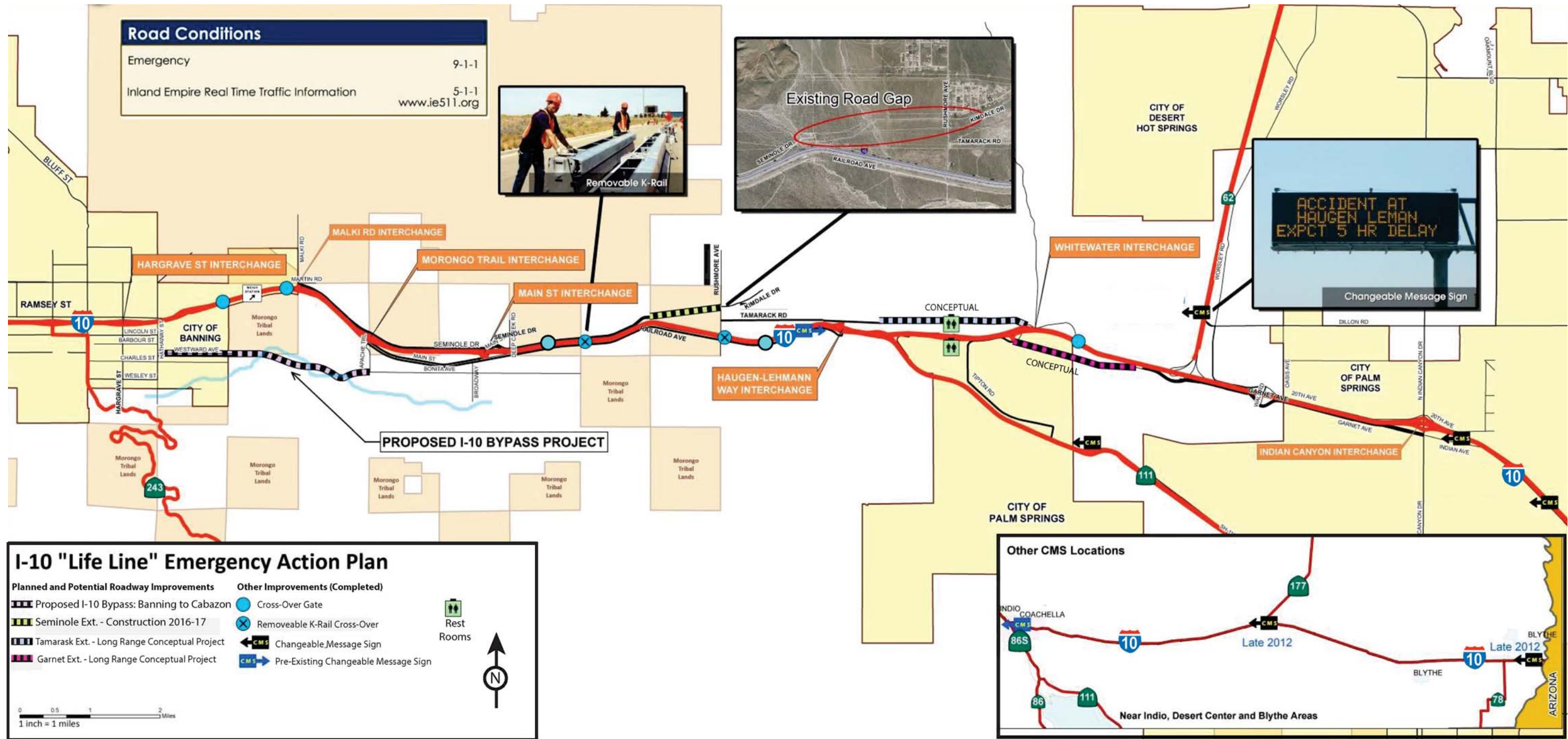


FIGURE 1.2-4



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- Five recently completed gated median breaks on I-10 between Hargrave Street in Banning and the State Route 111 (SR-111) Palm Springs exit, so that motorists trapped behind a blockage can make U-turns through the gated median breaks when the freeway is closed.
- Staging areas and emergency supplies to be used by emergency service providers.
- Construction of the following two new and improved local roadways parallel to I-10 to relieve the I-10 traffic when the adjacent segment of the freeway is closed or partially closed:
  - Seminole Drive will be extended east from its present eastern terminus on the north side of I-10 east of the Main Street interchange. When connected with existing roadways, the Seminole Drive Extension will provide an alternative route north of I-10 between the Main Street interchange in Cabazon and Haugen-Lehmann Way in Whitewater. This separate project, which is located 4.25 mi to the east of the Project, has received environmental approval and is anticipated to be constructed in the near future.
  - The EAP also proposes the long-range construction of two additional roadways parallel to I-10 in the Whitewater area: (1) extension of Tamarisk Avenue from Haugen-Lehmann Way to Whitewater Canyon Road, and (2) extension of Garnet Road from Whitewater Canyon Road to SR-62. However, these projects are not included in the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) or any local Capital Improvement Project listing. They are considered low priority because SR-111 and Indian Canyon Drive provide an existing potential detour route (for approximately 3 mi) for the parallel segments of I-10.

The EAP also recommends construction of the Project, which is the subject of this environmental review. When combined with existing roadways in the vicinity, the Project would provide an emergency alternate route to and from I-10 between the Hargrave Street interchange and the Morongo Trail interchange. Congestion and delays will still be experienced in the area because the Project does not provide the same capacity as I-10. However, a portion of the mainline traffic would be able to bypass the closure, relieving some of the pressure and limiting the queue on I-10.

## **1.3 Purpose and Need for the Project**

### **1.3.1 Purpose of the Project**

The purpose of the Project is to provide a local roadway connecting Banning and Cabazon that would:

- Accommodate local trips on a local roadway;
- Provide an alternate route between Banning and Cabazon in the event of a closure on I-10;
- Provide a safe route for bicyclists;
- Provide a safe route for pedestrians;
- Provide a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks;
- Improve the transportation facilities connecting Banning and Cabazon to address growth and mobility needs as identified in the 2015 County General Plan policy cited in Section 1.3.2.4, as well as in the Banning General Plan Circulation Element, and;
- Improve the transportation facilities connecting Banning and Cabazon consistent with the 2016–2040 SCAG RTP/SCS and the 2019 FTIP.

### **1.3.2 Need for the Project**

Banning and Cabazon have no local roadway connecting them. The two communities are located approximately 3 mi apart, with I-10 providing the only roadway connection. All travel between Banning and Cabazon, whether local or through traffic, must be accommodated on I-10, and this creates several problems for both local and regional travelers as well as for bicyclists and pedestrians.

#### **1.3.2.1 Deficiencies in Regional Circulation**

The lack of a local road connecting Banning and Cabazon creates adverse effects on regional circulation during emergency situations. When the segment of I-10 between the Morongo Trail and Ramsey Street interchanges is fully or partially closed, the freeway is subject to lengthy traffic backups. Given the unplanned and unusual circumstances associated with such closures, there is no existing traffic data for these situations except for observations of previous instances.

While actual predictions of traffic congestion during full/partial closures are impractical, based on assumptions, it is possible to roughly estimate the length of the queue of vehicles that could be caused by a full I-10 closure in one direction.

Assuming that I-10 is carrying its average hourly volume (based on average daily volumes), a full closure of the freeway in one direction could generate a 4 to 5 mi backup in approximately 1 hour, and the backup could easily reach 10 mi or more after 2 or 3 hours. This corresponds with reports of 10 mi or more backups during recent closures of I-10.



Even under normal conditions, adding local trips to traffic flows on I-10 interchanges creates additional congestion. The Malki Road and Morongo Trail interchanges are observed to be highly congested during the major retail shopping seasons at the Desert Hills Premium Outlets Mall and the Cabazon Outlets Mall. The congestion at these interchanges can extend onto I-10, which can then adversely affect freeway traffic. In the long term (2038), the level of service (LOS) at the I-10/Morongo Trail interchange is forecast to be at LOS F in both directions. By diverting some local traffic away from that interchange and onto the new roadway, the LOS at the Morongo Trail interchange could be improved.

### **1.3.2.2 Deficiencies in Local Circulation**

FHWA Guidelines state that Interstate highways “were designed and constructed with mobility and long-distance travel in mind,” not for local travel needs.<sup>1</sup> The lack of a local roadway connection adversely impacts the area’s livability for its residents as shown in the following examples:

- As a small community, Cabazon does not have any supermarkets, drug stores, or hospitals; therefore, residents must access I-10 to reach the closest services in Banning. Conversely, Banning residents must use the freeway to access the regional commercial facilities in North Cabazon, including the Desert Hills Premium Outlets Mall, Cabazon Outlets Mall, and the Morongo Casino Resort and Spa.
- High school students from Cabazon attend Banning High School, which is located in Banning at the intersection of Westward Avenue and San Gorgonio Avenue. Students must use vehicular transport (i.e., personal cars or transit) on I-10 to reach the campus.
- Cabazon residents who live south of the UPRR must access I-10 via Apache Trail or Broadway using at-grade railroad crossings for both local and long-range trips. These crossings are subject to lengthy delays caused by long, slow trains that also delay emergency vehicles, thus compounding emergency response times.

### **1.3.2.3 Deficiencies in Pedestrian and Bicyclist Circulation**

The lack of a local street connection or trail between Banning and Cabazon forces bicyclists to use the I-10 shoulders between the two communities. Caltrans allows bicyclists to use these shoulders, which are immediately adjacent to big-rig trucks in

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<sup>1</sup> Federal Highway Administration. 2013. *Highway Functional Classification Concepts, Criteria and Procedures* (2013 Edition), p. 14.

the right lane. I-10 is one of the nation's key freight-hauling routes. According to Caltrans 2015 Truck Traffic Data, the truck volumes on I-10 were approximately 21,600 trucks per day (18 percent of the total traffic volume) at the Ramsey Street interchange. Also, trucks must cross the shoulders to reach the truck scales located between the Ramsey Street interchange and the Malki Road interchange. Any bicyclist using the shoulder on I-10 must compete with freight-hauling trucks crossing their paths to reach the scales.

There are no sidewalks or trails for pedestrian travel. Any pedestrians walking between the adjacent communities must travel overland on private property or trespass along the railroad right-of-way.

#### **1.3.2.4 System Linkages and Regional Planning Consistency**

The Project is needed to implement certain elements of the Riverside County and City of Banning General Plans, as well as the circulation plans of the Riverside County Transportation Commission (RCTC) and SCAG, as follows:

- The Project is necessary to address long-range (post-2035) circulation needs identified in the 2015 Riverside County General Plan Circulation Element, Policy 1.5: “Evaluate the planned circulation system as needed to enhance the arterial highway network to respond to anticipated growth and mobility needs” (AI 49).
- The Project will implement a roadway link shown in the 2015 Riverside County General Plan Circulation Element.
- The Project will implement a roadway link shown in the City of Banning's General Plan Circulation Element.
- The Project is listed in the Measure A Expenditure Plan adopted by the RCTC.
- The Project is listed in both the 2016–2040 RTP/SCS and 2019 FTIP adopted by SCAG.

#### **1.3.2.5 Legislation**

In 2004, United States Congress passed the Fiscal Year 2003 Omnibus Appropriation Bill containing a \$1.75 million appropriation for the preliminary planning of the Ramsey Street Extension Project, which provided for a bypass north of I-10 along the proposed extension of Ramsey Street.

In 2009, at the request of the County of Riverside, the City of Banning, and the Morongo Band of Mission Indians, the Congressional description of the Project was changed to relocate the Project south of I-10. The Project retains the original \$1.75 million congressional allocation.

### **1.3.2.6 Traffic Levels of Service**

Many roadway projects are designed to accommodate existing and forecast traffic demand at a particular LOS. As noted above, the Project will not operate at an acceptable LOS when I-10 is closed, but will allow some traffic to bypass the closed segment of I-10. Except during emergency conditions and other special/unusual situations, the existing roadways within the Project vicinity can accommodate existing demand at an acceptable LOS. Some intersections are forecast to operate below the County and City standards in future years 2022 and 2038, and the Project will help alleviate these deficiencies. The Project's effects on traffic LOS and its consistency with the City and County General Plan LOS standards are discussed in Section 2.5, Traffic and Transportation, of this Final EIR/EA.

### **1.3.2.7 Logical Termini and Independent Utility**

FHWA regulations (Code of Federal Regulations Title 23, Part 771.111 [f]) require that the action:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad level;
2. Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made); and
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The Project meets the requirements for Logical Termini and Independent Utility for the following reasons:

1. The Project has logical termini because it will provide a Banning-to- Cabazon connection to meet the Purpose and Need by connecting the City of Banning street network to the Cabazon street network at the west and east ends of the new bypass road. Existing local streets in Banning (Westward Avenue and Hathaway Street) will be improved as part of the Project to provide a connection to I-10 via Lincoln Avenue on the west end of the Build Alternative (Alternative 12 [Preferred Alternative]) and existing streets in the community of Cabazon (Apache Trail and Bonita Avenue) will be improved to provide a connection to the I-10 on the east end of the Build Alternative (Alternative 12 [Preferred Alternative]). Therefore, the Logical Termini for the Project include Hathaway Street at Lincoln Avenue on the west and Apache Trail and I-10 on the east.

2. The Project would be a reasonable expenditure and would have independent utility by providing the only surface street connection between the community of Cabazon and the City of Banning in the Project area and also by providing a bypass for I-10 in the event of freeway closures. No additional transportation improvements would be required to make use of the completed project.
3. The majority of the Build Alternative (Alternative 12 [Preferred Alternative]) is located in areas that are mostly undeveloped, and there are no approved transportation projects in the City and County General Plans and no other planned transportation projects in the immediate vicinity. The Project would not preclude reasonably foreseeable future transportation projects in the Project area, such as providing connections to parcels adjacent to the new bypass road. Therefore, implementation of the Project would not restrict the consideration of alternatives for other reasonably foreseeable transportation projects.

## 1.4 Alternatives

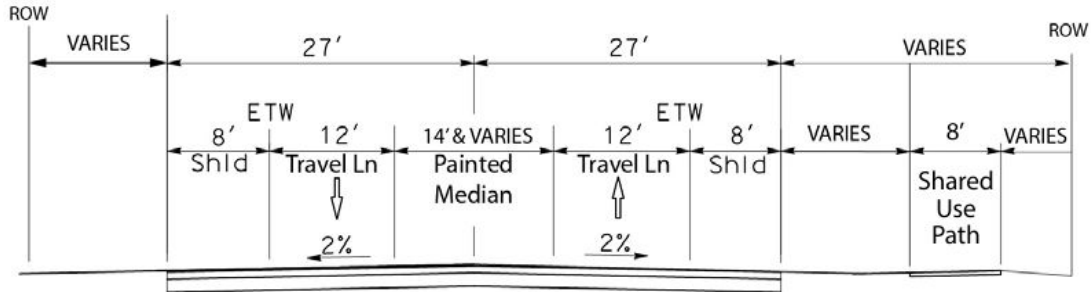
The Final EIR/EA considers the environmental impacts of two Build Alternatives identified as Alternative 5 and Alternative 12 (Preferred Alternative), as well as the No Build Alternative.

### 1.4.1 No Build Alternative

The No Build Alternative is based on a forecast of the foreseeable future conditions assuming the Project is not built (i.e., no new roadway is constructed connecting Banning and Cabazon). The No Build Alternative forecast includes “what would reasonably be expected to occur if the Project was not approved.” Under NEPA, the federal environmental protection law, the No Build Alternative is the *baseline condition* for determining the environmental impacts resulting from each of the Build Alternatives. Impacts are assessed by comparing future conditions under the No Build Alternative to future conditions with each of the Build Alternatives. Each of the resource sections in Chapter 2 describes the No Build Alternative for that resource, including any changes from the existing conditions that would reasonably be expected to occur without the Project.

### 1.4.2 Alternative 5 and Alternative 12 (Preferred Alternative)

Figure 1.4-1 shows a typical cross-section of the new roadway for both Build Alternatives from 4,000 ft east of Hathaway Street to the San Gorgonio River. Alternative 5 and Alternative 12 (Preferred Alternative) would provide one 12 ft travel lane in each direction with an 8 ft paved shoulder that could be used by



Source: Kimley-Horn and Associates, Inc. (April 2015).

**Figure 1.4-1 Typical Cross-Section from 4,000 Feet East of Hathaway Street to Bonita Avenue**

bicyclists and a 14 ft painted median within a 54 ft paved cross-section. An 8 ft shared-use pathway would also be developed outside the paved surface on the south side of the roadway, adjacent to Smith Creek.

Depending on actual conditions, in the event of a freeway closure, the median could be used as a reversible emergency travel lane.

This is a preliminary design and may change as a result of refinements throughout the environmental and design processes. Appendix F, Concept Plan, contains more detailed typical cross-sections. Opportunities for increasing the minimum widths of both shoulders that may be used by bicyclists and the shared-use pathway will be considered throughout the environmental and design processes and implemented where feasible. Note that right-of-way, grading, and bridges include the ultimate four-lane facility for portions of the Project east of existing Westward Avenue to the intersection with Apache Trail and Bonita Avenue. For the portions of the Project utilizing existing Westward Avenue in the City of Banning from Hathaway Street to approximately 4,000 ft to the east, the existing two-lane roadway is improved within existing right-of-way.

Alternative 5 and Alternative 12 (Preferred Alternative) have the following common features:

- One 12 ft lane in each direction, with a 14 ft painted median and 8 ft paved shoulders.
- An 8 ft wide multi-use path.
- Drainage ditches/swales approximately 10 to 20 ft wide running parallel to the roadway with inlets.

- Cross culverts under the roadway ranging in size from approximately 36 inches in diameter to a 10x10 ft box.
- Inlet protection and/or debris settling basins at the upstream ends of cross culverts. These will range in size from approximately 15 ft to 100 ft in diameter (or similar length/width combination).
- Water quality basins within the designated roadway right-of-way to encourage infiltration. These will run linear and parallel to the roadway, ranging in width from approximately 10 ft to 75 ft.
- Rock slope protection along roadway slopes, where adjacent to Smith Creek, ranging in length from a few hundred feet to approximately 2,000 ft.
- Cut slopes graded to blend in with the adjacent foothills.
- Erosion control to re-establish the natural vegetation within disturbed areas.
- Fencing along the entire length of the Project on both sides of the roadway.
- Wildlife crossings (three bridges with wildlife crossings for Alternative 12 [Preferred Alternative] and two bridges with wildlife crossings for Alternative 5).
- One CHP pullout area in each direction consisting of entrance/exit ramps connecting to a paved area measuring approximately 60 ft wide by 600 ft long.
- Limited roadway lighting only where needed, such as at intersections. Lighting in these areas will be designed using County/City lighting standards up to 35 ft in height to only light areas of the roadway right-of-way.
- Additional safety lighting along the proposed multi-use path for safety will be considered during final design. All lighting will be designed and installed so as to prevent light spillover into natural areas and away from areas proposed for wildlife crossings. Proposed lighting may incorporate newer technologies associated with lower brightness levels, user activation (motion sensing), and/or designated hours of operation.

#### **1.4.2.1 Project Description Segments**

The following sections provide the Project Description for the Build Alternatives subdivided into the following segments:

- Westward Avenue/Hathaway Street intersection improvements
- Westward Avenue between Hathaway Street and 3,000 ft east of Hathaway Street
- Alternative 5 Between 3,000 ft east of Hathaway Street and the San Gorgonio River Bridge
- Alternative 12 Between 3,000 ft east of Hathaway Street and the San Gorgonio River Bridge

- The San Geronio River Bridge to Bonita Avenue/Apache Trail
- Apache Trail between Bonita Avenue and the UPRR
- East and west connections to I-10
- Considerations for ultimate widening to four lanes

### ***Westward Avenue/Hathaway Street Intersection Improvements***

These improvements would be the same for both Build Alternatives. The intersection of Westward Avenue/Hathaway Street will be improved to accommodate the increased traffic flows from the Project. Hathaway Street would be widened within its existing right-of-way from approximately 400 ft south of the Westward Avenue intersection to 200 ft north of the intersection to provide a northbound right-turn lane and a southbound left-turn lane. A new traffic signal would be installed at the intersection, and a small amount of right-of-way would be required at the intersection to construct standard curb returns at the northeast and southeast corners. The Westward Avenue approach to the intersection from the east would include both the westbound left-turn and right-turn lanes.

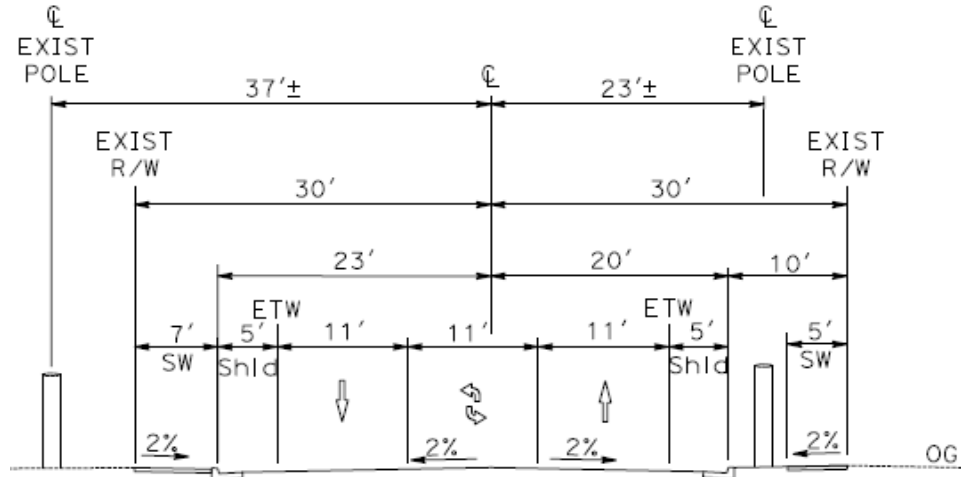
Since regional traffic is intended to access the new roadway via Lincoln Street and Hathaway Street, guide signs would be added, and intersection treatment, such as roadway striping and curb alignment, will be considered to promote this.

In anticipation of future development, a half-block section of Westward Avenue has been paved between Hathaway Street and 650 ft to the west. The roadway is currently blocked off with concrete barricades because there is no development to access.

### ***Westward Avenue from Hathaway Street to 3,000 Feet East of Hathaway Street***

These improvements would be the same for both Build Alternatives. The typical cross-section of the improved roadway is shown on Figure 1.4-2. Existing Westward Avenue east of Hathaway Street varies in width from approximately 25 ft to approximately 42 ft between Hathaway Street and approximately 2,700 ft east of Hathaway Street, where the paved roadway currently ends.

The existing roadway would be improved from Hathaway Street to the end of the paved road to provide a 43 ft paved section with 11 ft travel lanes in each direction, an 11 ft painted median, and a 5 ft paved shoulder that could be used by bicyclists in each direction, as shown on Figure 1.4-2.



Source: Kimley-Horn and Associates, Inc. (April 2015).

**Figure 1.4-2 Typical Cross-Section East of Hathaway Street**

The provision of paved shoulders will specifically benefit both bicyclists and motorists by providing adequate room for bicyclists to travel the roadway without interfering with motor vehicle traffic. California Assembly Bill (AB) 1371, which was passed in 2013, requires motorists to give bicyclists a minimum of 3 ft of clearance when passing a cyclist, with or without a striped bicycle lane. This can be difficult when the motorist and bicyclist share an 11 ft or 12 ft travel lane without shoulders. Development of 5 ft to 8 ft paved shoulders would allow for a 3 ft separation between the car and the bicycle. The provision of paved shoulders allows the County and the City to make future decisions to install striped bicycle lanes, if desired.

In compliance with the Americans with Disabilities Act (ADA), a 7 ft sidewalk would be included along the north side of the new roadway to provide clearance around such objects as signs and poles. An ADA-compliant 5 ft wide sidewalk would be provided on the south side of the roadway within a 10 ft parkway. Any raised features, such as poles, fire hydrants, and signs would be contained between the curb and sidewalk at standard setbacks from the curb face. At the end of the paved roadway, this section would be extended eastwardly an additional 300 ft to approximately 3,000 ft east of Hathaway Street, where the alignment begins to split for Alternative 5 and Alternative 12 (Preferred Alternative). Cross-sections shown are based on preliminary design and may vary as a result of refinements throughout the environmental and design processes. The striped median is designed to separate eastbound and westbound traffic and to accommodate left-turning cars.



Approximately 3,000 ft east of Hathaway Street, the alignments of Alternative 5 and Alternative 12 (Preferred Alternative) begin to diverge, with Alternative 5 curving to the south and Alternative 12 (Preferred Alternative) curving to the north. Section 1.4.2.2 describes the Alternative 5 alignment between 3,000 ft east of Hathaway Street and the San Gorgonio River. Section 1.4.2.3 describes the Alternative 12 (Preferred Alternative) alignment within the same limits.

#### **1.4.2.2 Alternative 5 from 3,000 Feet East of Hathaway Street to the San Gorgonio River**

An overview of Alternative 5 is shown on Figure 1.4-3. Alternative 5 would be a new roadway between 3,000 ft east of Hathaway Street and the bridge over the San Gorgonio River in Cabazon. Beginning 3,000 ft east of Hathaway Street, the new road would curve slightly to the south to avoid jurisdictional waters of the United States. It would then transition to a wider cross-section, beginning 4,000 ft east of Hathaway Street. Alternative 5 would cross Smith Creek on a new bridge near the eastern Banning city limits, approximately 1 mi east of Hathaway Street, and then extend easterly parallel to the south side of Smith Creek (in Riverside County jurisdiction) to the San Gorgonio River.

The following sections describe key aspects of Alternative 5.

##### ***Alternative 5 Smith Creek Bridge***

The Alternative 5 bridge over Smith Creek would be approximately 650 ft long by 102 ft wide, with a road surface elevation of approximately 40 ft over the 100-year water surface. The bridge has been designed to:

- Provide an all-weather creek crossing that adequately accommodates existing flood flows without increasing downstream flows;
- Provide a wildlife undercrossing of the new roadway for both large and small animals with support columns separated by approximately 190 ft and a 35 ft clearance over the creek bed;
- Preserve sand flows for those downstream habitats that are dependent on such sand flows; and
- Stabilize the path of Smith Creek in the vicinity of the bridge.

##### ***Alternative 5 Hillside Cuts***

Alternative 5 would run along the south side of Smith Creek and was carefully aligned to avoid/minimize impacts to jurisdictional waters of Smith Creek.

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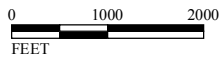




FIGURE 1.4-3

LEGEND

- Alternative 5
- Morongo Band of Mission Indians Tribal Lands
- City/County Boundary
- Proposed Bridges
- Interstate 10
- Union Pacific Railroad



SOURCE: Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2015)

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*I-10 Bypass: Banning to Cabazon*  
Alternative 5 Alignment Overview

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This alignment requires five cut slopes at the point where the foothills of the San Jacinto Mountains extend down to the edge of Smith Creek. The maximum height of the cut slopes would be approximately 155 ft. Contour grading, including land forming and slope rounding along the cut slopes, will be incorporated to lessen the effects of the cuts, and the slopes will be seeded and replanted with native species.

**Alternative 5 Drainage Between Smith Creek and the San Gorgonio River**

Alternative 5 would include drainage swales paralleling the roadway on each side, as well as five cross drains in the reach.

**1.4.2.3 Alternative 12 (Preferred Alternative) from 3,000 Feet East of Hathaway Street to the San Gorgonio River**

An overview of Alternative 12 (Preferred Alternative) is shown on Figure 1.4-4. Like Alternative 5, Alternative 12 (Preferred Alternative) would be a new roadway between 3,000 ft east of Hathaway Street (at the east end of the existing Westward Avenue segment) and the proposed bridge over the San Gorgonio River in Cabazon. In contrast with Alternative 5, Alternative 12 (Preferred Alternative) would curve to the north to avoid Smith Creek and then transition to a wider cross-section beginning 4,000 ft east of Hathaway Street. Alternative 12 (Preferred Alternative) would then enter land owned by the Morongo Band of Mission Indians near the eastern Banning city limit, approximately 1 mi east of Hathaway Street. It would extend parallel to the north side of Smith Creek in the Morongo Band of Mission Indians Tribal Lands for approximately 1 mi, then exit the Tribal Lands and enter Riverside County jurisdiction. At that point, Alternative 12 (Preferred Alternative) would cross Smith Creek on a new bridge.

**Alternative 12 (Preferred Alternative) Alignment through Tribal Lands**

Alternative 12 (Preferred Alternative) would enter Morongo Band of Mission Indians Tribal Lands approximately 1 mi east of Hathaway Street and exit the Tribal Lands approximately 2 mi east of Hathaway Street. The Morongo Band of Mission Indians supported this alignment in a letter to the County dated February 21, 2013. In a letter dated September 25, 2018, the Morongo Band of Mission Indians stated that while they had previously expressed support for Alternative 13, they believed Alternative 12 (Preferred Alternative) provided cost savings due to reduced environmental and road construction impacts and that it was supportive of their long-term development plans.

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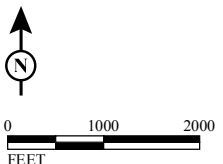




FIGURE 1.4-4

LEGEND

- Alternative 12
- Morongo Band of Mission Indians Tribal Lands
- Proposed Bridges
- City/County Boundary
- Interstate 10
- Union Pacific Railroad



SOURCE: Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2015)  
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As Alternative 12 has been identified as the Preferred Alternative, the County and the Morongo Band of Mission Indians anticipate entering into an agreement for leasing the land necessary to accommodate this facility.

Within the Morongo Band of Mission Indians Tribal Lands, the Alternative 12 (Preferred Alternative) alignment has been designed to avoid/minimize impacts to the jurisdictional waters of Smith Creek. The shared-use path for pedestrians is located on the south side of the roadway, adjacent to Smith Creek, and should provide favorable views of Smith Creek and the adjacent foothills.

### ***Alternative 12 (Preferred Alternative) Smith Creek Bridge***

Southeast of the Morongo Band of Mission Indians Tribal Lands, Alternative 12 (Preferred Alternative) turns southeasterly and crosses over Smith Creek on an approximate 1,100 ft long by 101 ft wide bridge at a road surface elevation of approximately 16 ft over the 100-year water surface. The bridge has been designed to:

- Provide an all-weather creek crossing that adequately accommodates existing flood flows without increasing downstream flows;
- Provide a wildlife undercrossing suitable for both large and small animals with an approximate undercrossing width of 1,050 ft and a 10 ft clearance under the bridge;
- Preserve sand flows for downstream habitats dependent on such sand flows;
- Stabilize the path of Smith Creek in the vicinity of the bridge; and
- Provide for potential Smith Creek equestrian trails under the bridge.

### ***Alternative 12 (Preferred Alternative) from Smith Creek Bridge to San Gorgonio River Bridge***

After crossing the Smith Creek Bridge, Alternative 12 (Preferred Alternative) turns easterly and rejoins the Alternative 5 alignment and ultimately connects to Bonita Avenue at Apache Trail.

### ***Alternative 12 (Preferred Alternative) Hillside Cut***

The Alternative 12 alignment along the north side of Smith Creek avoids four of the major hillside cuts associated with Alternative 5. However, once the alignment crosses to the south side of Smith Creek, it requires the same cut in this location as Alternative 5 because the eastern portion of Alternative 5 slopes at the point where the foothills of the San Jacinto Mountains extend down to the edge of Smith Creek.

Contour grading, including land forming and slope rounding along the cut slope, will be incorporated to lessen the effects of the cut, and the slopes will be replanted with native species.

### ***Alternative 12 (Preferred Alternative) Drainage between Smith Creek and the San Gorgonio River***

Depending on the location, Alternative 12 (Preferred Alternative) would include drainage swales paralleling the roadway on each side. Eleven cross drains would be necessary for Alternative 12 (Preferred Alternative).

#### **1.4.2.4 San Gorgonio River Bridge to Apache Trail**

From the San Gorgonio River Bridge to Apache Trail, the alignment would be the same for both Alternative 5 and Alternative 12 (Preferred Alternative).

#### ***San Gorgonio River Bridge (Both Alternatives)***

Both Alternative 5 and Alternative 12 (Preferred Alternative) cross the San Gorgonio River approximately 600 ft south of the confluence with Smith Creek, avoiding both the turbulence associated with the confluence flows and the County-required 500 ft setback from the existing wind turbine on the Robertson's Ready Mix site to the edge of the proposed roadway.

The bridge over the San Gorgonio River would be approximately 900 ft long by 101 ft wide, with the road surface crossing approximately 12 ft over the 100-year water surface. The bridge has been designed to:

- Provide an all-weather creek crossing that adequately accommodates existing flood flows without increasing downstream flows;
- Provide a wildlife undercrossing suitable for large and small animals with an approximate width of 730 ft and a 12 ft clearance under the bridge;
- Preserve sand flows for downstream habitats dependent on such sand flows;
- Stabilize the path of the San Gorgonio River in the vicinity of the bridge; and
- Provide for a potential San Gorgonio River trail under the bridge as shown in the 2015 Riverside County General Plan.

#### ***Intersection Improvements at Bonita Avenue and Apache Trail***

The new bypass road would connect to Bonita Avenue at the Apache Trail intersection in the community of Cabazon, where the intersection is currently a 90-degree L-shaped connection. The new connection would result in a T-intersection with turn lanes and would require widening Bonita Avenue to approximately 850 ft

east of Apache Trail for lane transitions and a new westbound right-turn lane, and widening Apache Trail to approximately 400 ft north of Bonita Avenue for a new southbound right-turn lane. In addition, a new traffic signal would be installed at the intersection of the new roadway with Bonita Avenue and Apache Trail.

#### **1.4.2.5 Apache Trail Shoulders from Bonita Avenue to the UPRR**

Apache Trail would be widened to provide 8 ft paved shoulders that could be used by bicyclists in each direction from Bonita Avenue to the UPRR crossing immediately south of the eastbound I-10/Morong Trail interchange roundabout. This connection provides non-motorized vehicle connections from the new roadway to old downtown Cabazon, the Desert Hills Premium Outlets Mall, the Cabazon Outlets Mall, and the Morongo Casino Resort and Spa.

#### **1.4.2.6 Connections to I-10 Interchanges**

During a full or partial closure of I-10, the Project would provide an emergency bypass between the I-10/Hargrave Street interchange to the west and the I-10/Morong Trail interchange to the east by connecting to existing roadways.

##### ***West End Connections to I-10***

From the I-10/Hargrave Street interchange, vehicles would travel south on Hargrave Street to Lincoln Street, then east along Lincoln Street to Hathaway Street and south to East Westward Avenue, where the new roadway begins. Vehicles could also exit I-10 at the Sunset Avenue, 22<sup>nd</sup> Street, and 8<sup>th</sup> Street interchanges, proceed south to Lincoln Avenue, and access the new roadway at East Westward Avenue.

No improvements are proposed at the I-10/Hargrave Street interchange or along Hargrave Street. Improvements along Lincoln Street would be limited to signing and potentially striping the existing roadway.

##### ***East End Connections to I-10***

From the I-10/Morong Trail interchange, vehicles would travel south along Apache Trail to Bonita Avenue to access the new roadway. Vehicles could also exit at the Main Street interchange, proceed west on Main Street, then south on Broadway and west on Bonita Avenue.

### 1.4.2.7 Utility Impacts

There are several utilities within the Project area (see Table 1.4.1 Utility Relocations Required) that would need to be moved or modified to allow construction of the new roadway. If there are conflicts with an existing utility, the utility would be relocated to generally cross perpendicular to the new roadway. Such crossings would occur within the graded roadbed. Utility protection in place, such as encasement, may also be necessary at certain locations. In addition, each utility agency would need to provide input regarding its current standards for relocation work.

**Table 1.4.1 Utility Relocations Required**

Alt. No.	Type/No. of Utility Relocation	Utility Company
5	Two overhead electric transmission lines, including up to six power poles	Southern California Edison
5	One electric distribution line, including up to three power poles	Southern California Edison
12	Two overhead electric transmission lines, including up to eight power poles	Southern California Edison
12	Two electric distribution lines, including up to seven power poles	Southern California Edison
12	One 16-inch natural gas line	Questar
12	Two 36-inch high-pressure natural gas lines	Southern California Gas
12	One fiber optics line	Level 3
12	Two segments of an abandoned fiber optics line (leased to Level 3)	Kinder Morgan

#### **Alternative 5 Utility Impacts**

The following utility relocations are proposed under Alternative 5.

##### ***Southern California Edison – Transmission***

Alternative 5 would require two Southern California Edison (SCE) transmission line relocations. The first transmission line is located south of Westward Avenue and traverses the Project area to the northeast. The transmission line would be relocated to parallel the proposed roadway alignment and cross perpendicular to the north, then connect back to the existing transmission line at an existing power pole. This work would require approximately two relocated and/or new power poles.

The second transmission line relocation, along the north side of Bonita Avenue accommodates the roadway widening to the north near Apache Trail. The work would require approximately four relocated and/or new power poles.

***Southern California Edison – Distribution***

The SCE distribution line along the south side of Bonita Avenue at its intersection with Apache Trail would require relocation to accommodate roadway widening. In addition, the distribution line would be undergrounded to the west through the proposed bridge across the San Gorgonio River. At the west side of the San Gorgonio River Bridge, the undergrounded distribution line would become aerial at an existing pole to reconnect with the existing facility to the west. This work would require approximately three relocated and/or new power poles.

***Alternative 12 (Preferred Alternative) Utility Impacts***

The following utility relocations are proposed under Alternative 12 (Preferred Alternative).

***Southern California Edison – Transmission***

Alternative 12 (Preferred Alternative) would require two SCE transmission line relocations. The first transmission line relocation is located in the southeast corner of the Morongo Band of Mission Indians Tribal Lands, just north of the proposed Smith Creek Bridge. This entails transmission line relocation to parallel the proposed roadway on each side to create a perpendicular crossing and join with the existing facility to the east and west. This work requires approximately four relocated and/or new power poles.

The second transmission line relocation includes the same SCE transmission line relocation described above for Alternative 5 at Bonita Avenue and Apache Trail.

***Southern California Edison – Distribution***

Alternative 12 (Preferred Alternative) would require two SCE distribution line relocations. The first distribution line is located along Westward Avenue north of the sewage treatment pond. The distribution line would need to be relocated to the north, parallel to the proposed roadway alignment, and then cross back over to the south to join with the existing distribution line. This relocation involves approximately four relocated and/or new power poles.

The second distribution line relocation includes the same SCE distribution line relocation described above for Alternative 5 at Bonita Avenue and Apache Trail.

***Questar***

Alternative 12 (Preferred Alternative) would require the relocation of a 16-inch Questar gas line located along Westward Avenue, adjacent to the sewage treatment

ponds. The gas line would be relocated to continue east along Westward Avenue to avoid the proposed drainage features and then angle to the southeast to join the existing gas line.

### *Southern California Gas*

Alternative 12 (Preferred Alternative) would require two relocations of a 36-inch high-pressure Southern California Gas line. The first gas line relocation is located along Westward Avenue, adjacent to the sewage treatment ponds. This Southern California Gas line parallels the existing 16-inch Questar gas line and would be relocated in parallel.

The second gas line relocation is located in the southwest corner of the Morongo Band of Mission Indians Tribal Lands north of Smith Creek. The gas line would be relocated to parallel the proposed roadway alignment and cross more perpendicular to connect back to the existing gas line.

### *Kinder Morgan (Leased by Level 3 with Fiber Optics)*

The abandoned Kinder Morgan fiber optic line currently being leased by Level 3 would require two relocations. The first line relocation is in the southwest corner of the Morongo Band of Mission Indians Tribal Lands north of Smith Creek. The existing fiber optic line extends through the proposed alignment at an angle point and would be relocated to parallel the proposed roadway alignment and avoid conflict with the roadway.

The second fiber optics line relocation is in the southeast corner of the Morongo Band of Mission Indians Tribal Lands, north of the proposed Smith Creek Bridge. To avoid crossing at a skew, the fiber optic line would be relocated to parallel the proposed roadway and cross perpendicular to join the existing facility to the east and west.

### **1.4.2.8 Other Project Elements**

Additional project design elements include the following:

- The Project includes measures necessary to establish stable banks where the roadway is immediately adjacent to or crosses Smith Creek and the San Gorgonio River. These measures include buried rock protection at creek slopes that are subject to erosion and similar buried rock creek protection to protect bridge abutments.
- The Project includes parallel turn-outs on both sides of the new roadway (located approximately 4,000 ft west of the San Gorgonio River Bridge) for CHP

- monitoring and enforcement of truck traffic to preclude truck drivers from using the new roadway to bypass the CHP vehicle inspection station on parallel segments of I-10. This strategy was discussed during several stakeholder meetings with the CHP in attendance and one focus meeting with the CHP. In addition to the proposed parallel turn-outs on both sides of the new roadway, additional features (such as cameras) may be considered during future design phases.
- All of the bridges and many of the local drainage culverts under the roadway will be able to accommodate wildlife movement. In addition, dedicated wildlife crossings would be added. The number of drainage culverts and wildlife crossings would be slightly different between the Build Alternatives. Wildlife would also be able to pass underneath bridges where the Build Alternatives cross Smith Creek and the San Gorgonio River (the Build Alternatives cross Smith Creek in different locations, while both Build Alternatives cross the San Gorgonio River in the same location).

#### **1.4.2.9 Incorporation of Engineering Studies**

As part of the development of the preliminary plans for Alternative 5 and Alternative 12 (Preferred Alternative), the County and its consultants prepared the *Preliminary Geotechnical Design Report* (August 2014), the *Location Hydraulic Study* (May 2015), and the *Drainage Report* (January 2020) for the Project. The recommendations of these studies are already incorporated as requirements into the Project design; these recommendations are cited in the appropriate environmental section but are not repeated as environmental mitigation measures.

#### **1.4.2.10 Ultimate Right-of-Way, Grading, and Structures**

Traffic forecast volumes estimate the need for four lanes on this roadway after completion of the initial two-lane roadway and prior to the 20-year planning horizon; therefore, a phased approach will be used, with two lanes being constructed initially and two additional lanes constructed within 20 years. If feasible, the ultimate 129 ft right-of-way for the future four-lane roadway will be acquired even though the Project will only construct a two-lane facility. Also, the County intends to grade the ultimate four-lane right-of-way, depending on the funds available. The extent of such grading will not be determined until preparation of final project plans. It is not considered cost effective to construct the full pavement improvements for the four-lane roadway until needed. In contrast, completing the grading all at once is considered to be cost effective.

The County also intends to grade for the ultimate four-lane right-of-way to avoid potential environmental impacts associated with widening in the future. Figure 1.4-5, Ultimate Right-of-Way, Grading, and Structures, demonstrates the extent of major features that are more appropriately placed in their ultimate location for the future four-lane roadway during construction of the initial two-lane facility. As a point of context, the amount of additional right-of-way needed on each side of the proposed roadway to construct the future four-lane roadway is 11 ft, for a total of 22 ft. Obtaining this right-of-way initially would allow the ultimate cuts, embankments, channel protection, and bridges to be placed to avoid potential environmental impacts that would result from disturbing the area a second time in the future and would avoid the costly relocation or widening of these features in the future. In addition, this approach would assist in establishing the permanent relocation of major transmission utilities in this area and would avoid impacting them a second time in the future.

As shown on Figure 1.4-5, Alternative 5 includes numerous cuts, embankments, channel protection areas, and bridges that span most of the length of this alternative. Alternative 12 (Preferred Alternative) is similar in its cuts, embankments, and bridges, but it also includes a new section of roadway through the tribal lands of the Morongo Band of Mission Indians where permanent right-of-way would not be acquired. Instead, a permanent easement would be necessary through tribal lands, and the Morongo Band of Mission Indians have expressed their preference for the grading of the ultimate four-lane facility at the same time the grading is conducted for the two-lane facility.

For both Alternative 5 and Alternative 12 (Preferred Alternative), the portion of the I-10 Bypass alignment along Westward Avenue would utilize existing right-of-way due to current constraints and the City of Banning's desire to address the four-lane facility in this roadway segment in the future due to the area's potential redevelopment. The Project includes minor improvements to the current two-lane roadway at the existing western connection for the I-10 Bypass within the City of Banning. Based on future City planning, including airport expansion, the location of the ultimate I-10 Bypass connection in the City may change.



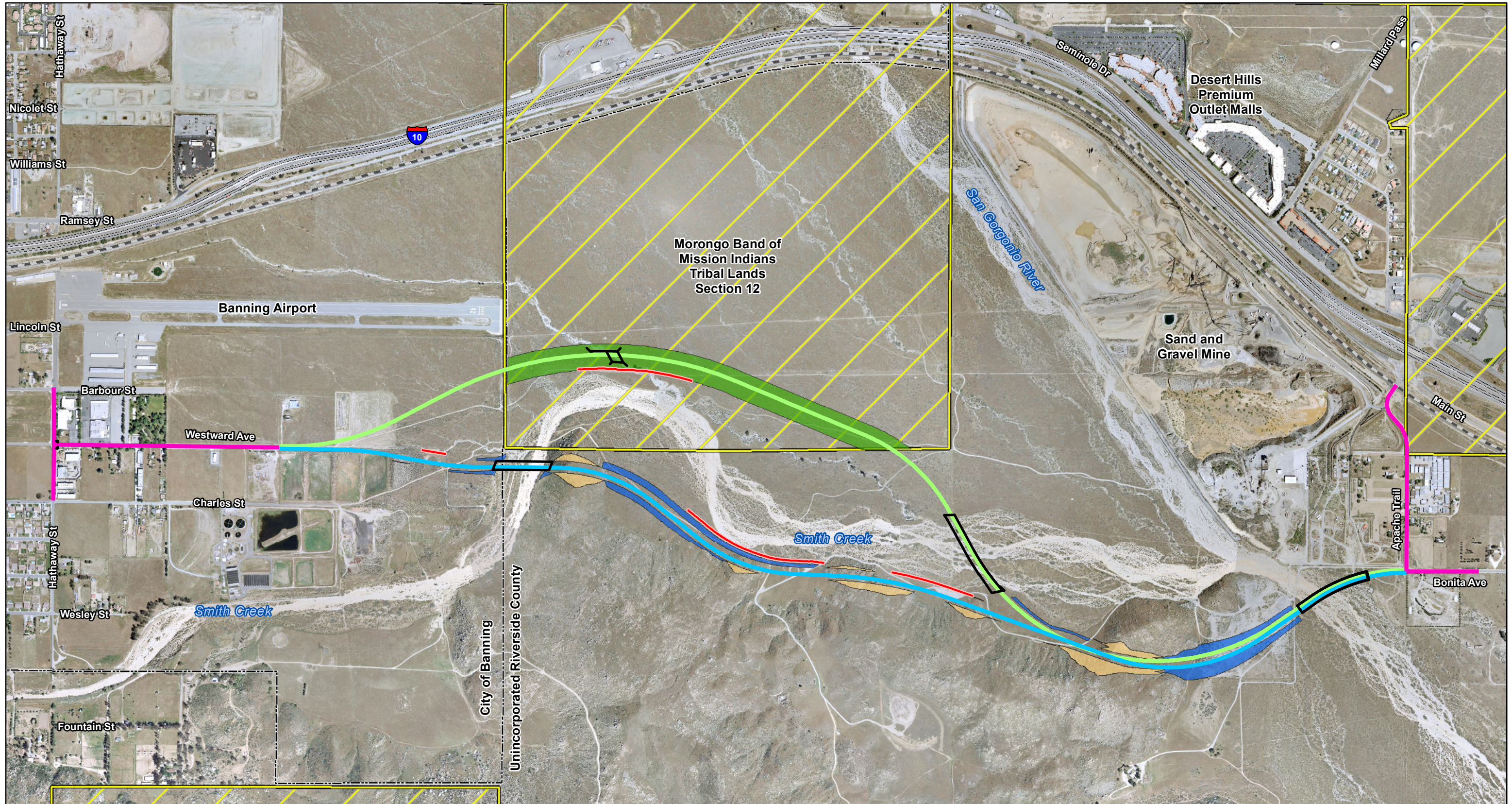
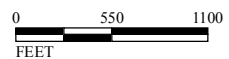


FIGURE I.4-5

LEGEND

- |                       |                             |  |
|-----------------------|-----------------------------|--|
| Alternatives 5 and 12 | Ultimate Channel Protection | Morongo Band of Mission Indians Tribal Lands |
| Alternative 5         | Ultimate Cut Slopes         | City/County Boundary                         |
| Alternative 12        | Ultimate Embankment         | Interstate 10                                |
| Proposed Bridges      | Easement Within Tribal Land | Union Pacific Railroad                       |



SOURCE: Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2015)

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Similarly, constructing the ultimate bridge structures for four lanes concurrently is considered to be cost effective and will avoid the requirements for the expensive partial widening of the bridges in the future. However, constructing the ultimate bridge width is still expensive, and funding may or may not be available to construct the ultimate bridges at the time of initial construction. The actual extent of the Project bridge construction will be determined during final design.

#### **1.4.2.11 Extent of Environmental Impacts Addressed in This Document**

The Project includes the following:

- Minor improvements to the existing two-lane I-10 Bypass roadway connection within the City of Banning;
- Acquisition of ultimate right-of-way for a four-lane roadway within County jurisdiction and lease of the ultimate easement with the Bureau of Indian Affairs;
- Ultimate grading of the Project for a two-lane roadway from 3,000 ft east of Hathaway Street to the City/County line and for a four-lane roadway from the City/County line to Apache Trail/Bonita Avenue intersection;
- Ultimate construction of the bridges over Smith Creek and the San Geronio River; and
- Paving two lanes and adding a median, paved shoulders, drainage, a shared-use path, and sidewalks.

Because widening the roadway to four lanes is not needed for approximately 20 years, a separate environmental approval document would be required at that time. This Final EIR/EA does not address potential environmental impacts associated with the ultimate paving or any other features that may be constructed in the future.

#### **1.4.3 Transportation System Management**

The Project itself is a Transportation System Management measure because it shifts local trips that must currently use I-10 between Banning and Cabazon to the local roadway system, thereby allowing more efficient use of I-10 for regional trips.

By providing paved roadway shoulders that could be used by bicyclists and a shared-use path that is also usable by pedestrians, the Project encourages the use of pedestrian and bicycle modes. In particular, the Project provides a more direct path for students who live in Cabazon and attend Banning High School.

The Project also provides an additional route between Banning and Cabazon that could be used by “The Pass” Transit System local transit network. Any use of the new roadway for transit would need to be considered by the local transit system operator.

#### **1.4.4 Cost Comparison**

The preliminary construction cost estimate for Alternative 5 is approximately \$77,900,000.

The preliminary construction cost estimate for Alternative 12 (Preferred Alternative) is approximately \$75,400,000.

These capital costs are representative of the costs associated with right-of-way acquisition, construction, and utility relocation.

### **1.5 Identification of the Preferred Alternative**

After comparing and weighing the benefits and impacts of all feasible alternatives (see Table 1.5.1 below for a summary of impacts identified for Alternative 5 and Alternative 12), the Lead Agency for CEQA (the County of Riverside) has identified Alternative 12 as the Preferred Alternative. Alternative 5 and Alternative 12 (Preferred Alternative) are evaluated at the same level of detail in this Final EIR/EA, allowing for a determination of the impacts and/or effects on the environment to be made. As stated above, Table 1.5.1 shows a summary of impacts identified for Alternative 5 and Alternative 12, and the table text is italicized where there are differences between the two Build Alternatives. The non-italicized text indicates the impacts are the same for both Build Alternatives. An Environmental Commitments Record (see Appendix C) lists measures that reduce impacts. These measures are also summarized in Table 1.5.1.

After comparing and weighing the benefits of the Build Alternatives and considering potential impacts and reasonable mitigation measures and comments received during the public review periods for the Draft EIR/EA and the Recirculated Draft EIR/EA, the Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative at a PDT meeting held at Caltrans District 8 on December 17, 2019. Per the analysis provided in the Draft EIR/EA, the Recirculated Draft EIR/EA and in this Final EIR/EA, Alternative 12 (Preferred Alternative) would result in lower impacts to environmental resources compared to Alternative 5. Specifically, Alternative 12 would result in fewer temporary and permanent impacts to alluvial fan sage scrub,

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
Land Use	<i>Alternative 5 would not require the acquisition of any Morongo Band of Mission Indians Tribal Land and would not provide access to Tribal Lands in Section 12.</i>	<i>Alternative 12 (Preferred Alternative) would require the acquisition of approximately 14 acres of Morongo Band of Mission Indians Tribal Land and would provide access to Tribal Lands in Section 12.</i>
	Alternative 5 is consistent with the 2015 Pass Area Plan Circulation Plan Map (Riverside County General Plan).	Alternative 12 (Preferred Alternative) is consistent with the 2015 Pass Area Plan Circulation Plan Map (Riverside County General Plan).
	<i>Alternative 5 crosses more land in the jurisdiction of Riverside County than Alternative 12 and provides greater improved access in those areas than Alternative 12 (Preferred Alternative).</i>	<i>Alternative 12 (Preferred Alternative) crosses less land in the jurisdiction of Riverside County than Alternative 5 and provides access to Morongo Band of Mission Indians Tribal Lands not provided in Alternative 5.</i>
	Alternative 5 is inconsistent with Policy 6 in the City of Banning General Plan Circulation Element (Alternative 5 does not meet the LOS D standard for that plan at three intersections). Alternative 5 is consistent with policies and programs in the 2016-2040 SCAG RTP/SCS, 2019 FTIP, WRMSHCP, and CVMSHCP.	Alternative 12 (Preferred Alternative) is inconsistent with Policy 6 in the City of Banning General Plan Circulation Element (Alternative 12 (Preferred Alternative) does not meet the LOS D standard for that plan at three intersections). Alternative 12 is consistent with policies and programs in the 2016-2040 SCAG RTP/SCS, 2019 FTIP, WRMSHCP, and CVMSHCP.
	Alternative 5 will not impact existing parks.	Alternative 12 (Preferred Alternative) will not impact existing parks.
Growth	<i>Alternative 5 could potentially result in minor shifts in the locations and timing of growth in the study area, but less than Alternative 12 (Preferred Alternative).</i>	<i>Alternative 12 (Preferred Alternative) could potentially result in greater shifts in the locations of growth in the study area than Alternative 5 because there is more land available for development north of Smith Creek, but Alternative 12 (Preferred Alternative) would result in the same potential shifts in the timing of growth as Alternative 5.</i>
	Alternative 5 would not result in the type or density of growth forecast in the study area based on adopted General Plans and other land use plans.	Alternative 12 (Preferred Alternative) would not result in changes in the type or density of growth forecast in the study area based on adopted General Plans and other land use plans.
Community Impacts	Alternative 5 would result in temporary impacts to residences and businesses, including partial restrictions to access (one lane would always remain open during construction) and potential detours; however, substantial disruptions to the local neighborhoods in the study area are not anticipated.	Alternative 12 (Preferred Alternative) would result in temporary impacts to residences and businesses, including partial restrictions to access (one lane would always remain open during construction), and potential detours; however, substantial disruptions to the local neighborhoods in the study area are not anticipated.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
	<i>Alternative 5 would require temporary construction easements from approximately 34 parcels for the purpose of construction vehicle, equipment, or personnel access and staging of construction materials.</i>	<i>Alternative 12 (Preferred Alternative) would require temporary construction easements from approximately 37 parcels, more than for Alternative 5.</i>
	Alternative 5 would not result in any full property acquisitions; No businesses or residences would be displaced.	Alternative 12 (Preferred Alternative) would not result in any full property acquisitions; No businesses or residences would be displaced.
	Alternative 5 would not affect residential populations; therefore, it would not have an adverse impact on population characteristics or any of the indicators of community cohesion.	Alternative 12 (Preferred Alternative) would not affect residential populations; therefore, it would not have an adverse impact on population characteristics or any of the indicators of community cohesion.
	<i>Alternative 5 would potentially result in 19 partial property acquisitions, but would avoid crossing into tribal lands that occur in Alternative 12 (Preferred Alternative).</i>	<i>Alternative 12 (Preferred Alternative) would potentially result in 20 partial property acquisitions, including approximately 14 acres of tribal lands as an easement for public road purposes.</i>
	Alternative 5 would result in beneficial impacts to community access, community facilities and services, and bicycle and pedestrian facilities, and since populations of minority and low-income residents occur within the Project area, these groups would experience the beneficial impacts associated with improved traffic circulation and infrastructure improvements.	Alternative 12 (Preferred Alternative) would result in beneficial impacts to community access, community facilities and services, and bicycle and pedestrian facilities, and since populations of minority and low-income residents occur within the Project area, these groups would experience the beneficial impacts associated with improved traffic circulation and infrastructure improvements.
Utilities/Emergency Services	<i>Alternative 5 would require protecting utilities in-place and relocating overhead utility lines in three locations. Two of these involve electric transmission lines that may require new poles meeting current standards. The third involves electric distribution with a section likely placed underground for a short distance across the San Gorgonio River in the bridge.</i>	<i>Alternative 12 (Preferred Alternative) would require protecting utilities in-place and relocating utilities in nine locations. Two of these involve overhead electric transmission lines that may require new poles meeting current standards; two involve overhead electric distribution relocations with one location that would likely be placed underground at the east end of the Project before crossing the San Gorgonio River in the bridge; three involve large diameter, high pressure natural gas lines that serve as regional supply; and two involve fiber optic communication lines.</i>
	Alternative 5 could result in minor delays in emergency response times during construction but would improve emergency response times in the long term.	Alternative 12 (Preferred Alternative) could result in delays in emergency response times during construction but would improve emergency response times in the long term.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
Traffic and Transportation	Alternative 5 is inconsistent with Policy 6 in the City of Banning General Plan Circulation Element (Alternative 5 does not meet the LOS D standard for that plan at three intersections). Alternative 5 is consistent with the relevant transportation programs and policies in the 2015 County of Riverside General Plan.	Alternative 12 (Preferred Alternative) is inconsistent with Policy 6 in the City of Banning General Plan Circulation Element (Alternative 12 (Preferred Alternative) does not meet the LOS D standard for that plan at three intersections). Alternative 12 (Preferred Alternative) is consistent with the relevant transportation programs and policies in the 2015 County of Riverside General Plan.
	Alternative 5 is anticipated to reduce overall vehicle miles traveled in the study area.	Alternative 12 (Preferred Alternative) is anticipated to reduce overall vehicle miles traveled in the study area.
	Alternative 5 would improve the AM peak hour LOS at the I-10 westbound ramps at Morongo Trail; PM peak hour LOS would remain at LOS F with reduced delay. At the I-10 eastbound ramps at Morongo Trail, Alternative 5 would improve the PM peak hour to LOS A with significantly reduced delay.	Alternative 12 (Preferred Alternative) would improve the AM peak hour LOS at the I-10 westbound ramps at Morongo Trail; PM peak hour LOS would remain at LOS F with reduced delay. At the I-10 eastbound ramps at Morongo Trail, Alternative 12 (Preferred Alternative) would improve the PM peak hour to LOS A with significantly reduced delay.
	Alternative 5 would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps/South 8 <sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project. In the Future Year (2038) condition, it is anticipated that traffic signals will be warranted at intersection Nos. 15 (Charles Street/South Hargrave Street) and 18 (North Hathaway Street/East Barbour Street). These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope.	Alternative 12 (Preferred Alternative) would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps/South 8 <sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project. In the Future Year (2038) condition, it is anticipated that traffic signals will be warranted at intersection Nos. 15 (Charles Street/South Hargrave Street) and 18 (North Hathaway Street/East Barbour Street). These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope.
	Alternative 5 will provide a bicycle/pedestrian connection between Banning and Cabazon.	Alternative 12 (Preferred Alternative) will provide a bicycle/pedestrian connection between Banning and Cabazon.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
Visual/Aesthetics	<p>Alternative 5 would alter the view of the landscape for one single family home when compared to existing conditions. The change in view of the existing landscape would be greater en route to or from the residence than the change in view from the single family home itself, which is set back into the hillside. The viewer group is small because there is only one single-family residence in this location; however, the residents' response to the change is anticipated to be high. From this viewpoint, the fill slope and culvert crossing is visible along with the foothill breach that would occur to the west. The resulting adverse change to visual quality and character at this viewpoint under Alternatives 5 would be high.</p>	<p>Alternative 12 (Preferred Alternative) would alter the view of the landscape for one single family home when compared to existing conditions. The change in view of the existing landscape would be greater en route to or from the residence than the change in view from the single family home itself, which is set back into the hillside. The viewer group is small because there is only one single-family residence in this location; however, the residents' response to the change is anticipated to be high. From this viewpoint, the fill slope and culvert crossing is visible along with the foothill breach that would occur to the west. The resulting adverse change to visual quality and character at this viewpoint under Alternatives 12 (Preferred Alternative) would be high.</p>
	<p><i>The primary visual impact under Alternative 5 is associated with five breaches of foothills compared to one breach of foothills in Alternative 12 (Preferred Alternative), Alternative 5 includes two bridges: one at the west end over Smith Creek and one at the east end over the San Gorgonio River. The elevated segment of Alternative 5 would include fill sections and visible side slopes as the road elevation rises and falls along the alignment through the foothills.</i></p>	<p><i>Alternative 12 (Preferred Alternative) includes two bridge structures. Under Alternative 12 (Preferred Alternative), the Smith Creek Bridge would be located more centrally along the alignment and would be substantially longer than the Alternative 5 bridge over Smith Creek. Alternative 12 (Preferred Alternative) remains close to the ground and within flat areas for approximately two-thirds of the alignment and breaches the foothills at only one location compared to the changing elevation along the alignment and the five breaches of the foothills in Alternative 5.</i></p>
	<p>Alternative 5 would not result in substantial impacts related to light and glare (the area is subject to nighttime lighting restrictions to protect the dark skies around the Palomar Observatory, included in the 2015 Riverside County General Plan).</p>	<p>Alternative 12 (Preferred Alternative) would not result in substantial impacts related to light and glare (the area is subject to nighttime lighting restrictions to protect the dark skies around the Palomar Observatory, included in the 2015 Riverside County General Plan).</p>
	<p>Short-term visual impacts would occur during construction of Alternative 5. Those impacts would include views of construction vehicles and equipment, clearing of existing vegetation, cut-and-fill grading activities, construction of the roadway and bridge construction staging areas, and trucks hauling materials. These visual impacts would end when the construction of Alternative 5 is complete.</p>	<p>Short-term visual impacts would occur during construction of Alternative 12 (Preferred Alternative). Those impacts would include views of construction vehicles and equipment, clearing of existing vegetation, cut-and-fill grading activities, construction of the roadway and bridge, construction staging areas, and trucks hauling materials. These visual impacts would end when the construction of Alternative 12 (Preferred Alternative) is complete.</p>



**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

<b>Environmental Topic</b>	<b>Impacts of Alternative 5</b>	<b>Impacts of Alternative 12 (Preferred Alternative)</b>
Cultural Resources	<i>Alternative 5 would result in indirect visual effects on the Deutsch Company Complex, the potential for discovery of cultural materials and/or human remains during construction, and potential impacts on eight bedrock milling features.</i>	<i>Alternative 12 (Preferred Alternative) would result in indirect visual effects on the Deutsch Company Complex, the potential for discovery of cultural materials and/or human remains during construction, and potential impacts on four bedrock milling features.</i>
Hydrology and Floodplains	<i>Alternative 5 would result in one longitudinal encroachment on Smith Creek.</i>	<i>Alternative 12 (Preferred Alternative) would not result in any longitudinal encroachments.</i>
	<i>Alternative 5 would result in an increase in the 100-year water surface elevation of less than 6 inches.</i>	<i>Alternative 12 (Preferred Alternative) would not result in an increase in the 100-year water surface elevation.</i>
	Alternative 5 bridges would meet the applicable FEMA and RCFCWCD minimum freeboard requirements.	Alternative 12 (Preferred Alternative) bridges would meet the applicable FEMA and RCFCWCD minimum freeboard requirements.
	Alternative 5 would result in the potential for erosion of exposed soil surfaces during construction.	Alternative 12 (Preferred Alternative) would result in the potential for erosion of exposed soil surfaces during construction.
	Alternative 5 would not result in significant floodplain encroachment, would not support incompatible floodplain development, and would not result in substantial impacts to natural and beneficial floodplain values.	Alternative 12 (Preferred Alternative) would not result in significant floodplain encroachment, would not support incompatible floodplain development, and would not result in substantial impacts to natural and beneficial floodplain values.
	Alternative 5 would not result in risks to life and property.	Alternative 12 (Preferred Alternative) would not result in risks to life and property.
Water Quality and Storm Water Runoff	Alternative 5 would have the potential to increase soil erosion from exposed bare soils during construction.	Alternative 12(Preferred Alternative) would have the potential to increase soil erosion from exposed bare soils during construction.
	<p><i>Alternative 5 would require the following permits:</i></p> <ul style="list-style-type: none"> <li>• <i>Section 401 Water Quality Certification</i></li> <li>• <i>Section 404 Permit</i></li> <li>• <i>Section 1602 Streambed Alteration Agreement</i></li> <li>• <i>Whitewater River Watershed MS4 Permit</i></li> <li>• <i>Construction General Permit</i></li> <li>• <i>City of Banning Municipal Code Chapter 13.24, Storm Water Management System</i></li> </ul>	<p><i>Alternative 12 (Preferred Alternative) would require the following permits:</i></p> <ul style="list-style-type: none"> <li>• <i>Section 401 Water Quality Certification</i></li> <li>• <i>Section 404 Permit</i></li> <li>• <i>Section 1602 Streambed Alteration Agreement</i></li> <li>• <i>Whitewater River Watershed MS4 Permit</i></li> <li>• <i>Construction General Permit</i></li> <li>• <i>City of Banning Municipal Code Chapter 13.24, Storm Water Management System</i></li> <li>• <i>Federal Construction Permit No. CAR 120001</i></li> </ul>
	The operation of Alternative 5 would not result in substantial adverse water quality impacts based on compliance with the requirements in the applicable permits.	The operation of Alternative 12 (Preferred Alternative) would not result in substantial adverse water quality impacts based on compliance with the requirements in the applicable permits.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
	Construction of Alternative 5 would result in an increased potential for erosion of exposed excavated soil and discharge of pollutants into receiving waters that would not be substantial after implementation of BMPs.	Construction of Alternative 12 (Preferred Alternative) would result in an increased potential for erosion of exposed excavated soil and discharge of pollutants into receiving waters that would not be substantial after implementation of BMPs.
Geology/Soils/ Seismic/ Topography	<i>Alternative 5 would result in approximately 1.2 million cubic yards of cut and 6,200 cubic yards of fill.</i>	<i>Alternative 12 (Preferred Alternative) would result in approximately 412,200 cubic yards of cut and 533,100 cubic yards of fill.</i>
	The improvements in Alternative 5 could result in increased potential for soil erosion and could be affected by ground motion and other seismic effects.	The improvements in Alternative 12 (Preferred Alternative) could result in increased potential for soil erosion and could be affected by ground motion and other seismic effects.
	During construction, Alternative 5 could result in increased potential for soil erosion and worker safety hazards, be affected by ground motion and other seismic effects, and require blasting in hard rock conditions.	During construction, Alternative 12 (Preferred Alternative) could result in increased potential for soil erosion and worker safety hazards, be affected by ground motion and other seismic effects, and require blasting in hard rock conditions.
Hazardous Waste	<i>Four areas of potential soil contamination from previous uses were identified. Site investigations of the four areas of potential contamination will be conducted to further evaluate the presence of contamination. If contaminated soil is identified, the extent and risk of the contamination will be assessed and remedial action may be taken.</i>	<i>No known areas of potential soil contamination have been identified. If contaminated soil is identified during construction, further assessment or remedial action may be necessary.</i>
Air Quality	Alternative 5 would reduce the number of vehicle trips crossing at-grade railroad tracks, which is anticipated to reduce the vehicle emissions associated with those trips.	Alternative 12 (Preferred Alternative) would reduce the number of vehicle trips crossing at-grade railroad tracks, which is anticipated to reduce the vehicle emissions associated with those trips.
	Alternative 5 is included in the conforming 2016–2040 SCAG RTP/SCS and is consistent with the scope and design concept in the 2019 FTIP.	Alternative 12 (Preferred Alternative) is included in the conforming 2016–2040 SCAG RTP/SCS and is consistent with the scope and design concept in the 2019 FTIP.
	Alternative 5 is not a project of air quality concern.	Alternative 12 (Preferred Alternative) is not a project of air quality concern.
	Alternative 5 is not anticipated to result in CO concentrations that would exceed the 1-hour or 8-hour CO standards.	Alternative 12 (Preferred Alternative) is not anticipated to result in CO concentrations that would exceed the 1-hour or 8-hour CO standards.
	Because Alternative 5 would reduce the traffic volumes on I-10, it would not result in any meaningful MSAT effects.	Because Alternative 12 (Preferred Alternative) would reduce the traffic volumes on I-10, it would not result in any meaningful MSAT effects.
	Construction activities for Alternative 5 would result in short-term ROG, CO, NO <sub>x</sub> , PM <sub>10</sub> , and PM <sub>2.5</sub> emissions.	Construction activities for Alternative 12 (Preferred Alternative) would result in short-term ROG, CO, NO <sub>x</sub> , PM <sub>10</sub> , and PM <sub>2.5</sub> emissions.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
Noise	Noise during construction of Alternative 5 would be intermittent, short term, and overshadowed by existing noise sources in the area; however, those would not be adverse impacts based on compliance with Caltrans Standard Specifications and Standard Special Provisions Section 14-8.01.	Noise during construction of Alternative 12 (Preferred Alternative) would be intermittent, short term, and overshadowed by existing noise sources in the area; however, those would not be adverse impacts based on compliance with Caltrans Standard Specifications and Standard Special Provisions Section 14-8.01.
	A total of 7 receptors would experience a traffic noise impact that would approach or exceed the Noise Abatement Criteria (NAC) under Alternative 5. Of the 7 receptors, 4 receptors would also experience a substantial noise increase of 12 dBA or more over their corresponding existing noise level. Noise abatement measures in the form of sound walls were considered for the 7 impacted receptors.	A total of 7 receptors would experience a traffic noise impact that would approach or exceed the Noise Abatement Criteria (NAC) under Alternative 12 (Preferred Alternative). Of the 7 receptors, 4 receptors would also experience a substantial noise increase of 12 dBA or more over their corresponding existing noise level. Noise abatement measures in the form of sound walls were considered for the 7 impacted receptors.
Natural Communities	<i>Alternative 5 would result in approximately 12.51 acres of temporary effects to Riversidean alluvial fan sage scrub based on incidental disturbances in construction areas and equipment staging areas.</i>	<i>Alternative 12 (Preferred Alternative) would result in approximately 12.43 acres of temporary effects to Riversidean alluvial fan sage scrub based on incidental disturbances in construction areas and equipment staging areas.</i>
	<i>Alternative 5 would result in approximately 0.55 acre of permanent effects to Riversidean alluvial fan sage scrub as a result of the removal of existing vegetation, encroachment into existing vegetation, shading effects, and fill material (e.g., dirt for grading activities, and concrete and steel for bridge columns).</i>	<i>Alternative 12 (Preferred Alternative) would result in approximately 0.04 acre of permanent effects to Riversidean alluvial fan sage scrub as a result of the removal of existing vegetation, encroachment into existing vegetation, shading effects, and fill material (e.g., dirt for grading activities, and concrete and steel for bridge columns).</i>
	Alternative 5 could result in short-term impacts on wildlife connectivity during construction but would provide for high-quality connectivity of habitats in Smith Creek and the San Gorgonio River in the long term.	Alternative 12 (Preferred Alternative) could result in short-term impacts on wildlife connectivity during construction but would provide for high-quality connectivity of habitats in Smith Creek and the San Gorgonio River in the long term.
	Alternative 5 will not result in substantial effects on the WRMSHCP Special Linkage Area in the BSA.	Alternative 12 (Preferred Alternative) will not result in substantial effects on the WRMSHCP Special Linkage Area in the BSA.
	Alternative 5 will not result in substantial effects on the CVMSHCP Conservation Areas or fluvial sand transport systems in the BSA.	Alternative 12 (Preferred Alternative) will not result in substantial effects on the CVMSHCP Conservation Areas or fluvial sand transport systems in the BSA.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
Wetlands and Other Waters	<i>Alternative 5 would result in 7.62 acres of temporary impacts to non-wetland jurisdictional waters and 8.36 acres of temporary impacts to CDFW streambeds.</i>	<i>Alternative 12 (Preferred Alternative) would result in 8.24 acres of temporary impacts to non-wetland jurisdictional waters and 10.80 acres of temporary impacts to CDFW streambeds.</i>
	<i>Alternative 5 would result in 0.31 acre of permanent impacts to non-wetland jurisdictional waters and 0.32 acre of permanent impacts to CDFW streambeds.</i>	<i>Alternative 12 (Preferred Alternative) would result in 0.12 acre of permanent impacts to non-wetland jurisdictional waters and 0.12 acre of permanent impacts to CDFW streambeds.</i>
	Alternative 5 will not temporarily or permanently impact wetland jurisdictional waters or CDFW riparian habitat.	Alternative 12 (Preferred Alternative) will not temporarily or permanently impact wetland jurisdictional waters or CDFW riparian habitat.
	Alternative 5 non-wetland jurisdictional waters provide low function and value for endangered species, fish habitat, nutrient production, flood storage, and sediment retention. Smith Creek and the San Gorgonio River provide high function and value for nutrient export, water purification, and groundwater discharge and recharge; and medium function and value for sediment detoxification. Along with three other drainages, the Creek and River provide high function and value for wildlife habitat.	Alternative 12 (Preferred Alternative) non-wetland jurisdictional waters provide low function and value for endangered species, fish habitat, nutrient production, flood storage, and sediment retention. Smith Creek and the San Gorgonio River provide high function and value for nutrient export, water purification, and groundwater discharge and recharge; and medium function and value for sediment detoxification. Along with three other drainages, the Creek and River provide high function and value for wildlife habitat.
	Alternative 5 will require compensatory mitigation to offset the loss of jurisdictional waters.	Alternative 12 (Preferred Alternative) will require compensatory mitigation to offset the loss of jurisdictional waters.
Plant Species	Alternative 5 is not anticipated to result in temporary or permanent effects on the Yucaipa onion and many-stemmed dudleya or any other special-status plant species.	Alternative 12 (Preferred Alternative) is not anticipated to result in temporary or permanent effects on the Yucaipa onion and many-stemmed dudleya or any other special-status plant species.
Animal Species	<i>Alternative 5 would result in 18.82 acres of temporary effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.</i>	<i>Alternative 12 (Preferred Alternative) would result in 3.07 ac of temporary effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.</i>
	Alternative 5 will not have substantial temporary or permanent effects on the burrowing owl or migratory birds.	Alternative 12 (Preferred Alternative) will not have substantial temporary or permanent effects on the burrowing owl or migratory birds.
	<i>Alternative 5 would result in 30.20 acres of permanent effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.</i>	<i>Alternative 12 (Preferred Alternative) would result in 4.24 ac of permanent effects to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat.</i>
Threatened and Endangered Species	Alternative 5 may temporarily or permanently affect the federally listed desert tortoise if that species is found in the Project construction area prior to the initiation of construction of Alternative 5.	Alternative 12 (Preferred Alternative) may temporarily or permanently affect the federally listed desert tortoise if that species is found in the Project construction area prior to the initiation of construction of Alternative 12 (Preferred Alternative).

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

<b>Environmental Topic</b>	<b>Impacts of Alternative 5</b>	<b>Impacts of Alternative 12 (Preferred Alternative)</b>
Invasive Species	Alternative 5 may temporarily or permanently result in the spread of invasive species.	Alternative 12 (Preferred Alternative) may temporarily or permanently result in the spread of invasive species.
Paleontology	Development of Alternative 5 has the potential to excavate into geologic units and formations that contain paleontologically significant vertebrate fossils.  A portion of the Alternative 5 alignment passes through deposits with high paleontological sensitivity, while the majority of the alignment passes through deposits with low or no paleontological sensitivity.	Development of Alternative 12 (Preferred Alternative) has the potential to excavate into geologic units and formations that contain paleontologically significant vertebrate fossils.  The majority of the Alternative 12 (Preferred Alternative) alignment passes through deposits with high paleontological sensitivity, while some of the alignment passes through deposits with low or no paleontological sensitivity.
Climate Change	Alternative 5 would improve traffic flow without increasing traffic volumes along I-10 between Banning and Cabazon, and would reduce vehicle idling times on I-10 and at railroad crossings. Therefore, Alternative 5 would reduce GHG emissions from idling vehicles and would not contribute to long-term GHG emissions.	Alternative 12 (Preferred Alternative) would improve traffic flow without increasing traffic volumes along I-10 between Banning and Cabazon, and would reduce vehicle idling times on I-10 and at railroad crossings. Therefore, Alternative 12 (Preferred Alternative) would reduce GHG emissions from idling vehicles and would not contribute to long-term GHG emissions.
Cumulative Impacts	Alternative 5 would result in improvements to circulation; three intersections would warrant further action to resolve level of service deficiencies.	Alternative 12 (Preferred Alternative) would result in improvements to circulation; three intersections would warrant further action to resolve level of service deficiencies.
	Alternative 5, when considered with the effects of other cumulative projects, would contribute incrementally to changes in the visual environment.	Alternative 12 (Preferred Alternative), when considered with the effects of other cumulative projects, would contribute incrementally to changes in the visual environment.
	Alternative 5 would result in potential significant impacts or substantial noise increases (under CEQA only). Where appropriate and possible, mitigation measures were recommended to reduce impacts to less than significant.	Alternative 12 (Preferred Alternative) would result in potential significant impacts or substantial noise increases (under CEQA only). Where appropriate and possible, mitigation measures were recommended to reduce impacts to less than significant.
	Alternative 5, when considered with the effects of other cumulative projects, would contribute incrementally to cumulative impacts related to natural communities and wildlife corridors.	Alternative 12 (Preferred Alternative), when considered with the effects of other cumulative projects, would contribute incrementally to cumulative impacts related to natural communities and wildlife corridors.
	Before mitigation, Alternative 5, when considered with the effects of other cumulative projects, would contribute incrementally to cumulative impacts to non-wetland jurisdictional waters, but would not contribute to cumulative impacts after mitigation.	Before mitigation, Alternative 12 (Preferred Alternative), when considered with the effects of other cumulative projects, would contribute incrementally to cumulative impacts to non-wetland jurisdictional waters, but would not contribute to cumulative impacts after mitigation.

**Table 1.5.1 Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative)**

Environmental Topic	Impacts of Alternative 5	Impacts of Alternative 12 (Preferred Alternative)
	Alternative 5, when considered with the effects of other cumulative projects, would contribute incrementally to impacts to one federally listed threatened species: the desert tortoise.	Alternative 12 (Preferred Alternative), when considered with the effects of other cumulative projects, would contribute incrementally to impacts to one federally listed threatened species: the desert tortoise.

Note: Text is *italicized* where the impacts differ between Alternative 5 and Alternative 12 (Preferred Alternative),

ac = acre(s)

BMPs = Best Management Practices

BSA = biological study area

Caltrans = California Department of Transportation

CDFW = California Department of Fish and Wildlife

CO = carbon monoxide

CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan

FEMA = Federal Emergency Management Agency

FTIP = Federal Transportation Improvement Plan

GHG = greenhouse gas

I-10 = Interstate 10

LOS = level of service

MS4 = Municipal Separate Storm Sewer System

MSAT = Mobile Source Air Toxics

NO<sub>x</sub> = nitrogen oxides

PM<sub>10</sub> = particulate matter less than 10 microns in size

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

RCFCWCD = Riverside County Flood Control and Water Conservation District

ROG = reactive organic gases

RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy

SCAG = Southern California Association of Governments

USACE = United States Army Corps of Engineers

WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

fewer permanent impacts to non-wetland jurisdictional waters, and fewer temporary and permanent impacts to Los Angeles pocket mouse WRMSHCP Mammal Species Survey Area habitat. For cultural resources, Alternative 12 (Preferred Alternative) has the potential to impact fewer bedrock milling features. In addition, Alternative 12 (Preferred Alternative) would not require any longitudinal encroachments into Smith Creek and would not increase the 100-year water surface elevation. No areas of known contamination have been identified in the Project area for Alternative 12 (Preferred Alternative), compared to four areas of known contamination identified for Alternative 5.

While Alternative 12 (Preferred Alternative) would require an easement within Morongo Band of Mission Indians Tribal Land, the Morongo Band of Mission Indians supports this alternative, as documented in a letter dated February 21, 2013 and another dated September 25, 2018 (copies of the letters are included in Chapter 4, Comments and Coordination, of the Draft EIR/EA). Alternative 12 is identified as the Preferred Alternative in this Final EIR/EA; therefore, the County and the Morongo Band of Mission Indians will need to enter into an agreement for leasing the land necessary to accommodate this facility.

An easement within tribal land would not be considered an adverse impact, as the landowner (Morongo Band of Mission Indians) would consider increased access a beneficial impact of Alternative 12 (Preferred Alternative).

The Visual/Aesthetics impacts of Alternative 12 (Preferred Alternative) would also be fewer, as the alignment only breaches the foothills at one location and would remain relatively close to the ground and within flat areas for the majority of the Project. In contrast, Alternative 5 would result in five breaches of the foothills and would include fill sections and visible side slopes as the road elevation rises and falls along the alignments through the foothills.

Alternative 5 and Alternative 12 (Preferred Alternative) would both result in potentially significant impacts (under CEQA only) to Land Use, Transportation and Traffic, Visual/Aesthetics, and Noise. There are no reasonable alternatives that would avoid such impacts. However, while Alternative 5 and Alternative 12 (Preferred Alternative) would result in adverse effects to Land Use related to inconsistency with applicable plans for intersection operations, only Alternative 12 (Preferred Alternative) would be consistent with the Draft General Plan and Draft Long-Range Transportation Plan of the Morongo Band of Mission Indians. In addition, Alternative

12 (Preferred Alternative) would lessen the severity of the impacts to Visual/Aesthetics with only one breach of the foothills and would result in fewer impacts to other environmental topics as described above.

In addition to superior environmental performance, Alternative 12 (Preferred Alternative) meets the Purpose and Need of the Project.

Under CEQA, the County will certify the following before any project approval:

- EIR compliance with CEQA;
- Adoption of Findings of Fact for all significant impacts identified; and
- Adoption of a Statement of Overriding Considerations for any impacts that will not be mitigated below a level of significance.

The County will then file a Notice of Determination with the State Clearinghouse that will identify whether the Preferred Alternative will have significant impacts, whether mitigation measures were included as conditions of project approval, that findings were made, and that a Statement of Overriding Considerations was adopted.

Under NEPA, Caltrans, as assigned by the FHWA, will determine whether implementation of the Preferred Alternative, taken as a whole, will have a significant adverse impact on the environment. If the determination is “No,” Caltrans will issue a Finding of No Significant Impact.

### **1.5.1 Alternatives Considered but Eliminated from Further Discussion Prior to Draft EIR/EA**

During the initial establishment of alternatives, the County undertook an extensive and elaborate alternatives screening process, which is described in Table 1.5.2. The following sections summarize the process involved for that study and its findings. In addition to the alternatives described in Table 1.5.2, the use of reversible lanes as part of the permanent traffic operation was also considered as an alternative, but was not carried forward due the fact that the forecasted traffic operates at an acceptable level-of-service with the designated minimum number of lanes (one lane in each direction). Furthermore, peak hour traffic data do not show a substantial directional differential that would indicate a need for reversible lanes. For opening year, the AM peak hour data differential is 12 percent higher in the eastbound direction and the PM peak hour differential is 9 percent higher in the westbound direction. The future year split reduces to 8 percent (AM) and 6 percent (PM). These are very low differentials that do not indicate a demand for reversible lanes. In addition, implementing a roadway



**Table 1.5.2 Alternatives Not Carried Forward**

Alternative Number	Alternative Description	Reasons for Removal
1	Located south of I-10, Alternative 1, would extend east from Westward Avenue to connect to the intersection of Bonita Avenue/ Apache Trail, crossing Smith Creek by way of two new bridges. This would impact approximately 6.2 acres of jurisdictional waters as well as the occupied habitat of the Los Angeles Pocket Mouse.	Adverse impact to biological resources (to waters of the United States, greater than 0.5 acre, and to Los Angeles pocket mouse).
2	Located south of I-10, Alternative 2 would extend east from Westward Avenue to connect to the intersection of Bonita Avenue/ Apache Trail, crossing Smith Creek by one new bridge and crossing the San Gorgonio River. This would impact a total of 12.6 acres of USACE jurisdiction as well as the occupied habitat of the Los Angeles pocket mouse.	Adverse impact to biological resources (to waters of the United States greater than 0.5 acre, and to Los Angeles pocket mouse).
3	Located south of I-10, Alternative 3 would extend east from Westward Avenue to connect to the intersection of Bonita Avenue/ Apache Trail, crossing Smith Creek by one new bridge and crossing the San Gorgonio River, while also filling several channels that feed Smith Creek. This would impact up to 6.2 acres of jurisdictional waters as well as the occupied habitat of the Los Angeles pocket mouse.	Adverse impact to biological resources (to waters of the United States greater than 0.5 acre, and to Los Angeles pocket mouse).
4	Located south of I-10, Alternative 4 would extend east from Westward Avenue to connect to the intersection of Bonita Avenue/ Apache Trail crossing Smith Creek by one new bridge; however, it then remains south of the delineated waters of Smith Creek until crossing the San Gorgonio River bridge. This would require additional cuts more than 150 ft in height into hillsides. This alignment completely avoids encroachment into jurisdictional waters, but still requires filling channels that feed Smith Creek. This alternative would still impact the occupied habitat of the Los Angeles pocket mouse.	Adverse impact to biological resources (to waters of the United States greater than 0.5 acre, and to Los Angeles pocket mouse). Potential visual impacts from additional cuts.

**Table 1.5.2 Alternatives Not Carried Forward**

Alternative Number	Alternative Description	Reasons for Removal
7	Located north of I-10, Alternative 7 would connect Ramsey Street with Seminole Drive. It would cross into Morongo Band of Mission Indians Tribal Lands that contain Tribal facilities and residential areas, and would increase traffic volumes at existing interchanges and roads (e.g., the I-10/Malki Road interchange; I-10/Morongo Trail interchange; and Seminole Drive between Malki Road and Morongo Trail).	Inability to acquire right-of-way from Morongo Band of Mission Indians as this alternative would require right-of-way north of I-10 near tribal residences. Impacts to local circulation. Alternative 7 is also inconsistent with the FTIP, land uses identified in the County General Plan, and Circulation Element of the Riverside County General Plan, which shows the roadway south of I-10, and is, therefore, inconsistent with the Project purpose. Alternative 7 would require bringing at least two non-standard freeway interchanges up to full standard. The cost of bringing these interchanges up to full standard would be prohibitive, making this alternative infeasible.
8	Located between I-10 and the existing UPRR right-of-way, Alternative 8 would follow the alignment of a defunct roadway that was known as Johnson Lane. Given the limited space between the railroad and I-10, this alternative would be limited to two lanes (one in each direction) and would not likely meet current design standards. This alternative would also require additional construction to connect Hargrave Street to the Ramsey Street interchange.	Inability to acquire right-of-way as this alternative would require the relocation of either I-10 or the railroad, which is considered infeasible. Failure to meet County and Caltrans design standards. Alternative 8 is also inconsistent with the FTIP, the land uses identified in the County General Plan, and the Circulation Elements of both the Riverside County General Plan and the Banning General Plan, neither of which show a roadway between I-10 and the UPRR tracks. Therefore, Alternative 8 is inconsistent with the Project purpose.
9	Located south of I-10, Alternative 9 would connect Westward Avenue and Bonita Avenue by constructing a new roadway north of Smith Creek that would cross over the San Gorgonio River via a single new bridge. This alternative would cross through both Morongo Band of Mission Indians Tribal Lands and lands owned by Robertson’s Ready Mix. Overall, this would impact 4.6 acres of jurisdictional waters.	Adverse impact to biological resources (to waters of the United States greater than 0.5 acre).
10	Located south of I-10, Alternative 10 would connect Barbour Street to the intersection of Bonita Avenue/Apache Trail rather than using Westward Avenue. Barbour Street, which is primarily a residential street, parallels Westward Avenue to the north. This alternative would result in circulation impacts in a mostly residential area.	Adverse impacts to local circulation, by inducing additional traffic along residential roadways.

**Table 1.5.2 Alternatives Not Carried Forward**

Alternative Number	Alternative Description	Reasons for Removal
11	Located south of I-10, Alternative 11 would connect Charles Street to the intersection of Bonita Avenue/Apache Trail rather than Westward Avenue. Charles Street is a primarily residential street that parallels Westward Avenue to the south, and Banning High School is located at the Charles Street/San Gorgonio Avenue intersection. This alternative would result in circulation impacts in a mostly residential area.	Adverse impacts to local circulation, by inducing additional traffic along residential roadways.
13	Located south of I-10, Alternative 13 would connect Westward Avenue to the intersection of Bonita Avenue/Apache Trail but would avoid using a bridge to cross Smith Creek. New roadway would curve to the northeast, cross into Morongo Band of Mission Indians Tribal Lands, and then generally follow the north edge of Smith Creek. It would cross the San Gorgonio River at its confluence with Smith Creek via a bridge. This alternative would also require an acquisition of approximately 7.6 acres from the Robertson's Ready Mix site.	Failure to meet hydraulic standards, right-of-way impacts, and impacts to mineral resources. The hydraulic uncertainties render this alternative infeasible. In addition, Alternative 13 would require the relocation of an existing wind turbine located on the Robertson's Ready Mix property at a cost of up to \$10 million. Adverse impact to biological resources (to waters of the United States greater than 0.5 acre).
14	Located south of I-10, Alternative 14 begins at Hargrave Street and parallels the existing UPRR alignment north of the Banning Airport until reaching Morongo Band of Mission Indians Tribal Lands. The alternative then turns south, crosses through Morongo Band of Mission Indians Tribal Lands, meets up with a proposed new bridge over Smith Creek, and terminates at the intersection of Bonita Avenue and Apache Trail	Failure to meet design standards. Alternative 14 is also inconsistent with the FTIP and Circulation Elements of both the Riverside County General Plan and the Banning General Plan, neither of which show a roadway between the UPRR tracks and Banning Municipal Airport. Therefore, Alternative 14 is inconsistent with the Project purpose. In addition, it is considered infeasible as the acquisition of right-of-way would not likely be granted by Morongo Band of Mission Indians due to the greater amount of right-of-way required from the Morongo Band of Mission Indians under Alternative 14 compared to right-of-way required from the Morongo Band of Mission Indians under Alternative 12 (Preferred Alternative),

I-10 = Interstate 10

UPRR= Union Pacific Railroad

USACE = United States Army Corps of Engineers

configuration for reversible lanes within the streets of Banning would be challenging since there are turns at four-legged intersections and freeway ramp intersections that are not designed to accommodate reversible lanes. For these reasons, there is no benefit to considering reversible lanes, and this alternative was eliminated from further discussion.

### **1.5.2 Alternatives Development**

Using an extensive coordination process with local and regional agencies, resource agencies, the Morongo Band of Mission Indians, property owners, and members of the public, the County and its consultant staff developed 13 preliminary project alignments. The original Alternative 6 was a minor variation of Alternative 5 with a slight difference in curve radii. Given their small differences, Alternatives 5 and 6 were combined into one alternative (Alternative 5), and Alternative 6 was dropped as a separately-listed alternative. An additional alternative, Alternative 14, was developed in response to public comments. Because Alternative 6 was dropped, 13 preliminary alignments were considered.

The County then conducted a preliminary engineering and environmental review of these 13 Build Alternatives. These Alternatives were numbered 1 through 5 and 7 through 14 (see Figure 1.5-1). Build Alternatives that failed to meet the Project purpose, could not be feasibly implemented, and/or had greater environmental impacts than others were removed from consideration in a process called “alternative screening.”

### **1.5.3 Summary of Alternative Screening Criteria**

Alternative screening is conducted by establishing a set of alternative screening criteria consistent with NEPA/CEQA guidelines. The three basic criteria used to screening alternatives included the following:

- **Purpose and Need:** Does the alternative meet the Project’s purpose and need? If not, then the alternative may be removed from consideration.
- **Feasibility:** Is the alternative feasible? In other words, does the Project sponsor have the ability to implement the alternative? If the alternative is infeasible, then the alternative may be removed from consideration.
- **Environmental Factors:** Does the alternative have greater environmental impacts than another alternative without offsetting advantages? If so, then the alternative may be removed from consideration.

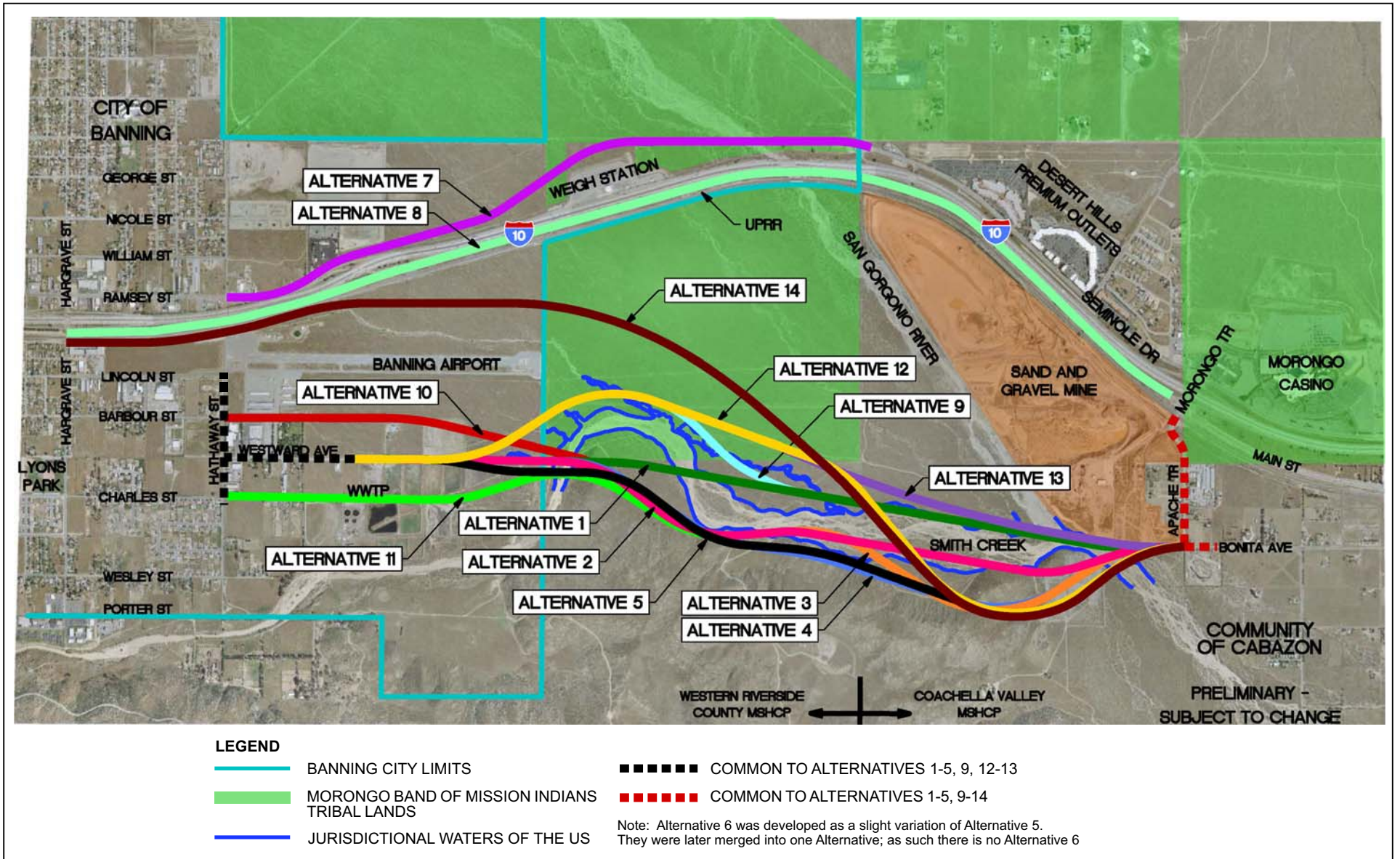
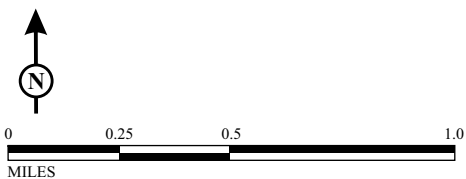


FIGURE 1.5-1



SOURCE: Kimley-Horn and Associates, Inc.

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I-10 Bypass: Banning to Cabazon  
Preliminary Alternatives Considered

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Key environmental constraints that were considered in the development and analysis of the alternatives include: (1) the ability of the County to acquire the necessary right-of-way, (2) impacts to waters of the U.S. and waters of the State of California, (3) requirements of the Local Habitat Conservation Plans, and (4) the extent of hillside grading. In addition to these key environmental constraints, four potentially adverse impacts were identified that would result in unacceptable environmental impacts: (1) induced traffic on residential streets, (2) major cuts from hillside grading, (3) impacts to Los Angeles Pocket Mouse habitat, and (4) impacts to State and County-designated Mineral Resource Recovery Areas.

Alternatives 1 through 4, 9, and 13 were screened out as infeasible due to substantially greater environmental impacts, specifically to biological resources. Alternatives 10 and 11 were screened out due to adverse impact to local traffic circulation. Alternative 13 would also have an adverse effect on mineral resources. Alternatives 7, 8, and 14 are all inconsistent with applicable plans, and it is unlikely the necessary right-of-way acquisitions could be obtained from the Morongo Band of Mission Indians.

#### **1.5.4 Summary of Recommendations**

In summary, the alternative screening analysis determined that 12 of the 14 Build Alternatives considered failed one or more of the screening criteria as summarized in Table 1.5.2. Alternatives that failed to meet the Project purpose, were not feasible, and/or had adverse environmental effects were recommended to be screened out and not carried forward into the environmental impact analysis.

Only Alternative 5 and Alternative 12 (Preferred Alternative) met the screening criteria, were recommended for further environmental consideration, and therefore are fully evaluated in Chapters 2 and 3 of this document. Although the No Build Alternative does not address the Project's Purpose and Need, it is also carried forward into the environmental analysis to provide a baseline for comparison.

### **1.6 Permits and Approvals Needed**

Permits, reviews, and approvals required for project construction are shown in Table 1.6.1. Additionally, utility relocations are shown in Table 1.4.1 and potential relocations under Alternative 5 and Alternative 12 (Preferred Alternative) are shown in Section 2.3, Community Impacts, in Table 2.3.6 (Partial Acquisitions, TCEs, and Easements Anticipated Under Alternative 5) and Table 2.3.8 (Partial Acquisitions, TCEs, and Easements Anticipated Under Alternative 12 [Preferred Alternative]).

**Table 1.6.1 Permits and Approvals Required**

Agency	Permit/Approval	Status
California Department of Transportation (Caltrans)	As assigned by the FHWA, approval of a Finding of No Significant Impact; approval of Preferred Alternative	Caltrans, as assigned by the FHWA, approved the Preferred Alternative and the Finding of No Significant Impact in 2021
Bureau of Indian Affairs (BIA)	Approval of any lease for Morongo Band of Mission Indians Tribal lands (Alternative 12 [Preferred Alternative] only)	The County and Caltrans, (as assigned by the FHWA), approved Alternative 12 as the Preferred Alternative. The County will coordinate with the BIA regarding approval of the lease for Morongo Band of Mission Indians Lands during the right-of-way acquisition phase of the Project.
Riverside County Airport Land Use Commission (RCALUC)	RCALUC review and approval	The County and Caltrans (as assigned by the FHWA), approved Alternative 12 as the Preferred Alternative. The January 30, 2020 RCALUC letter included in Chapter 4 of this Final EIR/EA documents the ALUC's and the Federal Aviation Administration's (FAA) determination that the I-10 Bypass Project is conditionally consistent with the Banning Municipal Airport Land Use Plan.
United States Fish and Wildlife Service (USFWS)	Streamlined Section 7 Consultation for the California gnatcatcher (CAGN) on WRMSHCP lands and desert tortoise on CVMSHCP lands. Two Section 7 Consultations for the following: desert tortoise and CAGN on Tribal Lands; and Section 7 Consultation for CAGN on CVMSHCP lands. All consultations are for Alternative 12 (Preferred Alternative) only.	Public review of the Recirculated Draft EIR/EA is complete and the PDT identified Alternative 12 as the Preferred Alternative for construction. The January 8, 2021 Biological Opinion (BO) prepared by the USFWS determined the Project is not likely to adversely affect gnatcatcher within the CVMSHCP based on historic occurrence information, quality of potentially suitable habitat, and the proposed conservation measures. The USFWS BO determined the Project is consistent with the WRMSHCP and the USFWS does not anticipate any adverse effects to the gnatcatcher that were not previously addressed by the WRMSHCP. The USFWS BO also determined the Project is not likely to jeopardize the continued existence of gnatcatcher on Tribal Lands. The USFWS withdrew their request for consultation on desert tortoise due to the lack of suitable habitat.
United States Army Corps of Engineers (USACE)	Section 404 Nationwide Permit	Application to be submitted during final design. The Navigable Waters Protection Rule (NWPR), effective June 22, 2020, has reduced federal jurisdiction of waters of the US to exclude previously considered waters, such as ephemeral waters that only flow in direct response to precipitation drainages. It is uncertain whether USACE would issue a 404 permit even if requested. However, if all features do not meet NWPR criteria for jurisdiction, some form of waters permit will be needed.
Federal Highway Administration (FHWA)	Air Quality Conformity Analysis Determination Letter	FHWA issued the Air Quality conformity determination on August 19, 2020
California Department of Fish and Wildlife (CDFW)	1602 Agreement for Streambed Alteration; also part of the Project review process for the WRMSHCP and the CVMSHCP	Application to be submitted during final design



**Table 1.6.1 Permits and Approvals Required**

Agency	Permit/Approval	Status
Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application to be submitted during final design. If USACE declines to issue a 404, the project would need to apply for Waste Discharge Requirements (WDRs) from RWQCB. The WDRs would serve as authorization under Porter-Cologne.
State Historic Preservation Officer (SHPO)	Concurrence with cultural resource findings	SHPO concurrence received May 4, 2017
Riverside County Regional Conservation Authority	Consistency with the WRMSHCP	The Final DBESP, was approved on October 1, 2020
Riverside County Board of Supervisors	Certification of the Final EIR, Findings, and Statement of Overriding Considerations; approval of the Preferred Alternative	Public review of the Recirculated Draft EIR/EA and Response to Comments are complete and the PDT identified Alternative 12 as the Preferred Alternative. The Riverside County Board of Supervisors will consider approval of the Final EIR along with the Findings, Statement of Overriding Considerations, and the Preferred Alternative in 2021.
Coachella Valley Conservation Authority	Consistency with the CVMSHCP	Public review of the Recirculated Draft EIR/EA is complete and the PDT identified Alternative 12 as the Preferred Alternative for construction. The Coachella Valley Conservation Authority confirmed the Project is consistent with the CVMSHCP on June 11, 2020.
City of Banning	Approval for modification of streets in the City of Banning	Execute a Cooperative Agreement between the County and City after the environmental document phase
Riverside County Transportation Department	Approval of plans for modification of Riverside County roadways	To be obtained prior to construction

CEQA = California Environmental Quality Act

CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan

DBESP = Determination of Biologically Equivalent or Superior Preservation

EIR = Environmental Impact Report

FHWA = Federal Highway Administration

WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

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## **Chapter 2**      Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

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Chapter 2 describes the existing affected environment in the study area for the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project). The affected environment discusses the base environmental conditions that are used to evaluate the environmental effects of the Build Alternatives.

The National Environmental Policy Act (NEPA) uses the terms, “impact,” “effect,” and “consequences” synonymously. NEPA distinguishes three types of impacts: direct, indirect, and cumulative.

Sections 2.1 through 2.22 of this Environmental Impact Report/Environmental Assessment (EIR/EA) analyze the permanent and temporary direct and indirect impacts of the No Build and Build Alternatives. Sections 2.1 through 2.22 cover the following environmental topics:

- 2.1: Land Use
- 2.2: Growth
- 2.3: Community Impacts
- 2.4: Utilities/Emergency Services
- 2.5: Traffic and Transportation/Pedestrian and Bicycle Facilities
- 2.6: Visual/Aesthetics
- 2.7: Cultural Resources
- 2.8: Hydrology and Floodplains
- 2.9: Water Quality and Storm Water Runoff
- 2.10: Geology/Soils/Seismic/Topography
- 2.11: Paleontology
- 2.12: Hazardous Waste
- 2.13: Air Quality
- 2.14: Noise
- 2.15: Natural Communities
- 2.16: Wetlands and Other Waters

- 2.17: Plant Species
- 2.18: Animal Species
- 2.19: Threatened and Endangered Species
- 2.20: Invasive Species
- 2.21: Energy
- 2.22: Cumulative Impacts

As part of the scoping and environmental analysis carried out for the Project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document:

- **Coastal Zone:** The study area is not located in the Coastal Zone. Therefore, there would be no effects to coastal resources.
- **National Wild and Scenic Rivers:** There are no rivers in the study area that are listed in the National Inventory of Wild and Scenic Rivers.
- **Recreation:** There are no existing local or regional parks along the proposed alignment. In addition, the Project does not include construction or expansion of recreational facilities.
- **Farmlands and Timberlands:** There are no timberlands and no prime, unique, or soils of local significance for farmlands in the study area.
- **National Fisheries:** This Project is located outside of National Marine Fisheries Service (NMFS) jurisdiction; therefore, an NMFS species list is not required and no effects to NMFS species are anticipated.

## **HUMAN ENVIRONMENT**

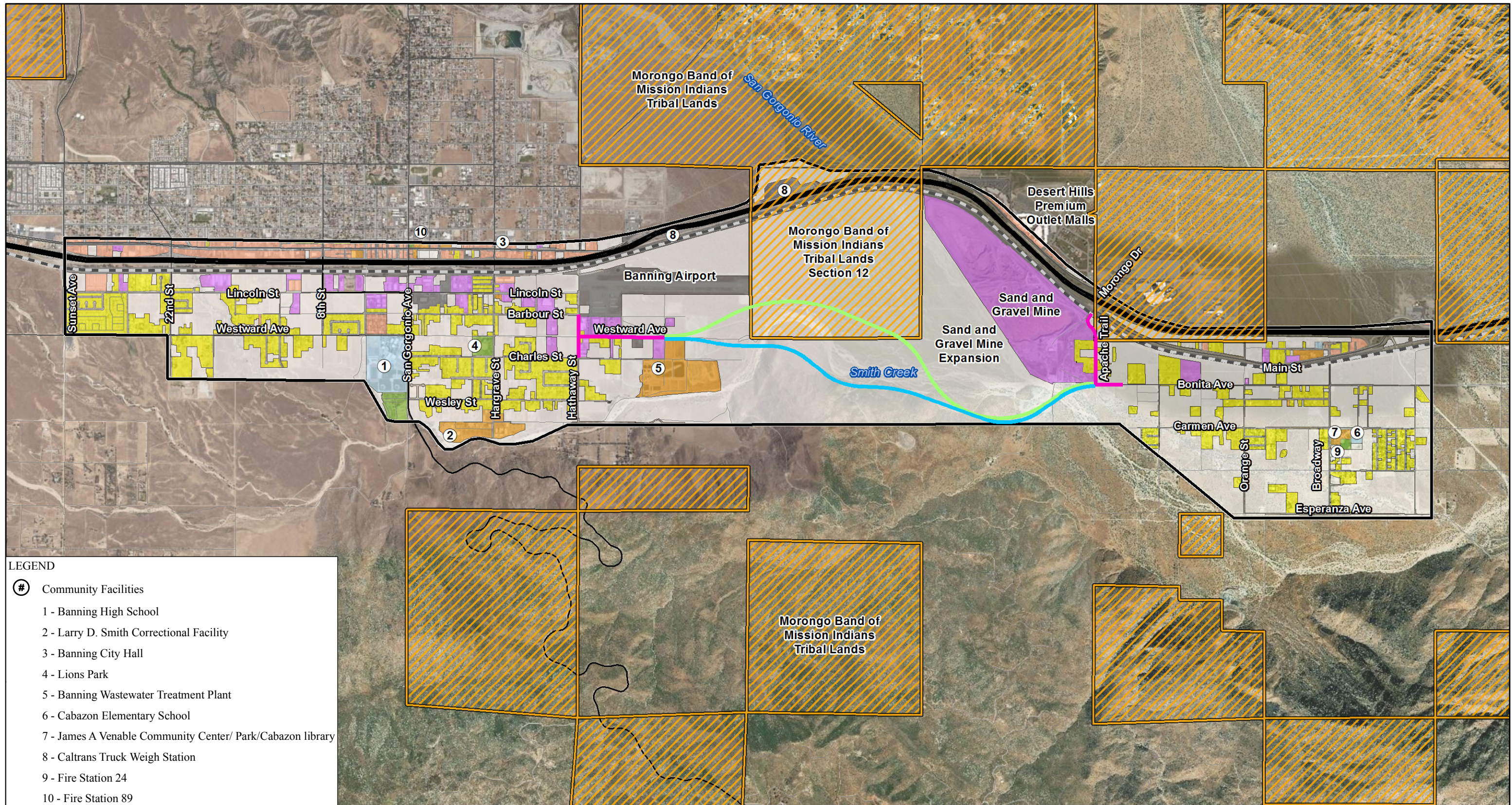
### **2.1 Land Use**

This section is based on information from the *Community Impact Assessment* (May 2017) prepared for the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project). The study area for this Land Use section is the *Community Impacts Assessment* study area. As shown on Figure 2.1-1, the study area includes portions of the City of Banning (Banning), the community of Cabazon (Cabazon), unincorporated Riverside County (County), the Morongo Band of Mission Indians Tribal Land, the Robertson's Ready Mix Sand and Gravel Mine (RRM) Cabazon Operation, Banning Municipal Airport, and the Union Pacific Railroad (UPRR) south of I-10. On the north side of I-10, the study area boundary follows Ramsey Street in Banning and the alignment of I-10 from Sunset Avenue on the west to Cabazon on the east and ends just east of the Seminole Drive off-ramp (slightly west of Deep Creek Road). The southern boundary of the study area extends east from Sunset Avenue at Westward Avenue in the City of Banning, continuing southeast to Victory Avenue at 22<sup>nd</sup> Street. Then, the study area then cuts across vacant land, extending south to encompass Banning High School, the Banning Stagecoach KOA, and the Larry D. Smith Correctional Facility. At this point, the study area continues south of Smith Creek and the Alternative 5 alignment, continuing south to Esperanza Avenue in Cabazon. The study area's westernmost border is Sunset Avenue in the City of Banning, and the easternmost border at Almond Street.

Note that land use impacts evaluated for the Project consider right-of-way and grading for the ultimate four-lane facility for portions of the Project east of existing Westward Avenue to the intersection with Apache Trail and Bonita Avenue. For the portions of the Project utilizing existing Westward Avenue in the City of Banning from Hathaway Street to approximately 4,000 ft to the east, the existing two-lane roadway is improved within existing right-of-way. The limits of the Project are located entirely within Census Tract 438.13, which is a large tract encompassing sparsely populated and unpopulated lands. Census Tract 443 is adjacent to the Project, west of Hathaway Street, and includes most areas of Banning south of I-10. The study area encompasses parts of these two tracts. The demographics of these two local census tracts are used to characterize the overall study area. The boundaries of these census tracts are shown on Figure 2.1-1.

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- LEGEND**
- Ⓝ Community Facilities
  - 1 - Banning High School
  - 2 - Larry D. Smith Correctional Facility
  - 3 - Banning City Hall
  - 4 - Lions Park
  - 5 - Banning Wastewater Treatment Plant
  - 6 - Cabazon Elementary School
  - 7 - James A Venable Community Center/ Park/Cabazon library
  - 8 - Caltrans Truck Weigh Station
  - 9 - Fire Station 24
  - 10 - Fire Station 89

**LEGEND**

Community Impact Assessment Study Area	Alternatives 5 and 12	Existing Land Use	Open Space and Recreation
Interstate 10	Alternative 5	Commercial and Services	Residential
Arterial Highway	Alternative 12 (Preferred Alternative)	Education	Transportation, Communications, and Utilities
Union Pacific Railroad	Morongo Band of Mission Indians Tribal Lands	Government Facility	Vacant
		Industrial	

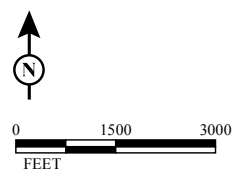


FIGURE 2.1-1

SOURCE: Bing Maps (2014); City of Banning (2016); County of Riverside (2015)  
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## **2.1.1 Existing and Future Land Use**

### **2.1.1.1 Existing Land Use**

Existing land uses in the study area are shown on Figure 2.1-1. Projects in the study area that are planned, approved, and under construction in Banning are listed in Section 2.1.1.2.

#### ***City of Banning***

Existing land uses in the Banning portion of the study area include residential and industrial uses, a wastewater treatment plant, Banning High School, the Larry D. Smith Correctional Facility, the Lions Public Park, the Banning Municipal Airport, the Banning Water Reclamation facility, Smith Creek and its tributaries, and undeveloped land.

#### ***Banning Municipal Airport***

The Banning Municipal Airport is located approximately 1,100–1,300 feet (ft) north of the alignments for the Project alignments. The 141-acre (ac) general aviation airport has a single runway, which is 5,200 x 150 ft. In 2014, the airport had approximately 10,000 general aviation operations (an operation is one take-off or one landing), an average of 25 per day. Hangars and tie-downs are located along the north side of Barbour Street. In 2014, 40 aircraft were based at the Airport, and all were single-engine aircraft.<sup>1</sup> The airport has no control tower and is therefore considered an uncontrolled airport. According to the Banning Airport Master Plan Update (2007), airport operations are anticipated to grow approximately 30 percent to 13,000 annually by 2026.

#### ***Morongo Band of Mission Indians Tribal Lands***

The study area contains two sections of the Morongo Band of Mission Indians Tribal Lands: Tribal Land to the east of Banning and north of I-10.

#### ***East of Banning Tribal Land (Section 12)***

To the east of the Banning city limits, the study area includes areas under County jurisdiction and part of the Tribal Lands of the Morongo Band of Mission Indians. The Morongo Band of Mission Indians Section 12 Tribal Land is within the study area and is currently undeveloped. Section 12 also contains several underground and overhead utility corridors, including electrical transmission lines, oil and gas transmission mains, and fiber optic cables. Smith Creek crosses a portion of the

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<sup>1</sup> AirNav.com. <http://www.airnav.com/airport/KBNG> (accessed November 8, 2014).

south-central part of Section 12, while a short stretch of the San Gorgonio River traverses the northeast part of Section 12.

No existing public roadways are within Section 12. That land is presently accessed from Banning by dirt road extensions of Westward Avenue and Charles Street; these access points are gated and the land is fenced to control access to Morongo Band of Mission Indians Tribal Lands and other privately owned lands. As shown on Figure 2.1-1, the dirt roads cross the property and, after passing through additional locked gates, enter County jurisdiction to the east of the Section 12 Tribal Land, eventually connecting to Bonita Avenue in Cabazon after a third set of gates.

### ***Tribal Land North of I-10***

The Morongo Band of Mission Indians also owns land in the study area north of the Section 12 Tribal Land and adjacent to I-10. The land features a California Department of Transportation (Caltrans) truck weigh station, a small restaurant, and residences located north of these structures (to the north of the study area). The remaining area to the north of the study area is vacant land.

The Morongo Band of Mission Indians Tribal Land also lies just outside the study area and west of Malki Road in the regional study area (RSA). Tribal policy precludes public roadway development in any Morongo Band of Mission Indians Tribal Land north of I-10. The Morongo Casino Resort and Spa is north of I-10 and east of Apache Trail.

### ***County of Riverside***

County jurisdiction in the study area can be broken into three subareas:

- Areas west of San Gorgonio River
- The RRM Cabazon operation
- Cabazon

### ***West of the San Gorgonio River***

Land uses include vacant land, cattle grazing, utility corridors, scattered residences, and Smith Creek. The San Gorgonio River traverses this area with the confluence of Smith Creek and the San Gorgonio River in the southeast of the study area. There are no public roadways in this area, which is crossed by several gated dirt roads that connect Westward Avenue to Bonita Avenue and provide access to privately owned lands and Morongo Band of Mission Indians Tribal Lands. The area is also crossed

by several utility corridors, including electrical transmission lines, gas and oil transmission mains, and fiber optic cables.

### *Robertson's Ready Mix Cabazon Site*

The RRM Cabazon Plant is in the area bounded on the west by the San Gorgonio River, on the north by the UPRR, on the east by Apache Trail, and on the south by a dirt road extension of Bonita Avenue west of Apache Trail. The RRM Cabazon Plant is a major sand and gravel extraction operation, as well as a concrete batch plant. RRM recently installed two wind generation turbines adjacent to the San Gorgonio River. RRM also owns the parcel to the west between the San Gorgonio River and Section 12 of the Morongo Band of Mission Indians Tribal Land. This area is currently undeveloped; however, RRM plans to extend its sand and gravel operation into this area.

### *Community of Cabazon*

A portion of unincorporated Cabazon is located south of I-10, in the far eastern part of the study area, and includes low-density residences and mobile homes south of the UPRR tracks with higher-density housing and limited commercial uses in a small core area north of Main Street.

The San Gorgonio River and its tributary creeks provide seasonal water flows through Cabazon from the San Bernardino Mountains to the Whitewater River and the Salton Sea. Due to the surrounding steep terrain and low-lying position, much of Cabazon is prone to flooding.

The James A. Venable Cabazon Community Center at 50390 Carmen Avenue in Cabazon is in the study area and provides recreation and community facilities for the Cabazon community. The Cabazon Fire Station is adjacent to the community center.

Cabazon Elementary School is located at 50575 Carmen Avenue, south of I-10 and the UPRR tracks and just east of Broadway. There are more intensely developed areas in Cabazon north of the study area and I-10, near the Morongo Parkway interchange, including the Desert Hills Premium Outlets and the Cabazon Outlets located west of Morongo Trail (Apache Trail). The Morongo Casino Resort and Spa is north of I-10 and east of Morongo Trail. The Desert Premium Outlet Mall and the Cabazon Outlet Mall are west of the Morongo Casino Resort and Spa.

## **Union Pacific Railroad**

### **Freight Service**

The UPRR operates the Sunset line between the Cities of Los Angeles and New Orleans in a railroad right-of-way south of I-10. This facility is a major transcontinental freight-hauling facility that serves traffic to and from the Port of Los Angeles, Port of Long Beach, and Southern California, with freight destinations across the country. Long trains in excess of 100 cars are common. The facility currently provides two tracks, and there are long-range plans to expand to three or four tracks within the existing right-of-way.

### **At-Grade Crossings**

Most of the track crossings within the study area are at grade at the following locations:

- 22<sup>nd</sup> Street,
- San Geronio Avenue,
- Hargrave Street,
- Apache Trail, and
- Broadway.

Grade separations between the railroad tracks and local roadways have been constructed at the following locations:

- 8<sup>th</sup> Street, and
- Sunset Avenue.

The existing at-grade railroad crossings have all been identified as needing grade separations per an analysis prepared for the Riverside County Transportation Commission (RCTC).<sup>1</sup> In total, 46 potential grade separations in the County were priority ranked based on a combination of factors, including the amount of train traffic and vehicle travel, delay, emissions, and accidents. Table 2.1.1 shows the priority for each of the proposed grade separations in the study area.

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<sup>1</sup> *Grade Separation Priority Update Study for Alameda Corridor East (Riverside County)*, Infra-Consult (prepared for RCTC), March 2012.

**Table 2.1.1 Priority Ranking of Grade Separations in the Study Area**

Grade Separation	Ranking
Hargrave Street	4
22 <sup>nd</sup> Street	12
San Gorgonio Avenue	14
Apache Trail (Morongo Trail)	28
Broadway	31

Source: *Grade Separation Priority Update Study for Alameda Corridor East (Riverside County)*, Infra-Consult (prepared for the Riverside County Transportation Commission) (March 2012).

The close proximity of the railroad tracks, I-10, and local roadway intersections makes designing these grade separations complex and expensive. Given the priority of these grade separations, costs, funding limitations, and competition from other grade separations, it will likely be several decades before all the existing crossings in the study area are grade separated. In particular, the grade separations at Apache Trail and Broadway in Cabazon received low rankings as shown in Table 2.1.1.

### ***Passenger Service***

The UPRR tracks also accommodate six Amtrak Sunset Limited trains per week, with three running eastbound and three running westbound.

### **2.1.1.2 Planned Land Uses**

The analysis included in this section is based on General Plan build out for the City of Banning General Plan (2006) and the Riverside County General Plans (2015).

Table 2.1.2 provides a list of projects that are planned, approved, or under construction in the study area. These projects are shown on Figure 2.1-2.

### **2.1.1.3 Roadway Planning**

Even before the focus on I-10 emergency conditions, the lack of a local roadway connection between Banning and Cabazon prompted the City of Banning and the County to initiate planning for a new arterial parallel to I-10. The Riverside County and Banning General Plan Circulation Elements envisioned an eastward extension of Ramsey Street east from its terminus at the existing I-10/Ramsey Street Interchange in Banning. That proposed roadway would extend along the north side of I-10, crossing Morongo Band of Mission Indians Tribal Lands to the existing intersection of Seminole Drive and Malki (formerly Fields) Road. Due to Tribal sovereignty, the Morongo Band of Mission Indians would need to approve any use of its Tribal Lands for any such roadway project, as would the Bureau of Indian Affairs.

**Table 2.1.2 Projects Planned, Approved, or Under Construction**

No.	Project Name and Location	Status	Project Build Out
1	Diversified Pacific Residential Development - Wilson Street east of Sunset Avenue (north side of Sunset Ave)	Approved, City anticipates Construction will begin in 2017	34.6 ac development, including 98 low-density residential units.
2	St. Boniface Residential Development - West of 8th Street and north of Gilman Street	Approved, City anticipates Construction will begin in 2017	171 single family homes, up to 5 du/ac.
3	Rancho San Geronio Specific Plan	Approved, Construction anticipated to begin mid-2018	A master-planned community organized into 44 planning areas and that includes a mixture of residential, commercial, open space, and recreational uses. In total, 3,133 du would be allowed in the Specific Plan area, with an average density of 4.1 du/ac.
4	Butterfield-Pardee Specific Plan	Approved	The Project proposes a maximum of 5,387 du (936.4 ac of residential), a golf course and open space (253.9 ac), parks (66.5 ac) and other open space (108.4 ac), two school sites (23.0 ac), an existing utility substation facility (4.2 ac), a potential fire station site (1.6 ac), a potential 1.5-2.0 mgd satellite treatment plant (3 ac), commercial/office sites (36.0 ac), and backbone roadways (113.6 ac).
5	Loma Linda (Banning Bench) Specific Plan - East of Sunset, North of Wilson	Approved with Development agreement 1995, construction not yet commenced	600 ac development, including 186 ac single-family residential, 15 ac public use, and 10 ac commercial development
6	Little Europe Specific Plan	Approved 1991. Development agreement not yet obtained	9.4 ac residential, 5.2 ac commercial
7	Sun Lakes North Specific Plan – East of Highland Springs and North of Sun Lake Boulevard	Original plan approved 1983	47.1 ac commercial
8	Community of Cabazon Land Use Plan <sup>3</sup>	Planning stages	The Community of Cabazon began preliminary research stage in April 2017 for the development of a Land Use Plan. Would include a Community Core Area for potential development and other uses. A "Possible Bypass Alignment Overlay" would depict the Project connecting Banning to the community of Cabazon via Bonita Avenue.
9	La Quinta Inn – West of Hargrave Street and North of Ramsey Street	Approved 2014. Development agreement not yet obtained	1.28 ac with commercial (hotel and restaurant) uses.
10	Village at Paseo San Geronio – Across from City Hall along Ramsey Street	Planning Stages	5.5 ac of mixed use development that includes approximately 65,000 sf of office, retail, and restaurant space
11	Cabazon Outlet Mall Expansion on Seminole Drive between Morongo Trail and Millard Pass	Planning stages	79,150 sf retail building
12	Plot plan for a 65,000 sf retail sales center on Seminole Drive between Morongo Trail and Millard Pass	Approved	65,000 sf retail building



**Table 2.1.2 Projects Planned, Approved, or Under Construction**

No.	Project Name and Location	Status	Project Build Out
13	O'Donnell Business Park at – Northeast corner of Hathaway Street at /Nicolet Street	Approved, Construction plans under review, mass grading commenced	64 ac with 1.2 million sf of light industrial and warehousing commercial space. Includes 12 buildings, ranging from 11,311-786,984 sf.
14	Banning Industrial Park Gordon-Messenger - North of Banning Airport, South of Railroad	Approved 2007. Development agreement not yet obtained	64 ac development, including 1 million sf industrial development.
15	Configure 21 parcels into 3 commercial parcels on Seminole Drive between Morongo Trail and Millard Pass	Planning stages	Three commercial parcels
16	Potential expansion of the Banning Airport	Planning stages	Construction of a second taxiway

Sources: City of Banning (2017) and County of Riverside (2017).

<sup>1</sup> This list includes all reasonably foreseeable projects in the Project area both north and south of I-10 that could potentially contribute to cumulative impacts on resources in the City of Banning, the community of Cabazon, this part of unincorporated Riverside County, and the Tribal Lands. Projects with expired approvals in the County of Riverside are not included in this list.

<sup>2</sup> Refer to Figure 2.1-2 for the locations of these projects.

<sup>3</sup> Exact location of project has not been identified as of June 2017. Therefore, this plan is not mapped on Figure 2.1-2.

ac = acre(s)

du = dwelling unit(s)

I-10 = Interstate 10

sf = square foot/feet

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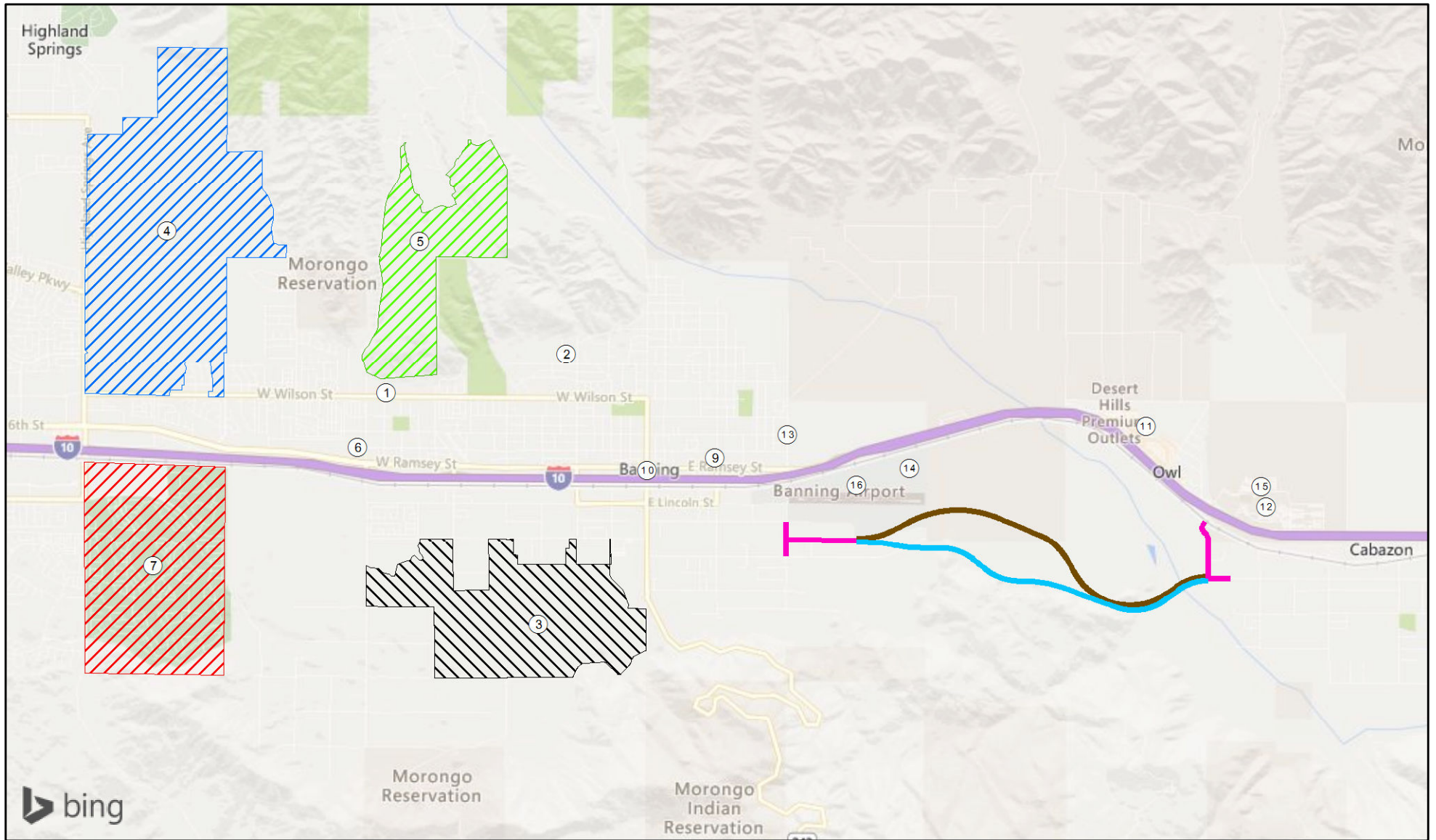


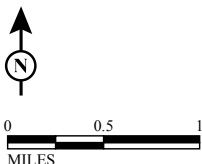
FIGURE 2.1-2

LEGEND

Planned, Approved, and Potential Projects

- |   |  |  |
|---|--|--|
| ① Diversified Pacific Residential Development | ⑦ Sun Lakes North Specific Plan        | ⑫ 65,000 sqft retail sales center                |
| ② St. Boniface Residential Development        | ⑧ Little Europe Specific Plan          | ⑬ O'Donnell Business Park                        |
| ③ Rancho San Gorgonio Specific Plan           | ⑨ St. Boniface Residential Development | ⑭ Banning Industrial Park Gordon - Messenger     |
| ④ Butterfield Specific Plan                   | ⑩ La Quinta Inn                        | ⑮ Banning Industrial Park Gordon - Messenger     |
| ⑤ Loma Linda Specific Plan                    | ⑪ Village at Paseo San Gorgonio        | ⑯ Configure 21 parcels into 3 commercial parcels |
|   | ⑫ Cabazon Outlet Mall Expansion        | ⑰ Potential Banning Municipal Airport Expansion  |

- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)



SOURCE: Bing Maps (2018); City of Banning (2016); County of Riverside (2016)

I:\KHA1101\GIS\PlannedProjects.mxd (3/4/2020)

*I-10 Bypass: Banning to Cabazon*  
Planned Projects

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In 2004, Congress passed the Fiscal Year 2003 Omnibus Appropriation Bill containing a \$1.75 million appropriation for the preliminary planning of the Ramsey Street Extension project. The Regional Transportation Plans (RTPs) were revised to show the extension as occurring within the next 6 years. The County, Banning, and the Morongo Band of Mission Indians then established a Joint Planning Committee to initiate studies of the proposed Ramsey Street project, and an engineer was retained to prepare preliminary plans and alignment alternatives.

### *Issues with Ramsey Street Extension*

In early 2008, the Joint Planning Committee reviewed alignment alternatives for the Ramsey Street Extension. The committee determined that the Ramsey Street Extension should not be pursued for several reasons, including:

- The existing I-10/Ramsey Street interchange does not meet Caltrans current design standards, and the Ramsey Street Extension would exacerbate the design deficiencies, potentially requiring complete reconstruction of the interchange to meet current standards.
- The existing I-10/Malki Road interchange does not meet Caltrans current design standards, and the Malki Road Extension would exacerbate the existing design deficiencies, potentially requiring major reconstruction of the interchange to meet current standards. The alternative was to accept a nonstandard interchange design.
- The right-of-way required for the Ramsey Street Extension is partially owned by the Morongo Band of Mission Indians, which had consistently opposed any alignment north of I-10 where Tribal member residences, Tribal services, and cultural resources are located. The County cannot acquire the right-of-way necessary for the Ramsey Street Extension without the agreement of the Morongo Band of Mission Indians and the concurrence of the Bureau of Indian Affairs.
- Modern transportation planning discourages closely spaced frontage roads like the proposed extension because they tend to contribute to traffic congestion. Placement of frontage roads adjacent to freeways is no longer considered the best practice.

For these reasons, the Ramsey Street Extension was rejected by the County, Banning, and the Morongo Band of Mission Indians in 2008. Instead, the committee decided to consider alignments south of I-10. Reallocation of the \$1.75 million federal authorization from the Ramsey Street Extension to a new roadway south of I-10 was requested, and the funds were redirected from the “Ramsey Street Extension” to the “I-10 South Bypass.” The Measure A Spending Plan was amended to show the

revised alignment. The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the corresponding Federal Transportation Improvement Program (FTIP), both of which were prepared by the Southern California Association of Governments (SCAG), were subsequently amended in 2011 consistent with Congressional direction to show the I-10 South Bypass as connecting Banning to Cabazon. Any roadway projects that require federal funding or federal approvals must be consistent with these documents.

### ***City of Banning***

#### ***General Plan Land Use Element***

The Banning General Plan provides for future land use designations within the existing city limits and sphere of influence. The Banning General Plan land use designations are shown on Figure 2.1-3. The City of Banning General Plan was adopted in 2006, with the latest amendments in 2013. The existing land use patterns for residential and industrial uses would be maintained in the study area under the adopted General Plan.

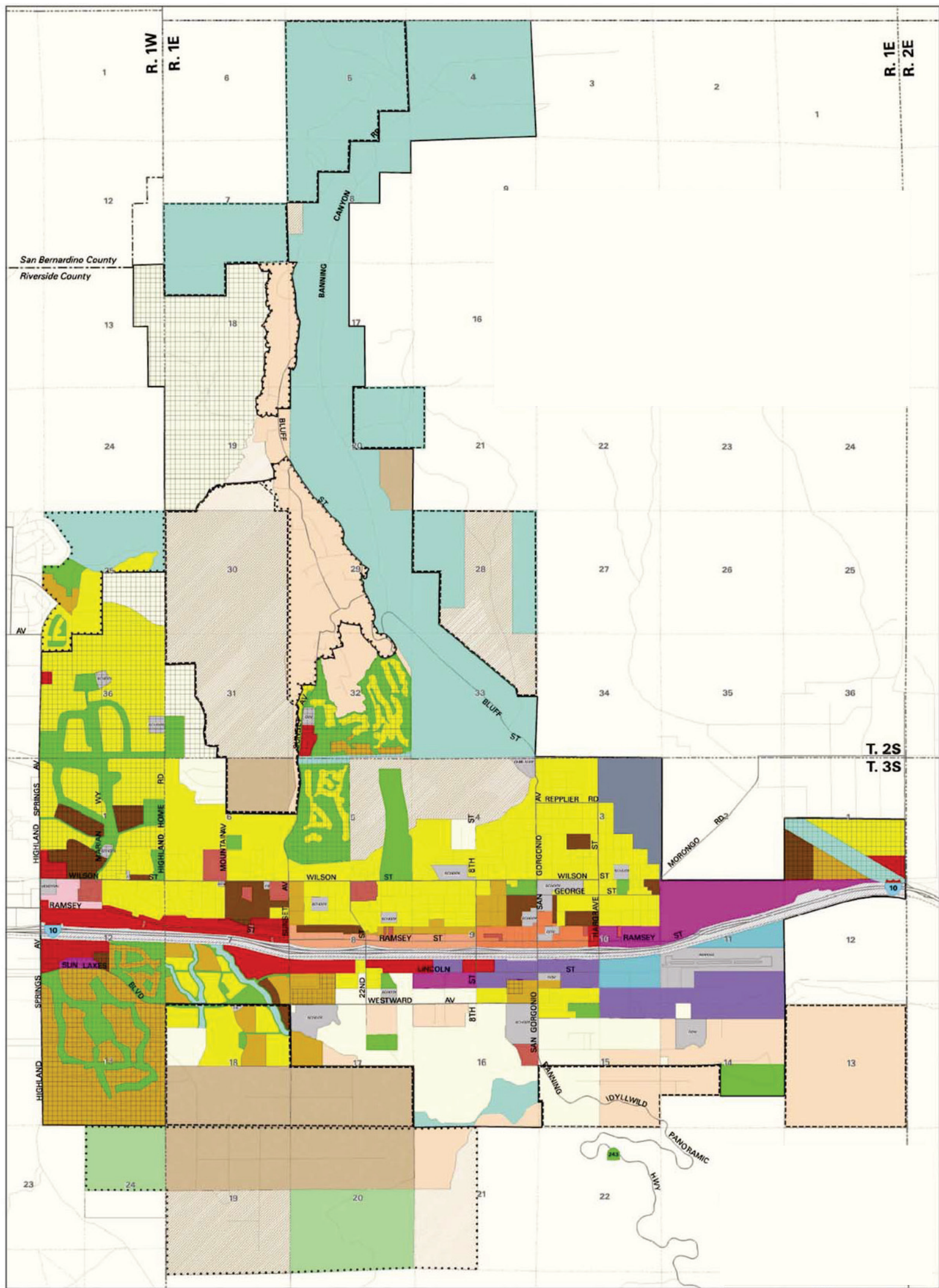
The City of Banning General Plan designates industrial land uses surrounding Westward Avenue. This includes the portion of Westward Avenue east of Hathaway Street, from Charles Street to the south to Barbour Avenue to the north, extending until the eastern city limits. The Banning General Plan envisions that the existing scattered residential uses along Westward Avenue east of Hathaway Street would eventually be converted to industrial uses.

The Banning General Plan includes a 1-square-mile quadrant immediately south of the Morongo Band of Mission Indians Tribal Lands and partially south of Smith Creek. This site, which is within County jurisdiction south of the Morongo Band of Mission Indians Tribal Lands, has not been annexed to Banning, is part of Banning's Sphere of Influence, and is currently designated as Rural Residential at 0 to 1 dwelling unit per acre.

#### ***General Plan Circulation Element***

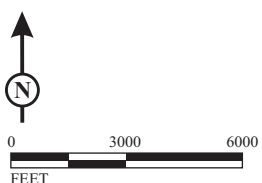
The planned street system in the City of Banning General Plan Circulation Element is shown on Figure 2.1-4. For the east-west streets, the General Plan shows Lincoln Street as a four-lane major highway, and Westward Avenue as a two-lane collector highway, including several currently unbuilt sections. The plan also shows Lincoln Street extending eastward as a four-lane major arterial or highway that realigns east of Hathaway Street south of the Banning Municipal Airport and generally within the





LEGEND			
— Banning City Limits	■ Ranch/Agriculture (10 ac min.)	■ Medium Density Residential (0-10 du/ac)	■ Professional Office
- - - Banning Sphere of Influence	■ Ranch/Agriculture - Hillside (10 ac min.)	■ High Density Residential (11-18 du/ac)	■ Business Park
· · · Banning Planning Areas	■ Rural Residential (0-1 du/ac)	■ Mobile Home Parks	■ Industrial
--- County Line	■ Rural Residential - Hillside (0-1 du/ac)	■ General Commercial	■ Airport Industrial
- - - Township/Range Lines	■ Very Low Density Residential (0-2 du/ac)	■ Downtown Commercial	■ Industrial Mineral Resources
--- Section Line	■ Low Density Residential (0-5 du/ac)	■ Highway Serving Commercial	■ Public Facilities
— Major Roads			■ Public Facilities - RR/Interstate
— Minor Roads			■ Open Space - Resources
— Railroads			■ Open Space - Parks
			■ Open Space - Public
			■ Open Space - Hillside Preservation
			■ Specific Plan Areas

FIGURE 2.1-3



SOURCE: City of Banning General Plan (2006) Exhibit III-2

I-10 Bypass: Banning to Cabazon  
Banning General Plan Land Use Map

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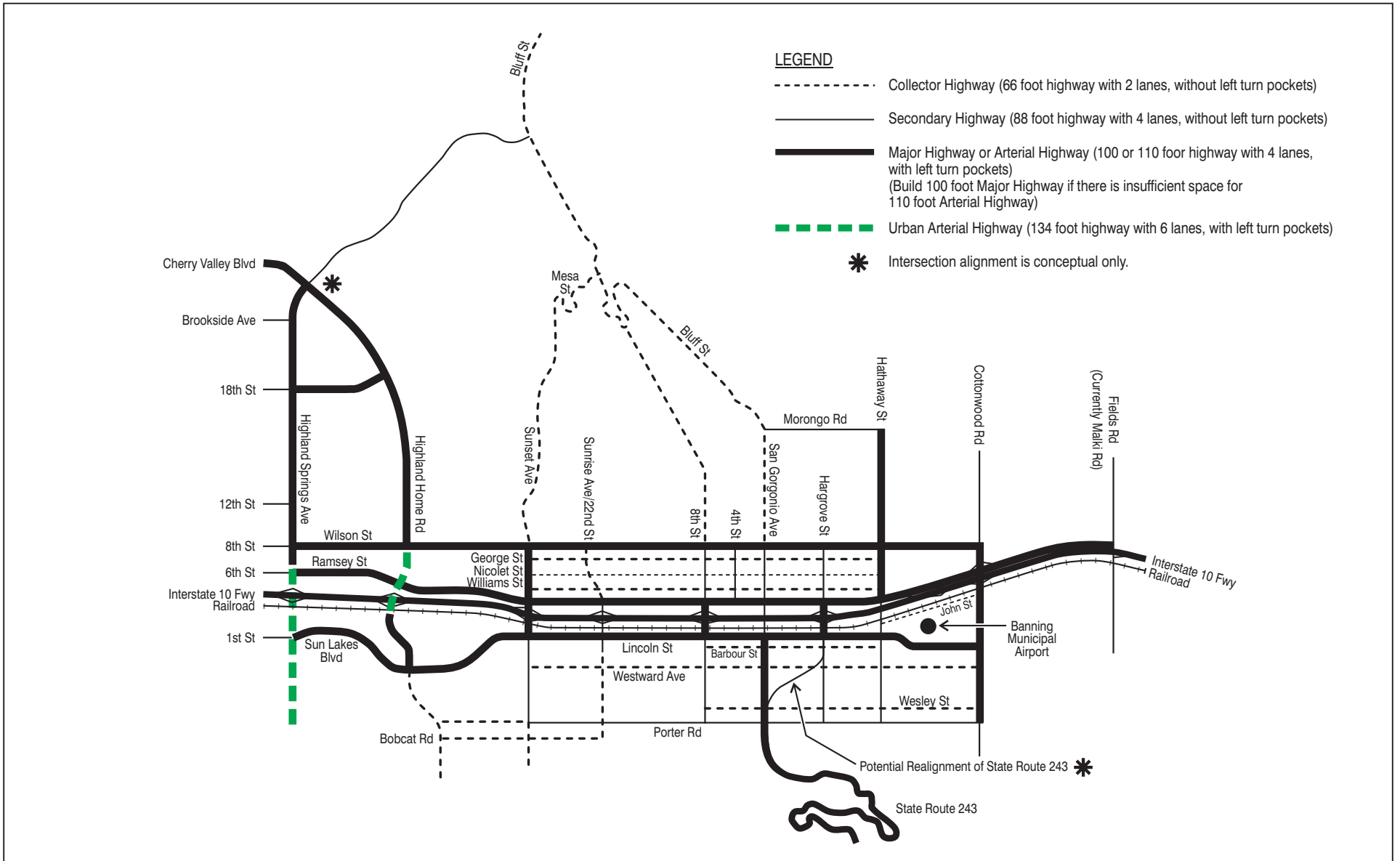


FIGURE 2.1-4



NO SCALE

*I-10 Bypass: Banning to Cabazon*  
 City of Banning Existing General Plan Street System

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current alignment of Barbour Street. North-south streets consist of San Gorgonio Avenue (a four-lane major highway south of Lincoln Street), Hargrave Street (a four-lane secondary highway south of Lincoln Street), and Hathaway Street (a four-lane secondary highway south of I-10).

If the Lincoln Street realignment option requires airport land, Federal Aviation Administration (FAA) involvement would occur.

### ***Banning Municipal Airport Master Plan***

The FAA periodically requires airport operators to update an airport's Master Plan and associated Airport Layout Plan (ALP). An airport's Master Plan and ALP define the recommended set of improvements needed to accommodate forecast demand and to meet FAA design standards. The latest Airport Master Plan for the Banning Municipal Airport (2007) recommends a series of improvements by 2030 to meet the forecasted demand of 13,000 annual operations. These improvements include the following:

- Removal of certain obsolete existing hangars and construction of new and replacement hangars that meet market demand
- Relocation of Taxiway A on the south side of Runway 8-26 to meet FAA runway/taxiway separation standards
- Acquisition of 1.63 ac at the northeast corner of East Barbour Avenue/South Hathaway Street for future airport development, including additional apron area of 9,680 square yards for aircraft tie-downs
- Construction of a new north-side taxiway parallel to Runway 8/26
- Acquisition of approximately 10 ac north of airport and south of I-10 for future airport development
- Construction of additional hangars and ground-support facilities in the north field

The revised Banning Municipal Airport Master Plan (2007) does not include the realignments of Lincoln Street and Barbour Street per the conceptual changes in the Proposed Street System from the Banning General Plan discussed earlier in Section 2.1.1.3 of this Final EIR/EA.

### ***Morongo Band of Mission Indians Tribal Lands***

In the Morongo Band of Mission Indians Draft General Plan Land Use Map (December 2008), Section 12 of the Morongo Band of Mission Indians Tribal Lands is designated for industrial land use. Much of the land north of I-10 is Tribal Land belonging to the Morongo Band of Mission Indians that is designated for mixed uses

under the draft 2008 general plan document. The Morongo Band of Mission Indians has formally endorsed the Alternative 12 (Preferred Alternative) alignment through Section 12 and has consistently opposed an alignment through Tribal Lands north of I-10. Therefore, alternatives north of I-10 have been rejected as infeasible.

The Morongo Band of Mission Indians Draft Long-Range Transportation Plan 2010–2030 lists proposed transportation projects on Morongo Band of Mission Indians Tribal Lands. This list includes the “I-10 South Bypass.” This Project is listed as having intermediate priority.

For the purposes of consideration of the alignment through the Morongo Band of Mission Indians Tribal Lands, Alternative 12 (Preferred Alternative) is identical to Alternative 13. The following is an excerpt from the Tribe’s letter to the County, dated February 21, 2013 (the full letter is contained in Chapter 4):

“We feel strongly that Alternative 13 presents a better option for meeting our regional safety, mobility, and economic development goals. The route presents cost savings, reduced environmental impacts, and is supportive of our long-term development plans. Support of Alternative 13 is consistent with the 2008 resolution approved by the Tribal Council, the County of Riverside, and the City of Banning which endorsed a Southern Route and rejected the Ramsey Street Extension, currently identified as Alternative 7.”<sup>1</sup>

### **County of Riverside**

#### ***The 2015 Pass Area Plan***

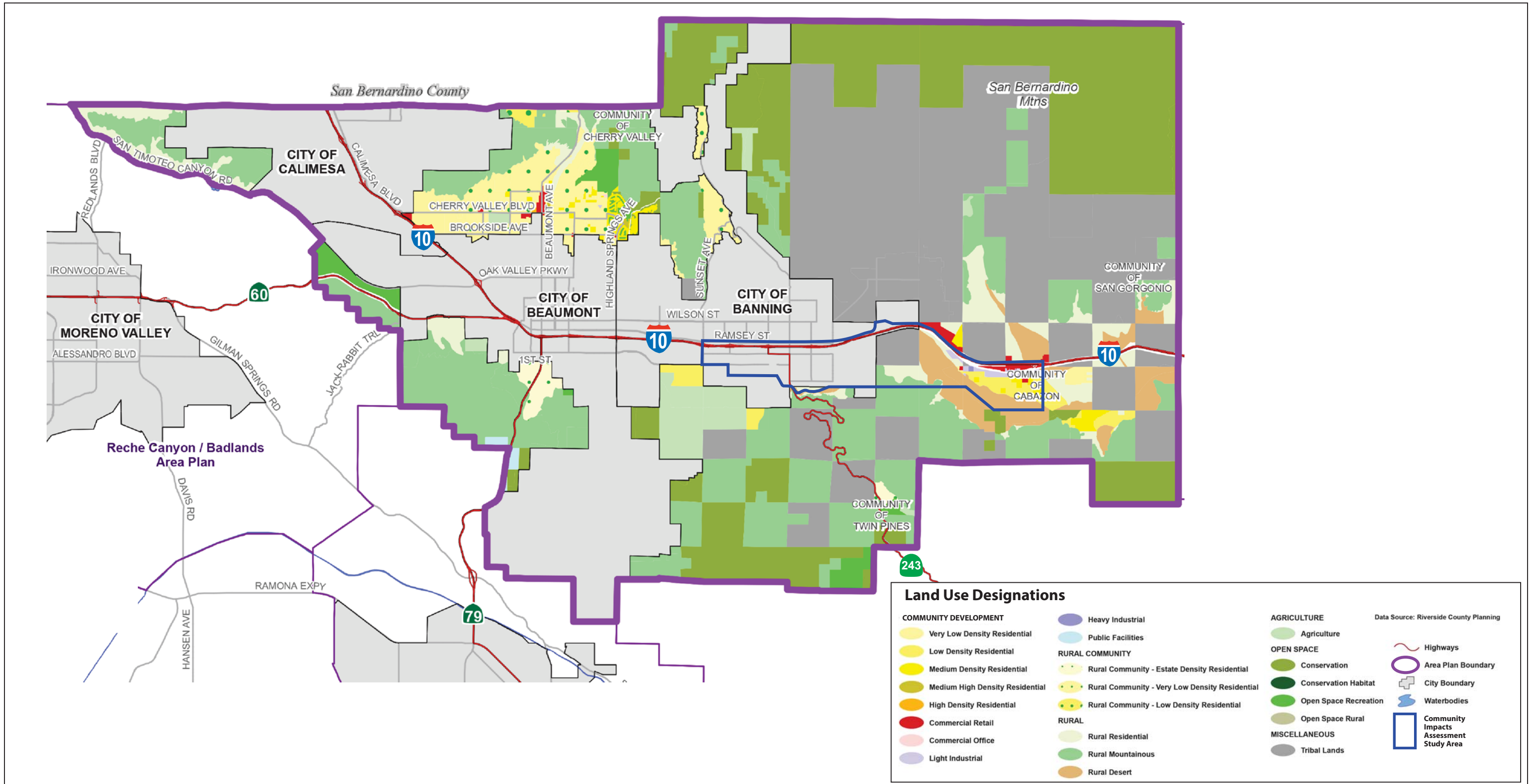
The Final EIR/EA analyzes the Project pursuant to the 2015 General Plan.

Land uses in Riverside County are controlled by the County’s 2015 General Plan. Land uses in the community of Cabazon are controlled by the 2015 Pass Area Plan, which is contained within the General Plan. The 2015 Pass Area Plan Land Use Plan is shown on Figure 2.1-5. The 2015 Pass Area Plan Overlays and Policy Areas are shown on Figure 2.1-6. The County’s General Plan excludes areas within Banning and the Morongo Band of Mission Indians Tribal Lands.

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<sup>1</sup> Letter from Tribal Chairman Robert Martin to County Project Manager, John Marcinek, dated February 21, 2013.





**NOTE:** Only land uses in the Community Impacts Assessment Study Area have been verified to be consistent in both the 2015 and 2003 Pass Area Plans.

FIGURE 2.1-5



NO SCALE

Source: GPA 960 The Pass Area Plan Land Use Map

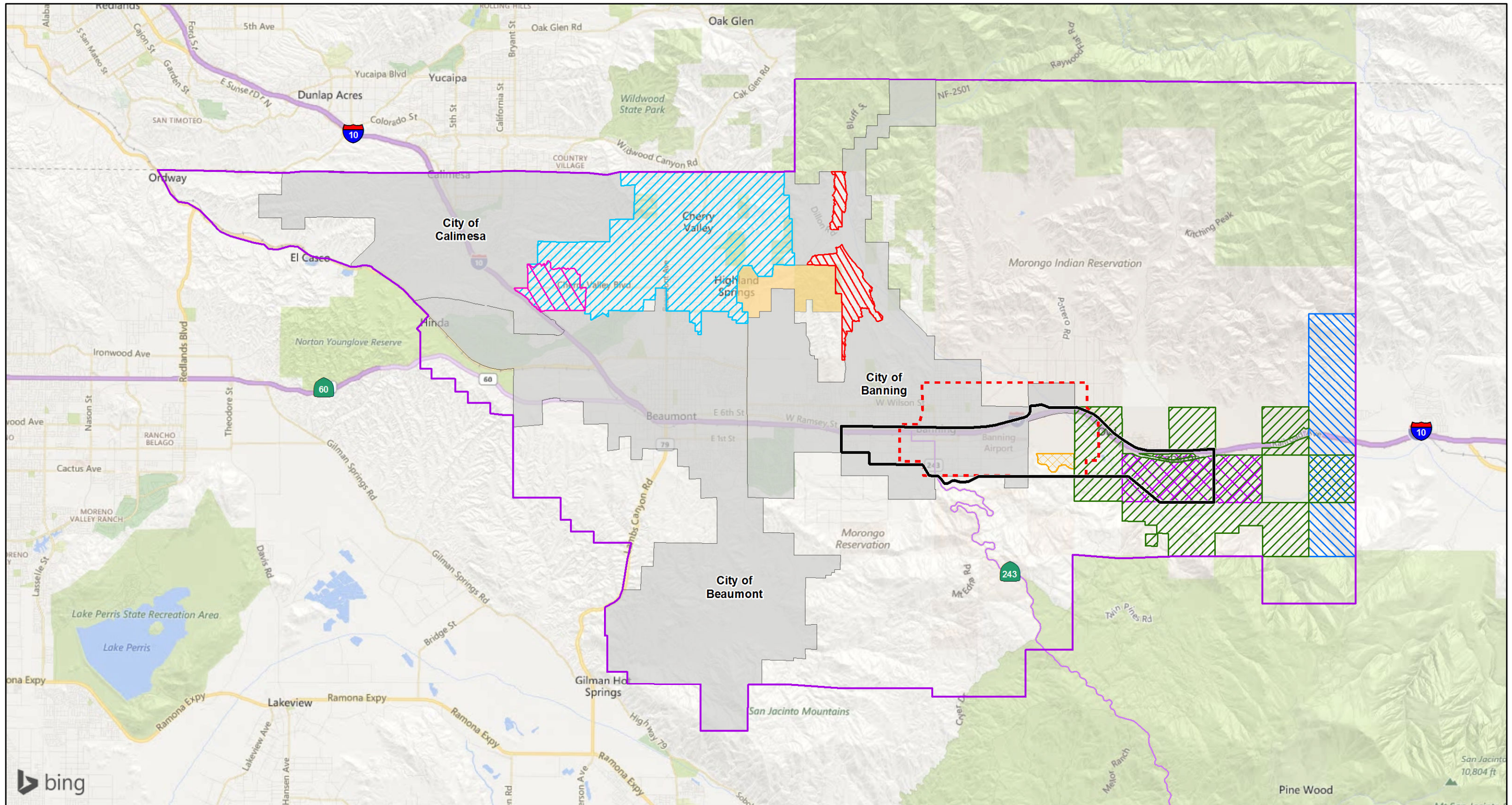
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I-10 Bypass: Banning to Cabazon













The 2015 and 2003 Pass Area Plan Land Use Map

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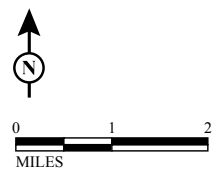




**LEGEND**

- |   |   |   |
|---|---|---|
|  Community Impacts Assessment Study Area |  Cherry Valley Gateway Policy Area         |  Banning Municipal Airport Influence Area (2015) |
|  Community Development Overlay           |  Cherry Valley Policy Area                 |  Specific Plan                                   |
|  Community Center Overlay                |  San Gorgonio Pass Wind Energy Policy Area |  The Pass Area Plan Boundary                     |
|  Banning Bench Policy Area               |  Cabazon Policy Area                       |  City Boundary                                   |

Note: The 2015 Pass Area Plan shows a larger Banning Municipal Airport Influence Area than the 2003 Pass Area Plan.



SOURCE: Bing Maps (2014); County of Riverside (2015)  
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FIGURE 2.1-6



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Any reference to the Riverside County General Plan and The Pass Area Plan throughout this section refers to the 2015 General Plan and the 2015 Pass Area Plan for Riverside County, unless otherwise specified.

County-designated land uses include the following within the study area:

- Rural Residential uses south of the Morongo Band of Mission Indians Section 12 Parcel (5 ac minimum lot size)
- Rural Mountainous uses along the rolling hillsides south of Smith Creek (10 ac minimum lot size)
- Rural Desert uses generally along the floodplain of the San Gorgonio River (10 ac minimum lot size)
- Low-Density Residential south of I-10 in the community of Cabazon (0.5 ac – 1 ac lot size)
- Medium-Density Residential south of I-10 in the community of Cabazon (2–5 dwelling units per acre)
- Heavy and Light Industrial uses along I-10 to the south
- Some Commercial Retail scattered south of I-10 and north of I-10

Additionally, the 2015 Riverside County General Plan Multi-Purpose Open Space and Conservation Element indicates that land within the study area is subject to the following policy regarding development:

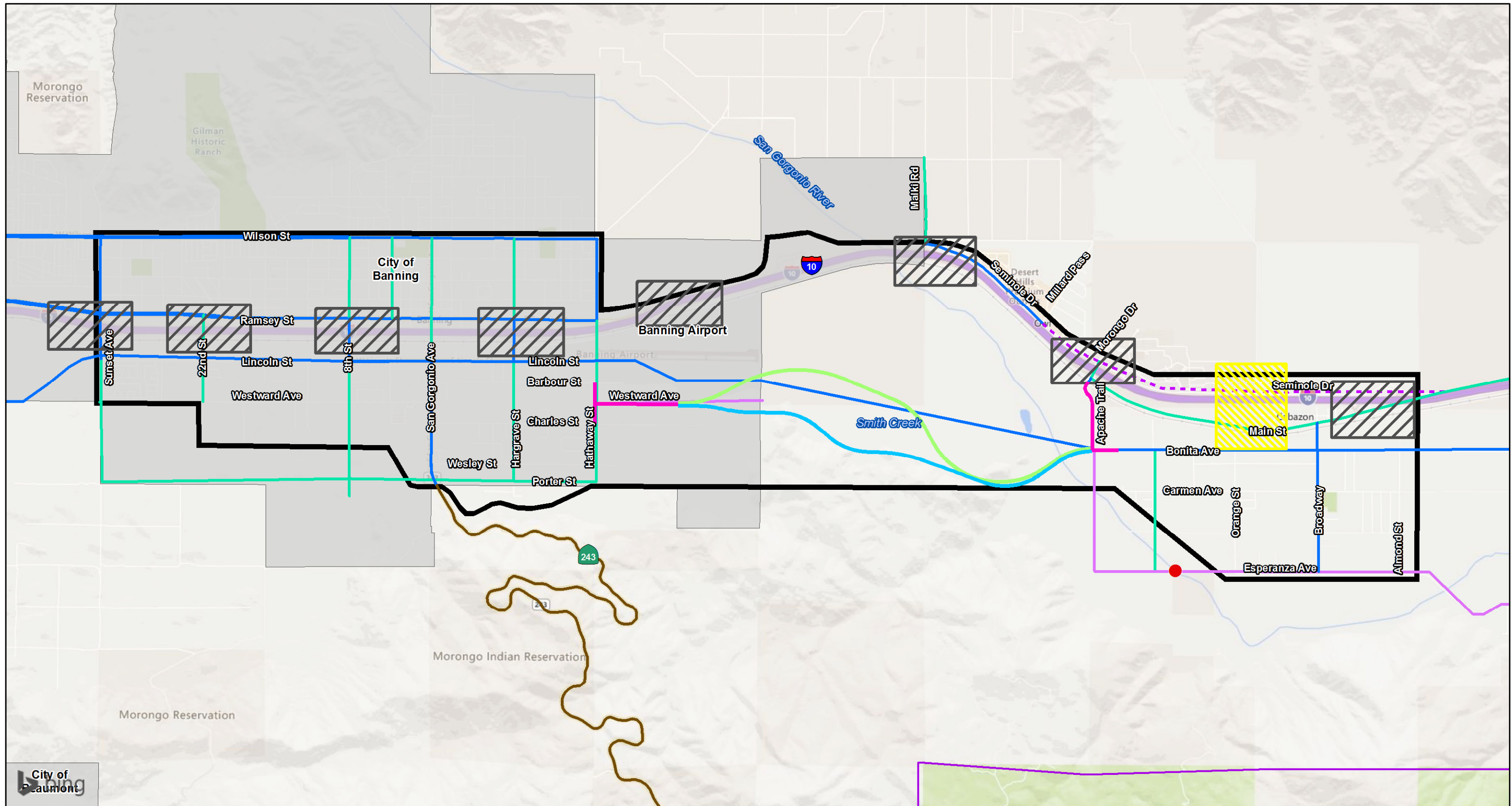
**OS 4.9:** Discourage development within watercourses and areas within 100 feet of the outside boundary of the riparian vegetation, the top of the bank, or the 100-year floodplain, whichever is greater.

The County's 2015 Pass Area Plan Circulation Plan is shown on Figure 2.1-7. The 2015 Circulation Plan shows a proposed roadway within County jurisdiction that connects Banning to Cabazon in the generalized location of the Project (alignments of unbuilt roadways in the General Plan are considered conceptual). The County designates the unbuilt roadway as ultimately becoming a four-lane major highway. County roadway cross-section standards differ from Banning cross-section standards.

The Project design uses County standards within County (and Tribal) jurisdictions and Banning standards within Banning jurisdiction.

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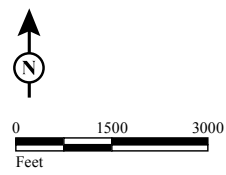


LEGEND

- |                             |  |  |                      |
|-----------------------------|--|--|----------------------|
| Traffic Study Area          | Alternatives 5 and 12                  | Major (118' ROW)   | Existing Interchange |
| The Pass Area Plan Boundary | Alternative 5                          | Secondary (100' ROW)   | Proposed Interchange |
| City Boundary               | Alternative 12 (Preferred Alternative) | Mountain Arterial 2 Ln (110' ROW)  | Existing Bridge      |
|                             |  | Collector (74' ROW)  |                      |
|                             |  | Seminole Drive (Downgraded to secondary highway in 2015 from a major highway in the 2003 Pass Area Plan) |                      |

Note: The Proposed Project is shown in the 2015 Pass Area Plan only. The roadway designations in the Traffic Study Area are the same in the 2015 and 2003 Pass Area Plans, except for the segment of Seminole Drive indicated.

FIGURE 2.1-7



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Additional considerations in the Riverside County General Plan and Pass Area Plan include the following:

- **Palomar Observatory:** The area is subject to nighttime lighting restrictions to protect the dark skies around the Palomar Observatory (included in the 2015 Riverside County General Plan).
- **San Geronio River Regional Trail:** A proposed multipurpose regional trail to be located along the banks of the San Geronio River (included in the 2015 Riverside County General Plan).
- **Banning Municipal Airport:** The Banning Municipal Airport Influence Area Plan recognizes the need to protect land around the Airport from development that is incompatible with Airport uses. The analysis in this section is based on the larger Banning Municipal Airport Influence Area in the 2015 Pass Area Plan.

## **2.1.2 Environmental Consequences**

### **2.1.2.1 No Build Alternative**

The No Build Alternative would not change land uses in the study area.

### **2.1.2.2 Build Alternatives**

#### ***City of Banning***

##### ***Build Alternatives***

The Project (both Build Alternatives) would improve and extend existing Westward Avenue within its existing 60 ft right-of-way from Hathaway Street to approximately 3,400 ft east of Hathaway Street to provide a 43 ft wide paved section with one 11 ft travel lane in each direction, an 11 ft striped median, 5 ft paved shoulders, and 5–7 ft sidewalks, thereby providing a “complete street.” Bicyclists would have the option of using either the paved roadway shoulders or the sidewalks.

Existing driveways would be maintained and/or reconstructed in place. Right-of-way would be needed to provide standard-radius curb returns at the Western Avenue/Hathaway Street intersection; these minor acquisitions would not affect any existing structures, off-street parking, or access. The improvements to Hathaway Street would otherwise be constructed within the existing right-of-way.

Westward Avenue is currently discontinuous for the 1-mile (mi) section from Hathaway Street west to San Geronio Avenue. Westward Avenue has been developed in the 2 mi segment between San Geronio Avenue and Sunset Avenue.

The Banning General Plan shows Westward Avenue as ultimately being developed between Hathaway Street and San Gorgonio Avenue; however, that improvement has no planned completion date and is not included in the RTP. A 600 ft half section of Westward Avenue immediately west of Hathaway Street has been paved. However, that segment is blocked from public use because it does not serve any developed parcels.

The Project would not conflict with the existing or planned industrial land uses in Banning. No existing off-street parking lots would be impacted, and existing driveways would be preserved. However, the Project would require the elimination of existing on-street parking on Westward Avenue in Banning between Hathaway Street and the city limits, which the Banning Public Works Department has approved. All of the existing land uses have extensive off-street parking. Examination of eight historic aerial photographs of Westward Avenue taken between 1996 and 2014 revealed on-street parking on Westward Avenue to be minimal (i.e., a maximum of two vehicles). Given the abundant off-street parking, eliminating on-street parking would not result in an adverse impact.

Both of the Build Alternatives are consistent with the Circulation Element Map of the Banning General Plan, which shows Westward Avenue extending easterly to the city limits at the boundary of the County jurisdiction and the Morongo Band of Mission Indians Tribal Land (per the City's General Plan Circulation Element Policy 1). However, both of the Build Alternatives are inconsistent with the City's Circulation Element Policy 6, which indicates that the City shall maintain peak hour Level of Service D or better on all local roadways and intersections. Table 2.1.3 highlights the City of Banning General Plan policies and programs relevant to the Project, and provides an analysis of the consistency of the Project alternatives with these policies and programs.

The new roadway would provide improved access to existing industrial-zoned lands east of the existing eastern terminus of paving on Westward Avenue.

### ***Morongo Band of Mission Indians Tribal Lands***

Both proposed Build Alternatives are consistent with the Morongo Band of Mission Indians' consistent support for an alignment south of I-10; however, the Morongo Band of Mission Indians has specifically supported Alternative 12 (Preferred Alternative). The two alternatives differ in their impacts to Tribal Section 12. Current access to Tribal Section 12 is provided via dirt roads.

### **Alternative 5**

Alternative 5 would not require the use of any Morongo Band of Mission Indians Tribal Lands for roadway purposes.

### **Alternative 12 (Preferred Alternative)**

Alternative 12 (Preferred Alternative) would require extending the paved portion of Westward Avenue from its current terminus to a point 4,000 ft easterly of Hathaway Street, where it would curve northeasterly out of the existing right-of-way and then enter into Section 12 north of Smith Creek. Alternative 12 (Preferred Alternative) would cross Morongo Band of Mission Indians Tribal Lands on a curving alignment paralleling the north edge of Smith Creek. It would run from the Section 12 boundary for approximately 5,300 ft to a point near the east end of Section 12, where it would curve southeast. Alternative 12 (Preferred Alternative) would then exit Morongo Band of Mission Indians Tribal Lands, bridge Smith Creek, then bridge the San Gorgonio River to meet Bonita Avenue at Apache Trail. The roadway would provide for two 12 ft wide travel lanes, a 14 ft wide paved median, two 8 ft wide paved shoulders, and an 8 ft wide paved walkway on the south side of the road, adjacent to Smith Creek.

For public road purposes, Alternative 12 (Preferred Alternative) would require the acquisition of an easement of approximately 14 ac of Morongo Band of Mission Indians Tribal Lands in Section 12.

Alternative 12 (Preferred Alternative) is consistent with the Morongo Band of Mission Indians' letter dated February 21, 2013, which supports an alignment that would facilitate the development of Tribal Lands. This alternative would replace existing dirt road access to the Tribe's Section 12 Parcel with a paved, two-lane, all-weather roadway providing access to and from Banning and I-10 west of the site, and would provide access to Cabazon and I-10 east of the site. This newly paved access would incrementally increase local access to the Morongo Band of Mission Indians' Section 12 Parcel, whereas Alternative 5 would not increase access to the Section 12 Parcel. Any development project on Morongo Band of Mission Indians Tribal Lands would require review and approval under the National Environmental Policy Act (NEPA).

### **County of Riverside**

Alternative 5 and Alternative 12 (Preferred Alternative) are consistent with the conceptual alignment for the roadway in the 2015 Pass Area Circulation Plan as

shown on Figure 2.1-7. The Project would replace existing dirt road access to the existing land uses shown on Figure 2.1-1. The new roadway would provide access between the residential and commercial areas of Cabazon and Banning.

The following discusses impacts of the Project on the area west of San Gorgonio River, the RRM Cabazon Plant, and the Cabazon areas within the County portion of the study area.

### ***West of San Gorgonio River***

#### ***Build Alternatives***

The Build Alternatives would construct a new roadway that would cross the existing dirt roadways, where intersections would be constructed. Existing fences and gates would be relocated, thereby preserving access for cattle operations and preventing cattle from wandering onto the roadway.

Because the Build Alternatives vary in alignment between the Banning city limits and approximately 1 mi east of the Banning city limits, separate impact analyses are provided for this segment.

#### ***Alternative 5***

Within the Riverside County boundary, Alternative 5 would cross the Smith Creek floodplain near the City of Banning boundary, and then generally follow the south edge of the Smith Creek floodplain to the San Gorgonio River. Under Alternative 5, a new bridge would cross the entire Smith Creek floodplain in this location, which would preserve the existing flows of water and sand.

The primary existing land use in this area is cattle grazing, which is generally located south of Smith Creek and extends over several hundred acres to the south.

Alternative 5 may make it more difficult for cattle to use the approximately 15 ac area between Smith Creek and the new roadway because the cattle would need to cross the road. Given the difficulty in getting the herd to cross the road, the cattle-grazing operators might not use the 15 ac north of the new road. Given that there are approximately 500 ac of cattle-grazing operations in the area, a reduction of 15 ac (3 percent) is not considered an adverse effect. During the scoping for the Project, members of the Project Development Team (PDT) met with the owner of the cattle operations. The owner indicated that the Project would not adversely affect his operations.



Cattle-grazing uses may be phased out before 2035 with the implementation of the 2015 Riverside County General Plans. The area is anticipated to be developed with Very Low-Density Residential uses.

Alternative 5 would provide paved road access to four parcels south of Smith Creek that currently only have dirt road access. These parcels are designated Rural Mountainous (one dwelling unit per 10 ac) in the 2015 Pass Area Plan. Alternative 5 is being designed to reduce grading and visual impacts while remaining outside the Smith Creek floodplain. The Project would use some of the more developable and flatter areas for roadway purposes. However, by providing access to the parcels adjacent to the roadway, the Project would be consistent with and facilitate the development of the 2015 Riverside County General Plan.

***Alternative 12 (Preferred Alternative)***

Alternative 12 (Preferred Alternative) follows the north side of the Smith Creek floodplain into Morongo Band of Mission Indians Tribal Lands, and then turns south to bridge over the Smith Creek floodplain and rejoin Alternative 5 approximately 2 mi east of Hathaway Street.

***Alternative 5 and Alternative 12 (Preferred Alternative) from Approximately 2 Miles East of Hathaway Street to the San Gorgonio River***

The Alternative 5 and 12 alignments rejoin and follow the same alignment beginning approximately 2 mi due east of Hathaway Street. The alignments then run together for approximately 2,000 ft to the proposed bridge over the San Gorgonio River.

The primary existing land use in this area is cattle grazing, which generally occurs south of Smith Creek. Both Build Alternatives would make it difficult for cattle to use the approximately 10 ac area between Smith Creek and the new roadway because they would need to cross the road. Given the overall extent of cattle-grazing operations in the area, this is not considered an adverse effect. During the scoping for the Project, the owner of the cattle operations indicated that the Project would not adversely affect his operations. Cattle-grazing uses may be phased out in the future.

***Future 2035 Conditions***

Most of the land in this area is designated Rural Desert in the 2015 Riverside County Pass Area Plan, with a maximum density of 1 dwelling unit per 10 ac. The Project is consistent with, and would provide access to, the planned land uses that would require new access. Traffic forecasts indicate that if the areas along the Project are

developed, the roadway would need to be widened to four lanes at the time such development would occur.

### ***Robertson's Ready Mix Cabazon Plant***

#### ***Build Alternatives***

Both Build Alternatives would construct an approximately 900 ft long bridge over the San Gorgonio River south of the Robertson's Ready Mix (RRM) plant that would span the entire floodplain. As a result, the bridge would preserve the existing flows of both water and sand at this location. The Project includes improvements to Apache Trail south of the RRM plant. Therefore, the Project does not improve access to the RRM plant.

Additionally, the 2015 Riverside County General Plan Multi-Purpose Open Space and Conservation Elements indicate that land in the study area is subject to the following policy regarding development:

**OS 14.2:** Restrict incompatible land uses within the impact area of existing or potential surface mining areas.

The Project does not introduce incompatible land uses that restrict access or operations at the RRM plant. Therefore, it is generally compatible with the County General Plan Policy OS 14.2.

### ***Community of Cabazon***

#### ***Build Alternatives***

After crossing the San Gorgonio River, the Project enters Cabazon and connects with Bonita Avenue at Apache Trail at a new signalized intersection with turn lanes. The Project would add paved shoulders to Apache Trail from Bonita Avenue north to the UPRR to provide safer bicycle and pedestrian access to and from the new roadway. The Project is consistent with existing land uses in this area.

Areas north of Bonita Avenue in the study area have a light industrial designation in the 2015 Pass Area Plan. Areas to the south of Bonita Avenue are designated Low-Density and Medium-Density Residential. The proposed intersection improvements at Apache Trail and Bonita Avenue are consistent with these land use designations. When adjacent areas are developed, Apache Trail would be widened to major highway status (widening would include additional travel lanes and paved shoulders), as shown in the 2015 Riverside County General Plan circulation element.

### **2.1.3 Avoidance, Minimization, and Mitigation Measures**

No adverse impacts to existing or planned land uses have been identified. Therefore, avoidance, minimization, and/or mitigation measures are not required.

### **2.1.4 Consistency with State, Regional, and Local Plans**

This section discusses applicable land use plans and the consistency of the Project with the regional and local plans. The following plans are applicable to the study area:

- Banning General Plan (2006)
- Banning Municipal Airport Land Use Compatibility Plan (2004)
- Riverside County General Plan (2015)
- SCAG 2016–2040 RTP/SCS
- SCAG 2017 FTIP
- Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP)
- Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
- Morongo Band of Mission Indians Draft General Plan 2008
- Morongo Band of Mission Indians Draft Long-Range Transportation Plan 2010–2030

#### **2.1.4.1 Affected Environment**

##### ***City of Banning General Plan***

Table 2.1.3 lists the policies contained in the Banning General Plan Economic Development Element and Circulation Element Amendment that are relevant to the planning of the Project. The first column lists the policy, and the second column analyzes the two Build Alternatives' consistency with the policy.

##### ***County of Riverside General Plan***

The Riverside County General Plan is the guiding document for land use decisions made in the County. The 2015 Riverside County General Plan (Table 2.1.4) include policies in the Circulation Element, the Land Use Element, and the Pass Area Plan that are relevant to the Project. The first column in Table 2.1.4 describes the relevant policies and the second column analyzes the two Build Alternatives' consistency with those policies.

**Table 2.1.3 Project Consistency with City of Banning General Plan**

Policy or Program	Discussion of the Build Alternatives' Consistency with the City of Banning General Plan
<b>Economic Development Element</b>	
<p><b>Policy 10:</b> Continue to cultivate cooperative relationships with the Morongo Band of Mission Indians and Bureau of Indian Affairs, particularly regarding development of Indian lands within and adjacent to the planning area, and development and enhancement of community facilities that provide joint benefit to the Tribe and the City.</p>	<p>The Project has been a cooperative effort among the County, Caltrans, Banning, and the Morongo Band of Mission Indians. Both Banning and the Morongo Band of Mission Indians are members of the Project Development Team. Banning is a responsible agency for the Project under CEQA. The Morongo Band of Mission Indians/ Bureau of Indian Affairs is a cooperating agency under NEPA. <b>(Consistent)</b></p>
<b>Circulation Element (2013)</b>	
<p><b>Policy 1:</b> The City's Recommended General Plan Street System shall be strictly implemented.</p>	<p>The Project implements the eastward extension of Westward Avenue from its current terminus to the eastern Banning city limits at the Tribal Boundary/County jurisdiction limits, which is consistent with Banning's existing and proposed General Plan Street System. The cross-section has been approved by the Banning Public Works Department. <b>(Consistent)</b></p>
<p><b>Program 1.A:</b> Street rights of way shall be 134 feet for Urban Arterial Highways, 110 feet for Arterial Highways, 100 feet for Major Highways, 88 feet for Secondary Highways, 78 feet for Divided Collectors, 66 feet for Collectors, and 60 feet for Local Streets. Local street standards can be amended as described in Policy 2.</p>	<p>The proposed eastward extension of Western Avenue would be improved within Banning's existing 60 ft right-of-way, which was amended to 66 ft with the 2006 General Plan Amendment. The proposed right-of-way approximates Banning's 66 ft right-of-way standard. The proposed paved cross-section is identical to the Banning standard. Banning is not seeking to expand existing collector streets to 66 ft where there is already an established right-of-way of 60 ft. <b>(Consistent with Banning's interpretation of the General Plan)</b></p>
<p><b>Policy 6:</b> The City shall maintain peak hour Level of Service D or better on all local roadways and intersections.</p>	<p>The Project would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps/South 8<sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project.</p> <p>In the Future Year (2038) condition, it is anticipated that traffic signals will be warranted at intersection Nos. 15 (Charles Street/South Hargrave Street) and 18 (North Hathaway Street/East Barbour Street). These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope. <b>(Inconsistent)</b></p>

**Table 2.1.3 Project Consistency with City of Banning General Plan**

Policy or Program	Discussion of the Build Alternatives' Consistency with the City of Banning General Plan
<p><b>Policy 10:</b> Sidewalks shall be provided on all roadways 66 feet wide or wider.</p>	<p>Sidewalks are provided on both sides of Westward Avenue within Banning between Hathaway Street and the point 4,000 ft east of Hathaway Street near the Banning city limits, where the alignments would diverge from the existing Westward Avenue right-of-way and transition to County standards. The roadway section would then transition to providing an 8 ft path on one side of the roadway easterly to Bonita Avenue, but would still be consistent with the Banning city standard. <b>(Consistent)</b></p>
<p><b>Program 25.C:</b> Class II bikeways and sidewalks should be designated on all existing arterial streets that have sufficient width to safely accommodate bicycle travel lanes.</p>	<p>The Project would include sidewalks within Banning. The section of Westward Avenue in Banning would have sufficient width to accommodate bicycle lanes within Banning city limits. Therefore, Banning may designate the proposed roadway shoulder as a Class II bikeway and request bicycle lane striping if so desired. <b>(Consistent)</b></p>

Sources: *City of Banning General Plan Economic Development Element* (2006) and *Circulation Element Amendment* (2013).

Banning = City of Banning

Caltrans = California Department of Transportation

CEQA = California Environmental Quality Act

County = County of Riverside

ft = foot/feet

LOS = level(s) of service

NEPA = National Environmental Policy Act

Project = Interstate 10 Bypass Project: Banning to Cabazon

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<b>Circulation Element Policies</b>	
<p><b>C 1.1:</b> Design the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the Circulation Plan.</p>	<p>The Project would connect residents and businesses between Banning and Cabazon as shown on Figure 2.1-7 of this document. <b>(Consistent)</b></p>
<p><b>C 1.2:</b> Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary highways, bikeways, park-n-ride facilities, and pedestrian facilities.</p>	<p>The Project would provide access for vehicles, bicycles, pedestrians, and public transit, and would improve access to the Morongo Casino Resort and Spa, the Desert Premium Outlet Mall, and the Cabazon Outlet Mall. <b>(Consistent)</b></p>
<p><b>C 1.3:</b> Support the development of transit connections between Riverside County and regional activity centers in other counties as well as transit connections that link the community centers located throughout the County and as identified in the Land Use Element and in the individual Area Plans.</p>	<p>The Project would provide a new route connecting Cabazon with Banning, providing an opportunity for improved transit between the two communities. <b>(Consistent)</b></p>
<p><b>C 1.4:</b> Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.</p>	<p>The Project connects existing infrastructure in Banning with existing infrastructure in Cabazon by extending Westward Avenue east and connecting to existing Apache Trail/Bonita Avenue. <b>(Consistent)</b></p>
<p><b>C 1.5:</b> Evaluate the planned circulation system as needed to enhance the highway network to respond to anticipated growth and mobility need.</p>	<p>The Project provides for a two-lane roadway where none currently exists to address existing circulation needs while preserving the right-of-way for a future four-lane roadway when required by future development as shown in the Banning and Riverside County General Plans. <b>(Consistent)</b></p>
<p><b>C 1.6:</b> Cooperate with, and where appropriate lead, local, regional, state, and federal agencies to establish an efficient circulation system.</p>	<p>The County has consulted with the following federal, State, regional, and local agencies:</p> <p><b>Federal:</b></p> <ul style="list-style-type: none"> <li>• United States Army Corps of Engineers (USACE)</li> <li>• United States Fish and Wildlife Service (USFWS)</li> </ul> <p><b>Sovereign Nations:</b></p> <p><b>Morongo Band of Mission Indians</b></p> <ul style="list-style-type: none"> <li>• Tribal Council</li> <li>• Tribal Planning Commission</li> <li>• Tribal Planning Staff</li> </ul> <p><b>State:</b></p> <ul style="list-style-type: none"> <li>• California Department of Transportation (Caltrans)</li> <li>• State Historic Preservation Office (SHPO)</li> </ul> <p><b>Regional:</b></p> <ul style="list-style-type: none"> <li>• Southern California Association of Governments (SCAG)</li> <li>• South Coast Air Quality Management Agency (SCAQMD)</li> <li>• Riverside County Transportation Commission (RTC)</li> </ul>



**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
	<ul style="list-style-type: none"> <li>• Coachella Valley Association of Governments (CVAG)</li> <li>• Western Riverside County Conservation Authority</li> <li>• Coachella Valley Conservation Commission (CVCC)</li> </ul> <p><b>Local Governments/Groups</b></p> <ul style="list-style-type: none"> <li>• City of Banning               <ul style="list-style-type: none"> <li>○ City Council</li> <li>○ Planning and Public Works Staff</li> </ul> </li> <li>• West Desert Municipal Advisory Committee (includes Cabazon)</li> <li>• San Geronio Pass Municipal Advisory Committee</li> <li>• Friends of the Desert Mountains</li> <li>• The Pass Transit Agency</li> </ul> <p><b>(Consistent)</b></p>
<p><b>C 1.7:</b> Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.</p>	<p>The Project provides for a new, safer route for bicyclists and pedestrians between the two communities. Bicyclists would have the option of using the on-street paved shoulders or the off-street trail that parallels the Project.</p> <p><b>(Consistent)</b></p>
<p><b>C 3.12:</b> Improve highways serving as arterials through mountainous and rural areas to adequately meet travel demands and safety requirements while minimizing the need for excessive cut and fill.</p>	<p>Both alternatives were designed to minimize the extent of cut-and-fill, given the basic alignment of the alternative (north or south of Smith Creek).</p> <p>Alternative 12 (Preferred Alternative) requires less cut-and-fill because it would be constructed on flat land (Morongo Band of Mission Indians Tribal Land) north of Smith Creek.</p> <p>Alternative 5 must rely more on cut-and-fill methods in order to pass through the hillsides south of Smith Creek.</p> <p>Although some cut-and-fill is required for Alternative 5 and Alternative 12 (Preferred Alternative), grading would be limited and wing walls and bridge abutments would be used in many locations to minimize cut and fill.</p> <p><b>(Consistent)</b></p>
<p><b>C 3.13:</b> Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.</p>	<p>The Project includes turning lanes and traffic signals at the intersections of Westward Avenue/Hathaway Street and Bonita Avenue/Apache Trail.</p> <p><b>(Consistent)</b></p>
<p><b>C 3.20:</b> Determine location of General Plan road rights of way and levels of road improvements needed based primarily upon land uses and travel demand.</p>	<p>The Project is consistent with and would support the future land uses identified in the Banning and Riverside County General Plans by providing access to such land uses. The scope of the Project is consistent with the travel demand on opening day and for the next 16 years. The Project would acquire right-of-way in County jurisdiction to allow for the future widening of the roadway to four lanes.</p> <p><b>(Consistent)</b></p>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<p><b>C 3.24:</b> Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, secondary access, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.</p>	<p>The Project is designed to improve the current street network and is consistent with County design standards that incorporate the requirements for emergency vehicles. With the Project, faster response times are anticipated. The Project would provide a secondary access route between the two communities usable by all vehicles that does not depend on the use of I-10. <b>(Consistent)</b></p>
<p><b>C 3.27:</b> Evaluate proposed highway extensions or widening projects for potential noise impacts on existing and future land uses in the area. Require that the effects of truck mix, speed limits, and ultimate motor vehicle volumes on noise levels are also explored during the environmental process.</p>	<p>Potential noise impacts are identified in the Noise Study Report (October 2016). The Noise Study Report includes truck mix, vehicle speeds, and 2035 motor vehicle volumes in the analysis to determine noise levels. <b>(Consistent)</b></p>
<p><b>C 3.29:</b> Include noise mitigation measures in the design of new roadway projects in the County.</p>	<p>Mitigation Measure N-1 is included in Section 2.13. <b>(Consistent)</b></p>
<p><b>C 3.30:</b> Design roadways to accommodate wildlife crossings whenever feasible and necessary.</p>	<p>Both project alternatives include bridge crossings over Smith Creek and the San Gorgonio River that span the entire floodplain and would provide wildlife crossings. In addition, various proposed drainage culverts under the proposed roadway alignments would provide additional wildlife crossings. Refer to the Natural Environment Study (April 2015) for further information. <b>(Consistent)</b></p>
<p><b>C 3.33:</b> Assure all-weather, paved access to all developing areas.</p>	<p>Both project alternatives would provide a paved roadway that is elevated above the 100-year floodplain. <b>(Consistent)</b></p>
<p><b>C 4.4:</b> Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.</p>	<p>Both project alternatives would provide a paved pedestrian access route along the bypass so that pedestrians may travel the bypass between the City of Banning and the community of Cabazon. <b>(Consistent)</b></p>
<p><b>C 15.6:</b> Provide, where feasible, the construction of overpasses or undercrossings where trails intersect arterials, urban arterials, expressways, or freeways.</p>	<p>The Project would cross over the proposed San Gorgonio River trail as shown in The 2015 Pass Area Plan of the Riverside County General Plan. The Project proposes a high bridge over the river that would accommodate the trail that is planned to cross under the roadway. <b>(Consistent)</b></p>
<p><b>C 20.2:</b> Provide all roadways located within identified flood areas with adequate flood control measures.</p>	<p>The Project provides underground riprap stabilization to protect roadway structures (i.e., bridge columns and abutments) within the floodplain. <b>(Consistent)</b></p>
<p><b>C 20.3:</b> Locate roadways outside identified floodplains whenever possible.</p>	<p>The roadway alignment was carefully selected to be outside the existing 100-year floodplain where possible. Both Build Alternatives utilize long bridges to cross over the Smith Creek and San Gorgonio River floodplains. <b>(Consistent)</b></p>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<p><b>C 20.4:</b> New crossings of watercourses by local roads shall occur at the minimum frequency necessary to provide for adequate neighborhood and community circulation and fire protection. Wherever feasible, new crossings shall occur using bridging systems that pass over entire watercourses and associated floodplains and riparian vegetation in single spans. Dip or culvert crossings shall be avoided, but, where their use is unavoidable, they shall be designed to minimize impacts on watercourses.</p>	<p>The Project provides new local and emergency access to Cabazon. New bridges are required over Smith Creek and the San Gorgonio River. Given the 700 ft to 1,000 ft bridge lengths, single-span bridges are not feasible. When crossing the watercourses, multi-span bridges are proposed. However, column size is minimized to minimize the impacts to storm flow and to preserve sand transport. <b>(Consistent)</b></p>
<p><b>C 20.6:</b> Control dust and mitigate other environmental impacts during all stages of roadway construction.</p>	<p>This is a standard mitigation measure required of all projects in the South Coast Air Basin. The Project would include additional measures to control dust and would incorporate standard measures due to environmental impacts during construction (refer to the Air Quality Analysis, September 2014). <b>(Consistent)</b></p>
<p><b>C 20.9:</b> Incorporate specific requirements of the Western Riverside County Multiple Species Habitat Conservation Plan and the Coachella Valley Multiple Species Habitat Conservation Plan into transportation plans and development proposals.</p>	<p>The Project is consistent with the applicable provisions of both plans and has incorporated specific requirements of the conservation plans. Refer to Appendix I of the Natural Environment Study (April 2015) for an analysis of consistency with the WRMSHCP. Refer to Appendix J of the Natural Environment Study for an analysis of consistency with the CVMSHCP. <b>(Consistent)</b></p>
<p><b>C 20.10:</b> Avoid, where practicable, disturbance of existing communities and biotic resource areas when identifying alignments for new roadways, or for improvements to existing roadways and other transportation system improvements.</p>	<p>The Project is consistent with this objective to the extent practicable. The Project minimizes the impacts to the waters of the United States; alternatives with excessive impacts to waters (i.e., greater than 0.5 ac) were screened out early in the process. Alternative 5 and Alternative 12 (Preferred Alternative) are both designed to minimize impacts to sensitive species identified in the WRMSHCP. The Alternative Screening Analysis demonstrated that several Build Alternatives, including Alternatives 1, 2, 3, 4, and 9, would have greater impacts to biological resources than either Alternative 5 or Alternative 12 (Preferred Alternative) and, therefore, have been removed from consideration. <b>(Consistent)</b></p>
<p><b>C 20.11:</b> Implement the Circulation Plan in a manner consistent with federal, state, and local environmental quality standards and regulations.</p>	<p>The Project would demonstrate compliance with the following federal, State, and local environmental standards and regulations via the following steps:</p> <ul style="list-style-type: none"> <li>• NEPA (federal) via the preparation of an EA that is anticipated to lead to a Finding of No Significant Impacts, with measures to reduce harm incorporated.</li> <li>• CEQA (State), via preparation of a Draft and Final EIR (prepared jointly with the EA) incorporating mitigation measures to reduce the Project's adverse impacts. In addition, the County would</li> </ul>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
	<p>adopt Findings regarding Project impacts, and would issue a Statement of Overriding Considerations regarding any impacts that cannot be mitigated below a level of significance.</p> <ul style="list-style-type: none"> <li>• The federal Clean Air Act, as demonstrated in the approved Air Quality Analysis (September 2014), which also addresses the State air quality requirements.</li> <li>• The federal Clean Water Act through compliance with Section 404 regarding impacts to the waters of the United States as discussed in the Natural Environment Study (April 2015), and to be approved by the USACE, through compliance with Section 401 requiring project certification by the RWQCB, as discussed in the Natural Environment Study.</li> <li>• State Clean Water requirements through compliance with the California Porter-Cologne Water Quality Control Act and approval by the RWQCB as discussed in the Natural Environment Study.</li> <li>• FESA, through the analysis of impacts to federally listed threatened and endangered species as discussed in the Natural Environment Study. In addition, Caltrans is anticipated to conduct a Section 7 Consultation with the USFWS regarding potential impacts to desert tortoise.</li> <li>• State and local endangered species impacts are addressed in the Natural Environment Study. In particular, the Project is consistent with the applicable provisions of the two local Conservation Plans. Refer to Appendix I of the Natural Environment Study for an analysis of consistency with the WRMSHCP. Refer to Appendix J of the Natural Environment Study for an analysis of consistency with the CVMSHCP.</li> <li>• Consistency with the Riverside County General Plan and The Pass Area Plan is demonstrated in the Community Impact Assessment (May 2017), as is consistency with the Banning General Plan.</li> <li>• Additional federal, State, and local environmental requirements as discussed in the Air Quality Analysis (September 2014), the Initial Site Assessment (February 2016, updated September 2020), the Historic Resources Evaluation Report (June 2016), the Noise Study Report (October 2016), the Natural Environment Study (April 2015), the Traffic Operational Analysis Revised Final Report (April 2015), the Visual Impact Assessment (March 2015), as well as the EIR/EA.</li> </ul> <p><b>(Consistent)</b></p>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<b>C 20.14:</b> Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles.	The Project provides for a separate path parallel to the roadway usable by pedestrians and bicyclists. Bicyclists may also use the paved shoulders. <b>(Consistent)</b>
<b>C 20.15:</b> Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply	Applicable NPDES requirements will be incorporated into the Project. <b>(Consistent)</b>
<b>Land Use Element Policies</b>	
<b>LU 27.3:</b> Protect road access to mining activities and prevent or mitigate traffic conflicts with surrounding properties.	Alternatives that could have impacted existing and planned mining operations were eliminated from consideration. The proposed Build Alternatives would protect mining operations from impacts to access and traffic conflicts. <b>(Consistent)</b>
<p><b>LU 37.1:</b> The County of Riverside will continue to work with Tribal authorities to implement existing inter-governmental agreements with regard to land use regulatory authority over lands within Indian reservation boundaries.</p> <p><b>LU 37.2:</b> The County of Riverside will continue to work with Tribal authorities to negotiate inter-governmental agreements in situations where such agreements would be mutually beneficial.</p> <p><b>LU 37.4:</b> The County of Riverside will continue to work with Tribes to seek compatibility between Riverside County and Tribal land use plans and policies.</p>	The County has worked cooperatively with the Morongo Band of Mission Indians on this Project, and has presented the Project to the Morongo Band of Mission Indians Tribal Council, the Tribal Planning Commission, and the Bureau of Indian Affairs. Tribal representatives and the Bureau of Indian Affairs have been members of the Project Development Team from the inception of the Project. If Alternative 12 (Preferred Alternative) is adopted, the County anticipates that a cooperative agreement would be executed with the Morongo Band of Mission Indians regarding right-of-way and construction on Morongo Band of Mission Indians Tribal Lands. The County will continue to coordinate with the Morongo Band of Mission Indians and will verify the consistency of the Project with general plans, when made available. <b>(Consistent)</b>
<b>Multipurpose Open Space Element Policies</b>	
<p><b>OS 5.1:</b> Substantially alter floodways or implement other channelization only as a "last resort," and limit the alteration to:</p> <ul style="list-style-type: none"> <li>a. that necessary for the protection of public health and safety only after all other options are exhausted;</li> <li>b. essential public service projects where no other feasible construction method or alternative project location exists; or</li> <li>c. projects where the primary function is improvement of fish and wildlife habitat</li> </ul>	The Project maintains both Smith Creek and San Gorgonio River in their current locations, and includes riprap placed underground to prevent both water courses from migrating into the roadway alignment and existing or long-range planned development. The Project's primary function is connecting the two communities. However, the Project would include wildlife crossings to improve wildlife movement and linkages. <b>(Consistent)</b>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<p><b>OS 5.2:</b> If substantial modification to a floodway is proposed, design it to reduce adverse environmental effects to the maximum extent feasible, considering the following factors:</p> <ol style="list-style-type: none"> <li>stream scour;</li> <li>erosion protection and sedimentation;</li> <li>wildlife habitat and linkages;</li> <li>cultural resources including human remains;</li> <li>groundwater recharge capability;</li> <li>adjacent property; and</li> <li>design (a natural effect, examples could include soft riparian bottoms and gentle bank slopes, wide and shallow floodways, minimization of visible use of concrete, and landscaping with native plants to the maximum extent possible).</li> </ol> <p>A site-specific hydrologic study may be required.</p>	<p>The Project design takes all the listed factors into account. Both Smith Creek and San Geronio River would be maintained as soft-bottom channels with gentle bank slopes; any stabilization would be placed underground. A Draft Location Hydraulic Study (May 2015) has been prepared. Cultural resources are addressed in the Historic Properties Survey Report (August 2016). Impacts to adjacent properties are addressed above in Section 2.1.2. Smith Creek would be maintained as a soft-bottom streambed with gentle bank slopes and wide and shallow floodways. <b>(Consistent)</b></p>
<p><b>OS 14.2:</b> Restrict incompatible land uses within the impact area of existing or potential surface mining areas.</p>	<p>The Project does not restrict access or operations at the RRM plant. <b>(Consistent)</b></p>
<p><b>OS 17.3:</b> Enforce the provisions of applicable MSHCPs when developing transportation or other infrastructure projects that have been designated as covered activities in the applicable MSHCP.</p>	<p>The Project is consistent with both the WRMSHCP and CVMSHCP. <b>(Consistent)</b></p>
<p><b>The Pass Area Plan</b></p>	
<p><b>PAP 1.1:</b> To provide for the orderly development of Banning Municipal Airport and the surrounding areas, comply with the Airport Land Use Compatibility Plan for Banning Municipal Airport, as well as any applicable policies related to airports in the Land Use, Circulation, Safety and Noise Elements of the Riverside County General Plan.</p>	<p>The Project complies with the requirements of the Banning Airport Land Use Compatibility Plan of the 2015 Riverside County Pass Area Plan. The Project is in Airport Land Use zones where roadways are considered a compatible use and is consistent with the orderly development of the airport. If Alternative 12 (Preferred Alternative) is selected as the preferred alternative, the following would be required:</p> <ul style="list-style-type: none"> <li>Riverside County Airport Land Use Commission review and approval</li> </ul> <p>As found in the Growth-Related Indirect Impact Analysis (January 2017), no additional mitigation beyond compliance with existing regulations is necessary to ensure consistency between the Project and the orderly development of the Banning Municipal Airport. <b>(Consistent)</b></p>



**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<b>PAP 5.2:</b> Provide bank stabilization and protection for the San Gorgonio River within the Cabazon Policy Area.	The Project design provides for bank stabilization and slope protection for the San Gorgonio River within the Project limits. <b>(Consistent)</b>
<b>PAP 9.1:</b> Adhere to the County's lighting requirements for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.	Lighting is limited to safety lighting at intersections and bridge lighting, which would be required to adhere to the County's lighting requirements. <b>(Consistent)</b>
<b>PAP 10.1:</b> Design and develop the vehicular roadway system per Figure 7, Circulation [in The Pass Area Plan; see Figure 2.1-7 of this document], and in accordance with the Functional Classifications section of the General Plan Circulation Element.	The Project is one element of the circulation network as shown on the 2015 Pass Area Plan (Figure 2.1-7). <b>(Consistent)</b>
<b>PAP 10.2:</b> Maintain the County's roadway Level of Service standards as described in the Level of Service section of the General Plan Circulation Element.	The Project would satisfy the LOS standards for all intersections within Unincorporated Riverside County. Refer to the Traffic Operational Analysis Revised Final Report (April 2015). The documents conclude that area intersections affected by the Project would operate at LOS D, consistent with County standards. <b>(Consistent)</b>
<b>PAP 12.1:</b> Protect the scenic highways in the Pass from change that would diminish the aesthetic value of adjacent properties in accordance with the Scenic Corridors section of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements.	The only designated scenic highway in the vicinity is SR-243 to Idyllwild. The Project would not impact SR-243 or diminish the aesthetic value of adjacent properties. The Project's Visual Impact Assessment (March 2015) concludes that views from this facility would not be adversely affected. <b>(Consistent)</b>
<b>PAP 13.3:</b> Eliminate the restrictions for emergency vehicles through coordination with the railroad companies, by building grade separations at key points, and by the creation of alternative emergency circulation routes.	The only existing emergency vehicle access to Cabazon from the west is via I-10, and all access to the southern part of Cabazon must use at-grade crossings of the UPRR, which are frequently blocked by trains. The construction of the Project would not include a grade separation at the UPRR, but would provide for a new alternative emergency access route and would provide Cabazon residents the opportunity to use existing grade-separated crossings in Banning at 8 <sup>th</sup> Street and Sunset Avenue. <b>(Consistent)</b>
<b>PAP 16.6:</b> Ensure interconnected habitat conservation in order to provide a linkage from the San Jacinto Mountains to the Coachella Valley.	The Project is consistent with this objective with the proposed wildlife crossings. Refer to the discussion of habitat connectivity in the Natural Environment Study (April 2015). <b>(Consistent)</b>
<b>PAP 16.10:</b> Protect sensitive biological resources in the Pass Area Plan through adherence to policies found in the Multiple Species Habitat Conservation Plans, Environmentally Sensitive Lands, Wetlands, and Floodplain and Riparian Area Management sections of the General Plan Multipurpose Open Space Element.	The Project is consistent with the WRMSHCP and CVMSHCP, and with the multipurpose open space plan. <b>(Consistent)</b>

**Table 2.1.4 Project Consistency with the 2015 Riverside County  
General Plan Policies**

Policy	Discussion of Alternative 5 and 12 Consistency with Riverside County General Plan Policies
<p><b>PAP 17.1:</b> Protect life and property from the hazards of flood events through adherence to the Flood and Inundation Hazards section of the General Plan Safety Element.</p>	<p>The Project is consistent with the cited requirements as discussed in the Draft Drainage Report (January 2020), which also concludes that the Project would not raise downstream flood flows. <b>(Consistent)</b></p>
<p>ac = acres Banning = City of Banning Cabazon = unincorporated community of Cabazon CEQA = California Environmental Quality Act County = Riverside County CVMShCP = Coachella Valley Multiple Species Habitat Conservation Plan EA = Environmental Assessment EIR = Environmental Impact Report FESA = Federal Endangered Species Act I-10 = Interstate 10</p>	<p>LOS = level of service NEPA = National Environmental Policy Act NPDES = National Pollutant Discharge Elimination System Project = Interstate I-10 Bypass Project: Banning to Cabazon RWQCB = Regional Water Quality Control Board SR-243 = State Route 243 UPRR = Union Pacific Railroad WRMShCP = Western Riverside County Multiple Species Habitat Conservation Plan</p>

***SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy and 2019 Federal Transportation Improvement Plan***

The RTP/SCS contains a listing of both short-range and long-range transportation improvements proposed in the SCAG region. It contains a project list broken into projects with 6 years of already-committed funding (i.e., FTIP). To be eligible for federal funding, and to demonstrate regional air quality conformity, a Project must be listed in both of these plans. The Project is listed in both of these plans with a Project ID of RIV031202 and the following description:

**I-10 Bypass South (Formerly Ramsey St. Ext.):** Construct two lanes of roadway to provide a bypass/network facility for the I-10, approx. 1/2 mile s/o I-10 between the eastern end of the City of Banning and Apache Trail in Cabazon. Other improvements include the construction of bridge crossings at Smith Creek and San Gorgonio River. Because the Project is listed in the regional and federal transportation plans, it is consistent with the goals and policies of these plans.

***Morongo Band of Mission Indians Draft General Plan 2008***

The Morongo Band of Mission Indians Draft 2008 General Plan establishes a plan to balance the physical, economic, and environmental growth of the Morongo Band of Mission Indians Tribal Lands. Table 2.1.5 lists the policies contained in the Morongo Band of Mission Indians Draft General Plan that are relevant to the planning of the Project. The first column describes the relevant policy and the second column analyzes the Build Alternatives’ consistency with that policy.

**Table 2.1.5 Project Consistency with Morongo Band of Mission Indians  
Draft General Plan**

Policy or Program	Discussion of Alternative 5 and Alternative 12 (Preferred Alternative) Consistency with Morongo Band of Mission Indians Draft General Plan
<b>Policy 1.2:</b> For identified targeted development areas, Specific Plans containing development standards, distribution of land uses, infrastructure requirements and implementation measures shall be utilized as a principal implementation tool.	The Project complements the Specific Plan for the I-10 Commercial/Industrial Corridor. The Project improves infrastructure on existing roads that provide access to the I-10 Commercial/Industrial Corridor, and it improves mobility from the City of Banning to the Specific Plan area. <b>(Consistent)</b>
<b>Objective 6:</b> Preserve and acquire open space for the Morongo Band of Mission Indians in order to enhance the quality of life for the tribe.	The Project would not impact land designated as Open Space. The Section 12 parcel that would be traversed by Alternative 12 (Preferred Alternative) is located on land designated for industrial use. <b>(Consistent)</b>
<b>Policy 7.1:</b> Target new development into the I-10 Commercial/Industrial Corridor, and into specific growth areas outside of the Open Space and Conservation and Culturally Sensitive Areas of the Reservation.	The Project would improve regional access to the businesses in the I-10 Commercial/Industrial Corridor, thereby supporting the targeted new developments. <b>(Consistent)</b>
<b>Policy 15.2:</b> Provide land use opportunities to retain and to develop regionally significant cultural, scientific, corporate, entertainment and educational institutions	The Project would not have an effect on land identified for cultural, scientific, corporate, entertainment, or educational use. The Section 12 Parcel that would be traversed by Alternative 12 (Preferred Alternative) is located on land identified for industrial use. <b>(Consistent)</b>

I-10 = Interstate 10

**Morongo Band of Mission Indians Draft Long-Range Transportation Plan  
2010–2030**

The Morongo Band of Mission Indians Draft Long-Range Transportation Plan guides transportation activities on Morongo Band of Mission Indians Tribal Lands. The goals of the Long-Range Transportation Plan are to provide safe and efficient public access, to complement surrounding transportation facilities, and to promote economic development while protecting natural and cultural resources. The Long-Range Transportation Plan provides a list of proposed short-, intermediate-, and long-term transportation projects.

**Banning Municipal Airport Land Use Compatibility Plan**

As discussed in the January 30, 2020, letter from the Riverside County Airport Land Use Commission (RCALUC) to the County of Riverside Transportation Department, the RCALUC found that the Project is conditionally consistent with the 2004 Banning Municipal Airport Land Use Compatibility Plan. The January 30, 2020, letter is included as an attachment to Chapter 4, Comments and Coordination. The conditions,

which apply to the proposed power and light poles as part of the Project, are as follows:

- Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- Neither marking nor lighting of the proposed power and light pole structures is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with Federal Aviation Administration (FAA) Advisory Circular 70/7460-1 L Change 2 and shall be maintained in accordance therewith for the life of the Project.
- The proposed power poles shall not exceed a height of 70 feet above ground level and a maximum elevation at top point of 2,195 feet above mean sea level.
- The maximum height and top point elevation specified above shall not be amended without further review by the RCALUC and the FAA, provided, however, that reduction in structure height or elevation shall not require further review by the RCALUC.
- Temporary construction equipment used during actual construction of the structures shall not exceed 70 feet in height and a maximum elevation of 2,195 feet above mean sea level, unless separate notice is provided to the FAA through the Form 7460-1 process.

Within five days after construction of each structure reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the Project proponent or his/her designee and e-filed with the FAA. This requirement is also applicable in the event that the Project is abandoned or a decision is made not to construct the applicable structure.

### ***Western Riverside County Multiple Species Habitat Conservation Plan***

As discussed in the *Natural Environment Study* (April 2015), the Project is consistent with the applicable provisions of the WRMSHCP. Refer to Appendix I of the *Natural Environment Study* for an analysis of the Project's consistency with the WRMSHCP.

### ***Coachella Valley Multiple Species Habitat Conservation Plan***

As discussed in the *Natural Environment Study* (April 2015), the Project is consistent with the applicable provisions of the CVMSHCP. Refer to Appendix J of the *Natural Environment Study* for an analysis of the Project's consistency with the CVMSHCP.

## **2.1.4.2 Environmental Consequences**

### **No Build Alternative**

The existing condition in the study area is not consistent with the regional mobility goals and objectives of the City of Banning, the County of Riverside, and SCAG. The existing condition does not meet the standards and goals of the Banning and County General Plans to provide a local multimodal roadway connecting the City of Banning with the community of Cabazon. The No Build Alternative would not construct the I-10 Bypass and, therefore, would not be consistent with the goals of local and regional agencies.

### **Build Alternatives**

The Project is within unincorporated Riverside County and the City of Banning. Both the County and the City consider LOS D as an acceptable level of service for intersections and roadway segments. The Project would be inconsistent with Policy 6, which establishes a minimum LOS D for roadways in the City of Banning as three intersections within the City of Banning (refer to Table 2.1.3) are expected to exceed LOS D. These future intersection LOS deficiencies are unavoidable and unmitigated project impacts, resulting in an adverse effect under NEPA.

Other than Policy 6, the Build Alternatives are consistent with all other relevant General Plan goals and policies discussed in Section 2.1.4.1. The County's requirements for nighttime lighting around Mt. Palomar would be incorporated as a standard condition. Compliance with the National Pollutant Discharge Elimination System (NPDES) will be required.

- Growth-related impacts are addressed in the *Growth-Related Indirect Impact Analysis* (January 2017).
- Traffic impacts are addressed in the *Traffic Operational Analysis Final Revised Report* (April 2015).
- Impacts to visual resources are addressed in the *Visual Impact Assessment* (March 2015).
- Impacts to cultural resources are addressed in the *Historic Property Survey Report* (August 2016), the *Historic Resources Evaluation Report* (June 2016), the *Archaeological Survey Report* (February 2016), and the *Extended Phase I Report* (February 2016).
- Water resources impacts are addressed in the *Location Hydraulic Study* (May 2015) and the *Drainage Report* (January 2020).

- Geological and soil impacts are addressed in the *Preliminary Foundation Report, I-10 Bypass Project, San Geronio River Bridge, Banning, California* (August 2014), *Preliminary Foundation Report, I-10 Bypass Project, Smith Creek Bridge, Banning, California* (August 2014), and the *Preliminary Geotechnical Design Report* (August 2014).
- Impacts to biological resources are addressed in the *Natural Environment Study* (April 2015), and the *Jurisdictional Delineation Report* (January 2015).
- Air quality impacts are addressed in the *Air Quality Analysis* (September 2014).
- Noise impacts are addressed in the *Noise Study Report* (October 2016) and the *Noise Abatement Decision Report* (April 2017).

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

There are no feasible avoidance, minimization, and/or mitigation measures for the substantial adverse effects under NEPA identified in Section 2.1.4.2, Environmental Consequences. Therefore, avoidance, minimization, and/or mitigation measures are not proposed.

#### **2.1.5 Parks and Recreational Facilities**

##### **Regulatory Setting**

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400–5409) prohibits local and State agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Two parks are located within the Project study area:

- Lions Park, which is located at the intersection of Charles Street/Hargrave Street in Banning, 0.5 mi west of the Project limits (see Figure 2.1-1), is the home of Banning’s Little League team and includes three baseball fields, a children’s playground, a snack bar, and parking.
- The James A. Venable Civic Center and Park, which is located at 50390 Carmen Avenue in Cabazon, approximately 1.5 mi southeast of the Project limits, provides recreation and community facilities for the Cabazon community, including ball fields, a skateboard park, two lighted outdoor basketball courts, a children’s playground, and a picnic shelter.



### **2.1.5.1 Environmental Consequences**

#### ***No Build Alternative***

The No Build Alternative does not include construction or improvements associated with the I-10 Bypass from Banning to Cabazon. Therefore, it would have no adverse effects on parks and recreation facilities located within the study area.

#### ***Build Alternatives***

The Project will not have any adverse effects to the existing park facilities within the study area because the park facilities are outside the Project's footprint. However, the Project will improve access to Lions Park and the James A. Venable Civic Center Park.

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

The Project will have no effect on parks and recreational facilities. Therefore, avoidance, minimization, and/or mitigation measures are not required.

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## 2.2 Growth

This section discusses the potential for the proposed Interstate 10 (I-10) Bypass Project: Banning to Cabazon Project (Project) to influence growth in the study area in the long term. The potential to influence growth, including methodology is documented in detail in the *Growth-Related Indirect Impact Analysis* (January 2017). That analysis is summarized in this section. The Growth Analysis Study Area is shown on Figure 2.2-1.

### 2.2.1 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 includes a requirement to examine indirect effects, 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..."

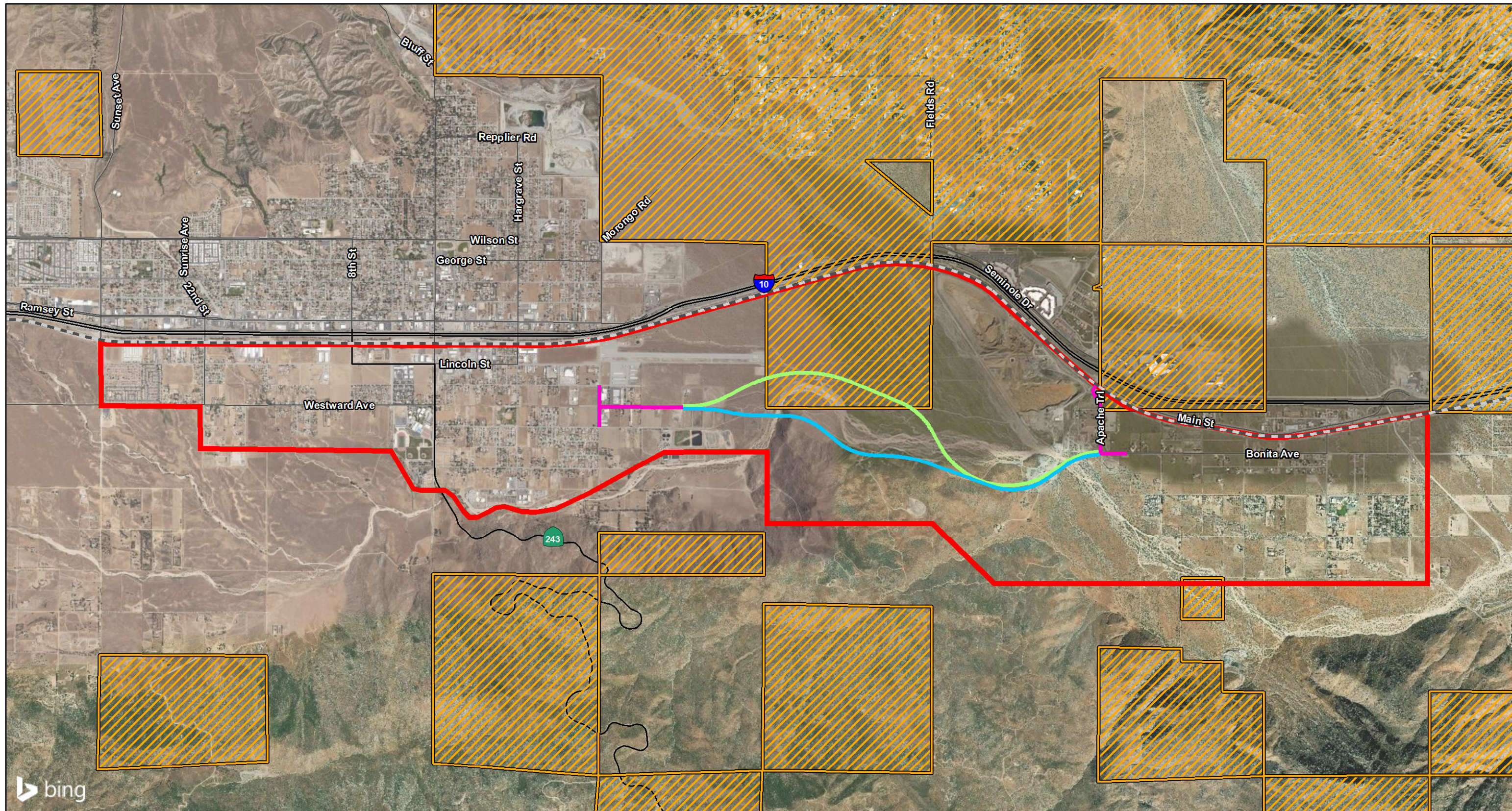
The growth analysis was prepared by following the steps outlined in the *Standard Environmental Reference, Guidance for Preparers of Growth-Related, Indirect Impact Analyses* (Guidance) (March 24, 2016)<sup>1</sup> developed by the California Department of Transportation (Caltrans) in conjunction with the Federal Highway Administration (FHWA) and the United States Environmental Protection Agency (EPA). The Guidance was prepared to address California's specific challenges to

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<sup>1</sup> California Department of Transportation (Caltrans). *Guidance for Preparers of Growth-Related Indirect Impact Analyses* (last updated March 24, 2016; available at [http://www.dot.ca.gov/ser/Growth-related\\_IndirectImpactAnalysis/gri\\_guidance.htm](http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/gri_guidance.htm) [site accessed August 31, 2016]).

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LEGEND

- Growth Study Area
- Morongo Band of Mission Indians Tribal Lands
- Union Pacific Railroad
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)



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FEET

SOURCE: Bing Maps (2014)

F:\KHA1101\GIS\GrowthStudy\_Area.mxd (3/4/2020)

FIGURE 2.2-1

*I-10 Bypass: Banning to Cabazon*  
Growth Study Area



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growth-related impacts and recommends that the analysis focuses on the *influence* that transportation projects may have. The Guidance identified a two-phase approach to evaluating how a project may influence the location, type, and/or rate of future growth and development.

## **2.2.2 Affected Environment**

The previous section of this Final Environmental Impact Report/Environmental Assessment (EIR/EA) (i.e., 2.1, Land Use) describes the existing and planned land uses in the study area, which constitutes the affected environment for this analysis. As discussed in Section 2.1, the study area includes parts of the City of Banning (Banning), the community of Cabazon (Cabazon), unincorporated Riverside County (County) lands, and Morongo Band of Mission Indians Tribal Lands. Section 2.1 also describes the applicable land use planning documents for each area. The study area for the growth analysis is shown on Figure 2.2-1.

### **2.2.2.1 Study Area Demographics**

#### ***Population***

##### ***Total Riverside County***

Riverside County has experienced rapid population and housing growth in the last few decades and is projected to continue to grow over the next 20 years. Over the past several decades, many people have moved to Riverside County from neighboring Los Angeles and Orange Counties in search of lower housing costs and a suburban lifestyle. The Southern California Association of Governments (SCAG) projects that the population of Riverside County will grow approximately 37.4 percent between 2015 and 2040. This is a slower population growth rate than has occurred over the past few decades in the County.

According to the 2010 United States Census, the County's total population increased dramatically between 2000 and 2010 (42 percent), from 1,545,387 to 2,189,641 persons. According to SCAG, the total population in Riverside County is forecast to increase to more than 3,183,000 residents by 2040. The Build Alternatives are proposed in the part of the County referred to as the San Gorgonio Pass.

##### ***City of Banning***

According to the Banning General Plan Community Development Element (2007), Banning's population increased by nearly half (47 percent) between 1980 and 1990, from 14,020 to 20,570 persons. Between 1990 and January 2000, Banning's population grew by just over 2 percent annually. The City's General Plan estimates

that the 2 percent annual rate of population growth should remain at this modest level to 2040.

According to the 2010 United States Census, the population of Banning increased by 6,041 persons (26 percent) between 2000 and 2010. In 2010, the population of Banning was 29,603 persons, which accounted for 1.3 percent of the total population in the County.

The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Growth Forecast adopted by SCAG for 2020 and 2040 estimates that the total population in Banning will increase by approximately 25 percent (to more than 37,600 residents) between 2012 and 2040.

#### ***Community of Cabazon and Unincorporated Riverside County***

According to the 2010 United States Census, the population in the community of Cabazon increased between 2000 and 2010 from 2,229 to 2,535 persons (13 percent). During the same period, the population of Riverside County increased by 42 percent. The total population in unincorporated Riverside County, which includes Cabazon, is projected to continue to increase, reaching more than 499,200 residents by 2040 (39 percent increase between 2012 and 2040).

#### ***Morongo Band of Mission Indians Tribal Lands***

According to the 2000 United States Census, the Morongo Band of Mission Indians Tribal Lands had over 954 residents in 2000. Census information was not available for the Morongo Band of Mission Indians Tribal Lands for 2010. No growth forecast for the Morongo Band of Mission Indians Tribal Lands was provided in the 2016 RTP/SCS Growth Forecast.

#### ***Employment***

According to the 2016–2040 SCAG RTP/SCS Growth Forecast, the number of jobs in the County of Riverside increased 15 percent (i.e., from 514,000 to 592,000 jobs) between 2000 and 2010. Based on estimates in the 2016–2040 SCAG RTP/SCS Growth Forecast, employment is projected to increase in Riverside County by 58.4 percent (i.e., to 1,175,000 jobs) between 2015 and 2040. The number of jobs in Banning and unincorporated Riverside County is projected to increase by 95 percent and 122 percent, respectively, from 2012 to 2040.

## **Housing**

According to the 2010 United States Census, the number of households in the County of Riverside increased 36 percent (i.e., from 506,218 to 686,260 households) between 2000 and 2010. The number of households in unincorporated Riverside County and Banning is projected to increase by 45 percent and 30 percent, respectively, from 2012 to 2040. Only a small amount of the growth in households in unincorporated Riverside County will occur in Cabazon.

### **2.2.2.2 Resources of Concern in the Study Area**

The general categories of resources of concern that could potentially be affected by development in the study area were identified as follows:

- Biological resources:
  - Federal and State endangered species and their habitats (desert tortoise, Le Conte's thrasher, burrowing owl, and Los Angeles pocket mouse)
  - Waters (normally dry streambeds) of the United States and waters of the State, specifically the San Gorgonio River and Smith Creek and their tributaries as well as important fluvial sand transport systems
  - Impacts to wildlife migration between the San Gorgonio Mountains and the San Jacinto Mountains
  - Consistency with applicable habitat conservation plans (Western Riverside County Multiple Species Habitat Conservation Plan [WRMSHCP], and Coachella Valley Multiple Species Habitat Conservation Plan [CVMSHCP]).
- Visual resources (specifically, short- and long-range views of the southern foothills in the San Jacinto Mountains)
- Traffic congestion resulting from potential additional growth in the study area
- Rural community character
- Air quality
- Surface water hydrology relating to increased impervious surfaces

### **2.2.3 Environmental Consequences**

The potential growth-related impacts of the Project were considered in the context of the first-cut screening analysis approach to assess the likely growth potential effect of the Project and whether further analysis is necessary, based on consideration of the following:

- How, if at all, does the project potentially change accessibility?

- How, if at all, do the project type, project location, and growth pressure potentially influence growth?
- Is project-related growth reasonably foreseeable as defined in NEPA? Under NEPA, indirect impacts need only be evaluated if they are reasonably foreseeable as opposed to remote and speculative.
- If there is anticipated project-related growth, how, if at all, will that affect resources of concern?

### **2.2.3.1 No Build Alternative**

Under the No Build Alternative, existing transportation deficiencies in the study area would not be addressed, and the No Build Alternative would not be consistent with regional mobility goals and objectives of the City of Banning, the County of Riverside, SCAG, or the Morongo Band of Mission Indians to provide a local road connecting Banning with the community of Cabazon. Under the No Build Alternative, development in the study area would be expected to be consistent with the existing Banning, County, and Morongo Band of Mission Indians adopted land use plans for the study area (the Morongo Band of Mission Indians land use plan is a draft plan). As a result, the No Build Alternative would not be expected to influence the amount, timing, or location of growth in the study area. Therefore, the No Build Alternative would not result in growth-inducing impacts on resources in the community of Cabazon.

### **2.2.3.2 Alternative 5 and Alternative 12 (Preferred Alternative)**

The Build Alternatives were compared to existing and future land uses in the study area to determine potential growth-related impacts based on the Guidance questions described earlier. The potential influence of the Project on growth and the potential for induced growth to impact resources of concern in the area (including biological and visual resources, and traffic/transportation) are also addressed. Where the effects of the Build Alternatives would be the same or similar, the analysis refers to the Build Alternatives; where there are differences, the discussion refers to Alternative 5 and Alternative 12 (Preferred Alternative) as appropriate.

### ***First-Cut Screening in the Evaluation of Potential Growth-Related Effects***

The determination of whether the Build Alternatives would influence or generate growth is based on analysis in response to the first-cut screening analysis questions discussed in the following sections:

*How, if at all, does the Project potentially change accessibility?*

The Build Alternatives would provide a paved road from Banning to Cabazon through an area under County jurisdiction that is primarily undeveloped with no current public access, potentially making future growth in these areas more attractive.

*How, if at all, do the project type and location, and growth pressure potentially influence growth?*

The Project could potentially influence growth in the areas crossed by the alignments because the Project would provide a new road, and would result in a redistribution of traffic in the Project area. Specifically, the Build Alternatives could affect the timing and location of development. As soon as the Project is built, immediate access would be provided to large areas of flat developable land, which are currently inaccessible/ blocked off by sand mining or floodplains/creeks. There is a high level of current pressure for development in the area, as is seen especially north of I-10 where access was provided for several outlet shopping centers. As stated on page 2.1-33 of this Final EIR/EA, the Morongo Band of Mission Indians supports the new bypass road under Alternative 12 (Preferred Alternative) to facilitate development of land uses in their General Plan. Alternative 12 (Preferred Alternative) would facilitate and speed the conversion of vacant land areas to developed uses by providing access. The Build Alternatives would not affect the density or type of development on these parcels because future growth is expected to be consistent with currently applicable General Plans and other governing land use plans; growth would be largely in response to market pressure and other factors, not only the presence of the new bypass. Similarly, the development and locations of the General Plan land uses could shift closer to the selected Build Alternative to minimize the need for additional roads to connect new land uses to the new bypass road, although shifts are dependent upon economic forces and not expected to be substantially different from General Plan uses. The new bypass road would be a through road and would not provide driveways or frontage roads to facilitate new access. It should be noted that construction of the future four-lane facility, if needed based on future traffic volumes, is not evaluated in this Final EIR/EA and would require separate environmental approvals in the future. However, the additional lanes for the future four-lane facility would not be anticipated to affect the density or type of development in the Project area because market conditions are likely to play a larger role in affecting the type or density of growth in the area than increased accessibility to this area. The Build Alternatives would abide by the General Plans and other governing land use plans for the area and would not alter land uses established in these plans.

*Is the project-related growth reasonably foreseeable as defined by NEPA? Specifically, under NEPA, indirect impacts need only be evaluated if they are reasonably foreseeable as opposed to remote and speculative.*

Based on the analysis provided above, it was determined that project-related growth is reasonably foreseeable as defined by NEPA. As stated above, the Build Alternatives could affect the timing and location of development; however, the Build Alternatives would not be expected to affect the density or type of development on land that would otherwise be inaccessible.

Therefore, additional analysis was conducted to answer the following questions in Section 3.1.4:

- What is the potential for growth under each alternative?
- What are the growth-related effects of each alternative on resources of concern?
- Are there any measures to avoid and minimize growth-related impacts?
- What are the results of the analysis for each alternative?

*If there is project-related growth, how, if at all, will that affect resources of concern? Identify which resources of concern are likely to be affected by the foreseeable future growth. If a project is likely to influence future growth, but no resources of concern will be affected, then state that here and indicate that no further growth analysis is necessary.*

It is anticipated that future growth would not be substantially different as a result of the Project than growth already planned and considered in adopted General Plans and other land use plans in the study area. The primary resources of concern in the study area are biological and visual resources, traffic/transportation, rural community character, air quality, and surface water hydrology (refer to Section 2.2.2.2).

Future growth in the study area, if allowed to occur without jurisdictional oversight by agencies with land use planning and approval authority, could cause increased traffic on local roadways, as well as potential adverse effects to biological and visual resources. It is also expected that growth on the flatter lands that would become more accessible with implementation of the Build Alternatives would start sooner than under the No Build Alternative due to the presence of a new road in an area that is primarily undeveloped with no current public access. Development in the area would likely occur faster and lead to greater conversion of biological habitat/open space into fully developed urban land uses than the No Build Alternative. There would also be future adverse effects on visual resources, the rural community character, air quality,



and surface water hydrology in the Project area. However, effects on resources of concern from future projects in the study area would be evaluated during the permitting process for those projects by the agencies with land use planning and approval authority. Projects would be required to comply with the applicable State and federal regulations and policies, including Habitat Conservation Plans, to protect resources of concern. Future projects, including the Build Alternatives, would be required to avoid, minimize, or mitigate such adverse effects in accordance with regulatory requirements.

### ***Second-Cut Screening in the Evaluation of Potential Growth-Related Effects***

#### ***What is the potential for growth under each alternative?***

Alternative 5 would be aligned south of Smith Creek and along the foothills of the San Jacinto Mountains. This area is within County jurisdiction and is primarily undeveloped with industrial and rural residential (0 to 1 dwelling unit per acre) General Plan land use designations. There is less property potentially available for development in this area than in the area crossed by Alternative 12 (Preferred Alternative), which runs north of Smith Creek through Tribal Lands primarily designated as industrial in the Morongo Band of Mission Indians Draft General Plan. There is also an existing railroad facility adjacent to I-10. As a result, implementation of Alternative 12 (Preferred Alternative) could make the Tribal Lands identified for industrial uses more attractive for future projects. However, real estate development is largely driven by market forces and is not dependent on the availability of one type of infrastructure such as a new roadway. As a result, the Build Alternatives would not be expected to influence the type or density of growth because market conditions are likely to play a larger role in affecting the type or density of growth in the area than increased accessibility to this area. Nonetheless, both Build Alternatives could influence the timing of planned growth in the study area if the proposed road is constructed in advance of any future roads in those areas considered by the City of Banning and/or the County. Similarly, the locations of the General Plan land uses could shift closer to the selected Build Alternative to minimize the need for additional roads to connect new land uses to the new bypass road. As a result, the Build Alternatives could potentially influence the timing and/or location of planned growth in the study area. Alternative 12 (Preferred Alternative) might result in slightly greater influence on the timing and location of the planned growth because it would be aligned through more land available for development than Alternative 5.

The type and density of future growth would be consistent with the applicable General Plans for the areas, most of which assumed that access would eventually be provided to the study area.

*What are the growth-related effects of each alternative on resources of concern?*

Development of planned land uses in the applicable adopted General Plans and other land use plans have the potential to affect biological and visual resources as well as the rural community character of the surrounding area. Similar to the Build Alternatives, the environmental evaluations for future projects (either as part of the environmental evaluations for the General Plans or individual environmental evaluations on a project-by-project basis) would be required to identify specific impacts related to the resources of concern and to develop appropriate avoidance, minimization, and mitigation measures for adverse effects on those resources.

Because the Build Alternatives are not anticipated to influence the type or density of growth in the study area, effects on resources of concern greater than those identified for each Build Alternative and for build out of the adopted General Plans are not anticipated as a result of the Project. The influence of the Build Alternatives on the timing and location of growth would similarly not be expected to change the effects of build out of the applicable land use plans on the resources of concern in the study area.

*Are there any measures to avoid and minimize growth-related impacts?*

The influence of the Build Alternatives on the timing and location of growth in the study area would not result in substantial adverse effects on resources of concern different from those already anticipated based on the adopted land use plans in the study area. Therefore, no specific measures are needed to avoid, minimize, or mitigate growth-related effects other than the project-specific measures already identified in the technical analyses for the Project.

*What are the results of the analysis for each alternative?*

Alternative 5 could potentially result in minor shifts in the locations and timing of growth in the study area. However, Alternative 5 would not result in changes in the type or density of growth forecast in the study area based on adopted General Plans and other land use plans.

Alternative 12 (Preferred Alternative) could potentially result in greater shifts in the locations of growth in the study area than Alternative 5 but would potentially result in

the same shifts in the timing of growth as Alternative 5. However, Alternative 12 (Preferred Alternative) would not result in changes in the type or density of growth forecast in the study area based on adopted General Plans and other land use plans.

#### **2.2.4 Avoidance, Minimization, and Mitigation Measures**

The Project would not result in a growth-related substantial adverse effect. Therefore, no avoidance, minimization, and/or mitigation measures are required.

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## 2.3 Community Impacts

This chapter provides information regarding the social, economic, and land use effects of the Project. It includes an assessment of community character and cohesion, relocations and real property acquisitions, and environmental justice.

The following technical reports prepared in support of the proposed Interstate 10 (I-10) Bypass: Banning to Cabazon Project were used in the preparation of this chapter:

- *Community Impact Assessment* (May 2017)
- *Traffic Operational Analysis Final Revised Report* (April 2015)

### 2.3.1 Community Character and Cohesion

#### 2.3.1.1 Regulatory Setting

The National Environmental Policy Act of 1969 (NEPA), as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b](2)). The Federal Highway Administration in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

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.

#### 2.3.1.2 Affected Environment

This section is based on the *Community Impact Assessment* (May 2017) prepared for the proposed I-10 Bypass Project: Banning to Cabazon (Project). The study area is the area surrounding the Project where community impacts could occur. The larger Regional Study Area (RSA) includes Riverside County (County). Comparing study

area data to regional data often provides perspective by identifying similarities, differences, and relationships between the areas.

As shown on Figure 2.3-1, the study area for this Project includes portions of the City of Banning (Banning), the community of Cabazon, unincorporated County of Riverside lands, the Morongo Band of Mission Indians Tribal Lands, the Robertson's Ready Mix Sand and Gravel Mine (RRM), Banning Municipal Airport, and the Union Pacific Railroad (UPRR) south of I-10. On the north side of I-10, the study area boundary generally follows Ramsey Street in Banning and the alignment of I-10 from Sunset Avenue on the west to the community of Cabazon on the east and ends just east of the Seminole Drive off-ramp (slightly west of Deep Creek Road). The southern study area boundary continues south of Smith Creek and the Alternative 12 (Preferred Alternative) alignment from Sunset Avenue on the west to Banning on the east and ends approximately at Almond Street, where it intersects with Esperanza Avenue (south of I-10).

The Project is located entirely within United States Census Bureau (U.S. Census Bureau) Census Tract 438.13, which is a large tract encompassing sparsely populated and unpopulated lands. Census Tract 443 is adjacent to the Project west of Hathaway Street, and encompasses most areas on the west side of Banning that are south of I-10. The study area encompasses parts of these two tracts. The demographics of these two local census tracts are used to characterize the overall study area.

Data presented in this section are based on the census tracts from the 2010 U.S. Census and the 2010–2014 American Community Survey (ACS).<sup>1</sup> Existing data from the 2010 Census include the demographics of larger clusters and metropolitan areas such as counties and large cities; however, information regarding communities and census tracts is also available at the ACS level. The main differences between the 2010 Census and the 2010–2014 ACS are in the sample sizes and the periods of time in which the samples were taken. Whereas the 2010 Census covers all households and

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<sup>1</sup> The ACS is an ongoing survey conducted by the United States Census Bureau that provides data every year, giving communities the current information they need to plan investments and services. Information from the survey generates data that helps determine how more than \$675 billion in federal and State funds is distributed each year. Website: <https://www.census.gov/programs-surveys/decennial-census/about/why.html> (accessed March 20, 2020).



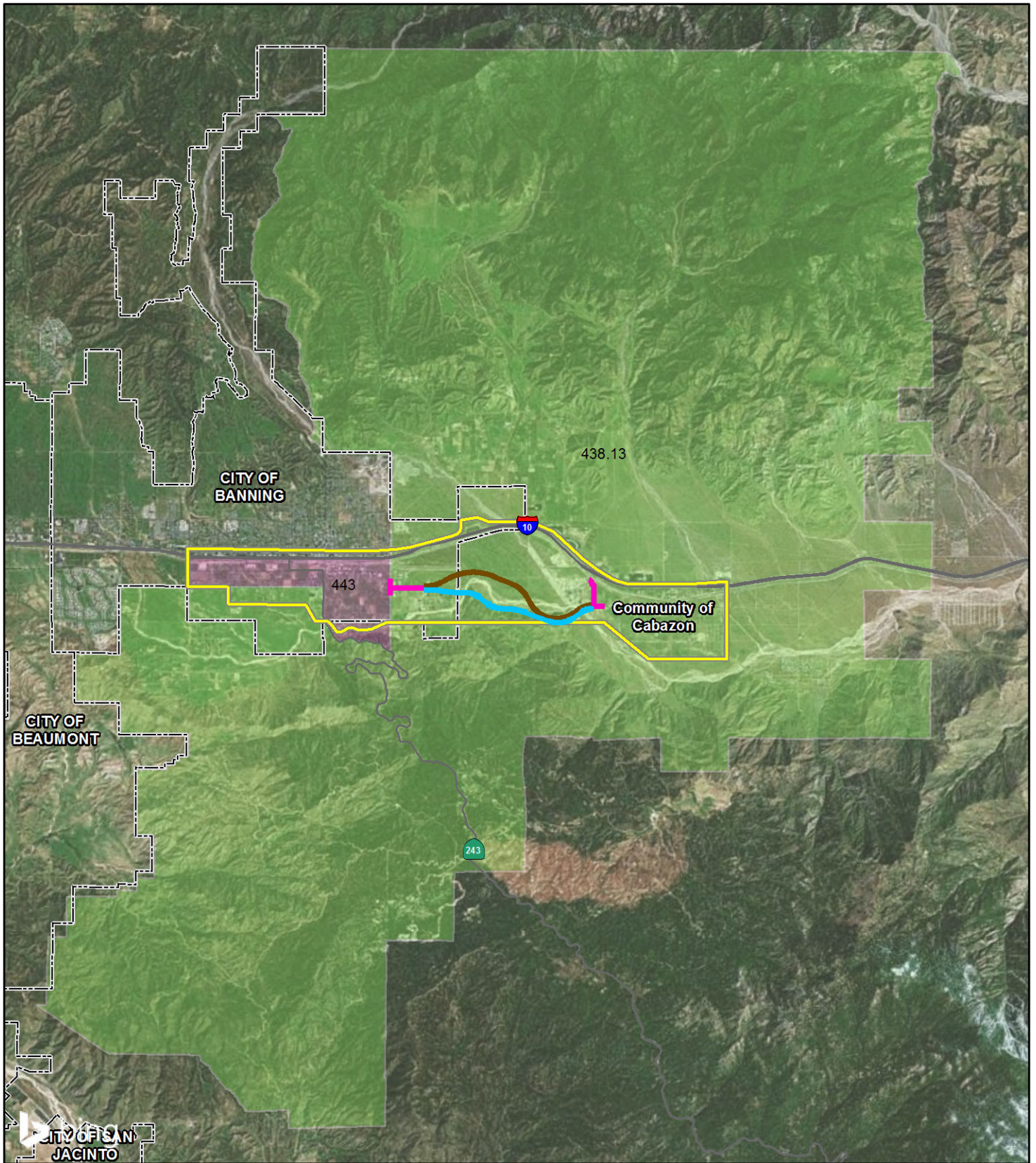
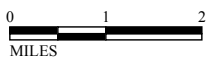


FIGURE 2.3-1

LEGEND

- |               |  |                     |
|---------------|--|---------------------|
| City Boundary | All Alternatives                       | Census Tract 438.13 |
| Study Area    | Alternative 5                          | Census Tract 443    |
|               | Alternative 12 (Preferred Alternative) |                     |



SOURCE: Bing (~2012); Kimley-Horn (2014); U.S. Census (2010)  
 F:\KHA1101\GIS\CIA\_CensusTracts.mxd (3/4/2020)

*I-10 Bypass: Banning to Cabazon*  
 Study Area Census Tracts

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residents, and provides general demographic characteristics, the ACS is sample-derived data and provides detailed information on all levels, including by census tracts. The study area includes data from the 2010–2014 ACS and the 2010 Census. Census tracts were used because they are the most complete data set for the level of detail required for this analysis. Data boundaries with a finer level of detail, such as census blocks, were not used due to incomplete data in some of the required demographic categories necessary for analysis. Detailed information concerning the affected environment is provided for these census tracts where appropriate. For context and comparison, information is also provided at the city and county levels for certain topics.

Community cohesion is the degree to which residents feel attachments to their neighborhood, a level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time.

The following demographic indicators tend to correlate with a higher degree of community cohesion and are used in the *Community Impact Assessment* (May 2017) to determine the degree of community cohesion present in an area:

- **Ethnic and Racial Demographics:** In general, homogeneity of the population contributes to higher levels of cohesion. Communities that are ethnically homogenous often speak the same language, hold similar beliefs, and share a common culture, and therefore are more likely to engage in social interaction on a routine basis.
- **Age:** In general, communities with a high percentage of elderly residents (65 years or older) tend to demonstrate a greater social commitment to their community. This is because the elderly population, which includes retirees, often tends to be more active in the community since they have more time available for volunteering and participating in social organizations.
- **Owner Occupancy:** Although subject to debate, and dependent on the geographic location and other social factors, communities with a high percentage of owner-occupied residences are typically more cohesive because their population tends to be less mobile. Since they have a financial stake in their community, homeowners often take a greater interest in what is happening in their community than renters do.

- Household Size:** In general, communities with a high percentage of families with children are more cohesive than communities composed of largely single people. This appears to be because children tend to establish friendships with other children in their community. The social networks of children often lead to the establishment of friendships and affiliations among parents in the community. Data regarding household size can serve as a proxy for households with children.

These indicators of community cohesion in the study area and the applicable local jurisdiction are described in more detail below.

### Population Characteristics

Table 2.3.1 shows the ethnic and racial composition of the County, Banning, and of the local census tracts in the study area as reported in the 2010 Census. As shown in Figure 2.3-1, Census Tract 443 in the east end includes areas of Banning south of I-10, and Census Tract 438.13 is large and includes the Morongo Band of Mission Indians Tribal Lands, the community of Cabazon, and rural areas in the San Bernardino and San Jacinto Mountains. As discussed in Section 2.3.1.2, Affected Environment, the demographics of these two census tracts are used to characterize the overall study area.

**Table 2.3.1 Ethnic and Racial Demographics (Year 2010)**

Jurisdiction	Total	Percentage <sup>1</sup>							
		White	Black	American Indian/ Native Alaskan	Asian	Hawaiian / Pacific Islander	Some Other Race	Multiple Races	Hispanic or Latino <sup>2</sup>
Riverside County	2,189,641	61.0	6.4	1.1	6.0	0.3	20.5	4.8	45.5
City of Banning	29,603	64.7	7.3	2.2	5.2	0.1	15.6	4.9	41.1
Tract 438.13	4,340	60.0	4.1	15.3	2.1	0.5	10.8	7.2	36.1
Tract 443	4,774	59.3	8.2	2.1	10.7	0.2	15.2	4.2	48.5

Source: United States Census Bureau, 2010 Census. Website: <http://factfinder2.census.gov> (accessed June 15, 2012 and October 4, 2016).

<sup>1</sup> Percentages do not necessarily add up to 100 percent due to rounding and to the fact that Hispanics may also be counted as white.

<sup>2</sup> Hispanic or Latino is not a race; rather, it is an ethnic subset of the entire population. Percentages do not add up to 100 percent because Hispanics (as an ethnicity), as counted by the U.S. Census Bureau, may be of any race.

The largest racial group in the study area, Banning, and the RSA is white. The Hispanic/Latino population in the study area census tracts ranges from 36.1 percent to 48.5 percent of the population compared to the County at 45.5 percent and Banning at 41.1 percent. The American Indian/Native Alaskan population is highest for Tract 438.13 (15.3 percent) compared to Tract 443 (2.1 percent) and the County (1.1 percent). Tract 443 has a substantial minority Asian population at 10.7 percent.



Table 2.3.2 provides the age distribution in the study area census tracts, Banning, and the County. The median age for County residents was 33.7 years. The largest segment of the population was adults, ages 18–64, who composed 59.9 percent of the total population. Those under 18 years of age composed the next largest group, constituting 28.3 percent of the population. Senior citizens, ages 65 and over, accounted for 11.8 percent of the total population in the County. The Banning age breakdown is comparable to that of the County.

**Table 2.3.2 Age Demographics**

Jurisdiction	Median Age	Percentage		
		Population < 18	Population 18–64	Population > 65
County of Riverside	33.7	28.3	59.9	11.8
City of Banning	42.3	22.9	51.2	25.9
Census Tract 438.13	34.4	29.1	60.5	10.4
Census Tract 443	31.2	23.8	64.8	11.4

Source: U.S. Census Bureau, 2010 Census. Website: <http://factfinder2.census.gov> (accessed June 15, 2012).

The median age in Census Tract 438.13 is higher than the median age in the County and in Census Tract 443. The median age in Banning (42.3 years) is higher than for the County or the study area census tracts. Table 2.3.3 provides income and other demographic characteristics of the Project study area and the County, as reported in the last U.S. Census (Year 2010).

**Table 2.3.3 Income and Other Demographics**

Characteristic	County of Riverside	City of Banning	Census Tract 438.13	Census Tract 443
Work-at-Home Population	5.0%	3.2%	9.9%	1.6%
Median Household Income	\$56,592	\$46,434	\$41,365	\$45,256
Families Below Poverty Level	13.1%	15.4%	18.8%	10.6%
Unemployed Civilian Labor Force	14.3%	13.5%	20.9%	9.8%

Source: U.S. Census Bureau, 2010–2014 American Community Survey 5-Year Estimates, <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed February 23, 2016).

Median household incomes in the two census tracts in the study area range from \$41,465 to \$45,256, while the median County household income is \$56,592 and Banning’s median income is \$46,434.

### Housing Demographics

Table 2.3.4 summarizes the housing characteristics for the County, for Banning, and for the study area census tracts. The percentage of owner-occupied housing units in Census Tract 438.13 is the same as that of the County at 67.4 percent. Census Tract 438.13 has a rather high vacancy rate at 21.5 percent.

**Table 2.3.4 Housing Information**

Jurisdiction	Total Housing Units		Type of Occupancy		Housing Affordability Index	Median Home Price	Median Rent	Average Household Size
	Occupied	Vacant	Owner	Renter				
County of Riverside	686,260 (85.7%)	114,447 (14.3%)	462,212 (67.4%)	224,048 (32.6%)	41% <sup>1</sup>	\$333,370 <sup>2</sup>	\$1,016 <sup>3</sup>	3.14
City of Banning	10,838 (89.2%)	1,306 (10.8%)	7,412 (68.4%)	3,426 (31.6%)	N/A	N/A	N/A	2.61
Census Tract 438.13	1,447 (78.5%)	397 (21.5%)	976 (67.4%)	471 (32.6%)	N/A	N/A	N/A	2.99
Census Tract 443	1,227 (90.6%)	128 (9.4%)	712 (58.0%)	515 (42.0%)	N/A	N/A	N/A	3.15

Source: U.S. Census Bureau, 2010 Census. Website: <http://factfinder2.census.gov> (accessed June 15, 2012).

<sup>1</sup> California Association of Realtors. Website: <http://www.car.org/marketdata/data/haitraditional> (accessed February 23, 2016) (data for the fourth quarter of 2014).

<sup>2</sup> California Association of Realtors. Website: <http://www.car.org/marketdata/data/countysalesactivity/> (accessed February 23, 2016) (data for January 2016).

<sup>3</sup> City Data. Website: [http://www.city-data.com/county/Riverside\\_County-CA.html](http://www.city-data.com/county/Riverside_County-CA.html) (accessed February 23, 2016) (data for the fourth quarter of 2013).

N/A = not available

The California Association of Realtors reports real estate data in cities and counties throughout California. In January 2016, the median price of a County residence was \$333,370.

As noted above in Table 2.3.4, the average household size within the study area census tracts ranges from 2.99 persons to 3.15 persons per household, compared to the County average of 3.14 persons per household and the Banning average of 2.61 persons per household.

### Other Demographics

Table 2.3.5 breaks down the civilian labor force in the County, in Banning, and in the study area census tracts. The County and Banning have similar employment sector percentages. As shown in Table 2.3.5, the largest employment sector in both the County and Banning is Educational Services, Health Care, and Social Assistance. Arts, Entertainment, Recreation, Accommodation, and Food are the largest employment sectors in Census Tract 438.13. The largest employment sector in Census Tract 443 is Retail Trade.



**Table 2.3.5 Labor Market by Industry**

2010–2014 Labor Market by Industry	Percentage of Employees by Sector			
	County of Riverside	City of Banning	Tract 438.13	Tract 443
Agriculture, Forestry, Fishing and Hunting, and Mining	1.7	0.6	1.1	1.2
Construction	8.1	5.8	9.6	3.8
Manufacturing	9.2	10.9	5.4	10.6
Wholesale Trade	3.3	2.9	2.8	7.4
Retail Trade	13.1	14.1	11.4	20.1
Transportation and Warehousing, and Utilities	5.5	4.6	14.5	4.3
Information	1.6	0.5	0.0	1.0
Finance and Insurance, Real Estate, and Rental and Leasing	5.3	3.2	3.1	1.3
Professional, Scientific, Management, and Administrative	10.1	6.6	2.0	6.0
Educational Services, Health Care, and Social Assistance	20.4	24.2	16.6	17.9
Arts, Entertainment, Recreation, Accommodation, and Food	11.4	16.8	24.1	16.9
Other Services, except Public Administration	5.3	4.5	3.0	3.8
Public Administration	5.2	5.3	6.4	5.6

Source: U.S. Census, American FactFinder. Website: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed February 23, 2016).

## **Community Facilities**

### **Schools**

The Banning Unified School District (BUSD) serves students within the study area, including the areas outside the Banning city limits (e.g., Cabazon and points farther east). BUSD educates approximately 5,000 students enrolled in grades K–12, and consists of four elementary schools, one intermediate school, one middle school, one comprehensive high school, one continuation high school, and one independent study school. Banning High School, at 100 West Westward Avenue, lies 1 mile (mi) west of the Project limits and is the nearest school to the Project. Cabazon Elementary School is located at 50575 Carmen Street, south of I-10 and the UPRR tracks, just east of Broadway.

### **Health Care**

The Morongo Health Clinic, at 11555½ Potrero Road in Banning, serves the health care needs of the Morongo Band of Mission Indians members, as well as eligible members of various tribes in the Counties of Riverside and San Bernardino. San Gorgonio Memorial Hospital, at 600 North Highland Springs Avenue in Banning near the Banning border with the City of Beaumont, serves the broader primary health care needs of the population in the study area.

### ***Library***

The Banning Library District serves the study area with its public facility at 21 West Nicolet Street in Banning, approximately 1 mi northwest of the Project. The library lends books, audiobooks, DVDs, and CDs. The facility has a reference collection and online databases for research, including microfilm of the local newspaper, the *Record Gazette*, dating to 1908. The Cabazon Library is located at 50425 Carmen Avenue in Cabazon, approximately 1.5 mi east of the Project. The Cabazon Library is part of the County Library System. The library offers a multipurpose room for library programs and community events, a children's corner, a teen area, an adult reading area, and public internet computers.

### ***Bicycle and Pedestrian Facilities***

There are no designated bicycle routes or facilities within the Banning portion of the study area. Sidewalks are not continuous, and are intermittently provided where development is located adjacent to the street and along Lincoln Street. Sidewalks are provided on limited portions of Westward Avenue east of Hathaway Street.

In the part of the study area under County jurisdiction, the Pass Area Plan shows a regional trail along the San Gorgonio River.

As indicated in Section 1.3.4, there are currently no pedestrian connections between Banning and Cabazon, and bicyclists are forced to use I-10. In addition to the new connection, pedestrians would benefit from the installation of crosswalks at various intersections (such as Westward Avenue/Hathaway Street and Apache Trail/Bonita Avenue). Crosswalk locations would be determined during final design.

### ***Public Transportation***

Local public transportation in the study area is provided by the Pass Transit System operated by the Cities of Banning and Beaumont. The Pass Transit System Routes 1 and 5 and the Cabazon Circulator serve portions of the study area. All connections between Banning and Cabazon must use I-10.

Sunline Transit Agency, the transit agency in Coachella Valley, operates Commuter Link 220 from the City of Palm Desert to the City of Riverside via I-10 and State Route 60 (SR-60), with stops in Cabazon and Beaumont that connect to the Pass Transit System routes. Amtrak's Sunset Limited operates three trains per week in each direction from Los Angeles to New Orleans on the UPRR tracks through the study area. The nearest stop to the west is in the City of Ontario, California, while the

nearest stop to the east is in North Palm Springs. Residents within the study area can connect to Amtrak via Sunline Transit Route 220.

The Riverside County Transportation Commission (RCTC), the California Department of Transportation (Caltrans), and the Coachella Valley Association of Governments (CVAG) have prepared several studies (most recently in May 2013) evaluating the possibility of expanded rail service along the UPRR tracks between Los Angeles Union Station and the Coachella Valley via the Banning Pass, Riverside, and Fullerton. All of the studies have recommended implementation of such service, although funding has not yet been identified and there is no schedule for establishing such service.

### *Emergency Services*

The Cabazon Station of the Riverside County Sheriff-Coroner's Department provides law enforcement services to the mid-County Pass area. This includes the unincorporated communities around the Cities of Beaumont and Banning, as well as contract services to the City of Calimesa and the Morongo Band of Mission Indians Tribal Lands. The station is located at 50290 Main Street in the community of Cabazon.

The Riverside County Fire Department provides fire protection and emergency medical services to the study area. Station 24, staffed by Battalion 3, is located at 50382 Irene Street in Cabazon. Station 89, also staffed by Battalion 3, is located at 172 North Murray Street in Banning.<sup>1</sup> Other area stations in the City of Beaumont and the area of Poppet Flats provide additional service in the study area, if needed.

### *Community Access*

I-10 provides the primary regional east west access through the study area. Roadways in the Banning portion of the study area form a partial grid system, with I-10 and SR-243 (San Geronio Avenue) providing regional access. Banning currently owns a 60 ft wide right-of-way for Westward Avenue extending from Hathaway Street to approximately 1 mi east of Hathaway Street at the eastern city boundary.

Approximately the first part of Westward Avenue is paved, with the balance being a graded dirt roadway with gated access.

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<sup>1</sup> Riverside County Fire Department, Fire Stations. Website: <http://www.rvcfire.org/stationsAndFunctions/FireStations/Pages/default.aspx> (accessed December 3, 2013).

East of the San Gorgonio River, County roads within Cabazon also form a partial grid system, with Main Street, Bonita Avenue, and Carmen Avenue providing the main east-west circulation. Apache Trail and Broadway are the only north-south streets that cross the UPRR, both at grade. Sidewalks are rare in Cabazon, and most parking is provided off street.

Residents of Cabazon south of the UPRR must currently cross the railroad and get on I-10 to access commercial and community services in nearby Banning and Beaumont that are not provided in Cabazon (e.g., full-service pharmacies). During emergency operations, when traffic is detoured from I-10 onto the new bypass roadway, the local roadway network is congested. Under existing conditions, residents located on one side or the other of an I-10 closure are precluded from traveling across the closure.

### **Community Cohesion Summary**

#### ***Ethnic and Racial Demographics***

As shown in Table 2.3.1, the study area as a whole has an American Indian/Native Alaskan population that ranges from 2.1 to 15.3 percent of the total population, which exceeds the County average of 1.1 percent. Census Tract 443 has a Black population (8.2 percent) that exceeds the County average (6.4 percent). Census Tract 443 also has an Asian population (10.7 percent) that exceeds the County average (6.0 percent). The Hispanic or Latino population in Census Tract 443 (48.5 percent) also exceeds that of the County (45.5 percent). The population of Hawaiian/Pacific Islanders in Census Tract 438.13 (0.5 percent) slightly exceeds the County average (0.3 percent). The substantial presence of substantial populations with shared culture indicates that the study area demonstrates community cohesion.

#### ***Age***

As shown in Table 2.3.2, neither Census Tract 438.13 (10.4 percent) nor Census Tract 443 (11.4 percent) has a population of elderly residents that exceeds the County average of 11.8 percent. Therefore, the study area does not display this indicator of community cohesion.

#### ***Owner Occupancy***

As shown in Table 2.3.4, neither Census Tract 438.13 (67.4 percent) nor Census Tract 443 (58.0 percent) has a higher percentage of owner-occupied housing units than the County average of 67.4 percent. Therefore, the study area does not exhibit this indicator of community cohesion.

### ***Household Size***

As shown in Table 2.3.4, Riverside County has an average household size (3.14) that is slightly exceeded by Census Tract 443 (3.15). Therefore, part of the study area exhibits this indicator of community cohesion.

### ***Conclusion***

The study area exhibits two of four indicators of community cohesion: the presence of ethnic and racial homogeneity and a higher average household size.

## **2.3.1.3 Environmental Consequences**

### ***Temporary Impacts***

#### ***No Build Alternative***

The No Build Alternative does not include construction of the I-10 Bypass from Banning to Cabazon. Therefore, it would not result in temporary impacts to businesses or to community character and cohesion.

#### ***Build Alternatives***

Construction activities for the Build Alternatives would result in temporary impacts to residences and businesses in the study area, including partial closures on roadways (one traffic lane would always remain open during construction), and potential detours. Most of the road construction would occur away from developed areas, thereby limiting adverse effects on existing residences and businesses. Emergency access would be provided at all times during construction of the Project.

During construction, access would be maintained for residents and businesses affected by the Build Alternatives. Partial road closures and potential road detours would result in traffic delays for local residents, businesses, and commuters. However, substantial disruptions to the local neighborhoods in the study area are not anticipated. Appropriate detour signage will be developed for the Project.

Construction impacts would be minimized through compliance with Caltrans standards for noise, emissions, a traffic management plan (TMP) (see TR-1 in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities) and temporary construction easements (TCEs) and with County standards for construction noise (for work within local jurisdictional boundaries), as well as through implementation of a comprehensive public outreach program. No substantial adverse effects are anticipated.

## **Permanent Impacts**

### ***No Build Alternative***

The No Build Alternative does not include construction of the I-10 Bypass from Banning to Cabazon. Therefore, it would not result in temporary impacts to businesses or to community character and cohesion. As discussed in Section 1.3.2, Project Need, long-range operational deficiencies are anticipated for the study area due to the lack of a multimodal roadway connection between the City of Banning and the community of Cabazon. The continued lack of a local roadway connection between the City of Banning and the community of Cabazon under the No Build Alternative would have an adverse effect on community character in the study area and result in permanent impacts to community character and cohesion.

### ***Build Alternatives***

Parking would be restricted on Westward Avenue. However, these restrictions are not anticipated to impact the community because the affected area is currently developed with only a handful of residential and commercial uses, each of which appear to have a sufficient off-street parking supply such that they do not rely on on-street parking. Therefore, the removal of on-street parking on Westward Avenue would not have an adverse impact on community cohesion by modifying access or otherwise affecting community interaction.

Minor right-of-way acquisitions would be required; however, no structures would be affected and no persons or businesses would be displaced. No adverse effects to population and housing have been identified.

The Project would not affect residential populations; therefore, it would not have an adverse impact on population characteristics or any of the indicators of community cohesion.

During normal operation, the Project would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps and South 8<sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project.



In the Future Year (2038) condition, it is anticipated that traffic signals will be warranted at the intersections of Charles Street and South Hargrave Street, and North Hathaway Street and East Barbour Street. These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope. However, the Project would result in improved access and circulation that would benefit the neighborhood overall.

By creating an alternate route for vehicles and a new pedestrian and bicycle route, the Project would improve access, circulation, and emergency response times in Cabazon, which are considered to be enhancements to the neighborhood. No adverse environmental consequences to community access are foreseen.

The new connection would make it easier for residents of Cabazon south of the UPRR to access commercial and community services in the Cities of Banning and Beaumont because they would no longer have to cross the railroad and use I-10 to access such services (e.g., there are no full-service pharmacies in Cabazon, but Banning has two). The proposed Build Alternatives would provide striped paved shoulders on existing Westward Avenue and the eastward extension of the new roadway from Westward Avenue to Bonita Avenue, as well as construct new paved shoulders along Apache Trail from Bonita Avenue to the I-10/Morongito Trail Interchange. Such paved shoulders, when combined with a "No Parking" restriction along the new roadway and Apache Trail, would provide a route for bicyclists between Banning and Cabazon. In addition, pedestrians would benefit from crosswalks installed at various intersections (such as Westward Avenue/Hathaway Street and Apache Trail/Bonita Avenue) to be determined during final design. The proposed bridge over the San Geronio River would provide for a future grade-separated crossing of the proposed Riverside County regional trail along the San Geronio River, as well as provide a potential access point to the trail. The proposed sidewalk/trail along the Project would provide pedestrian access between Banning and Cabazon. Implementation of either of the proposed Build Alternatives would have no adverse effect on public transportation but could provide a new route for transit between Banning and Cabazon.

During emergency operations when traffic is detoured from I-10 onto the new bypass roadway, the local roadway network can be expected to be congested with diverted traffic. Based on the history of such events, such diversions occur less than once

every 2 years; such rare events are not considered an adverse impact. In any case, in the existing condition, residents located on either side of an I-10 closure would be precluded from traveling across the closure. Implementation of the Project would allow local residents to travel both east and west during such emergency conditions.

The Project would not adversely affect schools, health care, libraries, or alternative transportation. Access to Banning High School from Cabazon would provide a benefit because Cabazon students would no longer have to use I-10 to access the high school.

The Project would reduce emergency response times, particularly in Cabazon, because vehicles would be able to avoid freeway congestion and possible delays at railroad track crossings.

Alternative 5 and Alternative 12 (Preferred Alternative) would not displace any businesses. Residential properties in close proximity to the Project would likely experience a minimal increase in value due to a combination of beneficial and adverse impacts as a result of the Project (i.e., improved accessibility for automobiles, pedestrians and bicyclists, improved emergency response time, and increased patronage and access for existing businesses or opportunities for new business). One residential property would experience a visual impact and three residences would experience noise impacts as a result of Alternative 5 and Alternative 12 (Preferred Alternative). The new bypass road would divert some traffic away from I-10 and through the affected communities (including regional through-traffic and some trucks). The current rural character would become more urbanized, affecting the rural lifestyle of the area's residents. Open space would be converted to transportation or developed land uses and growth may proceed, especially in open-space areas which currently have no access. Visual impacts in the immediate area would affect community character. Lighting impacts to desert night skies are anticipated to be minimal, as lighting is not proposed, with the possible exception of lighting at intersections and bridges. However, these adverse effects would not be substantial because they would be partly outweighed by the benefits of improved access.

The Project would not have any adverse consequences on employment in the study area. No commercial, industrial, or other nonresidential uses would be displaced by the Build Alternatives. Therefore, there would be no losses in local tax revenues.

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

The visual measures listed in Section 2.6, Visual/Aesthetics, would help to minimize adverse visual effects. In addition, the Traffic Management Plan measure (Measure TR-1) in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, would help alleviate traffic effects on community character. In addition to those measures, the following measure would substantially reduce the short-term adverse effects on community character under the Build Alternatives.

**COM-1 Disturbance Area.** Every effort will be made during the Design and Construction phases to further minimize grading/disturbed areas to minimize impacts on the rural community character of the areas surrounding the Project.

#### **2.3.2 Relocations and Real Property Acquisitions**

This section is based on information regarding relocations and displacement impacts from the *Community Impact Assessment* (May 2017) prepared for the Project. Figures 2.3-2 and 2.3-3 show right-of-way impacts for Alternative 5 and Alternative 12 (Preferred Alternative), respectively.

##### **2.3.2.1 Regulatory Setting**

Caltrans' 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 due to the implementation 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.

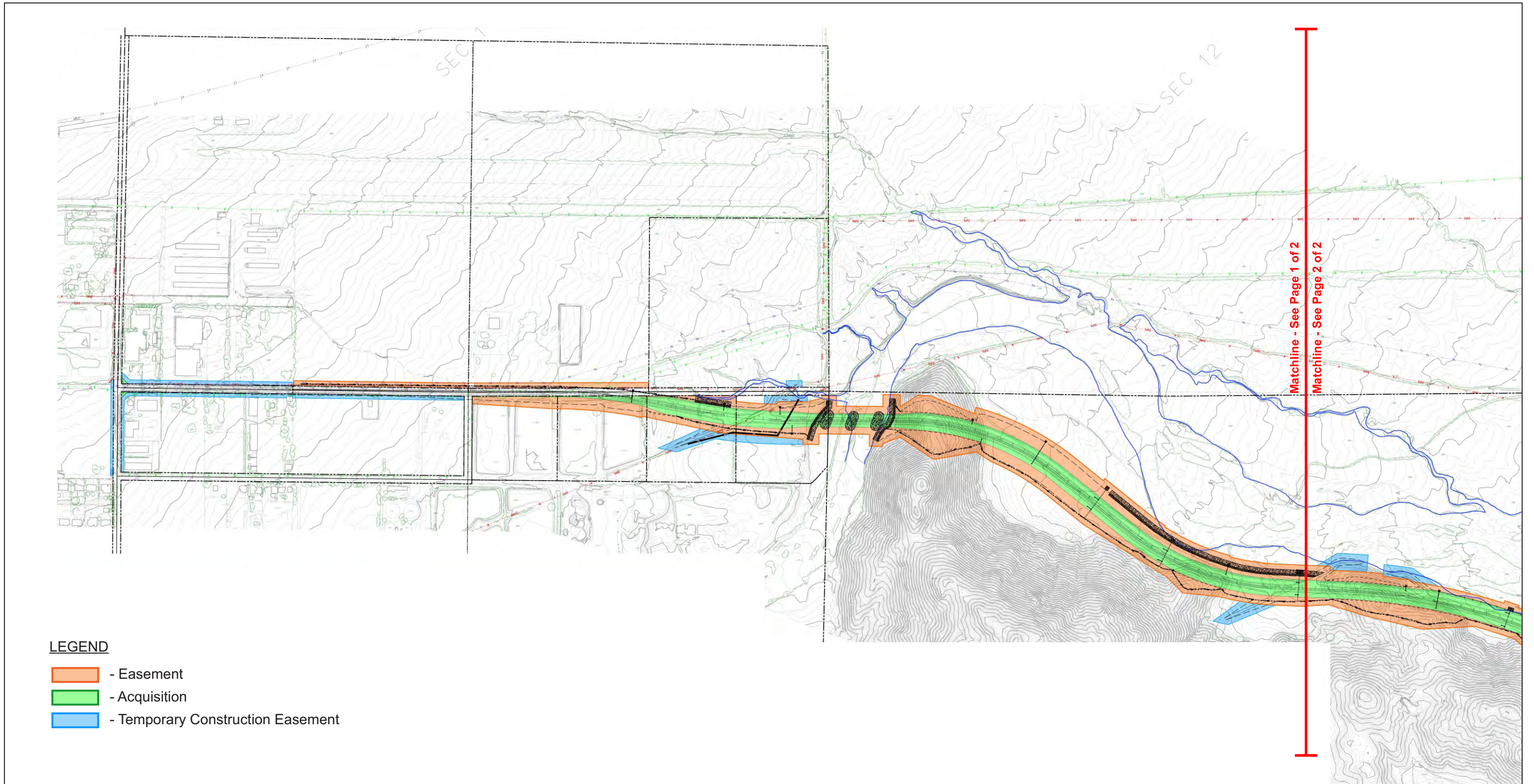
All relocation services and benefits are administered without regard to race, color, national origin, or sex. Please see Appendix B for a copy of Caltrans' Title VI Policy Statement.

##### **2.3.2.2 Affected Environment**

As discussed in Section 2.3.1.2, the study area for this Project includes portions of the City of Banning, the community of Cabazon, unincorporated areas of

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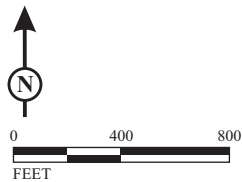




**LEGEND**

- Easement
- Acquisition
- Temporary Construction Easement

**FIGURE 2.3-2**  
(Page 1 of 2)



SOURCE: Kimley-Horn and Associates, Inc. (5/16/2016)

*I-10 Bypass: Banning to Cabazon*  
Alternative 5 Right-of-Way



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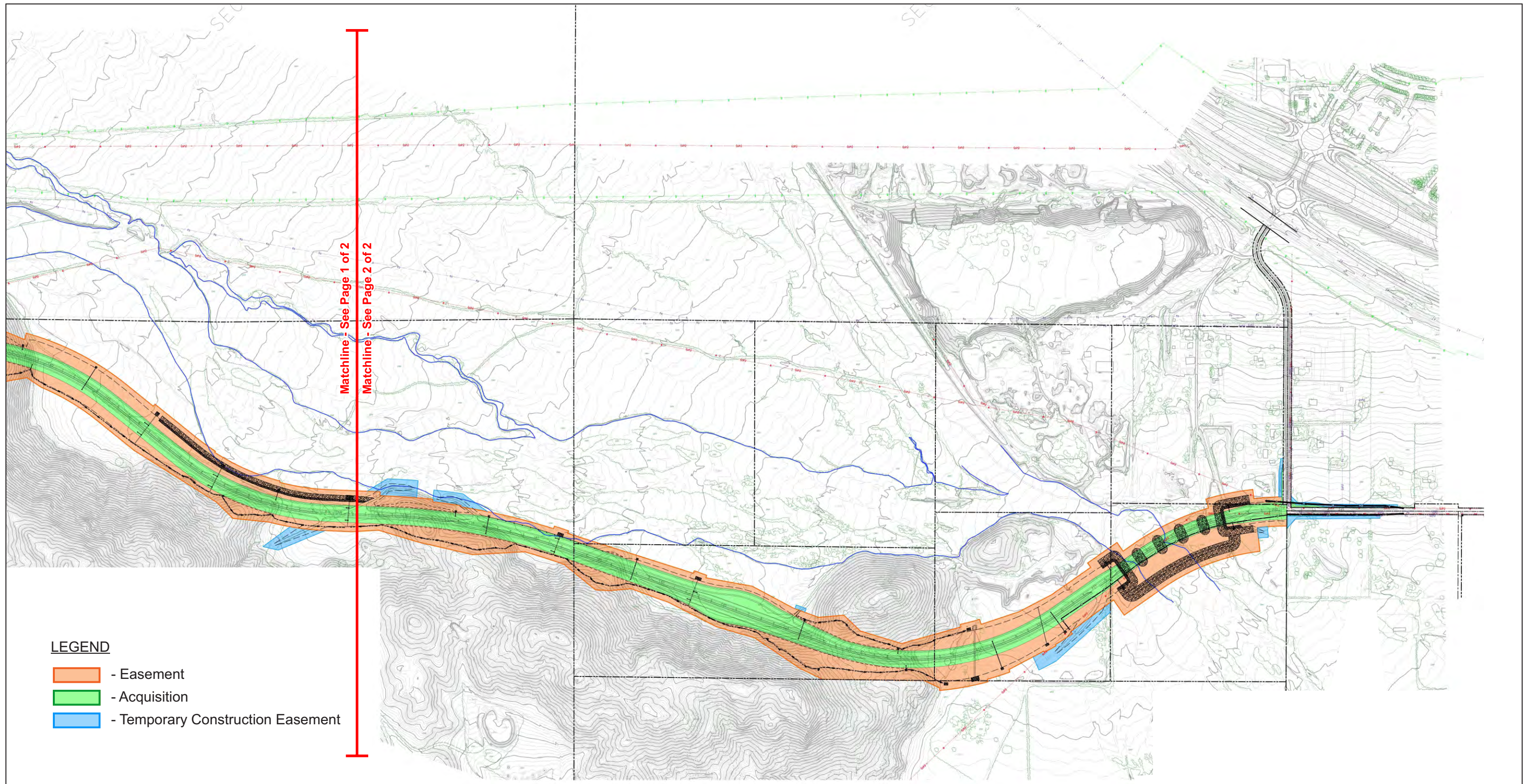
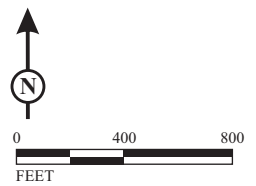


FIGURE 2.3-2  
(Page 2 of 2)



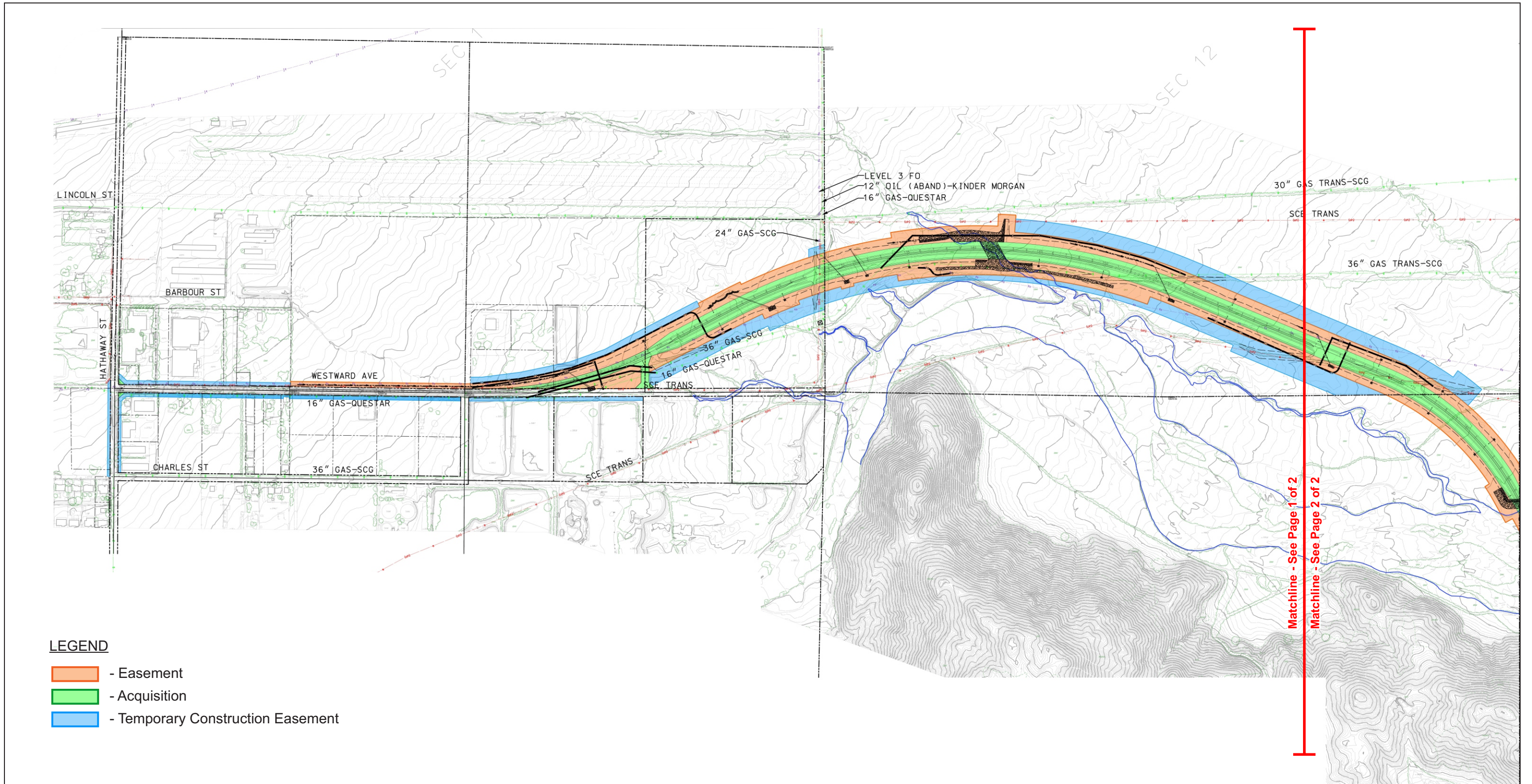
SOURCE: Kimley-Horn and Associates, Inc. (5/16/2016)

*I-10 Bypass: Banning to Cabazon*  
Alternative 5 Right-of-Way



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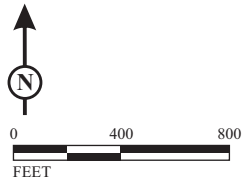
**LEGEND**

- Easement
- Acquisition
- Temporary Construction Easement

Matchline - See Page 1 of 2

Matchline - See Page 2 of 2

**FIGURE 2.3-3**  
(Page 1 of 2)



SOURCE: Kimley-Horn and Associates, Inc. (5/16/2016)

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*I-10 Bypass: Banning to Cabazon*  
Alternative 12 (Preferred Alternative) Right-of-Way



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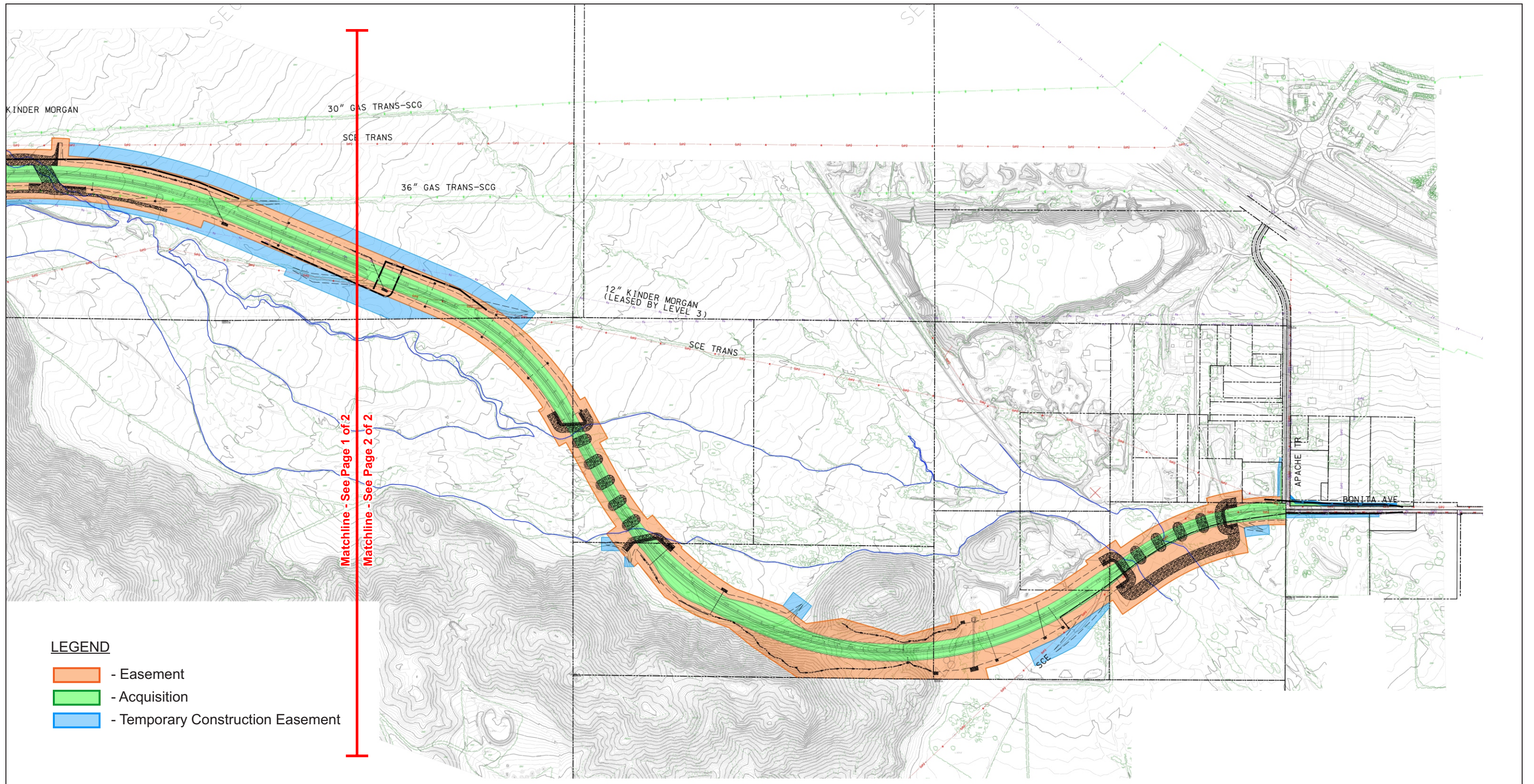
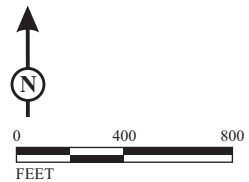


FIGURE 2.3-3  
(Page 2 of 2)



SOURCE: Kimley-Horn and Associates, Inc. (5/16/2016)

I-10 Bypass: Banning to Cabazon  
Alternative 12 (Preferred Alternative) Right-of-Way

I:\KHA1101\G\Alternative-12\_ROW\_A-B.cdr (10/27/2016)



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Riverside County, the Morongo Band of Mission Indians Tribal Lands, Robertson's Ready Mix Sand and Gravel Mine, the Banning Municipal Airport, and the UPRR south of I-10. A large part of the study area is undeveloped vacant land belonging to the County or the Morongo Band of Mission Indians.

### **2.3.2.3 Environmental Consequences**

#### ***Temporary Impacts***

##### ***No Build Alternative***

The No Build Alternative does not include any improvements as a result of the I-10 Bypass in the study area and, therefore, would not require TCEs.

##### ***Alternative 5***

Construction activities associated with implementation of the Project would result in temporary effects to parcels adjacent to the footprint of the Project due to TCEs.

Construction impacts would be minimized through compliance with Caltrans and County standards for noise, emissions, and TCEs, as well as implementation of a comprehensive public outreach program. No substantial adverse effects are anticipated.

Alternative 5 would require TCEs from approximately 34 parcels for the purpose of construction vehicle, equipment, or personnel access and staging of construction materials (refer to Figure 2.3-2 for the locations of all TCEs required under Alternative 5).

After construction, all of the TCEs would be restored to their original pre-project condition. TCEs would not require businesses, employees, or residents to relocate. Owners of the parcels affected by TCEs would be compensated for the temporary use of their properties during construction. For these reasons, temporary right-of-way acquisition effects are not anticipated to be adverse.

##### ***Alternative 12 (Preferred Alternative)***

Temporary impacts to community character and cohesion under Alternative 12 (Preferred Alternative) would be similar to those under Alternative 5. Alternative 12 (Preferred Alternative) would require TCEs from approximately 37 parcels (refer to Figure 2.3-3 for the locations of all TCEs required under Alternative 12 [Preferred Alternative]). After construction, all of the TCEs would be restored to their original pre-project condition. No displacements would occur; therefore, temporary property acquisition effects are not anticipated to be adverse.

## ***Permanent Impacts***

### ***No Build Alternative***

The No Build Alternative does not include any improvements as a result of the I-10 Bypass in the study area and therefore would not require any property acquisitions.

### ***Alternative 5***

Alternative 5 would not result in any full acquisitions. No businesses or residents would be displaced. As shown in Table 2.3.6, it is anticipated that Alternative 5 would potentially result in 19 partial acquisitions (the number and location of partial acquisitions are subject to change during final design). Figure 2.3-2 shows Alternative 5, based on preliminary engineering efforts to date, existing right-of-way limits, and the anticipated future right-of-way limits if Alternative 5 were to be constructed.

As previously stated, no businesses would be displaced under Alternative 5; therefore, no job displacements or sales tax losses would occur.

### ***Property Tax Loss***

Reduced property tax revenues were estimated for all permanent property acquisitions. These potential effects were estimated quantitatively as the estimated reduction in property tax revenue for County budgets resulting from the permanent removal of parts of privately owned properties from the tax rolls. The property tax losses associated with partial acquisitions were calculated based on the number of square feet to be acquired as a percentage of the parcel's overall land value, as reported by the Riverside County Assessor.

The assessed value of the parcels to be potentially acquired under each Build Alternative was multiplied by California's property tax rate to determine the overall potential tax loss. The property tax losses associated with potential acquisitions was then compared to the total property tax base in that jurisdiction to determine whether each alternative would result in the loss of part of the affected jurisdiction's property tax base.

Acquisitions under Alternative 5 would result in a minimal loss of property tax revenue to the County. Table 2.3.7 presents potential effects on local property taxes under Alternative 5.

**Table 2.3.6 Partial Acquisitions, TCEs, and Easements Anticipated  
Under Alternative 5**

Assessor's Parcel Number (APN)	Type
541-330-002	TCE
543-090-008	TCE
532-130-005	Partial acquisition, TCE
532-130-014	TCE
532-160-012	Partial acquisition, TCE
532-160-003	TCE
532-160-004	TCE
532-160-005	TCE
532-160-006	TCE
532-160-007	TCE
532-160-008	TCE
532-160-009	TCE
532-180-013	TCE
532-180-043	TCE
532-180-044	TCE
532-180-030	TCE
532-180-032	TCE
532-130-008	Drainage/slope easement
532-130-021	Drainage/slope easement
532-130-017	Drainage/slope easement
532-130-011	TCE
532-180-037	Drainage/slope easement
532-180-036	Partial acquisition, drainage/slope easement
532-180-035	Partial acquisition, TCE, Drainage/slope easement, utility easement
532-180-034	Partial acquisition, TCE, Drainage/slope easement, utility easement
532-210-001	Partial acquisition, TCE, drainage/slope easement
519-200-011	Partial acquisition, drainage/slope easement
519-200-010	Partial acquisition, TCE, drainage/slope easement
519-230-002	Drainage/slope easement
519-200-008	Partial acquisition, TCE, Drainage/slope easement, utility easement
519-200-006	Partial acquisition, drainage/slope easement
519-220-011	TCE
519-220-010	TCE
519-220-013	Partial acquisition, TCE, drainage/slope easement
519-200-004	Partial acquisition, TCE, drainage/slope easement
519-260-003	Partial acquisition, TCE
519-280-001	Partial acquisition, TCE
519-280-003	Partial acquisition, TCE
519-260-004	Partial acquisition, TCE
519-260-005	Partial acquisition, TCE
519-260-006	Partial acquisition, TCE
519-260-007	Partial acquisition, TCE

Source: Kimley-Horn and Associates, Inc. (2016).  
TCE = Temporary Construction Easement

**Table 2.3.7 Estimated Annual Property Tax Loss Under Alternative 5**

Jurisdiction	Property Tax Revenue Loss	Total Annual County Property Tax Revenue <sup>1</sup>	Percentage of Total Annual Property Tax Revenue Loss
County of Riverside	\$985.15	\$3,014,000,000.00	<0.01%

Source: County of Riverside (2016).

<sup>1</sup> Total County tax revenue was obtained from the Riverside County Assessor's Office and is based on the tax rolls obtained from the County in 2015.

As shown in Table 2.3.8, Alternative 5 would result in the loss of an estimated \$985.15 in annual property tax revenue. The County would lose less than 0.01 percent of its total annual property tax revenue.

**Alternative 12 (Preferred Alternative)**

Alternative 12 (Preferred Alternative) would require the acquisition of an easement for public road purposes of approximately ±14 acres (ac) of Morongo Band of Mission Indians Tribal Lands. As shown in Table 2.3.8, Alternative 12 (Preferred Alternative) would result in 20 partial acquisitions (the number and location of partial acquisitions subject to change during final design).

Figure 2.3-3 shows Alternative 12 (Preferred Alternative), based on preliminary engineering efforts to date as well as existing right-of-way limits and the anticipated future right-of-way limits if Alternative 12 (Preferred Alternative) were to be constructed.

Similar to Alternative 5, no residence or business displacements would occur under Alternative 12 (Preferred Alternative). Therefore, no employee displacements or sales tax losses would occur.

**Property Tax Loss**

Table 2.3.9 presents impacts on local property taxes under Alternative 12 (Preferred Alternative). Alternative 12 (Preferred Alternative) would partially acquire 20 parcels, resulting in a loss of \$1,933.41 in property taxes, which is less than 0.01 percent of the County's total annual property tax revenue. Refer to Section 2.3.2.3, Environmental Consequences (Permanent Impacts, Alternative 5, Property Tax Loss) for an explanation of the property tax loss analysis.

**Table 2.3.8 Partial Acquisitions, TCEs, and Easements Anticipated Under Alternative 12 (Preferred Alternative)**

Assessor's Parcel Number (APN)	Type
541-330-002	TCE
543-090-008	TCE
532-130-005	Partial acquisition, TCE
532-130-014	TCE
532-160-012	Partial acquisition, TCE
532-160-003	TCE
532-160-004	TCE
532-160-005	TCE
532-160-006	TCE
532-160-007	TCE
532-160-008	TCE
532-160-009	TCE
532-180-013	TCE
532-180-043	TCE
532-180-044	TCE
532-180-030	TCE
532-180-032	TCE
532-130-008	Drainage/slope easement
532-130-021	Partial acquisition, TCE, Drainage/slope easement, utility easement
532-130-017	Partial acquisition, TCE, Drainage/slope easement, utility easement
532-130-011	Partial acquisition, TCE, Drainage/slope easement, two utility easements
532-180-037	TCE
532-180-036	TCE, utility easement
532-100-001	Roadway easement, TCE, drainage/slope easement
532-210-001	Partial acquisition, TCE, drainage/slope easement
519-200-011	Partial acquisition, TCE, drainage/slope easement
519-200-010	Partial acquisition, TCE, drainage/slope easement
519-200-008	Partial acquisition, TCE, drainage/slope easement, utility easement
519-200-006	Partial acquisition, drainage/slope easement
519-220-011	Drainage/slope easement
519-220-010	Partial acquisition, TCE
519-220-013	Partial acquisition, TCE, drainage/slope easement
519-200-004	Partial acquisition, TCE, drainage/slope easement
519-260-003	Partial acquisition, TCE
519-280-001	Partial acquisition, TCE
519-280-003	Partial acquisition, TCE
519-260-004	Partial acquisition, TCE
519-260-005	Partial acquisition, TCE
519-260-006	Partial acquisition, TCE
519-260-007	Partial acquisition, TCE

Source: Kimley-Horn and Associates, Inc. (2016).  
TCE = Temporary Construction Easement

**Table 2.3.9 Estimated Annual Property Tax Loss Under Alternative 12  
(Preferred Alternative)**

Jurisdiction	Property Tax Revenue Loss	Total Annual County Property Tax Revenue <sup>1</sup>	Percentage of Total Annual Property Tax Revenue Loss
County of Riverside	\$1,933.41	\$3,014,000,000.00	<0.01

Source: County of Riverside (2016).

<sup>1</sup> Total County tax revenue was obtained from the Riverside County Assessor's Office and is based on the tax rolls obtained from the County in 2015.

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

Alternative 5 and Alternative 12 (Preferred Alternative) would not result in substantial temporary adverse effects. Additionally, Alternative 5 and Alternative 12 (Preferred Alternative) would not result in adverse effects to community cohesion, business, housing, or job displacements, or substantial property tax loss as a result of partial acquisitions. Therefore, avoidance, minimization, and/or mitigation measures are not required.

## 2.3.3 Environmental Justice

### 2.3.3.1 Regulatory Setting

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 based on the Department of Health and Human Services poverty guidelines. For 2015, this consisted of an income of \$24,300 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. Caltrans's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which is provided in Appendix B of this document.

The discussion of environmental justice that follows has been prepared in accordance with the applicable guidance for addressing environmental justice, including: U.S. Department of Transportation Order 5610.2 (April 15, 1997), Federal Highway Administration (FHWA) Order 6640-23 (December 2, 1998), the *FHWA Western*



*Resource Center Interim Guidance* (March 2, 1999), the FHWA California Division Environmental Justice Environmental Documents Checklist, and the *Caltrans Desk Guide – Environmental Justice in Transportation Planning and Investments* (January 2003).

Consistent with this guidance, the environmental justice analysis for the Project describes: (1) the existing study area population and the presence of minority and low-income population groups in the study area; (2) potential adverse effects and measures to avoid or minimize those effects for all study area population groups, including minority and low-income population groups; (3) potential disproportionately high and adverse effects on minority and low-income population groups; and (4) community outreach and public involvement efforts.

### **2.3.3.2 Affected Environment**

This section is based on information from the *Community Impact Assessment* (May 2017). The study area for environmental justice is the same as the study area described in Section 2.3.1, Community Character and Cohesion. An area is considered to have a substantial population of environmental justice communities if the percentage of minority or low-income population exceeds that of the reference community, which is Riverside County.

The percentages of racial minority populations for each study area census tract and the County are shown in Table 2.3.1. Census Tract 443 has a greater percentage of minority populations than the City and County average. Both census tracts have substantial populations of at least two minority racial or ethnic groups. Census Tract 443 has a higher percentage of Hispanics (48.5 percent) compared to Census Tract 438.13, the City of Banning, and the County. In addition, the American Indian/Native Alaskan population is highest for Tract 438.13 (15.3 percent) compared to Tract 443 (2.1 percent) and the County (1.1 percent).

Table 2.3.3 presents income demographics data for the County, the City of Banning, and the study area census tracts. As shown in Table 2.3.3, Census Tract 438.13 has a substantially higher percentage of families living below the poverty level (18.8 percent) than Census Tract 443 (10.36 percent). The percentage of families living below the poverty level in Tract 443 was slightly less than the countywide average, at 10.6 percent.

### **2.3.3.3 Environmental Consequences**

#### ***No Build Alternative***

The No Build Alternative does not include construction of the I-10 Bypass from Banning to Cabazon. Therefore, no adverse effects related to environmental justice would occur.

#### ***Build Alternatives***

The Project would result in beneficial impacts to community access, community facilities and services, and bicycle and pedestrian facilities. Since the study area is home to substantial populations of minority and low-income residents, minority and low-income populations would experience the beneficial impacts associated with improved traffic circulation and infrastructure improvements.

The only potentially adverse community impacts identified are those of potential disruption of utility lines and increased traffic at an I-10 on-ramp and two intersections. These impacts would be borne by the community as a whole, which includes substantial minority and low-income populations. In addition, avoidance, minimization, and/or mitigation measures would be selected to lessen the impact to utilities and the redistribution of traffic. The Project would not result in disproportionately high and adverse effects on the health or environment of minority and low-income populations.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes in the long term have been included in the Project. Based on the discussion and analysis, the Build Alternatives will not cause disproportionately high and adverse effects on any minority or low-income populations per EO 12898 regarding environmental justice.

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

Based on the above discussion and analysis, the Build Alternatives will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

## 2.4 Utilities/Emergency Services

### 2.4.1 Affected Environment

This section is based on a review of the existing utility and emergency service providers and facilities in the study area, and on the *Community Impact Assessment* (May 2017).

Emergency service providers in the Project vicinity include Riverside County (County), the City of Banning, the community of Cabazon, and the Morongo Band of Mission Indians.

#### 2.4.1.1 Utilities

The following service providers have utility facilities within the Project footprint:

- **Southern California Edison (SCE):** electric distribution and transmission lines
- **City of Banning:** electric distribution line
- **Questar:** natural gas line
- **Southern California Gas (SCG):** natural gas line
- **Level 3:** fiber optics line
- **Kinder Morgan:** abandoned; leased by Level 3 for fiber optics line

#### 2.4.1.2 Law Enforcement Services

The Cabazon Station of the Riverside County Sheriff's Department provides law enforcement services to the mid-county Pass area. This includes the unincorporated communities around the Cities of Beaumont and Banning, as well as contract services to the Morongo Band of Mission Indians Reservation. The station is located at 50290 Main Street in Cabazon.

The Banning Police Department consists of 27 sworn personnel and 12 classified personnel. The Banning Police Department is located at 125 East Ramsey Street in Banning.

The Morongo Reservation Patrol consists of the Traffic Division, the Patrol Division, and Enterprise Security. The Morongo Reservation Patrol enforces Tribal Ordinances, monitors entryways to the reservation and Morongo Band of Mission Indians' enterprises, patrols the Morongo Band of Mission Indians Tribal Lands, and assists the Morongo Tribal Court.

California is a Public Law 280 state that transferred federal law authority within certain tribal nations to the state government. The County Sheriff has jurisdiction over criminal matters. The Morongo Reservation has Deputy Sheriffs under contract working on the reservation.

#### **2.4.1.3 Fire Protection and Emergency Medical Services**

The Riverside County Fire Department provides fire protection and emergency medical services to the Project area. Fire Station 24, which is staffed by Battalion 3, is in Cabazon at 50382 Irene Street. Fire Station 89, which is also staffed by Battalion 3, is in Banning at 172 North Murray Street.

The Morongo Fire Department responds to calls both on and off the Morongo Band of Mission Indians Reservation. The Morongo Fire Department staff of 20 firefighters is responsible for protecting 110 square miles of reservation land, as well as the residential community, the Morongo Band of Mission Indians' enterprises, and the 27-story, 44-acre (ac) casino.

The Morongo Fire Department is dispatched by the Riverside County Fire Department dispatch center in Perris. The Morongo Fire Department has auto-aid and mutual-aid agreements with the County and responds almost daily to the adjoining city and County areas. The Morongo Fire Department also has a California Fire Assistance Agreement with the State of California and responds throughout California to State fires, Bureau of Land Management fires, and Bureau of Indian Affairs fires.

Other area fire stations in Beaumont and Poppet Flats provide additional service in the Project area if needed.

The California Department of Forestry and Fire Protection (CAL FIRE) is an emergency response and resource protection department. CAL FIRE protects people, property, and natural resources from fire; responds to emergencies of all types; and protects and preserves timberlands, wildlands, and urban forests. The CAL FIRE Southern Region Riverside Unit provides services in the Project area from local fire stations. CAL FIRE has a Cooperative Fire Protection Agreement with Riverside County. Riverside County Fire Department Station 24 also provides CAL FIRE services in the Project area.

#### 2.4.1.4 Emergency Medical Facilities

The Riverside County Fire Department provides emergency medical services to the Project area as shown in Table 2.4.1. The only hospital in the San Gorgonio Pass is San Gorgonio Memorial Hospital in Banning. The next nearest medical center is in Palm Springs as shown in Table 2.4.1.

**Table 2.4.1 Hospitals and Medical Facilities in the Study Area**

Hospitals and Medical Facilities	Service Area	Address
San Gorgonio Memorial Hospital	City of Banning	600 North Highland Springs Avenue Banning, CA 92220
Desert Regional Medical Center	Coachella Valley Region	1150 North Indian Canyon Drive Palm Springs, CA 92262

Source: *Community Impact Assessment* (May 2017).

### 2.4.2 Environmental Consequences

#### 2.4.2.1 Temporary Impacts

##### **Utilities**

##### *No Build Alternative*

The No Build Alternative would not include construction of Project improvements. Therefore, the No Build Alternative would not result in temporary impacts to utility facilities.

##### *Build Alternatives*

Where the Project conflicts with an existing utility, the utility would be protected in place or relocated, if necessary. Utility crossings at roadways will be relocated generally cross perpendicular to the roadway, if feasible. Utility protection, such as encasement, may be necessary at certain locations. Based on preliminary engineering efforts and coordination with utility providers to date, utility relocations are anticipated to be accomplished within the Project construction footprint.

California Public Utilities Commission (CPUC) General Order 131-D addresses the special permitting and environmental review requirements for major relocations of privately owned (CPUC-regulated) power lines and substations at voltages in excess of 50 kilovolts (kV). Relocations of power lines operating at and above 50 kV must be reviewed under the California Environmental Quality Act (CEQA) at both the Project planning phase and at the relocation plan approval stage in compliance with Section IX.B of the General Order. The California Department of Transportation (Caltrans) and the Riverside County Transportation Department (RCTD) are

complying with General Order 131-D by coordinating with the utility owners during the Project planning and environmental review phases.

The discussion below summarizes the anticipated utility facility relocations and/or protections in-place that would be necessary under the Build Alternatives. Table 2.4.2 provides an overview of utility relocations anticipated under the Build Alternatives. The decision on relocation or protection in-place would be made during final design in consultation with the owner of each affected utility. No substantial impacts are anticipated from utility relocations because utility owners would conduct the work under their existing permits and applicable environmental regulations.

**Table 2.4.2 Utility Relocations Required**

<b>Alt. No.</b>	<b>Type/No. of Utility Relocation</b>	<b>Utility Company</b>
5	Two overhead electric transmission lines, including up to six power poles	Southern California Edison
5	One electric distribution line, including up to three power poles	Southern California Edison
12 (Preferred Alternative)	Two overhead electric transmission lines, including up to eight power poles	Southern California Edison
12 (Preferred Alternative)	Two electric distribution lines, including up to seven power poles	Southern California Edison
12 (Preferred Alternative)	One 16-inch natural gas line	Questar
12 (Preferred Alternative)	Two 36-inch high-pressure natural gas lines	Southern California Gas
12 (Preferred Alternative)	One fiber optics line	Level 3
12 (Preferred Alternative)	Two segments of an abandoned fiber optics line (leased by Level 3)	Kinder Morgan

**Alternative 5**

***Southern California Edison – Transmission***

Two SCE overhead electric transmission lines would need to be relocated under Alternative 5. The first line is located south of Westward Avenue and traverses northeast at a skew across the Alternative 5 roadway alignment. The line would be relocated to parallel the proposed road and then cross the road perpendicular to the north to connect back to an existing power pole. This work would require relocating up to two power poles.



The second transmission line along the north side of Bonita Avenue would need to be relocated to accommodate the roadway widening to the north near Apache Trail. This work would require relocating up to four power poles.

***Southern California Edison – Distribution***

The SCE electric distribution line along the south side of Bonita Avenue at the intersection with Apache Trail would require relocation to accommodate the roadway widening for Alternative 5. The line would be undergrounded from the Bonita Avenue/Apache Trail intersection to the west through the proposed bridge across the San Geronio River. At the west side of the bridge, the underground line would become aerial at an existing power pole to reconnect with the existing line to the west. This work would require relocating up to three power poles.

***Alternative 12 (Preferred Alternative)***

***Southern California Edison – Transmission***

Two SCE overhead electric transmission lines would need to be relocated under Alternative 12 (Preferred Alternative). The first line is in the southeast corner of the Morongo Band of Mission Indians Tribal Lands just north of the proposed Smith Creek Bridge. The transmission line would need to be relocated to parallel the proposed roadway on each side, then cross perpendicular to the road and join with existing lines to the east and west. Work would require relocating up to four power poles.

The second transmission line is located along the north side of Bonita Avenue and would need to be relocated to accommodate the roadway widening to the north near Apache Trail. Work would require relocating up to four power poles.

***Southern California Edison – Distribution***

Two SCE overhead electric distribution lines would need to be relocated under Alternative 12 (Preferred Alternative). The first line is along Westward Avenue north of the sewage treatment ponds and would require relocating up to four power poles. The second distribution line relocation would be at the Bonita Avenue and Apache Trail intersection as discussed earlier for Alternative 5.

***Questar***

A 16-inch Questar gas line located along Westward Avenue adjacent to the sewage treatment ponds would need to be relocated to continue east on Westward Avenue to avoid proposed drainage features, and then angle to the northeast to reconnect to the existing line.

### ***Southern California Gas***

Two 36-inch, high-pressure SCG natural gas lines would need to be relocated under Alternative 12 (Preferred Alternative). The first is on Westward Avenue adjacent to the sewage treatment ponds. This line would be relocated parallel to the Questar gas line as described above.

The second gas line is situated in the southwest corner of the Morongo Band of Mission Indians Tribal Lands north of Smith Creek. It would be relocated to parallel the proposed roadway alignment and would cross perpendicular to the roadway to connect back to the existing SCG line.

Coordination with SCG identified plans by SCG to relocate or replace portions of their existing facilities that may conflict with the proposed Alternative 12 (Preferred Alternative) alignment. Additional coordination with SCG would be required during final design as the relocation and/or replacement plans continue to be developed.

### ***Level 3***

The Level 3 fiber optics line is on Westward Avenue near the sewage treatment ponds. The line would be relocated to parallel the proposed roadway alignment and then cross perpendicular to connect back to the existing line.

### ***Kinder Morgan***

Two segments of the abandoned Kinder Morgan line being leased by Level 3 would be relocated under Alternative 12 (Preferred Alternative). The first segment is located in the southwest corner of the Morongo Band of Mission Indians Tribal Lands north of Smith Creek and extends through the proposed alignment at an angle. This line would need to be relocated to parallel the proposed alignment and avoid conflict with the roadway.

The second segment is in the southeast corner of the Morongo Band of Mission Indians Tribal Lands north of the proposed Smith Creek Bridge. To avoid crossing the proposed alignment at a skew, the line would be relocated to parallel the proposed roadway and then cross perpendicular to the road to join existing lines to the east and west.

## **Law Enforcement, Fire and Emergency Medical Services, and Medical Facilities**

### ***No Build Alternative***

The No Build Alternative does not involve construction of the Project; therefore, it would not result in temporary impacts to law enforcement, California Highway Patrol (CHP), fire protection, or emergency service providers. No construction delays to emergency service providers from detours or closures would occur under the No Build Alternative.

### ***Build Alternatives***

The majority of construction activities under the Build Alternatives are for a new roadway on a new alignment. During construction of the Build Alternatives, the ability of emergency service providers to meet response times could be impaired as a result of temporary traffic delays, road and/or lane closures (one lane would always remain open during construction), or detours where improvements to existing streets are proposed. Coordination with the emergency services would alleviate delays and would provide uninterrupted service to residents and businesses. Connection of the Project to the existing roadway system will require limited construction activities on the following existing facilities:

- Improvement of existing Westward Avenue from Hathaway Street to the end of the existing roadway (widening, repaving, and construction of sidewalks)
- Improvements at the intersection of Westward Avenue and Hathaway Street
- Improvements at the intersection of Apache Trail and Bonita Avenue
- Construction of shoulders on Apache Trail between Bonita Avenue and the Union Pacific Railroad (UPRR)

Components of the Project could result in temporary traffic delays, road closures, lane closures (one lane would always remain open during construction), and potential detours that may impair the ability of law enforcement, fire, and other emergency service providers to meet response time goals in these areas.

Alternatives 5 and 12 (Preferred Alternative) include development of a Transportation Management Plan (TMP), as noted in Section 2.5, Traffic and Transportation/ Pedestrian and Bicycle Facilities, Project Description. This would facilitate coordination with law enforcement, CHP, fire protection, emergency service providers, and the public during the design phase and prior to and during project construction activities, including weekends and nights. Temporary construction-

related impacts to emergency service providers would be addressed in the TMP to minimize localized congestion and travel delays and to minimize construction-related effects on emergency service providers.

#### **2.4.2.2 Permanent Impacts**

##### ***Utilities***

###### ***No Build Alternative***

The No Build Alternative does not include Project improvements and would not result in any permanent impacts to utility facilities.

###### ***Build Alternatives***

Upon completion of construction of the Project, including any project-related utility relocations and protection in-place, no permanent impacts to utility providers and facilities would occur under the Build Alternatives.

##### ***Law Enforcement, Fire, and Emergency Medical Services***

###### ***No Build Alternative***

The No Build Alternative does not include any improvements. Therefore, the No Build Alternative would potentially result in increased delays and increased response times for emergency service providers in the future. These increased delays and response times for emergency services result from the projected increase in future congestion in the study area, and emergency services would have to continue to use the freeway in order to access the community of Cabazon, which would only be accessible by using I-10. Therefore, the No Build Alternative would not provide benefits to police, fire, and emergency services.

###### ***Build Alternatives***

The Project would reduce emergency response times, specifically in Banning and Cabazon, because vehicles can avoid freeway congestion and possible delays at railroad track crossings. The Project would result in faster, more reliable response times for emergency services in the Project vicinity. These reductions in emergency response times would be beneficial.

The Build Alternatives do not include construction of residential or nonresidential uses, and neither alternative was determined to influence growth based on the *Growth-Related Indirect Impact Analysis* (January 2017). Therefore, the Build Alternatives would not increase the population or increase the demand for public services or utilities in the Project area in the long term.

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

Temporary construction-related impacts on emergency services under the Build Alternatives would be addressed through a TMP implemented during construction to minimize temporary localized congestion and travel delays. This plan is discussed in Section 2.5, Measure TR-1.

The Build Alternatives would not result in permanent adverse effects related to utilities and emergency service providers; therefore, avoidance, minimization, and/or mitigation measures are not necessary.

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## **2.5 Traffic and Transportation/Pedestrian and Bicycle Facilities**

This section discusses the proposed Interstate 10 (I-10) Bypass Project: Banning to Cabazon Project's (Project) adverse effects on traffic and circulation, both during construction and after completion (long-term or operational impacts). Please note that recreational trails are discussed in Section 2.1, Land Use, and Section 2.3, Community Impacts, of this document.

### **2.5.1 Regulatory Setting**

Caltrans, as assigned by the Federal Highway Administration (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.

### **2.5.2 Affected Environment**

The traffic analysis for the Project is based in part on the following technical study:

- *Traffic Operational Analysis Revised Final Report* (April 2015)

The study area for the transportation analysis of the Project, as shown on Figure 2.5-1, includes portions of the City of Banning (Banning), the community of Cabazon, the Morongo Band of Mission Indians Tribal Lands, and unincorporated

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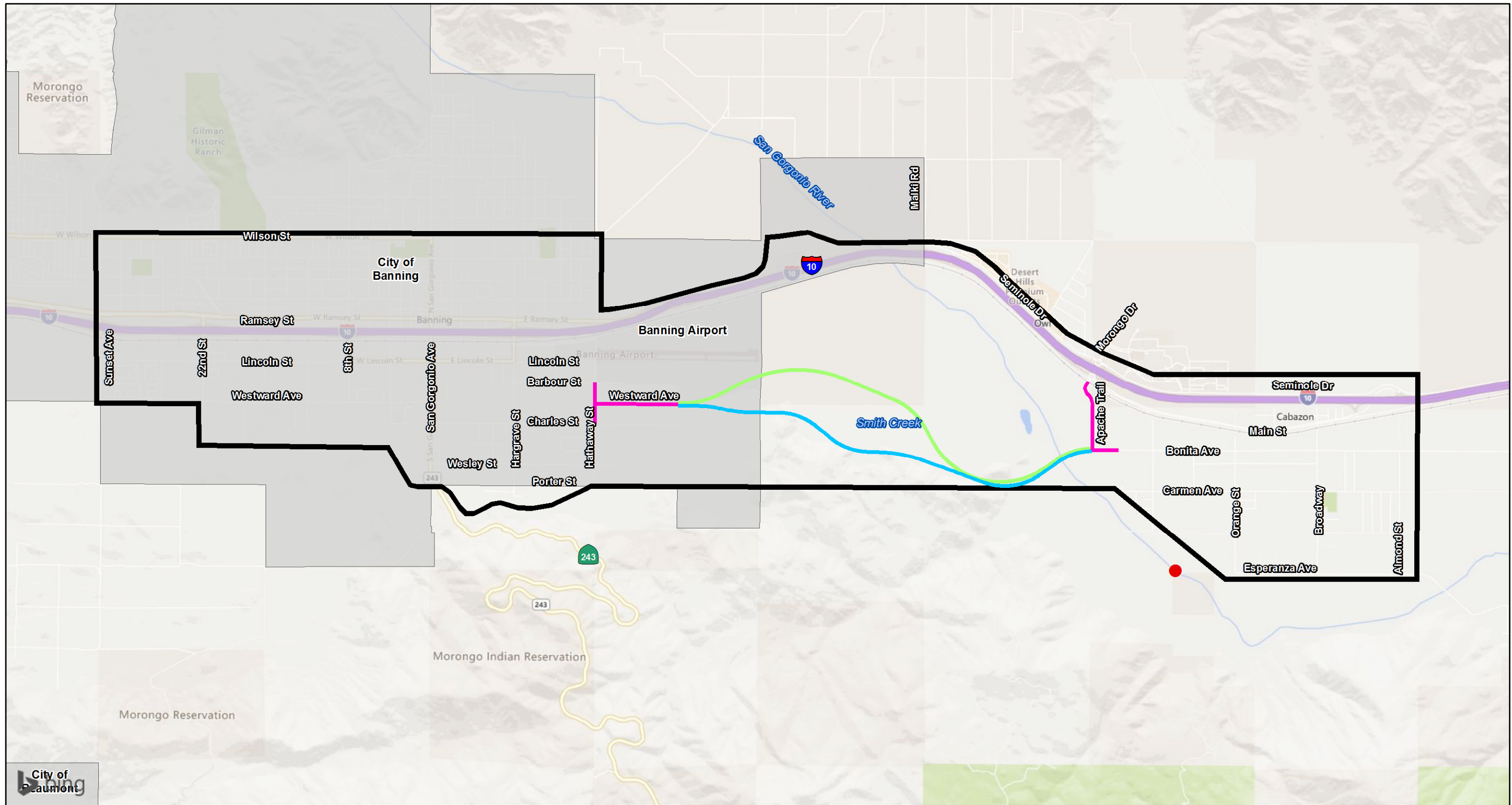
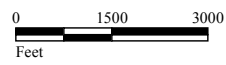


FIGURE 2.5-1

LEGEND

- Transportation Study Area
- City Boundary
- Existing Bridge
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)



SOURCE: Bing Maps (2014); County of Riverside (2015)

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Riverside County lands along I-10 between the Sunset Avenue/I-10 Interchange on the west and the Main Street (Cabazon)/I-10 Interchange on the east. This study area was chosen because the traffic modeling analysis showed that traffic volumes with and without the Project changed by less than 1 percent on freeway segments outside this study area.

The following describes the existing transportation facilities in each of the jurisdictions affected by the Project, planned improvements, and each agency's adopted policies relevant to the Project. "Existing" refers to Base Year (2012) when referring to traffic and transportation analysis.

### **2.5.2.1 City of Banning**

#### ***Base Year Conditions***

Existing roadways in Banning form a partial north-south grid system, with I-10 and State Route 243 (SR-243) (San Gorgonio Avenue) providing regional access. I-10 access is provided via full-service diamond interchanges with I-10 at Sunset Avenue, 22<sup>nd</sup> Street, 8<sup>th</sup> Street, and Hargrave Street, and a half-diamond interchange at the east end of Ramsey Street. Wilson Street, Ramsey Street, Lincoln Street, Barbour Street, Westward Avenue, Charles Street, and Wesley Street provide east-west circulation within the study area. Sunset Avenue, 22<sup>nd</sup> Street, 8<sup>th</sup> Street, San Gorgonio Avenue (SR-243), Hargrave Street, and Hathaway Street provide north-south circulation within Banning.

#### ***Westward Avenue***

Westward Avenue is a partially completed roadway proposed to ultimately extend from Sunset Avenue to the eastern Banning city limits. It has been constructed from Sunset Avenue to San Gorgonio Avenue and from 600 feet west of Hathaway Street. The incomplete section of Westward Avenue, between San Gorgonio Avenue and Hathaway Street (except for a 600 feet section just west of Hathaway Street) is approximately 1 mile in length. Figure 2.5-2 shows the development status of Westward Avenue. East of Hathaway Street, Westward Avenue is paved for approximately 0.5 mile west of the eastern city limit where the roadway becomes a gated unpaved road. The Western Avenue right-of-way is 60 feet wide from Hathaway Street to up to approximately 1,500 feet west of the eastern City limit at which the right-of-way is widened to 129 feet until the eastern City limit.

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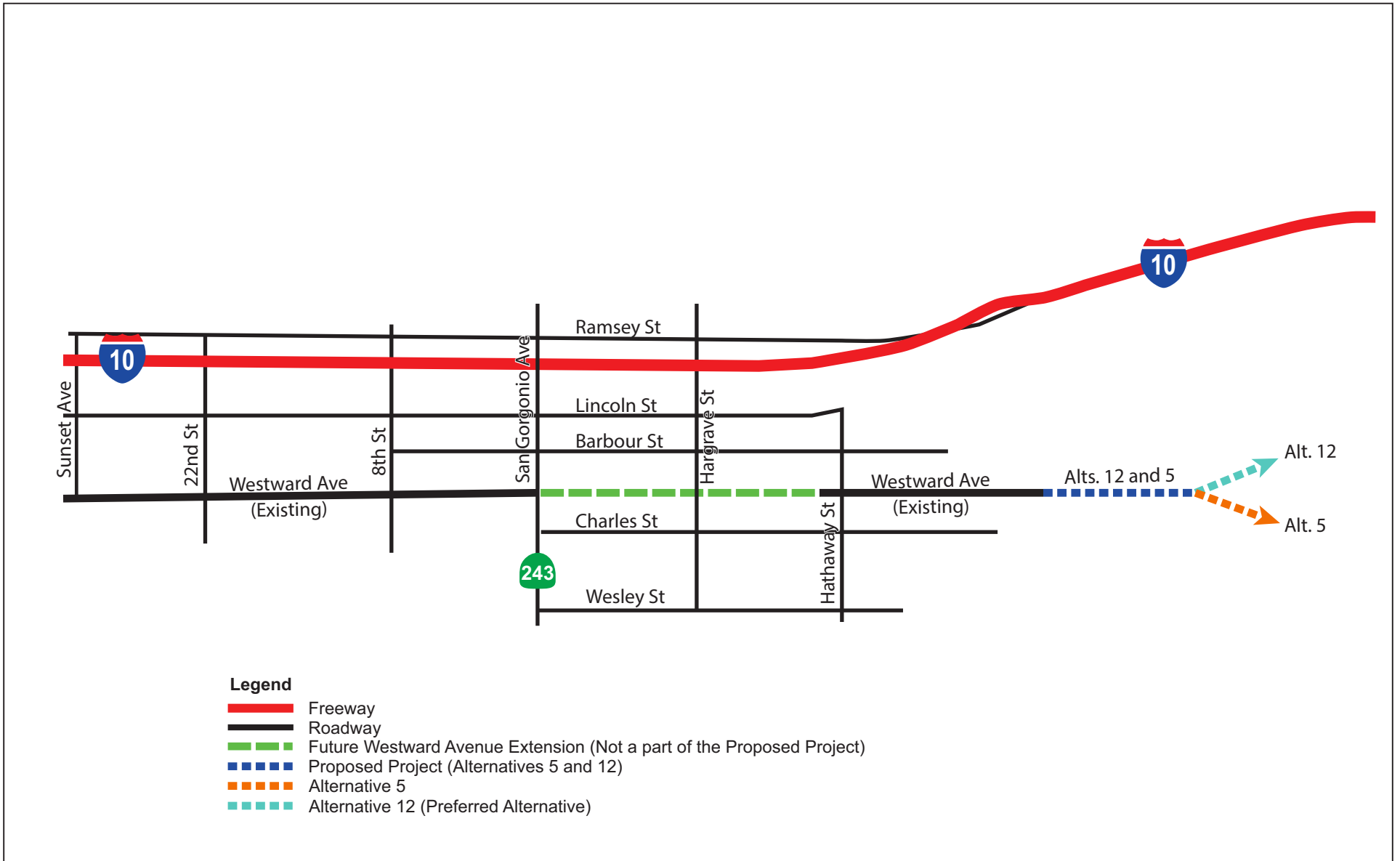


FIGURE 2.5-2



NO SCALE

*I-10 Bypass: Banning to Cabazon*  
 Westward Avenue Map

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### ***Other Streets and Transportation Facilities***

Hathaway Street is an existing two-lane roadway with varying cross-sections in the study area. Similarly, Lincoln Street, Barbour Street, Charles Street, 22<sup>nd</sup> Street, 8<sup>th</sup> Street, San Gorgonio Avenue, and Hargrave Street are all two-lane roadways with varying cross-sections.

There are no existing bicycle trails in the Banning portion of the study area.

Intermittent sidewalks are provided along Lincoln Street. Very limited sidewalks are provided along Hathaway Street and the existing segments of Westward Avenue.

### ***Planned Improvements***

The planned street system in the City of Banning General Plan Circulation Element is shown on Figure 2.5-3. For the east-west streets, the General Plan shows Lincoln Street as a four-lane Major Highway, and Westward Avenue as a two-lane Collector Highway, including several currently unbuilt sections. The plan also shows Barbour Street extending eastward from Lincoln Street to Hathaway Street as a two-lane collector. North-south streets consist of San Gorgonio Avenue (a four-lane major highway south of Lincoln Street), Hargrave Street (a four-lane secondary highway south of Lincoln Street), and Hathaway Street (a four-lane secondary highway south of I-10).

### ***Relevant Planning Policies***

The City of Banning's General Plan Circulation Element contains the following policies and programs relevant to the Project:

**Policy 1:** The City's Recommended General Plan Street System shall be strictly implemented.

**Program 1.A:** Street rights of way shall be 134 feet for Urban Arterial Highways, 110 feet for Arterial Highways, 100 feet for Major Highways, 88 feet for Secondary Highways, 78 feet for Divided Collectors, 66 feet for Collectors, and 60 feet for Local Streets. Local street standards can be amended as described in Policy 2.

**Policy 6:** The City shall maintain peak hour Level of Service D or better on all local intersections.

**Policy 10:** Sidewalks shall be provided on all roadways 66 feet wide or wider.

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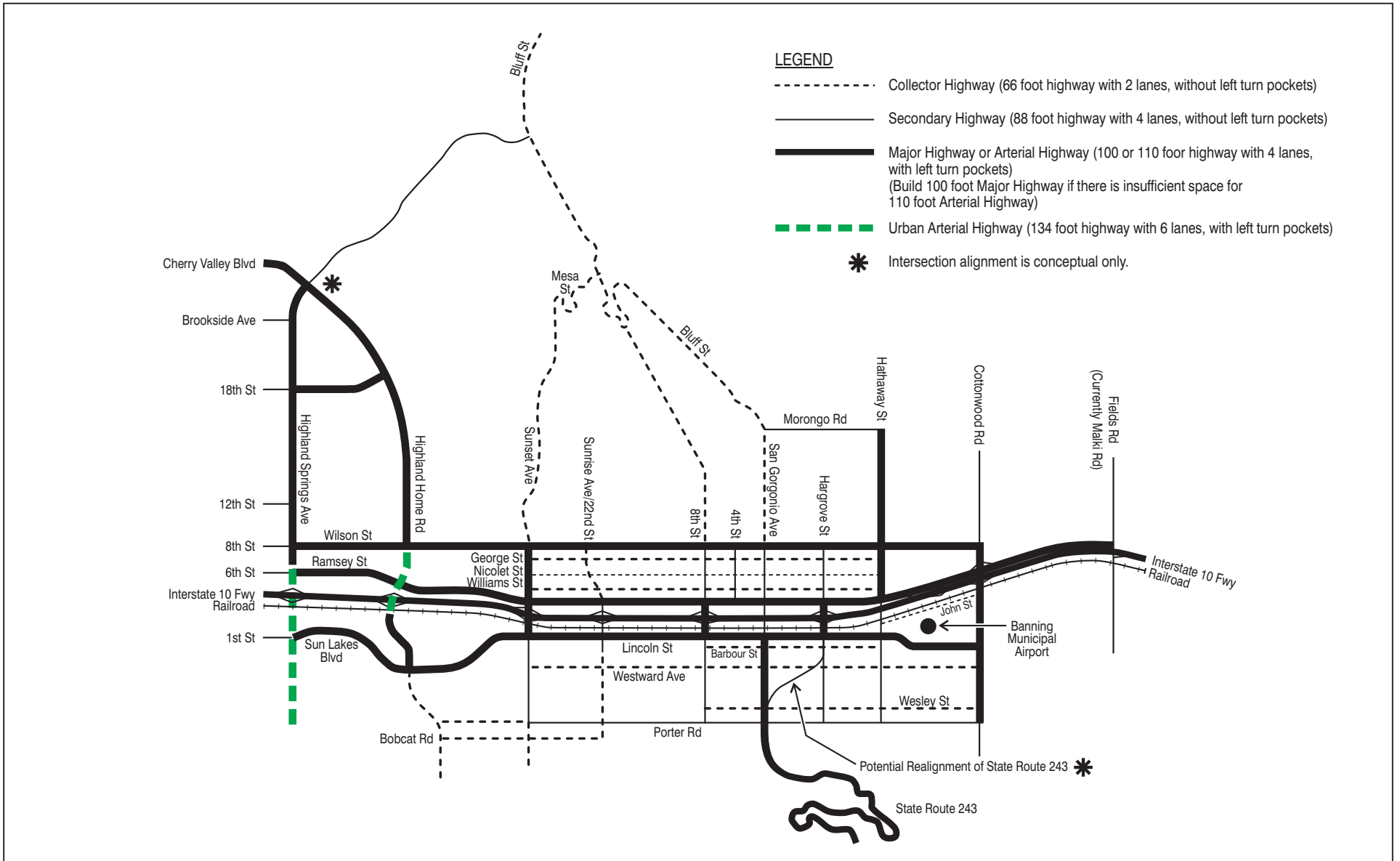


FIGURE 2.5-3



NO SCALE

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**Program 25.C:** Class II bikeways and sidewalks should be designated on all existing arterial streets that have sufficient width to safely accommodate bicycle travel lanes.

### **2.5.2.2 Morongo Band of Mission Indians Tribal Land**

#### ***Base Year Conditions***

To the east of the Banning city limits, the study area includes the Section 12 Parcel of the Morongo Band of Mission Indians Tribal Lands, which is currently undeveloped. There are no existing public roadways within the Section 12 Tribal parcel, which is presently accessed from Banning by dirt road extensions of Westward Avenue and Charles Street. These access points are gated, and the Section 12 Tribal parcel is fenced to control access. The dirt roads cross the property and, after passing through additional locked gates, enter County jurisdiction to the east of the Section 12 Tribal parcel, eventually connecting to Bonita Avenue in Cabazon after a third set of gates.

#### ***Relevant Planning Policies***

The General Plan for the Morongo Band of Mission Indians Tribal Lands is currently under development. At this time, there is no formal circulation plan for the undeveloped Section 12 Tribal parcel in the study area. As discussed in Chapter 1.0, Project Description, the Morongo Band of Mission Indians has formally endorsed the Alternative 13 alignment through this area. In a letter dated September 25, 2018, the Morongo Band of Mission Indians stated that while they had previously expressed support for Alternative 13, they believed Alternative 12 (Preferred Alternative), provided cost savings due to reduced environmental and road construction impacts and was supportive of their long-term development plans. In the September 25, 2018, letter, the Morongo Band of Mission Indians also indicated Alternative 12 (Preferred Alternative) is consistent with the 2008 resolution approved by the Tribal Council, the County of Riverside, and the City of Banning, which endorsed a Southern Route and rejected the Ramsey extension, identified as Alternative 7. Therefore, the Morongo Band of Mission Indians has expressed support for Alternative 12 (Preferred Alternative).

In 2011, the Tribe adopted the Morongo Band of Mission Indians Long Range Transportation Plan 2010–2030, which lists future transportation projects on the Morongo Band of Mission Indians Tribal Lands. This list includes the “I-10 South Bypass.” This Project is listed as having intermediate priority, with construction occurring within 3 to 6 years of the 2011 adoption of the Plan.

### **2.5.2.3 County of Riverside**

#### ***Base Year Conditions***

County lands include the generally undeveloped properties west of the San Gorgonio River that are primarily used for cattle grazing, and the community of Cabazon, which is east of the San Gorgonio River.

#### ***West of San Gorgonio River***

There are no public roadways in this area; however, there are several gated dirt roads that connect Westward Avenue in Banning to Bonita Avenue in Cabazon and provide access to privately owned lands and the Morongo Band of Mission Indians Tribal Lands. The area is also crossed by several utility corridors (including electrical transmission lines, gas and oil transmission mains, and fiber optic cables) and maintenance access roads for those utility corridors.

#### ***Community of Cabazon***

Existing roadways in the community of Cabazon south of I-10 are generally two lanes, with the exception of Main Street, which is a four-lane divided highway. Existing east-west roadways include Main Street north of the Union Pacific Railroad (UPRR) and Bonita Avenue, Carmen Avenue, Dolores Avenue, and Esperanza Avenue south of the UPRR. North-south streets include Apache Trail, Magnolia Street, Orange Street, and Broadway. Apache Trail and Broadway provide at-grade crossings of the UPRR and the only access to the regional transportation system for Cabazon residents residing south of the UPRR. During the scoping process, community members expressed interest in grade separations in Cabazon. At this time, however, there are no planned or committed projects to provide grade separations over the railroad in Cabazon.

There are no existing signed bicycle routes within Cabazon, and sidewalks are extremely limited.

#### ***Planned Improvements***

The Final EIR/EA analyzes the Project pursuant to the 2015 General Plan.

Circulation improvements in unincorporated Riverside County are controlled by the 2015 Riverside County General Plan, which includes the 2015 Pass Area Plan. The 2015 Pass Area Plan Circulation Plan (Figure 2.5-4) shows a proposed roadway

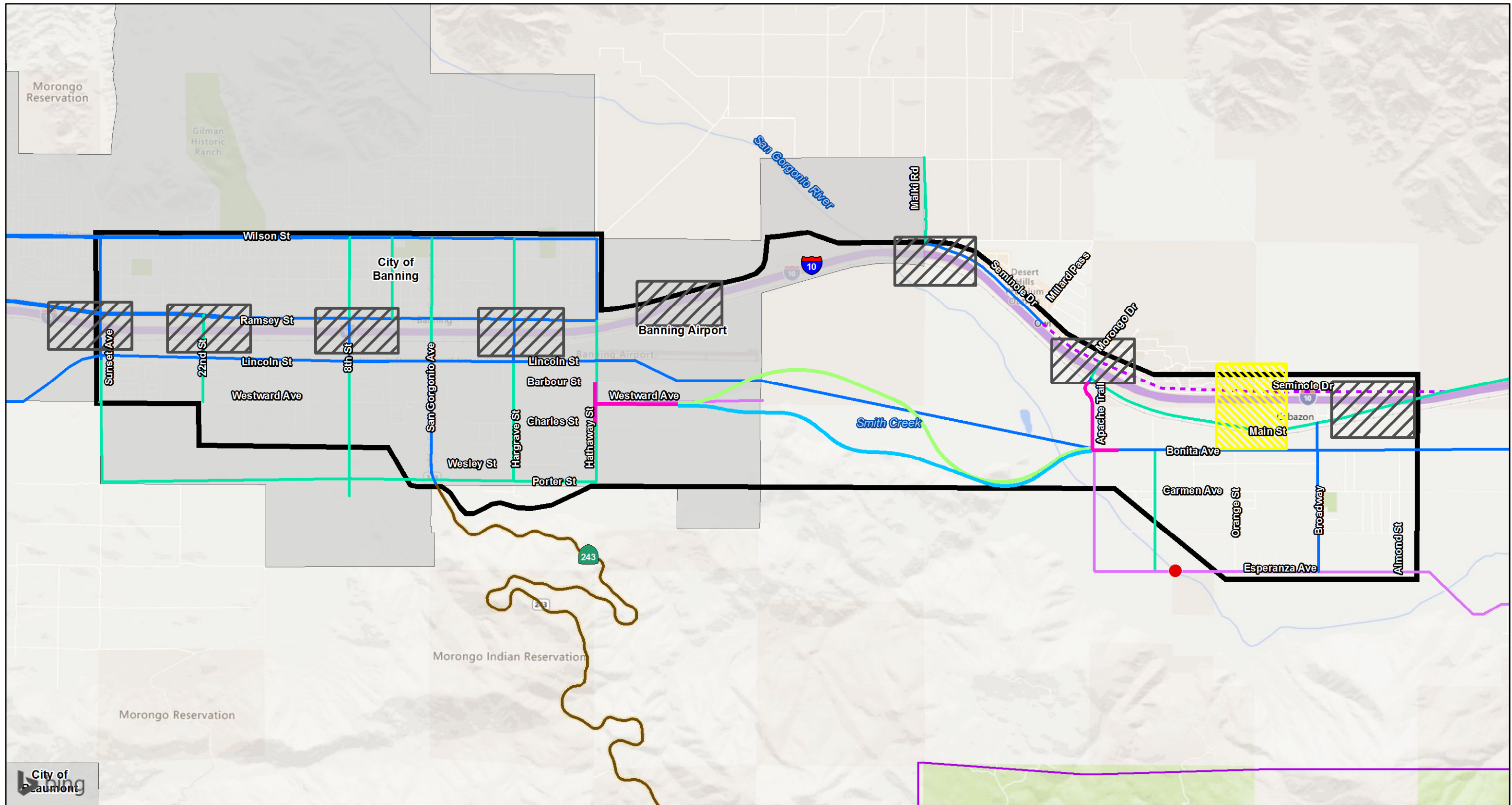
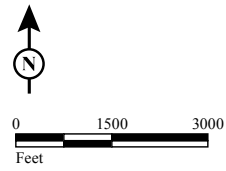


FIGURE 2.5-4

LEGEND

- Traffic Study Area
- The Pass Area Plan Boundary
- City Boundary
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)
- Major (118' ROW)
- Secondary (100' ROW)
- Mountain Arterial 2 Ln (110' ROW)
- Collector (74' ROW)
- Seminole Drive (Downgraded to secondary highway in 2015 from a major highway in the 2003 Pass Area Plan)
- Existing Interchange
- Proposed Interchange
- Existing Bridge

Note: The Proposed Project is shown in the 2015 Pass Area Plan only. The roadway designations in the Traffic Study Area are the same in the 2015 and 2003 Pass Area Plans, except for the segment of Seminole Drive indicated.



SOURCE: Bing Maps (2018); County of Riverside (2015)  
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within County jurisdiction that connects Banning to Cabazon in the generalized location of the Project (alignments of unbuilt roadways in the General Plan are considered conceptual). The County designates the unbuilt roadway as ultimately becoming a four-lane major highway (the County roadway cross-section standards may differ from City cross-section standards).

### *Union Pacific Railroad Freight Service*

The UPRR is a major transcontinental freight-hauling facility that serves traffic to and from the Port of Los Angeles, Port of Long Beach, and Southern California with freight destinations across the country. Long trains in excess of 100 cars are common. The facility currently provides two tracks, with long-range plans to expand to three or four tracks within the existing right-of-way.

### *At-Grade Crossings*

The UPRR tracks are located between the proposed bypass roadway and I-10. Vehicles traveling north in the study area from south of I-10 must cross the UPRR tracks to reach destinations north of I-10.

### *Passenger Service*

The UPRR tracks also accommodate six Amtrak Sunset Limited trains per week, with three running eastbound and three running westbound.

The Riverside County Transportation Commission (RCTC), in coordination with the Coachella Valley Association of Governments (CVAG), the California Department of Transportation (Caltrans), and the Federal Railroad Administration, is studying the expansion of passenger rail service to the Coachella Valley and San Gorgonio Pass. In 2010, the RCTC reaffirmed its formal support for implementation and expansion of intercity Amtrak rail service to the Coachella Valley and San Gorgonio Pass.

As of October 2016, RCTC had completed an Alternatives Analysis for the Coachella Valley-San Gorgonio Pass Rail Corridor Service and initiated the development of a program Environmental Impact Report/program Environmental Impact Statement (EIR/EIS).<sup>1</sup>

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<sup>1</sup> Riverside County Transportation Commission (RCTC). 2016. Coachella Valley-San Gorgonio Pass Rail Corridor Service. Website: <http://rctc.org/rail/coachella-valley-rail-service>, accessed February 6, 2017.

The RCTC indicates that Amtrak is viewed as the most appealing option for commuting and leisure travel. Although stops and station locations have yet to be determined, the initial service plan would be for two daily round trips along the corridor. RCTC anticipates that implementation of any passenger rail service is at least 10 years away.

#### **2.5.2.4 Levels of Service**

As Riverside County continues to grow, transportation demand management and systems management will be necessary to preserve and increase available roadway capacity. Level of service (LOS) targets are used to assess the performance of a street or highway system and the capacity of a roadway. An important goal when planning the transportation system is to maintain acceptable LOS along the federal and State highways and the local roadway network. To accomplish this, Caltrans, RCTC, Riverside County, and local agencies adopt minimum LOS to determine future infrastructure needs. Riverside County must provide and maintain a highway system with adequate capacity and acceptable LOS to accommodate projected travel demands associated with the buildout of the Land Use Element. This can be accomplished by establishing minimum service levels for the designated street and conventional State highway system. Strategies that result in improvements to the transportation system, coupled with local job creation, will allow Riverside County residents to have access to a wide range of job opportunities within reasonable commute times.







The concept of LOS provides a qualitative measure of existing and forecast traffic congestion and delay on roadway links (segments of roadways) and roadway intersections (where two roadways meet at grade). Figure 2.5-5 shows a characterization of LOS for freeway segments.

At roadway intersections, LOS is a function of the delay in vehicles passing through the intersection. For local roadways in an urban or semi-urban area such as Banning or Cabazon, the capacity of the roadway network is actually set by the LOS at roadway intersections rather than link volumes. In the Project's transportation study area, most intersections are unsignalized and controlled by either two-way or four-way stop signs. Figure 2.5-6 characterizes the LOS at unsignalized intersections. LOS "A" represents a high LOS, with little or no delay in proceeding through the intersection, while LOS "F" represents delays in excess of 50 seconds per vehicle on average. LOS "D" is considered minimally acceptable.



# LEVELS OF SERVICE

## for Freeways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
<b>A</b>		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. <b>No delays</b>
<b>B</b>		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. <b>No delays</b>
<b>C</b>		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. <b>Minimal delays</b>
<b>D</b>		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. <b>Minimal delays</b>
<b>E</b>		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. <b>Significant delays</b>
<b>F</b>		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. <b>Considerable delays</b>



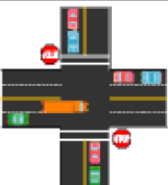

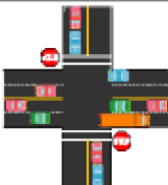

Source: California Department of Transportation Standard Environmental Reference (April 2015).

**Figure 2.5-5 Levels of Service for Freeway Links**

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# LEVELS OF SERVICE

for Unsignalized Intersections

Level of Service	Flow Conditions	Delay per Vehicle (seconds)	Technical Descriptions
<b>A</b>		<10	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. <b>Very short delay</b>
<b>B</b>		10-15	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. <b>No delays</b>
<b>C</b>		15-25	Stable traffic flow, but less freedom to select speed, change lanes or pass. <b>Minimal delays</b>
<b>D</b>		25-35	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. <b>Minimal delays</b>
<b>E</b>		35-50	Unstable traffic flow. Speeds change quickly and maneuverability is low. <b>Significant delays</b>
<b>F</b>		>50	Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. <b>Considerable delays</b>

Source: California Department of Transportation Standard Environmental Reference (April 2015).

**Figure 2.5-6 LOS for Unsignalized Intersection**

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There are some signalized intersections in the Project study area, and more intersections are anticipated to be signalized as development in the area occurs. Figure 2.5-7 characterizes the LOS for signalized intersections.

As noted above, both the City of Banning and the County of Riverside utilize a standard of LOS D for most roadways and intersections. In the following analyses of existing and forecast traffic volumes, the LOS standard is used to determine whether conditions are acceptable or whether other improvements may be needed to bring the segments or intersections into compliance with the General Plan circulation standards.

### **2.5.2.5 Existing Traffic Conditions**

#### **Study Area Intersection LOS**

Figure 2.5-8 shows the lane geometry and traffic control at 31 intersections in the study area. Figure 2.5-9 shows existing peak-hour traffic volumes and turning movements for the same 31 intersections as measured in 2012, at the beginning of the environmental studies for this Project. Table 2.5.1 shows the corresponding a.m. and p.m. peak-hour LOS at each of the same 31 intersections.

As shown in Table 2.5.1, the vast majority of intersections (28 out of 31) in the study area currently operate at the City/County standard of LOS D or better. Most intersections operate at LOS A or B, indicating a generally low level of congestion. However, the following intersections have been found to operate below the LOS D standard cited in both the City and County General Plans:

- **Intersection No. 3:** I-10 eastbound ramps/South 8<sup>th</sup> Street
- **Intersection No. 29:** I-10 eastbound ramps/Sunset Avenue
- **Intersection No. 31:** I-10 eastbound ramps/22<sup>nd</sup> Street

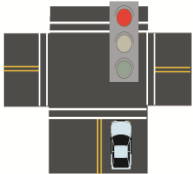
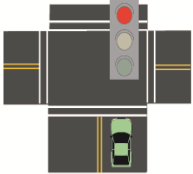
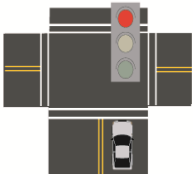
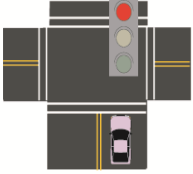
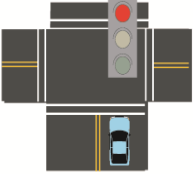
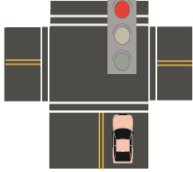
The intersections of 8<sup>th</sup> Street and 22<sup>nd</sup> Street with the I-10 eastbound off-ramps (Intersection Nos. 3 and 31) are both currently controlled by stop signs at the ends of the ramps; the cross-street, however, does not stop. Intersection No. 22, I-10 EB ramp at Morongo Trail operates at an unacceptable LOS without the proposed improvements. With the proposed improvements, the LOS is still unacceptable; however, the delay is reduced. The I-10 eastbound ramps/Sunset Avenue intersection also exceeded the LOS D threshold in 2012 when the traffic counts were taken. Subsequently, the Sunset Avenue/UPRR grade separation project has been completed, which made improvements to this intersection, including additional lanes and a traffic signal.

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# LEVELS OF SERVICE

for Intersections with Traffic Signals

Level of Service	Delay per Vehicle (seconds)
<b>A</b>	 $\leq 10$
<b>B</b>	 11-20
<b>C</b>	 21-35
<b>D</b>	 36-55
<b>E</b>	 56-80
<b>F</b>	 >80

**Factors Affecting LOS of Signalized Intersections**

**Traffic Signal Conditions:**

- Signal Coordination
- Cycle Length
- Protected left turn
- Timing
- Pre-timed or traffic activated signal
- Etc.

**Geometric Conditions:**

- Left- and right-turn lanes
- Number of lanes
- Etc.

**Traffic Conditions:**

- Percent of truck traffic
- Number of pedestrians
- Etc.

Source: California Department of Transportation Standard Environmental Reference (April 2015).

**Figure 2.5-7 LOS for Signalized Intersections**

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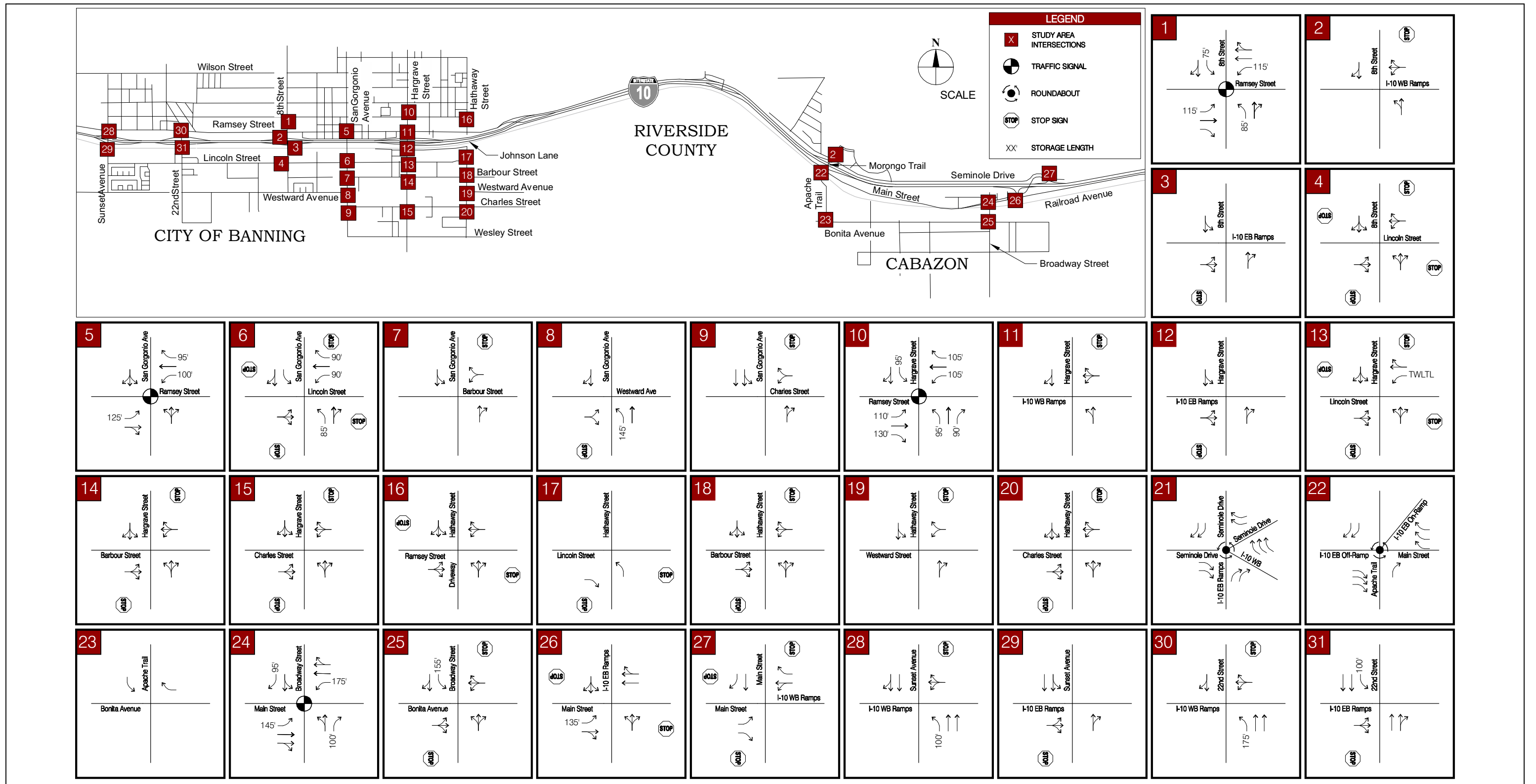


FIGURE 2.5-8

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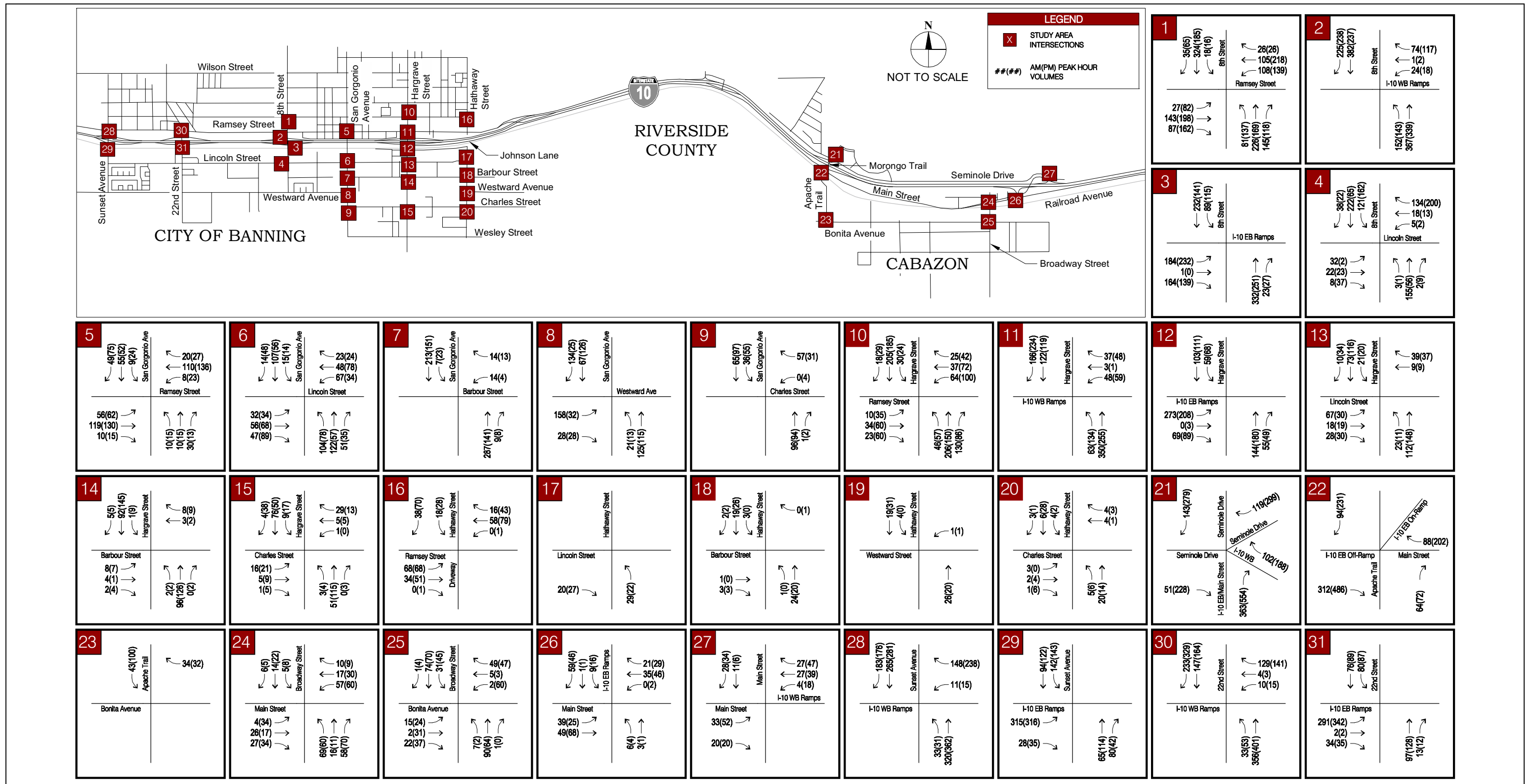


FIGURE 2.5-9

I-10 Bypass: Banning to Cabazon  
Existing (2012) Intersection Peak Hour Roadway Volumes

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**Table 2.5.1 Existing (2012) Intersection LOS**

No.	Intersection Name	Intersection Control	Criteria	AM Peak		PM Peak	
				LOS	V/C or Delay <sup>2</sup>	LOS	V/C or Delay <sup>2</sup>
1	Ramsey St./8 <sup>th</sup> St.	Signal	D	C	22.5	C	22.9
2	I-10 WB Ramps/8 <sup>th</sup> St.	SSSC	D	A	5.0	A	3.5
	Worst Approach			D	31.5	B	14.2
3	I-10 EB Ramps/8 <sup>th</sup> St.	SSSC	D	D	34.3	C	15.1
	Worst Approach			F	112.9	E	35.5
4	Lincoln St./8 <sup>th</sup> St.	AWSC	D	B	14.9	A	9.6
5	San Geronio Ave./Ramsey St.	Signal	D	A	9.8	A	9.5
6	Lincoln St./San Geronio Ave.	AWSC	D	B	11.5	A	9.6
	Barbour St./San Geronio Ave.			A	0.9	A	1.1
7	Worst Approach	SSSC	D	B	12.9	A	9.7
	Westward Ave./San Geronio Ave.			A	7.4	A	2.2
8	Worst Approach	SSSC	D	C	18.3	B	10.3
	Charles St./San Geronio Ave.			A	3.0	A	2.7
9	Worst Approach	SSSC	D	A	9.3	A	9.3
	Hargrave St./Ramsey St.			Signal	D	A	8.2
11	Hargrave St./I-10 WB Ramps	SSSC	D	A	3.0	A	4.1
	Worst Approach			C	19.3	C	19.6
12	Hargrave St./I-10 EB Ramps	SSSC	D	C	13.6	A	9.4
	Worst Approach			D	27.5	C	20.9
13	Lincoln St./Hargrave St.	AWSC	D	A	8.5	A	8.9
14	Barbour St./Hargrave St.	SSSC	D	A	1.2	A	1.1
	Worst Approach			A	10.0	B	10.9
15	Charles St./Hargrave St.	SSSC	D	A	3.8	A	2.8
	Worst Approach			B	10.5	B	10.8
16	Hathaway St./Ramsey St.	SSSC	D	A	4.8	A	4.5
	Worst Approach			A	9.8	B	10.3
17	Hathaway St./Lincoln St.	AWSC	D	A	7.1	A	6.9
18	Hathaway St./Barbour St.	SSSC	D	A	1.5	A	1.0
	Worst Approach			A	8.7	A	8.5
19	Hathaway St./Westward St.	SSSC	D	A	1.1	A	0.4
	Worst Approach			A	8.9	A	8.9
20	Hathaway St./Charles St.	SSSC	D	A	4.0	A	2.7
	Worst Approach			A	9.2	A	9.0
21	I-10 WB Ramps/Morongo Trail	Roundabout	D	A	5.1	A	7.7
22	I-10 EB Ramps/Morongo Trail	Roundabout	D	A	4.7	A	5.8
23	Apache Trail/Bonita Ave.	SSSC	D	A	7.1	A	7.6
	Worst Approach			A	7.5	A	7.9
24	Main St./Broadway	Signal	D	A	8.6	C	22.0
25	Broadway/Bonita Ave.	SSSC	D	A	4.2	A	6.8
	Worst Approach			B	10.2	B	11.3
26	I-10 EB Ramps/Main St.	SSSC	D	A	4.5	A	3.3
	Worst Approach			B	10.9	B	10.6
27	I-10 WB Ramps/Main St.	AWSC	D	A	6.7	A	7.0
	Sunset Ave./I-10 WB Ramps			Signal	D	A	2.3
28	Worst Approach	SSSC	D	B	11.2	B	13.2
	Sunset Ave./I-10 EB Ramps			Signal	D	E	35.5
29	Worst Approach	SSSC	D	F	74.7	F	118.7
	22 <sup>nd</sup> St./I-10 WB Ramps			SSSC	D	A	2.3
30	Worst Approach	SSSC	D	B	13.1	C	16.0
	22 <sup>nd</sup> St./I-10 EB Ramps			SSSC	D	C	19.9
31	Worst Approach	SSSC	D	E	35.6	F	92.1

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

<sup>1</sup> SSSC intersections show the average LOS and delay as well as the worst approach results.

<sup>2</sup> V/C is shown for roundabout intersections, and delay is shown for all other intersections.

AWSC = all-way stop-controlled

SSSC = side-street stop-controlled

EB = eastbound

V/C = volume-to-capacity ratio

I-10 = Interstate 10

WB = westbound

LOS = level(s) of service

### Freeway Segment Volumes

Table 2.5.2 summarizes the existing (2012) I-10 average annual daily trips (AADT) and peak-hour traffic volumes for eight freeway segments in the study area, including truck volumes. Generally, the traffic volume is equally distributed on I-10 within the study area. However, between the 8<sup>th</sup> Street and Morongo Trail interchanges, the freeway volumes are 2,000–3,000 vehicles higher than other segments of I-10 in the study area. This reflects that many “local” trips utilize I-10 for short trips because east/west connectors are limited in this section of I-10.

**Table 2.5.2 Existing (2012) Volumes on I-10**

Post Mile	I-10 Interchange Location	Truck %	Bi-Directional Traffic Volume Measured West of Post Mile	
			Peak Hour	AADT
11.333	Banning, Sunset Avenue	14.3	8,600	125,000
11.962	Banning, 22 <sup>nd</sup> Street	–	8,300	122,000
12.853	Banning, Junction SR-243	–	8,200	120,000
13.859	Banning, Hargrave Street	–	11,400	116,000
14.760	Banning, East Ramsey Street	16.0	10,600	108,000
16.544	Cabazon, Malki Road	18.3	10,900	111,000
17.657	Cabazon, Morongo Trail	–	10,100	103,000
19.398	Cabazon, Main Street (East Cabazon)	–	8,900	91,000

Source: 2012 *Traffic Volumes on State Highways* (California Department of Transportation 2013).

AADT = average annual daily trips

I-10 = Interstate 10

SR-243 = State Route 243

## 2.5.3 Environmental Consequences

### 2.5.3.1 Roadway Capacity

The Project (either Build Alternative) would have a forecast volume of approximately 5,200 vehicles per day (VPD) in the estimated opening year of 2022. As the Project obtains additional funding, these timeframes will be updated accordingly and the NEPA environmental document assessed for potential updates as required under 23 CFR 771.129 (Environmental Re-evaluations). This volume can be accommodated on a two-lane arterial because it is less than the County of Riverside LOS D capacity of 16,200 VPD. In the horizon year of 2038, the forecast volume along the proposed roadway would increase to 17,900 VPD. This volume would warrant a four-lane major arterial to accommodate the increase and remain within the appropriate County of Riverside threshold (LOS D). The County is proposing to acquire sufficient right-of-way for all four lanes (depending upon funding availability) within County jurisdiction at this time. Based on future City planning, including airport planning, the location of the ultimate I-10 Bypass connection in the City could change. According to the *Traffic Operational Analysis Revised Final Report* (April 2015), traffic

volumes on the roadway would reach the threshold volume that would warrant four lanes in approximately 2036. This forecast year is based on a straight, linear interpolation between the 2022 volumes and the 2038 volumes. In actuality, the timing of the need for four lanes will depend on the pace of future growth and development in the area, which in turn is driven largely by economic conditions that are difficult to accurately forecast. The actual need may occur earlier or later in time. The County's standard policy would be to require the development that creates the growth and would trigger the need for widening the roadway to four lanes to contribute to the funding for such a widening. The needs and conditions are assessed when a development project is entitled, and the facility would be improved when conditions warrant improvement.

In summary, based on the forecasted traffic demand, the proposed four-lane roadway would accommodate forecast demand in the Build-Out Year (2038). A two-lane roadway cross section would accommodate forecasted traffic in the Opening Year 2022.

### **2.5.3.2 Vehicle Miles Traveled**

As stated in Chapter 1, Project Description, a primary purpose of the Project is to provide an alternative to I-10 for local traffic in the study area. Currently, local traffic has no alternative to using I-10 between the City of Banning and Cabazon, but I-10 provides an indirect route between the two communities. The construction of the proposed bypass roadway would provide for a more direct path between the two communities, allowing much of the local traffic currently using I-10 for these short trips to use the shorter bypass roadway instead. This additional route is anticipated to reduce overall vehicle miles traveled (VMT) in this area by reducing out of direction travel for local vehicle trips.

### **2.5.3.3 Traffic Performance/Levels of Service**

#### ***Changes in Intersection Level of Service***

##### ***Opening Year (2022) Conditions***

Table 2.5.3 displays the LOS analysis results for the study area intersections for the Opening Year (2022) scenario. Analysis worksheets for this scenario are provided in the *Traffic Operational Analysis Revised Final Report* (April 2015). Improvements needed to achieve an acceptable level of service with or without the proposed improvements for the Opening Year (2022) are identified in Table 2.5.3.

Under the No Build condition, LOS is projected to decline at I-10 WB ramps/N. 8<sup>th</sup> Street, 22<sup>nd</sup> Street/I-10 WB Ramps, and 22<sup>nd</sup> Street/I-10 EB Ramps to below LOS D in Opening Year (2022). All other intersections will continue to operate at acceptable levels of service. Intersections that would improve in the Opening Year (2022) condition under the No Build condition include the intersections at S. Hargrave Street/I-10 EB, Main Street/Broadway, Sunset Avenue/I-10 EB ramps, and 22<sup>nd</sup> Street/I-10 EB.

As shown in Table 2.5.3, the Project would result in a redistribution of traffic in the study area rather than generate new traffic. The majority of the intersections would not result in a change in LOS. The Project would result in improved LOS at the following intersections:

- **Intersection No. 2:** I-10 WB Ramps/North 8<sup>th</sup> Street
- **Intersection No. 21:** I-10 WB Ramps/Morongio Trail
- **Intersection No. 30:** 22<sup>nd</sup> Street/I-10 WB Ramps

The Project eliminates the forecasted deficiencies at Intersection Nos. 2 and 21 that occur under the No Build condition. Delays are reduced with the Project at Intersection No. 30; however, they are not reduced enough to achieve an acceptable LOS. Although located within the City of Banning, Intersection No. 30 is within Caltrans jurisdiction in the City of Banning and should be monitored by those agencies to address operating conditions.

The Opening Year (2022) condition results in a LOS deficiency at Intersection No. 3 (I-10 EB ramps/South 8<sup>th</sup> Street) due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass Project.

Although the Project would improve LOS at Intersection Nos. 2, 21, and 30 in the Opening Year (2022) condition, the future intersection LOS deficiency at Intersection No. 3 is an unavoidable and unmitigated project impact, resulting in an adverse impact under NEPA.

**Table 2.5.3 Opening Year (2022) Intersection Peak-Hour Traffic LOS Summary**

No.	Intersection Name	Intersection Control	2022 Without Project				2022 With Project				Notes
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	
1	W. Ramsey St./N. 8 <sup>th</sup> St.	Signal	24.5	C	30.9	C	23.9	C	31.9	C	
2	I-10 WB ramps/N. 8 <sup>th</sup> St.	SSSC	7.4 (48.2)	<b>A (E)</b>	6.4 (27.6)	A (D)	4.3 (24.8)	A (C)	6.1 (27.1)	A (D)	Deficiency without the Project. The Project results in improved delay and acceptable LOS.
3	I-10 EB ramps/S. 8 <sup>th</sup> St.	SSSC	25.6 (79.0)	<b>C (F)</b>	16.2 (40.1)	C (E)	44.8 (141.3)	<b>E (F)</b>	12.9 (31.5)	B (D)	The Project would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps/South 8 <sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass Project.
4	W. Lincoln St./8 <sup>th</sup> St.	AWSC	19.3	C	13.0	B	18.4	C	12.5	B	
5	N. San Geronio Ave./E. Ramsey St.	Signal	9.0	A	11.3	B	9.3	A	10.9	B	
6	Lincoln St./S. San Geronio Ave	AWSC	10.7	B	11.7	B	10.9	B	11.4	B	
7	E. Barbour St./S. San Geronio Ave.	SSSC	0.8 (11.6)	A (B)	1.3 (9.7)	A (A)	1.0 (11.4)	A (B)	1.4 (9.7)	A (A)	
8	W. Westward Ave./S. San Geronio Ave.	SSSC	9.8 (18.2)	A (C)	3.7 (10.5)	A (B)	18.0 (33.3)	C (D)	5.1 (11.0)	A (B)	
9	Charles St./S. San Geronio Ave.	SSSC	3.4 (9.2)	A (A)	3.1 (9.5)	A (A)	4.8 (9.4)	A (A)	4.2 (9.8)	A (A)	
10	N. Hargrave St./E. Ramsey St.	Signal	10.1	B	11.9	B	10.8	B	12.4	B	
11	N. Hargrave S./I-10 WB Ramps	SSSC	5.0 (27.0)	A (D)	4.7 (26.9)	A (D)	3.7 (18.2)	A (C)	3.8 (17.6)	A (C)	
12	S. Hargrave St./I-10 EB Ramps	SSSC	9.3 (19.5)	A (C)	10.6 (26.2)	B (D)	9.3 (17.2)	A (C)	8.5 (17.6)	A (C)	
13	E. Lincoln St./S. Hargrave St.	AWSC	9.0	A	9.2	A	9.1	A	8.8	A	
14	E. Barbour St./S. Hargrave St.	SSSC	1.4 (10.4)	A (B)	1.3 (11.0)	A (B)	4.4 (11.2)	A (B)	4.7 (10.7)	A (B)	
15	Charles St./S. Hargrave St.	SSSC	4.5 (10.8)	A (B)	4.2 (11.8)	A (B)	7.4 (11.1)	A (B)	6.6 (11.4)	A (B)	
16	N. Hathaway St./E. Ramsey St.	SSSC	3.6 (10.7)	A (B)	3.5 (11.2)	A (B)	3.9 (10.5)	A (B)	3.4 (10.8)	A (B)	

**Table 2.5.3 Opening Year (2022) Intersection Peak-Hour Traffic LOS Summary**

No.	Intersection Name	Intersection Control	2022 Without Project				2022 With Project				Notes
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	
17	N. Hathaway St./E. Lincoln St.	AWSC	7.1	A	7.0	A	8.4	A	9.0	A	
18	N. Hathaway St./E. Barbour St.	SSSC	1.3(8.8)	A(A)	0.7(8.5)	A(A)	3.7(11.5)	A(B)	3.5(12.7)	A(B)	
19	N. Hathaway St./E. Westward St.	SSSC/Signal <sup>2</sup>	0.9 (9.0)	A (A)	0.2 (8.9)	A (A)	6.1	A	7.5	A	
20	N. Hathaway St./Charles St.	SSSC	6.5(10.0)	A(B)	4.9(9.1)	A(A)	5.4(11.0)	A(B)	5.4(11.7)	A(B)	
21	I-10 WB Ramps/Morongo Trail	Roundabout	6.3	A	44.9	<b>E</b>	6.1	A	k22.4	C	Deficiency without the Project. The Project results in improved delay and acceptable LOS.
22	I-10 EB Ramps/Morongo Trail	Roundabout	5.0	A	7.1	A	4.7	A	6.3	A	
23	Apache Trail/Bonita Ave.	SSSC/Signal <sup>2</sup>	7.2 (7.6)	A (A)	7.8 (8.1)	A (A)	15.9	B	7.9	A	
24	Main St./Broadway	Signal	8.3	A	12.1	B	8.5	A	11.6	B	
25	Broadway/Bonita Ave.	SSSC	11.6 (15.7)	B (C)	14.0 (16.9)	B (C)	3.9 (11.6)	A (B)	6.1 (12.7)	A (B)	
26	I-10 EB Ramps/Main St.	SSSC	5.6(11.6)	A(B)	8.3(15.8)	A(C)	6.1(12.6)	A(B)	4.1(12.0)	A(B)	
27	I-10 WB Ramps/Main St.	AWSC	6.9	A	7.3	A	7.4	A	7.4	A	
28	Sunset Ave./I-10 WB Ramps	Signal	10.9	B	10.8	B	10.5	B	10.1	B	
29	Sunset Ave./I-10 EB Ramps	Signal	16.6	B	16.4	B	16.4	B	16.8	B	
30	22 <sup>nd</sup> St./I-10 WB Ramps	SSSC	3.0 (13.3)	A (B)	13.3 (70.1)	<b>B (F)</b>	2.7 (12.9)	A (B)	6.9 (40.8)	<b>A (E)</b>	Deficiency without the Project. The Project results in improved delay and LOS, but not to an acceptable LOS. The City of Banning/ Caltrans should monitor to determine when poor operating conditions occur.
31	22 <sup>nd</sup> St./I-10 EB Ramps	SSSC	15.5 (26.6)	C (D)	36.4 (71.7)	<b>E (F)</b>	15.5 (26.6)	C (D)	36.4 (71.7)	<b>E (F)</b>	Deficiency without the Project. The Project results in an unchanged delay and LOS. The City of Banning and Caltrans should monitor to determine when poor operating conditions occur.

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

Note: Locations operating at unacceptable LOS (LOS E or lower) are shown in **bold**.

<sup>1</sup> This column depicts the average and the worst-case scenario LOS or delay. The average LOS is shown outside of the parenthesis, while the worst-case scenario LOS/delay is depicted in parenthesis (e.g., No. 31: 2022 without Project AM Peak Hour. The average delay = 15.5 sec, the worst-case scenario delay = 26.6 sec. The average LOS = C, the worst case scenario LOS = D (applies only to SSSC intersections).

<sup>2</sup> The Project Description includes the installation of a traffic signal at this intersection.

AWSC = all-way stop-controlled

Caltrans = California Department of Transportation

EB = eastbound

I-10 = Interstate 10

LOS = level(s) of service

sec = seconds

SSSC = side-street stop-controlled

WB = westbound



### ***Future Year (2038) Conditions***

Table 2.5.4 displays the forecasted LOS analysis results for the study area intersections in the Future Year (2038) scenario. Detailed analysis for this scenario is provided in the *Traffic Operational Analysis Revised Final Report* (April 2015) prepared for this Project. Table 2.5.5 lists the intersections in the study area that fail to meet the LOS D standard, including the causes and measures to address those intersections that fall below a LOS D standard.

Under the No Build Alternative, the LOS during the AM and PM peak hours at the I-10 westbound ramps at Morongo Trail is at an unacceptable level. The Build Alternatives would improve the AM peak-hour LOS, but the PM peak-hour LOS would remain at LOS F with reduced delay. The No Build Alternative results in a projected deficiency during the PM peak hours at the I-10 eastbound ramps at Morongo Trail. The Build Alternatives would improve the PM peak hour to LOS A with substantially reduced delay.

Under the Build Alternatives, an increase in traffic volumes at the connection points to the I-10 Bypass is projected to trigger the requirement for new traffic signals at the intersections of Barbour Street/Hathaway Street and Hargrave Street/Charles Street. The City of Banning would be responsible for installing signals on Banning city streets as development occurs and signals are warranted. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope. These future intersection LOS deficiencies are unavoidable and unmitigated project impacts, resulting in a substantial adverse effect under NEPA.

### ***Roadway Link Volumes Levels of Service***

#### ***Opening Year (2022) and Future Year (2038) Conditions***

Implementation of the Project would result in redistribution of traffic volumes in the study area. Daily traffic volumes on roadway links in the study area vicinity were forecast for both 2022 and 2038 with and without the Project. Table 2.5.6 shows the changes in daily roadway link volumes for year 2022 with and without the Project. Table 2.5.7 shows the changes in daily roadway link volumes for year 2038 with and without the Project. Figure 2.5-10 shows the changes for local, arterial, and freeway volumes for year 2022.

**Table 2.5.4 Future Year (2038) Intersection Peak-Hour Traffic LOS Summary**

No.	Intersection Name	Intersection Control	2038 Without Project				2038 with Project				Notes
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	
1	W. Ramsey St./N. 8 <sup>th</sup> St.	Signal	27.0	C	34.8	C	29.5	C	45.0	D	
2	I-10WB Ramps/N. 8 <sup>th</sup> St.	Signal	15.1	B	18.2	B	12.4	B	16.3	B	
3	I-10 EB Ramps/S. 8 <sup>th</sup> St.	Signal	15.6	B	19.3	B	20.3	C	23.1	C	
4	W. Lincoln St./S. 8 <sup>th</sup> St.	Signal	20.7	C	26.1	C	27	C	31.3	C	
5	N. San Gorgonio Ave./E. Ramsey St.	Signal	12.6	B	14.7	B	13.1	B	16.0	B	
6	Lincoln St./S. San Gorgonio Ave.	Signal	23.1	C	18.5	B	26.3	C	19.0	B	
7	E. Barbour St./S. San Gorgonio Ave.	Signal	5.9	A	7.0	A	6.2	A	11.4	B	
8	W. Westward Ave./S. San Gorgonio Ave.	Signal	29.4	C	18.3	B	25.1	C	23.4	C	
9	Charles St./S. San Gorgonio Ave.	SSSC	3.8 (9.0)	A (A)	4.1 (9.7)	A (A)	2.6 (10.6)	A (B)	3.8 (9.7)	A (A)	
10	N. Hargrave St./E. Ramsey St.	Signal	19.2	B	20.2	C	30.5	C	50.2	D	
11	N. Hargrave St./I-10 WB Ramps	Signal	11.6	B	9.0	A	11.8	B	16.8	B	
12	S. Hargrave St./I-10 EB Ramps	Signal	11.6	B	14.9	B	12.5	B	17.4	B	
13	E. Lincoln St./S. Hargrave St.	Signal	16.7	B	17.3	B	18.2	B	22.0	C	
14	E. Barbour St./S. Hargrave St.	Signal	5.8	A	7.3	A	14.7	B	17.4	B	
15	Charles St./S. Hargrave St.	SSSC	6.4 (12.6)	A (B)	6.0 (15.3)	A (C)	9.7 (20.5)	A (C)	151.7 (>500)	<b>F (F)</b>	Project traffic redistribution results in LOS F in PM peak hour. It is anticipated that traffic signals will be warranted at this intersection. These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope.
16	N. Hathaway St./E. Ramsey St.	Signal	6.7	A	7.1	A	6.9	A	7.5	A	
17	N. Hathaway St./E. Lincoln St.	AWSC	7.0	A	6.7	A	11.2	B	23.9	C	
18	N. Hathaway St./E. Barbour St.	SSSC	1.3 (9.1)	A(A)	0.7 8.6)	A (A)	5.1 (48.3)	A (E)	>500 (>500)	<b>F (F)</b>	Project traffic redistribution results in LOS F in PM peak hour. It is anticipated that traffic signals will be warranted at this intersection. These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only

**Table 2.5.4 Future Year (2038) Intersection Peak-Hour Traffic LOS Summary**

No.	Intersection Name	Intersection Control	2038 Without Project				2038 with Project				Notes
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	Delay (sec) <sup>1</sup>	LOS <sup>1</sup>	
											occur if warranted by growth and build-out of the City's General Plan. Therefore, it is not reasonable or feasible to include these traffic signals in the Project scope.
19	N. Hathaway St. and E Westward St.	SSSC/Signal <sup>2</sup>	1.0 (9.4)	A (A)	0.2 (9.2)	A (A)	10.8	B	20.7	C	
20	N Hathaway St and Charles St.	SSSC	7.9(12.5)	A(B)	5.5(10.1)	A(B)	6.0(12.4)	A(B)	7.2(15.3)	A(C)	
21	I-10 WB Ramps/Morongo Trail	Roundabout	38.0	E	711.7	<b>F</b>	13.8	B	318.2	<b>F</b>	No Build Alternative results in LOS F in the PM peak hour. Build Alternatives reduce delay to an acceptable LOS during AM peak hour. Unacceptable LOS would continue to occur in PM peak hour with reduced delay.
22	I-10EBRamps/MorongoTrail	Roundabout	8.2	A	138.7	<b>F</b>	5.9	A	8.8	A	No Build Alternative results in deficiency. Project reduces delay and improves LOS.
23	Apache Trail/Bonita Ave.	SSSC/Signal <sup>2</sup>	4.4 (8.9)	A (A)	6.9 (9.6)	A (A)	8.2	A	14.3	B	
24	MainSt./Broadway	Signal	8.1	A	10.4	B	11.4	B	15.1	B	
25	Broadway/Bonita Ave.	Signal	16.3	B	15.1	B	20.0	C	25.4	C	
26	I-10EBRamps/MainSt.	Signal	17.5	B	31.9	C	20.4	C	52.3	D	
27	I-10 WB Ramps/Main St.	AWSC	8.5	A	19.1	C	18.7	C	32.0	D	
28	SunsetAve./I-10WB Ramps	Signal	23.0	C	23.0	C	25.9	C	47.2	D	
29	Sunset Ave./I-10 EB Ramps	Signal	25.1	C	19.9	B	23.8	C	20.0	B	
30	22 <sup>nd</sup> St./I-10WB Ramps	Signal	12.6	B	12.3	B	9.1	A	11.4	B	
31	22 <sup>nd</sup> St./I-10 EB Ramps	Signal	12.6	B	13.3	B	13	B	13.9	B	

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

Note: Locations operating at unacceptable LOS (LOS E or lower) are shown in **bold**.

<sup>1</sup>. SSSC intersections list the average and worst approach LOS and delay (e.g., average delay/LOS [worst approach delay/LOS]).

<sup>2</sup>. The Project is assumed to install a traffic signal at this intersection.

AWSC = all-way stop-controlled

Caltrans = California Department of Transportation

EB = eastbound

I-10 = Interstate 10

LOS = level(s) of service

sec = seconds

SSSC = side-street stop-controlled

WB = westbound

**Table 2.5.5 Build-Out Year Deficient Intersections  
and Potential Measures**

No.	Intersection Name	No Build		Build		Deficiency Cause/Potential Measures
		AM LOS <sup>1</sup>	PM LOS <sup>1</sup>	AM LOS <sup>1</sup>	PM LOS <sup>1</sup>	
15	Charles St./ S. Hargrave St.	A (B)	A (C)	A (C)	F (F)	Traffic redistribution from the Build Alternatives would result in an unacceptable LOS.  The City of Banning should monitor the intersection for installation of traffic signals when needed, which would result in LOS B for AM and PM peak hours.
18	N. Hathaway St./ E. Barbour St.	A(A)	A (A)	A (E)	F (F)	Traffic redistribution from the Build Alternatives would result in an unacceptable LOS.  The City of Banning should monitor the intersection for installation of traffic signals when needed, which would result in LOS B for AM and PM peak hours.
21	I-10 WB Ramps/ Morongo Trail	E	F	B	F	The No Build Alternative results in a projected deficiency in both the AM and PM peak hours.  The Build Alternatives would result in an acceptable LOS during the AM peak hour. The unacceptable LOS would continue to occur in the PM peak hour, but delay would be reduced.
22	I-10EB Ramps/ Morongo Trail	A	F	A	A	The No Build Alternative results in a projected deficiency during the AM peak hour. The Project corrects the projected deficiency.

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

<sup>1</sup> Side-street stop-controlled intersections list the average and worst approach LOS and delay (e.g., average delay/LOS (worst approach delay/LOS)).

Caltrans = California Department of Transportation

EB = eastbound

I-10 = Interstate 10

LOS = level(s) of service

WB = westbound

**Table 2.5.6 Year 2022 Forecast Link Volumes With and Without the Project**

Name	Limits	Existing Classification	2022 Daily Volumes Without Project	LOS	2022 Daily Volumes With Project	LOS	Change in Volume
Project	Hathaway St. to Bonita Ave.	2-Lane Arterial	–		5,179	C	5,179
Bonita Ave.	Apache Trail to Magnolia St.	2-Lane Collector	1,983	C	6,052	C	4,069
	Magnolia St. to Orange St.	2-Lane Collector	1,047	C	4,626	C	3,579
	Orange St. to Broadway	2-Lane Collector	5,569	C	6,483	C	914
	Broadway to Almond St.	2-Lane Collector	4,227	C	4,290	C	62
Main St.	Morongo Trail to Orange St.	4-Lane Major Highway	3,032	C	2,848	C	-184
	Orange St. to Broadway	4-Lane Major Highway	3,172	C	2,850	C	-322
	East of Broadway	4-Lane Major Highway	4,459	C	5,675	C	1,216
Seminole Dr.	Malki Road to Morongo Trail	4-Lane Major Highway	10,957	D	9,654	C	-1,303
	Morongo Trail to Orange St.	2-Lane Collector	10,770	D	10,183	C	-586
	Orange St. to Main St.	2-Lane Collector	10,095	C	9,872	C	-222
Morongo Trail	Seminole Drive to Main St.	2-Lane Collector	6,332	C	5,812	C	-519
Apache Trail	Main St. to Bonita Ave.	2-Lane Collector	2,711	C	3,163	C	452
Broadway	Main St. to Bonita Ave.	2-Lane Collector	7,064	C	8,056	C	992
	Bonita Ave. to Carmen Ave.	2-Lane Collector	4,100	C	4,078	C	-22
Malki Rd.	South of Morongo Rd.	2-Lane Collector	7,368	C	6,174	C	-1,194
Westward Ave.	Sunset Ave. to 22 <sup>nd</sup> St.	2-Lane Collector	2,716	C	3,259	C	542
	22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	2-Lane Collector	3,091	C	3,797	C	706
	8 <sup>th</sup> St. to San Gorgonio Ave.	2-Lane Collector	2,984	C	4,099	C	1,116
Charles St.	San Gorgonio Ave. to Hargrave St.	2-Lane Local	2,129	C	2,592	C	464
	Hargrave St. to Hathaway St.	2-Lane Local	1,564	C	2,249	C	685
Wesley St.	San Gorgonio Ave. to Hargrave St.	2-Lane Collector	890	C	1,734	C	844
	Hargrave St. to Hathaway St.	2-Lane Collector	155	C	618	C	462
Barbour St.	San Gorgonio Ave. to Hargrave St.	2-Lane Collector	1,439	C	1,698	C	260
	Hargrave St. to Hathaway St.	2-Lane Collector	135	C	1,013	C	878
Lincoln St.	Sunset Ave. to 22 <sup>nd</sup> St.	2-Lane Collector	10,206	C	10,818	C	612
	22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	2-Lane Collector	9,555	C	10,164	C	609
	8 <sup>th</sup> St. to San Gorgonio Ave.	2-Lane Collector with TWLTL	8,692	C	9,584	C	892
	San Gorgonio Ave. to Hargrave St.	2-Lane Collector with TWLTL	10,115	C	11,265	C	1,150
	Hargrave St. to Hathaway St.	2-Lane Collector with TWLTL	1,313C	C	3,694	C	2,380

**Table 2.5.6 Year 2022 Forecast Link Volumes With and Without the Project**

Name	Limits	Existing Classification	2022 Daily Volumes Without Project	LOS	2022 Daily Volumes With Project	LOS	Change in Volume
Ramsey St.	West of Sunset Ave.	4-Lane Major Highway	10,457	C	10,441	C	-16
	Sunset Ave. to 22 <sup>nd</sup> St.	4-Lane Major Highway	8,437	C	8,247	C	-190
	22 <sup>nd</sup> St. to 16 <sup>th</sup> St.	4-Lane Major Highway	9,589	C	9,498	C	-92
	16 <sup>th</sup> St. to 8 <sup>th</sup> St.	4-Lane Major Highway	7,360	C	7,361	C	1
	8 <sup>th</sup> St. to 4 <sup>th</sup> St.	2-Lane Collector with TWLTL	7,727	C	7,626	C	-101
	4 <sup>th</sup> St. to San Gorgonio Ave.	2-Lane Collector	6,630	C	6,547	C	-83
	Hargrave St. to Hathaway St.	2-Lane Collector	11,185	C	10,315	C	-869
Hathaway St.	East of Hathaway St.	2-Lane Collector	8,631	C	7,654	C	-977
	Lincoln St. to Barbour St.	2-Lane Collector	1,313	C	3,458	C	2,144
	Barbour St. to Westward Ave.	2-Lane Collector	839	C	4,120	C	3,281
	Westward Ave. to Charles St.	2-Lane Collector	179	C	2,048	C	1,868
Hargrave St.	Charles St. to Wesley St.	2-Lane Collector	1,510	C	1,890	C	380
	North of Ramsey St.	2-Lane Collector	4,761	C	5,096	C	335
	Ramsey St. to Lincoln St.	2-Lane Collector	15,429	D	12,506	C	-2,923
	Lincoln St. to Barbour St.	2-Lane Collector	6,361	C	5,981	C	-380
	South of Barbour St.	2-Lane Collector	6,227	C	5,740	C	-487
San Gorgonio Ave.	Charles St. to Wesley St.	2-Lane Collector	1,130	C	1,372	C	242
	North of Ramsey St.	2-Lane Collector	3,853	C	3,659	C	-194
	Ramsey St. to Lincoln St.	2-Lane Collector	2,871	C	2,791	C	-80
	Lincoln St. to Barbour St.	2-Lane Collector	9,522	C	9,464	C	-59
	Barbour St. to Westward Ave.	2-Lane Collector	10,273	C	10,417	C	144
	Westward Ave. to Charles St.	3-Lane Collector (2 SB, 1 NB)	9,227	C	8,056	C	-1,170
SR-243	Charles St. to Wesley St.	3-Lane Collector (2 SB, 1 NB)	10,094	C	9,454	C	-640
8 <sup>th</sup> St.	South of Wesley St.	2-Lane Arterial	9,479	C	9,456	C	-23
	North of Ramsey St.	2-Lane Collector	3,256	C	3,226	C	-30
	Ramsey St. to I-10 WB Ramps	2-Lane Collector	8,374	C	8,421	C	47
	I-10 EB Ramps to Lincoln St.	2-Lane Collector	8,285	C	8,103	C	-181
	Lincoln St. to Westward Ave.	2-Lane Collector	2,950	C	2,440	C	-510
22 <sup>nd</sup> St.	North of Ramsey St.	2-Lane Collector	1,057	C	1,070	C	13
	Ramsey St. to I-10 WB Ramps	4-Lane Major Highway	6,186	C	6,202	C	16
	I-10 EB Ramps to Lincoln St.	4-Lane Major Highway	4,022	C	3,981	C	-41
	Lincoln St. to Westward Ave.	3-Lane Collector (2 SB, 1 NB)	2,866	C	2,825	C	-41



**Table 2.5.6 Year 2022 Forecast Link Volumes With and Without the Project**

Name	Limits	Existing Classification	2022 Daily Volumes Without Project	LOS	2022 Daily Volumes With Project	LOS	Change in Volume
Sunset Ave.	North of Ramsey St.	4-Lane Secondary	10,651	C	10,528	C	-124
	Ramsey St. to I-10 EB Ramps	4-Lane Secondary	15,076	C	15,649	C	574
	I-10 EB Ramps to Lincoln St.	2-Lane Collector	5,511	C	6,249	C	738
	Lincoln St. to Westward Ave.	2-Lane Collector	3,623	C	3,822	C	199

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

EB = eastbound

I-10 = Interstate 10

LOS = level(s) of service

NB = northbound

SB = southbound

SR-243 = State Route 243

TWLTL = two-way left-turn lane

WB = westbound

**Table 2.5.7 Year 2038 Forecast Link Volumes and LOS**

Roadway	Limits	Direction	Roadway Size	2038 Daily Volumes Without Project	LOS	2038 With Project Volumes	LOS	Change in Volume
Project	Hathaway St. to Bonita Ave.	E-W	4-Lane Arterial	-		17,900	C	17,900
Bonita Ave.	Morongo Trail to Magnolia St.	E-W	4-Lane Major Highway	3,374	C	19,192	C	15,818
	Magnolia St. to Orange St.	E-W	4-Lane Major Highway	2,666	C	17,211	C	14,545
	Orange St. to Broadway	E-W	4-Lane Major Highway	14,175	C	17,600	C	3,425
	Broadway to Almond St.	E-W	4-Lane Major Highway	10,760	C	11,058	C	298
Main St.	Morongo Trail to Orange St.	E-W	4-Lane Major Highway	4,464	C	4,435	C	-29
	Orange St. to Broadway St.	E-W	4-Lane Major Highway	4,820	C	4,605	C	-215
	East of Broadway	E-W	4-Lane Major Highway	8,739	C	14,459	C	5,720
Seminole Dr.	Malki Rd. to Morongo Trail	E-W	4-Lane Major Highway	21,694	C	16,154	C	-5,540
	Morongo Trail to Orange St.	E-W	4-Lane Major Highway	26,035	C	23,781	C	-2,254
	Orange St. to Main St.	E-W	4-Lane Major Highway	24,317	C	25,781	C	1,464
Morongo Trail	Seminole Dr. to Main St.	N-S	4-Lane Major Highway	11,068	C	10,836	C	-2,232
Apache Trail	Main St. to Bonita Ave.	N-S	4-Lane Major Highway	5,104	C	5,910	C	806
Broadway	Main St. to Bonita Ave.	N-S	4-Lane Major Highway	12,118	C	16,978	C	4,860
	Bonita Ave. to Carmen Ave.	N-S	4-Lane Major Highway	4,573	C	4,557	C	-16
Malki Rd.	South of Morongo Rd.	N-S	4-Lane Secondary	15,019	C	10,071	C	-4,948
Westward Ave.	Sunset Ave. to 22 <sup>nd</sup> St.	E-W	2-Lane Collector	6,565	C	9,185	C	2,620
	22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	E-W	2-Lane Collector	7,082	C	10,497	C	3,415
	8 <sup>th</sup> St. to San Gorgonio Ave.	E-W	2-Lane Collector	6,895	C	11,779	C	4,884
Charles St.	San Gorgonio Ave. to Hargrave St.	E-W	2-Lane Local	2,873	C	4,572	C	1,699
	Hargrave St. to Hathaway St.	E-W	2-Lane Local	3,980	C	8,187	C	4,207
Wesley St.	San Gorgonio Ave. to Hargrave St.	E-W	2-Lane Collector	1,339	C	3,843	C	2,504
	Hargrave St. to Hathaway St.	E-W	2-Lane Collector	49	C	691	C	642
Barbour St.	San Gorgonio Ave. to Hargrave St.	E-W	2-Lane Collector	1,849	C	3,380	C	1,531
	Hargrave St. to Hathaway St.	E-W	2-Lane Collector	302	C	3,895	C	3,593
Lincoln St.	Sunset Ave. to 22 <sup>nd</sup> St.	E-W	4-Lane Major Highway	22,045	C	23,964	C	1,919
	22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	E-W	4-Lane Major Highway	19,465	C	21,155	C	1,690
	8 <sup>th</sup> St. to San Gorgonio Ave.	E-W	4-Lane Major Highway	16,090	C	19,944	C	3,854
	San Gorgonio Ave. to Hargrave St.	E-W	4-Lane Major Highway	17,710	C	22,569	C	4,859
	Hargrave St. to Hathaway St.	E-W	4-Lane Major Highway	2,884	C	12,037	C	9,153

**Table 2.5.7 Year 2038 Forecast Link Volumes and LOS**

Roadway	Limits	Direction	Roadway Size	2038 Daily Volumes Without Project	LOS	2038 With Project Volumes	LOS	Change in Volume
Ramsey St.	West of Sunset Ave.	E-W	4-Lane Major Highway	22,568	C	22,527	C	-41
	Sunset Ave. to 22 <sup>nd</sup> St.	E-W	4-Lane Major Highway	18,379	C	17,964	C	-415
	22 <sup>nd</sup> St. to 16 <sup>th</sup> St.	E-W	4-Lane Major Highway	18,696	C	18,251	C	-445
	16 <sup>th</sup> St. to 8 <sup>th</sup> St.	E-W	4-Lane Major Highway	15,260	C	15,207	C	-53
	8 <sup>th</sup> St. to 4 <sup>th</sup> St.	E-W	4-Lane Major Highway	14,146	C	12,874	C	-1,272
	4 <sup>th</sup> St. to San Gorgonio Ave.	E-W	4-Lane Major Highway	13,148	C	11,947	C	-1,201
	Hargrave St. to Hathaway St.	E-W	4-Lane Major Highway	21,118	C	18,309	C	-2,809
	East of Hathaway St.	E-W	4-Lane Major Highway	20,026	C	17,383	C	-2,643
Hathaway St.	Lincoln St. to Barbour St.	N-S	4-Lane Secondary	2,884	C	12,037	C	9,153
	Barbour St. to Bypass Rd.	N-S	4-Lane Secondary	1,872	C	15,217	C	13,345
	Bypass Rd. to Charles St.	N-S	4-Lane Secondary	395	C	5,161	C	4,766
	Charles St. to Wesley St.	N-S	4-Lane Secondary	3,785	C	3,187	C	-598
Hargrave St.	North of Ramsey St.	N-S	4-Lane Secondary	8,675	C	10,329	C	1,654
	Ramsey St. to Lincoln St.	N-S	4-Lane Secondary	23,392	C	15,220	C	-8,172
	Lincoln St to Barbour St	N-S	4-Lane Secondary	8,763	C	9,432	C	669
	South of Barbour St.	N-S	4-Lane Secondary	9,094	C	9,143	C	49
	Charles St. to Wesley St.	N-S	4-Lane Secondary	1,527	C	3,519	C	1,992
San Gorgonio Ave.	North of Ramsey St.	N-S	4-Lane Secondary	5,154	C	4,937	C	-217
	Ramsey St. to Lincoln St.	N-S	4-Lane Secondary	5,000	C	5,095	C	95
	Lincoln St. to Barbour St.	N-S	4-Lane Major Highway	10,002	C	11,403	C	1,401
	Barbour St. to Westward Ave.	N-S	4-Lane Major Highway	11,061	C	13,190	C	2,129
	Westward Ave. to Charles St.	N-S	4-Lane Major Highway	10,416	C	8,399	C	-2,017
	Charles St. to Wesley St.	N-S	4-Lane Major Highway	10,084	C	8,478	C	-1,606
SR-243	South of Wesley St.	N-S	2-Lane Arterial	9,168	C	9,191	C	23
8 <sup>th</sup> St.	North of Ramsey St.	N-S	4-Lane Secondary	4,333	C	4,381	C	48
	Ramsey St. to I-10 WB Ramps	N-S	4-Lane Major Highway	10,666	C	12,026	C	1,360
	I-10 EB Ramps to Lincoln St.	N-S	4-Lane Major Highway	12,866	C	11,824	C	-1,042
	Lincoln St. to Westward Ave.	N-S	4-Lane Major Highway	6,915	C	5,364	C	-1,551

**Table 2.5.7 Year 2038 Forecast Link Volumes and LOS**

Roadway	Limits	Direction	Roadway Size	2038 Daily Volumes Without Project	LOS	2038 With Project Volumes	LOS	Change in Volume
22 <sup>nd</sup> St.	North of Ramsey St.	N-S	2-Lane Collector	2,262	C	2,303	C	41
	Ramsey St. to I-10 WB Ramps	N-S	4-Lane Major Highway	9,902	C	10,080	C	178
	I-10 EB Ramps to Lincoln St.	N-S	4-Lane Major Highway	6,189	C	6,209	C	20
	Lincoln St to Westward Ave.	N-S	3-Lane Collector (2 SB, 1 NB)	6,189	C	6,209	C	20
Sunset Ave.	North of Ramsey St.	N-S	4-Lane Major Highway	17,322	C	17,124	C	-198
	Ramsey St. to I-10 WB Ramps	N-S	4-Lane Major Highway	23,620	C	24,705	C	1,085
	I-10 EB Ramps to Lincoln St.	N-S	4-Lane Secondary	9,689	C	12,754	C	3,065
	Lincoln St. to Westward Ave.	N-S	4-Lane Secondary	7,183	C	7,035	C	-148

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

EB = eastbound

I-10 = Interstate 10

LOS = level(s) of service

NB = northbound

SB = southbound

SR-243 = State Route 243

WB = westbound

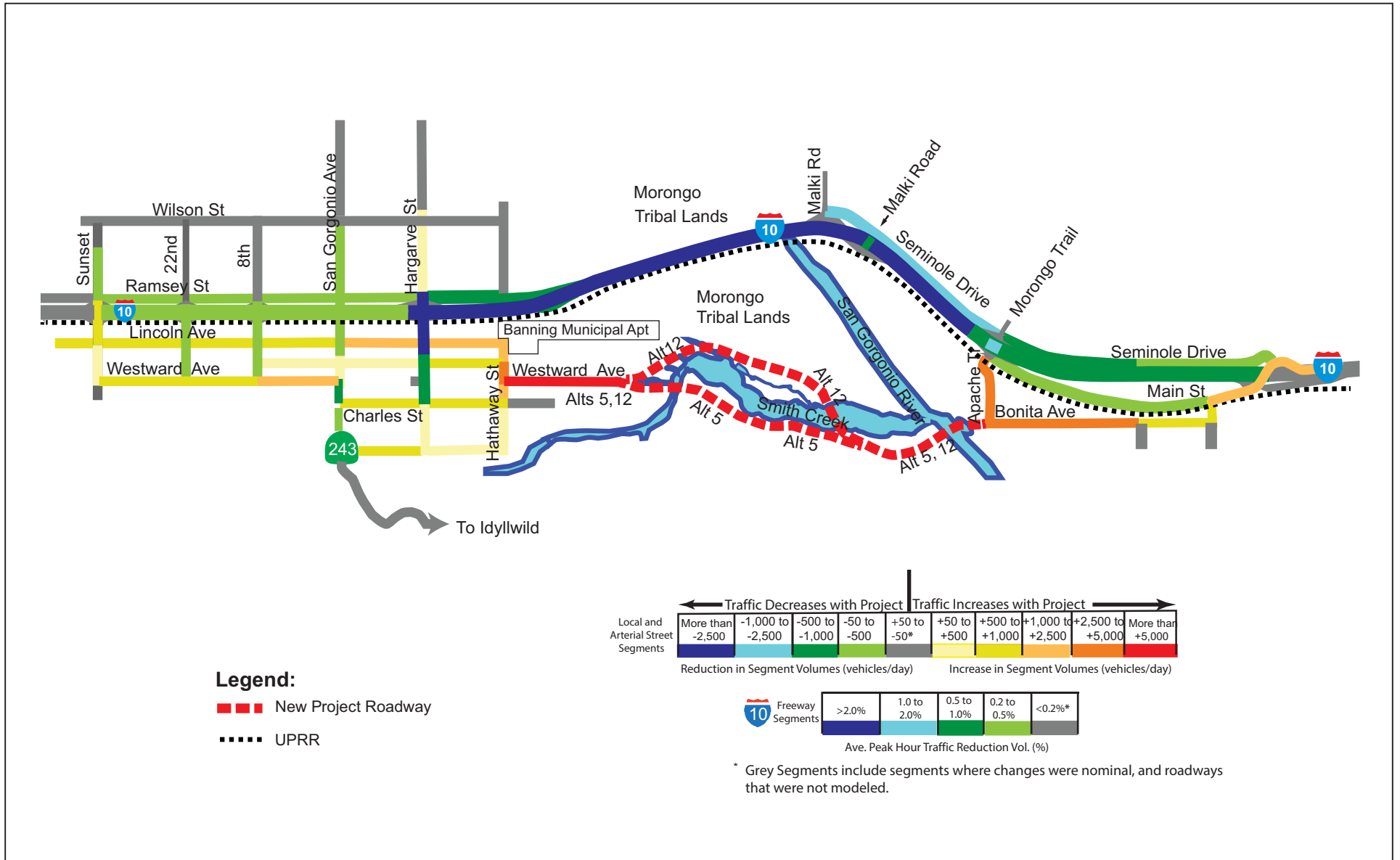


FIGURE 2.5-10



NO SCALE

Data Source: Traffic Operations Analysis, Kimley-Horn Associates, April, 2015

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I-10 Bypass: Banning to Cabazon

Changes in Local, Arterial and Freeway Volumes, Opening Year (2022)

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When comparing the No Build condition traffic volumes to the Build Alternatives condition volumes, notable increases in traffic occur on Westward Avenue, Hathaway Street, Lincoln Street, Barbour Street, Charles Street, Apache Trail, and Bonita Avenue, while decreases in traffic are forecast to occur on parallel sections of I-10, Seminole Drive, Ramsey Street, and some roadways leading to I-10. Under both the No Build and Build Alternative conditions, all roadway links are expected to operate at acceptable LOS.

In year 2038, changes in traffic patterns on roadway links within the study area are similar to those that occur in 2022. All roadway links are expected to operate at an acceptable LOS under both No Build and Build Alternative conditions for opening year (2022) and future year (2038).

The City's General Plan Circulation Element shows future plans to realign Lincoln Street east of Hathaway Street, which could be the future west-end connection of the Proposed Bypass roadway. Realigning the Proposed bypass roadway to join with Lincoln Street would be consistent with the City's Circulation Element Map (although the intent of the bypass roadway as depicted on that Map is intended to be conceptual). However, this realignment would impact the Banning Airport requiring significant modifications or removal of the airport.

#### **2.5.3.4 Impacts to Interstate 10 Opening Year (2022) Conditions**

Under normal operations in the Opening Year (2022) scenario, the Project will have a small beneficial impact on the operation of I-10, as shown in Table 2.5.8. On the segment of I-10 between Hargrave Street and Morongo Trail, traffic volumes would be reduced during the peak hours by up to 2.7 percent as local trips are diverted to the local street system. Because the Project removes traffic from most segments on I-10 and only minor increases (less than the 1 percent threshold) are experienced on a couple of segments, no recommended improvement is included as part of this Project.

The Project would also provide an alternative when I-10 is fully or partially closed between Hargrave Street and Morongo Trail by accommodating some portion of the traffic that normally uses I-10. The details of any particular incident cannot be reliably forecast in advance. However, when combined with the other elements of the I-10 Emergency Action Plan, as discussed in Section 1.2.6, the impacts to the traveling public of such a full or partial closure would be reduced.

**Table 2.5.8 Opening Year (2022) Freeway Volume Changes**

I-10 Segment	Direction	2022 Without Project				2022 With Project					
		AM Peak		PM Peak		AM Peak			PM Peak		
		Vol.	LOS	Vol.	LOS	Vol.	LOS	% Change	Vol.	LOS	% Change
West of Sunset Ave.	WB	6,405	C	8,645	E	6,399	C	-0.1%	8,651	E	0.1%
	EB	7,649	D	7,740	D	7,652	D	0.0%	7,752	D	0.2%
Sunset Avenue to 22 <sup>nd</sup> St.	WB	6,049	C	8,392	D	6,031	C	-0.3%	8,393	D	0.0%
	EB	7,380	D	7,424	D	7,363	D	-0.2%	7,441	D	0.2%
22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	WB	6,000	C	8,382	D	5,968	C	-0.5%	8,349	D	-0.4%
	EB	7,122	D	7,140	D	7,100	D	-0.3%	7,161	D	0.3%
8 <sup>th</sup> Street to Hargrave St.	WB	6,032	C	8,555	D	5,988	C	-0.7%	8,465	D	-1.1%
	EB	7,059	C	7,083	D	7,050	C	-0.1%	7,043	C	-0.6%
Hargrave St. to Morongo Trail	WB	6,528	C	9,502	E	6,380	C	-2.3%	9,243	E	-2.7%
	EB	7,683	D	8,114	D	7,499	D	-2.4%	7,923	D	-2.4%
Morongo Trail to Orange St.	WB	6,064	C	8,470	D	6,011	C	-0.9%	8,373	D	-1.1%
	EB	6,937	C	7,462	D	6,844	C	-1.3%	7,338	D	-1.7%
Orange St. to Main St.	WB	6,098	C	8,366	D	6,090	C	-0.1%	8,332	D	-0.4%
	EB	6,535	C	7,401	D	6,506	C	-0.4%	7,364	D	-0.5%
East of Main St.	WB	6,251	C	8,334	D	6,259	C	0.1%	8,331	D	0.0%
	EB	6,421	C	7,703	D	6,420	C	0.0%	7,728	D	0.3%

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

EB = eastbound  
LOS = level of service  
Vol. = Volume  
WB = westbound

**Future Year (2038) Conditions**

If I-10 is not improved to increase capacity, more traffic is expected to divert from I-10 to the local roadways (refer to Table 2.5.9). About 550 vehicles per hour (VPH) would be expected to be diverted from I-10 in each direction during the morning peak hour along the segment between Hargrave Street and Morongo Trail. During the afternoon peak hour, volumes would be reduced by about 1,520 VPH in the westbound direction and about 1,440 VPH in the eastbound direction for this segment of I-10 due to traffic rerouting to the proposed roadway. Because the Project reduces traffic on most segments on I-10 and only insignificant increases in traffic (less than the 1 percent threshold) would be experienced on a couple of segments of I-10, no improvements to I-10 are required as part of the Project. The Project is not intended to restore I-10 to acceptable operating conditions.

**Table 2.5.9 Future Year (2038) Freeway Volume Changes**

I-10 Segment	Direction	2038 Without Project				2038 With Project					
		AM Peak		PM Peak		AM Peak			PM Peak		
		Vol.	LOS	Vol.	LOS	Vol.	LOS	% Change	Vol.	LOS	% Change
West of Sunset Ave.	WB	9,560	E	10,389	F	9,550	E	-0.1%	10,370	F	-0.2%
	EB	9,821	F	10,589	F	9,845	F	0.2%	10,568	F	-0.2%
Sunset Avenue to 22 <sup>nd</sup> St.	WB	9,028	E	9,997	F	8,934	E	-1.0%	9,835	F	-1.6%
	EB	9,355	E	10,140	F	9,313	E	-0.4%	10,116	F	0.2%
22 <sup>nd</sup> St. to 8 <sup>th</sup> St.	WB	9,123	E	10,035	F	8,959	E	-1.8%	9,833	F	-2.0%
	EB	8,995	E	9,768	F	8,948	E	-0.5%	9,766	F	0.0%
8 <sup>th</sup> Street to Hargrave St.	WB	9,453	E	10,579	F	9,242	E	-2.2%	10,057	F	-4.9%
	EB	8,996	E	9,962	F	8,980	E	-0.2%	9,769	F	-1.9%
Hargrave St. to Morongo Trail	WB	10,828	F	12,280	F	10,263	F	-5.2%	11,496	F	-6.4%
	EB	10,203	F	12,349	F	9,656	F	-5.4%	11,513	F	-6.8%
Morongo Trail to Orange St.	WB	9,972	F	10,648	F	9,699	F	-2.7%	8,373	F	-4.6%
	EB	6,937	F	7,462	F	6,844	F	-3.6%	7,338	F	-5.6%
Orange St. to Main St.	WB	6,098	F	8,366	F	6,090	F	-1.0%	8,332	F	-2.7%
	EB	6,535	D	7,401	F	6,506	D	-0.7%	7,364	F	-1.7%
East of Main St.	WB	6,251	F	8,334	F	6,259	F	0.2%	8,331	F	-0.6%
	EB	6,421	D	7,703	F	6,420	D	0.0%	7,728	F	0.6%

Source: *Traffic Operational Analysis Revised Final Report* (April 2015).

EB = eastbound

LOS = level(s) of service

Vol. = Volume

WB = westbound

### 2.5.3.5 UPRR At-Grade Crossings

#### **Opening Year (2022) Conditions**

In the 2022 Opening Year Condition, within Banning, the number of trips crossing the UPRR tracks is expected to decrease by about 2,500 ADT, with each of the existing crossing locations projected to experience a traffic volume reduction due to the rerouting of traffic to the proposed bypass roadway. Thus, the back-ups and delays at the remaining at-grade crossings would be less than would occur without the bypass roadway. Although the Sunset Avenue crossing increases in number of daily crossings, this location is grade separated and therefore would not need an additional evaluation. The number of crossings at the two Cabazon crossings would increase by about 1,400 ADT with the addition of the Project. There will be a net reduction of 1,600 ADT at all the at-grade rail crossings in the study area with the Project.

The number of trains per day at each crossing in the study area is 46 trains in 2005 and 87 trains in 2030. To determine the number of trains projected in 2022, a growth factor was determined for 2005 to 2030 and applied to the 2022 scenario. This calculation resulted in 64 trains in 2022. The average delay per vehicle and queue length at each railroad crossing in Banning is the same or less than with the Project. The vehicle delay and queue length are projected to increase nominally for the Cabazon crossing locations. Delay would increase by 0.1 second per vehicle at the

Morong Trail crossing and 0.7 second at the Broadway crossing. The average maximum queue length would increase by approximately one vehicle length at each of these locations. In summary, the projected effect of the redistributed bypass traffic is not substantial due to the nominal changes in vehicle delay and queuing anticipated.

### **Future Year (2038) Conditions**

Under the Future Year Condition in 2038, within Banning, the number of trips crossing the UPRR tracks is expected to decrease by about 6,000 ADT. Thus, the back-ups and delays at grade crossings would be less than would occur without the bypass roadway. Although the Sunset Avenue crossing increases in number of daily crossings, this location is grade separated in the future year (2038) and therefore would not need an additional evaluation. The number of crossings at the two Cabazon crossings would increase by about 5,700 ADT with the addition of the Project. The total number of daily at-grade crossings in the study area will decrease by about 2,400 ADT with the Project.

The number of trains per day at each crossing in the study area is 46 trains in 2005 and 87 trains in 2030. To determine the number of trains projected in 2038, a growth factor was determined for 2005 to 2030 and applied to the 2038 scenario. This calculation resulted in 99 trains in 2038. The average delay per vehicle and queue length at each railroad crossing in Banning is the same or less than with the Project. The vehicle delay and queue length are projected to increase nominally for the Cabazon crossing locations. Delay would increase by 0.3 second per vehicle at the Morongo Trail crossing and by 0.9 second per vehicle at the Broadway Street crossing. The average maximum queue length would increase by approximately one vehicle length and three vehicle lengths at the Morongo Trail and Broadway crossings, respectively. In summary, with nominal changes in vehicle delay and queuing anticipated, the anticipated effect of the redistributed bypass traffic is not considered to be substantial.

### **2.5.3.6 Bicycle and Pedestrian Impacts**

There are currently no pedestrian connections between Banning and Cabazon, and bicyclists are forced to use I-10. The Project would provide a pedestrian connection via sidewalks and trails, and would provide two options for bicyclists: using the roadway shoulders or using the trail system adjacent to the roadway. This bicycle and pedestrian connection is considered a beneficial effect of the Project.

#### **2.5.4 Avoidance, Minimization, and Mitigation Measures**

There are no feasible avoidance, minimization and/or mitigation measures for the adverse effects under NEPA that would occur under the Opening Year (2022) and Future Year (2038) Conditions as identified in Section 2.1.4.2, Environmental Consequences. Therefore, avoidance, minimization, and/or mitigation measures are not proposed for these adverse effects.

The measure below is required to reduce adverse project effects from construction and operation of the Build Alternatives.

**TR-1** During final design, the County of Riverside's (County) Project Engineer will prepare a detailed Traffic Management Plan (TMP). The objective of the TMP is to minimize the potential impacts that construction activities may have on the traveling public and emergency services providers. Preparation of the TMP will be coordinated with the emergency services providers in the Project vicinity to minimize response delays resulting from traffic delays, temporary lane closures, and detours during project construction.

The TMP for the Project will include the following elements and strategies:

- a. During construction, the contractor will be required to coordinate all temporary detour plans with applicable fire, emergency, medical, and law enforcement providers in order to minimize temporary delays in provider response times.
- b. The TMP will include construction staging, detours, and lane closures, as applicable.
- c. Traffic control plans and related specifications, to be completed during final design of the Project, will be developed in accordance with the Work Area Traffic Control Handbook (also referred to as the WATCH Manual), Section 5 of the Caltrans Traffic Manual, Caltrans Standard Plans, and applicable County of Riverside requirements. These plans and specifications will include elements such as: advance roadside signs and portable changeable message signs (CMSs), traffic surveillance, and lane/shoulder closures, as well as temporary signing/stripping on local streets.

- d. The Project will implement a Public Awareness Campaign (PAC). The purpose of this PAC is to keep the surrounding community abreast of the Project's progress and construction activities that could affect the public's travel plans, as well as minimize delays or confusion to the motoring public during construction activities. Mailers/flyers and local newspaper advertising will be used to disseminate this information.
- e. The Project will implement the following construction strategies to minimize construction-related impacts:
  - Perform major construction activities at off-peak hours (e.g., at night or during the weekends) when feasible and reasonable.
  - Coordinate construction with adjacent projects. Coordination is important to address possible temporary increases in traffic due to detours from adjacent projects.
  - The Project will include provisions for maintaining pedestrian and bicycle access at all times during construction.
  - One traffic lane (existing streets modified as part of the Project) will remain open at all times during construction.
  - The Project will include contingency plans that specify the actions that will be taken in the event that something unexpected occurs with respect to construction activities or traffic operations. The Contractor will review these plans and incorporate them into the Contractor's contingency plan.



## 2.6 Visual/Aesthetics

### 2.6.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331(b)(2). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

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 210019b).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

### 2.6.2 Methodology

This section summarizes the methodology and terminology used to assess the visual impacts of Alternative 5 and Alternative 12 (Preferred Alternative). Details on the methodology are provided in the *Visual Impact Assessment* (March 2015; Errata, December 2017) for the Project. The *Visual Impact Assessment* followed the methodology in the *Visual Impact Assessment for Highway Projects* (FHWA, August 1981<sup>1</sup>). The following six principal steps were carried out to assess the potential visual impacts of Project:

1. Define the existing visual environment.
2. Identify key views for visual assessment.

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<sup>1</sup> Federal Highway Administration. 1988. *Visual Impact Assessment for Highway Projects*. U.S. Department of Transportation. Website: [https://www.environment.fhwa.dot.gov/guidebook/documents/VIA\\_Guidelines\\_for\\_Highway\\_Projects.pdf](https://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.pdf).

3. Analyze existing visual resources (visual quality and visual character) and viewer groups.
4. Depict the visual appearance of Project alternatives and viewer response.
5. Assess the visual impacts of Project alternatives.
6. Propose methods to avoid, minimize, and/or mitigate substantial adverse visual effects.

The visual impacts of the Project were determined by assessing the existing visual resources, determining the visual resource change due to the Project, and predicting viewer response to that change. The degree of visual quality in a view was evaluated using the following FHWA descriptive terms. FHWA defines visual quality as having three attributes: vividness, intactness, and unity, as follows:

- **Vividness:** Vividness is the extent to which a landscape is memorable. A vivid landscape makes an immediate and lasting impression on the viewer.
- **Intactness:** Intactness is the integrity of visual order in the landscape and the extent to which the landscape is free from non-typical visual intrusions. Both natural and cultural landscapes can have intactness if there is little or no encroachment or degradation to what is considered typical. This factor can be present in well-kept urban and rural landscapes and natural settings (e.g., a two-lane road that meanders through the countryside).
- **Unity:** FHWA defines unity as the extent to which visual intrusions are sensitive to, and in visual harmony with, the existing landscape. Although similar to the concept of intactness, this concept allows intrusions to occur (a modern bridge in a historic district, for instance). It merely asks if the intrusion was designed or inserted sensitively into the existing landscape.

The levels of visual impact are as follows:

- **Low:** A minor adverse change to the existing visual resource with low viewer response to a change in the visual environment.
- **Moderate:** A moderate adverse change to the visual resource with moderate viewer response to a change in the visual environment.
- **Moderately High:** A moderate adverse visual resource change with high viewer response to a change in the visual environment or a high adverse visual resource change with moderate viewer response to a change in the visual environment.

- **High:** An excessive adverse visual change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts.

### **2.6.3 Affected Environment**

The information in this section is based on the *Visual Impact Assessment* (March 2015; Errata, December 2017).

#### **2.6.3.1 Visual Environment**

The regional landscape establishes the general visual environment of the Project study area, but the specific visual environment on which the analysis focused was determined by defining landscape units and the Project viewshed. The Project's existing setting includes several types of land uses and visual characteristics, but the area is predominantly vacant land. Additional land uses in the study area include residential, industrial, and commercial uses. The study area includes the Interstate 10 (I-10) corridor and the Union Pacific Railroad (UPRR) tracks.

#### **2.6.3.2 Landscape Units**

Landscape units are relatively homogeneous combinations of landform and land cover. A landscape unit is part of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. The two landscape units identified in the Project study area include Desert Open Space and Urban Use landscape units. Those landscape units are discussed below.

##### ***Desert Open Space Landscape Unit***

The Project's study area generally traverses an expanse of desert open space immediately south of I-10, which transitions into the foothills of the northern reach of the San Jacinto Mountains to the south. Generally, the landscape is dominated by expansive views of desert open space and intermittent grazing land in the foreground and middle-ground.

Other natural features in the study area include Smith Creek, a generally east-west-flowing creek that is fed by a network of small, braided channels that follow the base outline of the foothills to the south. To the east, the San Gorgonio River flows from north to south and joins Smith Creek at the east end of the Project area, south of an existing large sand and gravel mining operation.

South of the study area, State Route 243 (SR-243) is designated by the California Department of Transportation (Caltrans) as a State Scenic Highway. SR-243 extends approximately 28.2 miles (mi) from the Banning city limits at I-10 to State Route 74 (SR-74) to the southeast. As part of the Palms to Pines Scenic Byway within SR-74, this United States Forest Service scenic byway traverses forested mountain scenery along a ridge of the San Jacinto Mountains. It rises in a series of switchbacks, offering views of the San Bernardino Valley and the desert scenery. This stretch of SR-74 offers views of the desert floor to the north.

### **Urban Use Landscape Unit**

The western and eastern ends of the Project are characterized by areas of single-family residences and scattered commercial and industrial uses. Banning Municipal Airport is just north of the western portion of the Project. Toward Cabazon at the eastern end of the Project area, there is a large sand and gravel mining operation. The UPRR tracks parallel I-10 in the Project area.

The regional landscape also includes the I-10 corridor, which is the primary location offering views of the Project area. Commercial development on the north side of I-10 includes two large outlet shopping malls, a strip commercial development, and the Morongo Casino Resort and Spa complex, which includes a 27-story hotel that dominates the viewshed at the eastern end of the Project area.

#### **2.6.3.3 Topography**

Most of the study area is flat. Part of the proposed alignments traverses the lower end of the foothills. More specifically, the study area consists of a flat desert plain in the north, the Smith Creek floodplain in the middle, the rolling foothills of the San Jacinto Mountains in the south, and the San Gorgonio River in the east.

#### **2.6.3.4 Existing Views**

Figure 2.6-1 provides an overview of the location and direction of each visual assessment unit. Figure 2.6-2 shows several key views that are representative of the existing visual conditions in the study area. These existing views are provided to assist the reader in visualizing the existing visual quality of the study area that is not provided in the key views and subsequent visual simulations. The existing views are provided for informational purposes only.

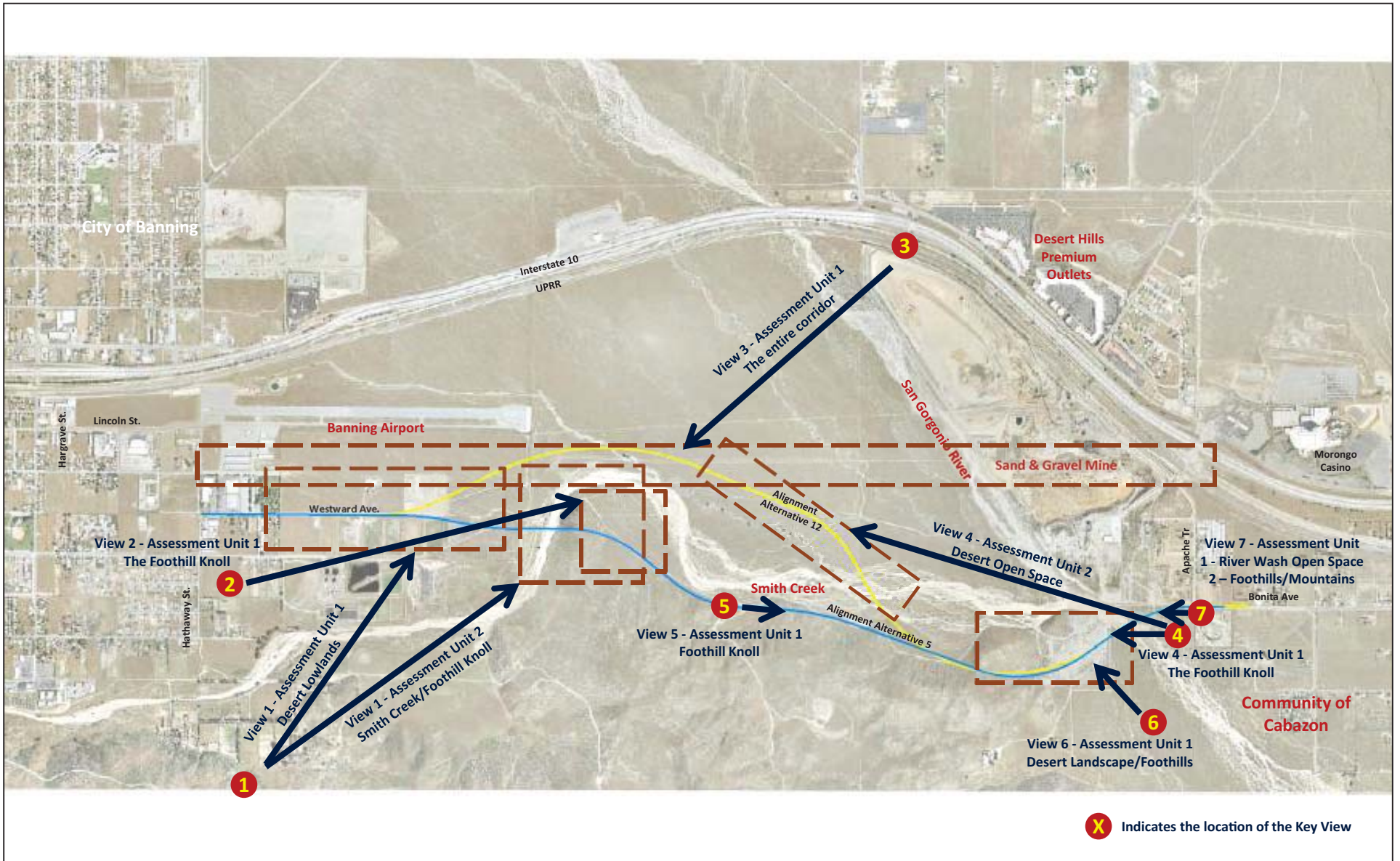


FIGURE 2.6-1



NO SCALE

SOURCE: Kimley Horn (3/2015, Revised 2/2017)

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I-10 Bypass: Banning to Cabazon  
Visual Assessment Units

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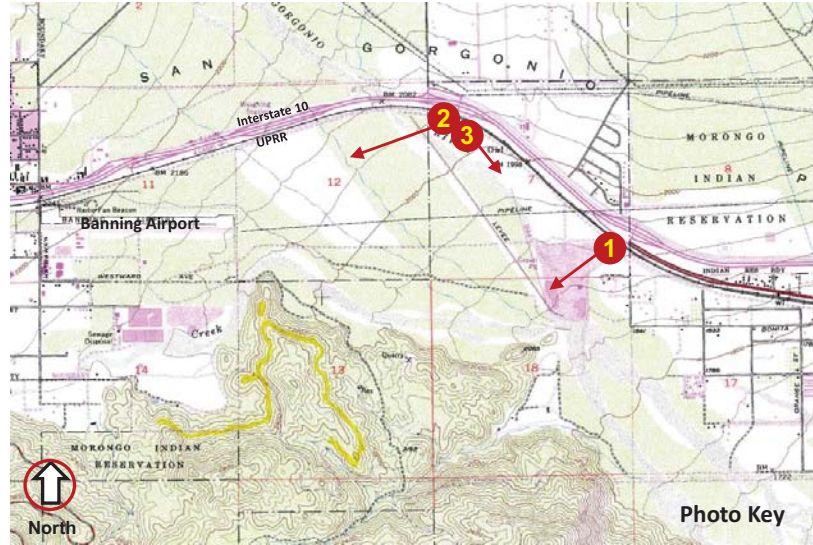


FIGURE 2.6-2  
(Page 1 of 3)

*I-10 Bypass: Banning to Cabazon*  
Existing Views

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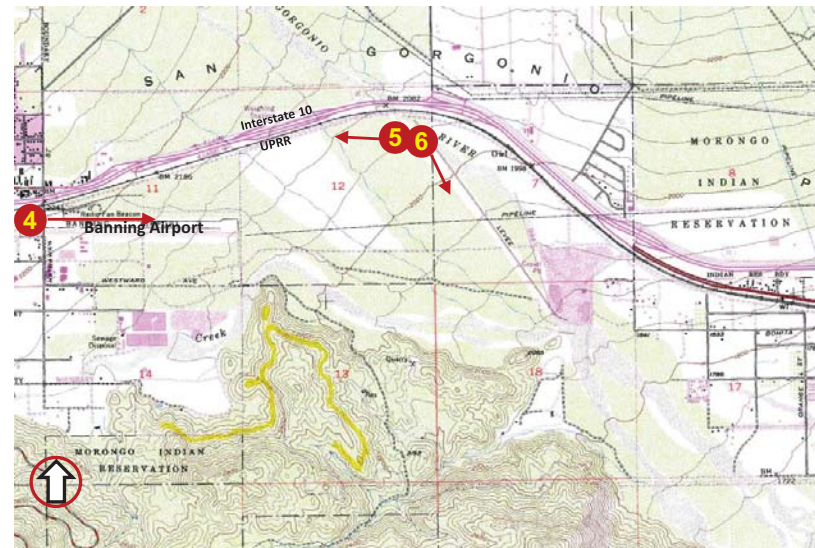


FIGURE 2.6-2  
(Page 2 of 3)

*I-10 Bypass: Banning to Cabazon*  
Existing Views

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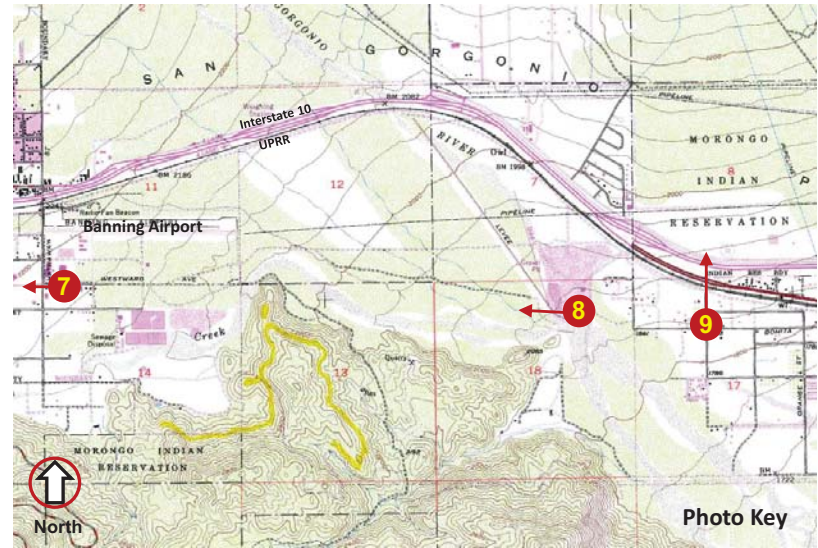


FIGURE 2.6-2  
(Page 3 of 3)

*I-10 Bypass: Banning to Cabazon*  
Existing Views

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### 2.6.3.5 Key Views

As mentioned previously, both existing views and key views are provided to assist in understanding the existing visual quality of the study area. Key views were specifically selected and provided for the Project to represent views from different land uses in the study area where the Project has the greatest potential for adverse effects. Because of the somewhat rural nature of the area, the key view locations were taken from some distance away from the proposed roadway, which is located away from populated areas. Other than at the eastern and western ends of the corridor, there are no existing close-up vantage points for these views that are accessible to substantial numbers of vehicles or pedestrians. Key views were selected based on two criteria: (1) where the greatest number of people (motorists, pedestrians, residents, and visitors) would view all or part of the proposed road; and (2) where the foothill breaches in the Build Alternatives would be most visible.

The location of each key view in the study area is shown on Figure 2.6-1. A description of the existing visual quality for each key view, using the FHWA *Visual Impact Assessment for Highway Projects* (August 1981) criteria, is provided in the following discussion (Key Views 1 through 7). Table 2.6.1, provided later in Section 2.6.5.1, includes the visual quality ratings of the key views for existing conditions, discussed in this section. The overall visual quality rating (1 to 7, or very low to very high) is an average of the three criteria ratings (i.e., vividness, intactness, and unity). The use of these evaluative criteria helps to establish an existing baseline to evaluate the effects on visual quality.

The Project corridor was divided into a series of visual assessment units as shown on Figure 2.6-1. Each visual assessment unit has its own visual character and visual quality, and is typically defined by the limits of a particular viewshed. Different visual assessment units have been identified for each view because only a small portion of the proposed roadway will be visible in all but one of the views. The view from I-10 fits within one assessment unit because the entire corridor is generally visible in one expanse, and the visual character of that expanse is consistent across the length of the view. Two of the key views have two assessment units each since they include both views of the road as it traverses the desert flatlands and views of the road as it would pass through a part of the elevated foothills.

The existing condition in the study area can be summarized as follows:

- **Vividness:** The landscape in the study area is only slightly memorable. The visual elements are typical of the landscape of the region and are not as memorable as other landscape elements in close proximity, such as the higher and more rugged mountain ranges and sweeping vistas of valleys to the east or west.
- **Intactness:** While there has not been significant visual intrusion of the landscape by non-typical elements, there are elements that create distractions for viewers, including the wind turbines near Cabazon, aboveground mining equipment, signage, and nondescript commercial and industrial buildings.
- **Unity:** Overall, the landscape is somewhat coherent as the character of the landscape does not change from one end of the corridor to the other. However, upon closer examination, the non-typical elements have the effect of diminishing the overall coherence of the viewshed.

The key views in the study area are described in the following sections.

### **Key View 1**

As shown on Figure 2.6-3, Key View 1 is from SR-243 and includes two visual assessment units. The views of the Project vary slightly at Key View 1 between Alternative 5 and Alternative 12 (Preferred Alternative).

- **Assessment Unit 1:** Desert lowlands from the western end of the Project at Westward Avenue in Banning to Smith Creek
- **Assessment Unit 2:** The Smith Creek Bridge crossing and the foothill knoll

Key View 1 shows SR-243 as it rises up into the San Jacinto Mountains, looking in a northerly direction to the proposed road in the Banning Pass below. The viewshed would only include the western part of the alignment (approximately 0.5 mi of the 2.6 mi total length). Beyond that, it is not visible from this vantage point.

Assessment Unit 1 is a stretch of desert flatlands that includes a pocket of single-family residences, small commercial and industrial buildings, Banning Municipal Airport, and large expanses of desert open space with limited vegetation. In the middle-ground are I-10 and the urban development adjacent to the north. The background view is of the San Bernardino Mountains.

Assessment Unit 2 is very similar, except that the landscape changes as the study area approaches the western foothills just east of Smith Creek. These landscape features are in the middle-ground of the view and are differentiated from those in Assessment Unit 1 by their overall color palette and landform.

Existing View



Proposed View



The view looking northeast from a point along Route 243. From this vantage point, Alternate 5 would appear as a barely visible across the middle of the view, with the bridge over Smith Creek and the cut into the western knoll visible in the proposed view. No portion of the road is visible beyond this knoll.

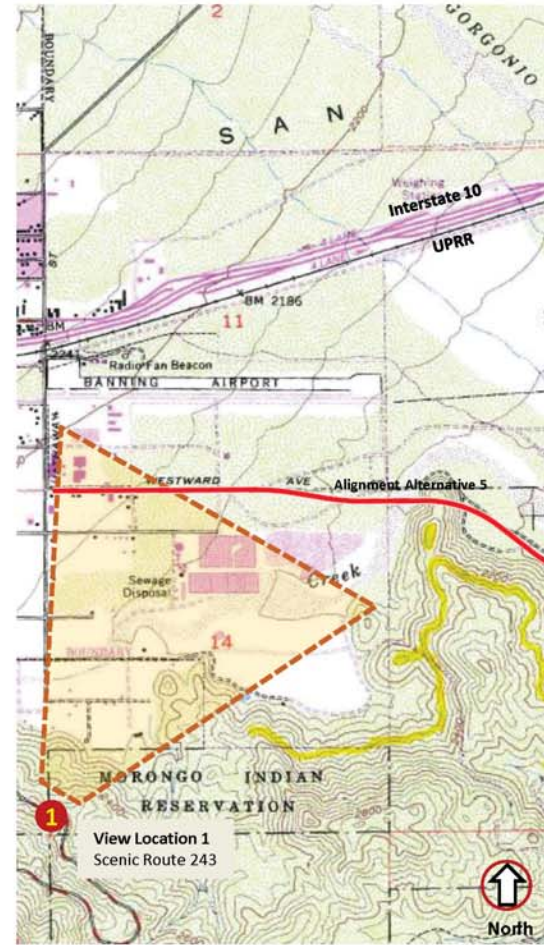


FIGURE 2.6-3  
(Page 1 of 2)

I-10 Bypass: Banning to Cabazon  
Key View 1: Alternative 5

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Existing View

The view looking northeast from a point along Route 243. From this vantage point, Alternate 12 is only visible as a thin line cross the middle of the view. The road remains generally along existing grade and does not affect the foothills visible in this view.



Proposed View

Proposed Road

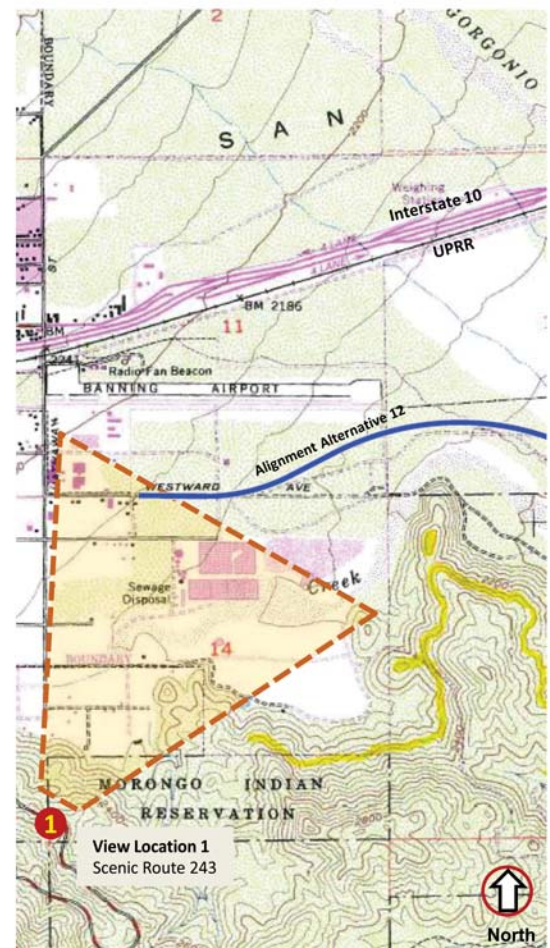


FIGURE 2.6-3  
(Page 2 of 2)

I-10 Bypass: Banning to Cabazon  
Key View 1: Alternative 12

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### **Key View 2**

As shown on Figure 2.6-4, Key View 2 is from a single-family residential area of Banning along Hathaway Street, south of Westward Avenue, and looking east. Assessment Unit 1 is a foothill knoll; only a portion of the knoll is visible above intervening small industrial buildings. The San Jacinto Mountains appear to the south (right) in the view. Only Alternative 5 would be visible in Key View 2.

### **Key View 3**

As shown on Figure 2.6-5, Key View 3 is the view from the south side of I-10 at the Malki Road undercrossing (Exit 103). The views of the Project vary slightly at Key View 3 between Alternative 5 and Alternative 12 (Preferred Alternative). The assessment unit is the entirety of the I-10 corridor. This location is representative of the view that motorists would have traveling on I-10 from east (left) to west (right). There is limited roadside vegetation or other features intervening in the view. The area is predominantly desert lowlands transitioning to undulating foothills. This view is consistent with many other views throughout this region without remarkable or visually intrusive landscape features.

### **Key View 4**

As shown on Figure 2.6-6, Key View 4 is the view from a residential area of the community of Cabazon on Magnolia Street. The views of the Project vary slightly at Key View 4 between Alternative 5 and Alternative 12 (Preferred Alternative). Key View 4 includes two visual assessment units:

- **Assessment Unit 1:** Two foothill knolls (one in the foreground and the other in the far distance)
- **Assessment Unit 2:** The desert open space to the north, with the two foothill knolls included in Assessment Unit 1 beyond

As shown on Sheet 3 of Figure 2.6-2, this view of Magnolia Street is just north of a small enclave of single-family residences. Generally, the view is to the west down the roadway corridor. Similar in character to Key View 2, this view has more existing vegetation in the foreground intervening in the view of the road. The existing wind turbines are a substantial distraction at this location.

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Existing View



The view looking east from a point along South Hathaway Street in Banning just east of a single family residential block. From this vantage point, the only visible impact is the breach in the westernmost foothill visible above the scattered buildings in the foreground.

Proposed View



Foothill  
breach



FIGURE 2.6-4

I-10 Bypass: Banning to Cabazon  
Key View 2: Alternative 5

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The view looking south from I-10 at Exit 103 (Malki Road). The photo is a panoramic view of most of the east-west length of the project area. From here, the five foothill breaches would be visible, as would the road in its slightly elevated position.



FIGURE 2.6-5  
(Page 1 of 2)

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The view looking south from I-10 at Exit 103 (Malki Road). The photo is a panoramic view of most of the east-west length of the project area. From here, this alternate appears as a line across the desert floor, with one foothill breach visible.

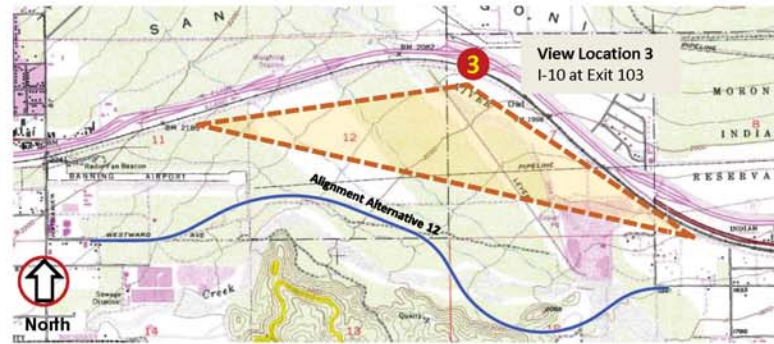


FIGURE 2.6-5  
(Page 2 of 2)

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The view looking west from an area near scattered single family homes in the Cabazon community. From here, the breach in the western most foothill would be visible as the road comes through. It would then disappear behind existing vegetation

Existing View



Proposed View



FIGURE 2.6-6  
(Page 1 of 2)

I-10 Bypass: Banning to Cabazon  
Key View 4: Alternative 5

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The view looking west from a point along Magnolia Street near scattered single family homes in the Cabazon community. From here, the breach in the western most foothill would be visible as the road comes through. It would then disappear behind existing vegetation

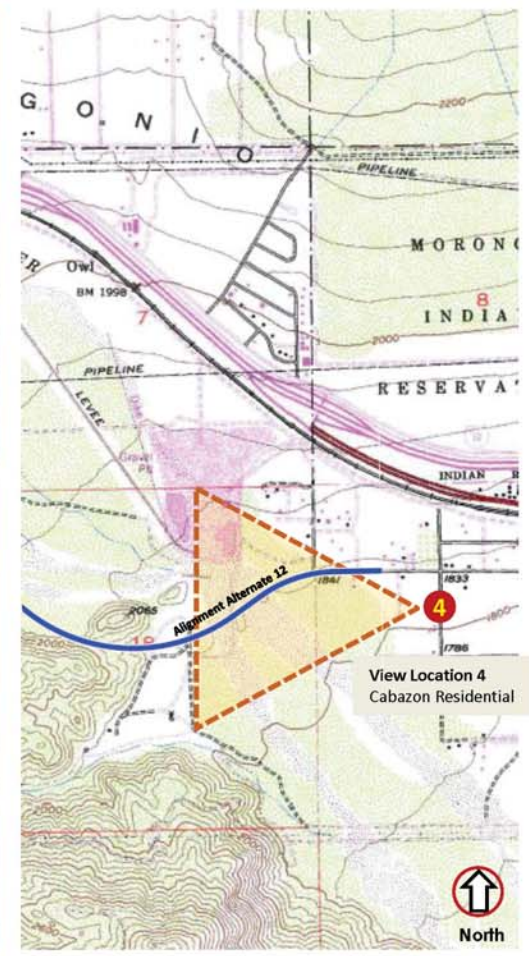


FIGURE 2.6-6  
(Page 2 of 2)

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### **Key View 5**

As shown on Figure 2.6-7, Key View 5 is the view looking east from the approximate midpoint of Alternative 5. It includes two visual assessment units:

- **Assessment Unit 1:** Foothill knoll in the near horizon
- **Assessment Unit 2:** Distant views to the east that include I-10 and the San Bernardino Mountain range

### **Key View 6**

As shown on Figure 2.6-8, Key View 6 is the view looking northwest from an access road to a single-family residence in the foothills. The viewpoint is from south of the proposed alignment and just west of the San Gorgonio River near the eastern terminus of the proposed road at Apache Trail. The existing view is of low foothills and a disturbed desert landscape in the near distance. One wind turbine is prominent in the right side (east side) of the view. Background views include the San Bernardino Mountains across I-10.

### **Key View 7**

As shown on Figure 2.6-9, Key View 7 shows the view looking west along the proposed roadway from the Bonita Avenue/Apache Trail intersection in Cabazon. It includes two visual assessment units:

- **Assessment Unit 1:** Disturbed desert landscape in the foreground, including river wash open space
- **Assessment Unit 2:** Foothills and the San Jacinto mountain range in the background

There is sparse desert scrub vegetation and exposed soil across the San Gorgonio River bed.

## **2.6.4 Sensitive Viewers**

Viewer sensitivity, which is a measure of the viewer's recognition of a particular object, has three attributes:

- Activity
- Awareness
- Local values and attitudes

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The view looking east from the approximate midpoint of Alternative 5. In this view, the roadway rises gradually towards a breach in the distant foothill.

Existing View



Proposed View

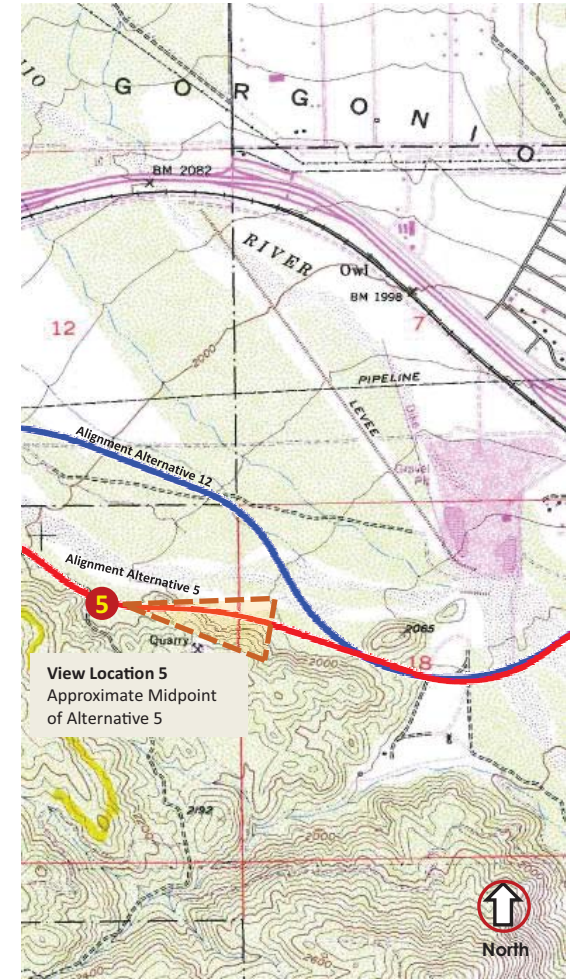


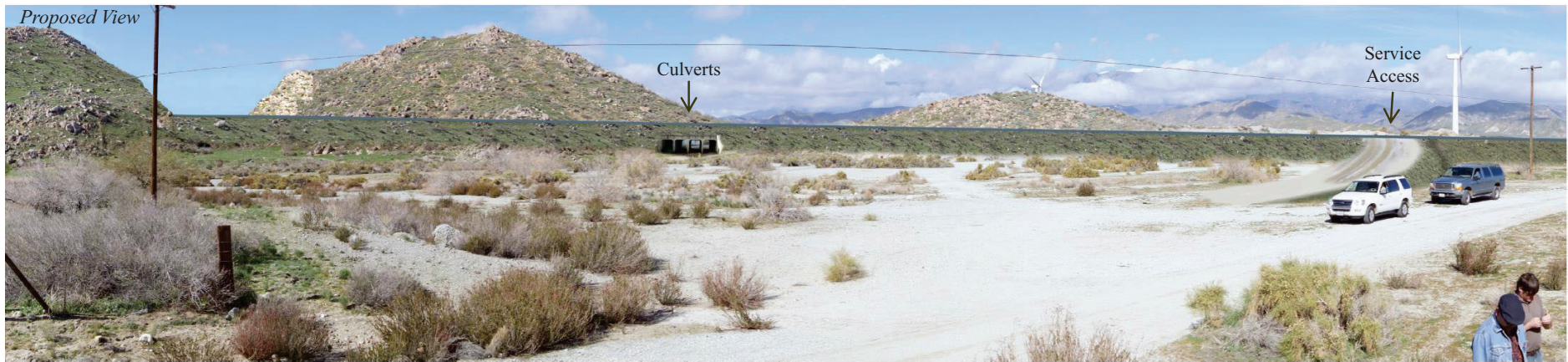
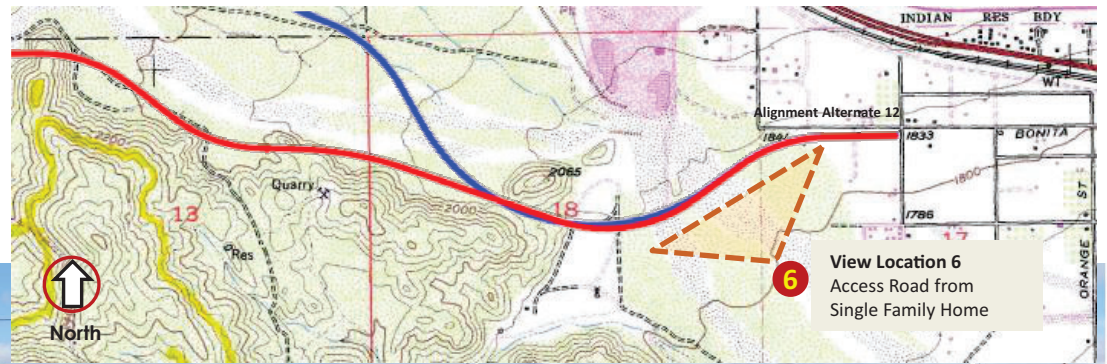
FIGURE 2.6-7

I-10 Bypass: Banning to Cabazon  
Key View 5: Alternative 5

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The view looking northwest from an access road to one single family home within the foothills. From here the fill slope and culvert crossing is visible along with the foothill breach that would occur to the left (west) as shown.



**Note:** Assumes revegetation success with seeding and planting, after two years.

FIGURE 2.6-8

I-10 Bypass: Banning to Cabazon  
Key View 6: Alternatives 5 and 12 (Preferred Alternative)

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The view looking west along the proposed roadway from the intersection of Bonita Avenue and Apache Trail. In this view, the roadway rises gradually towards a breach in the distant foothill. The bridge over the wash is visible in the foreground.

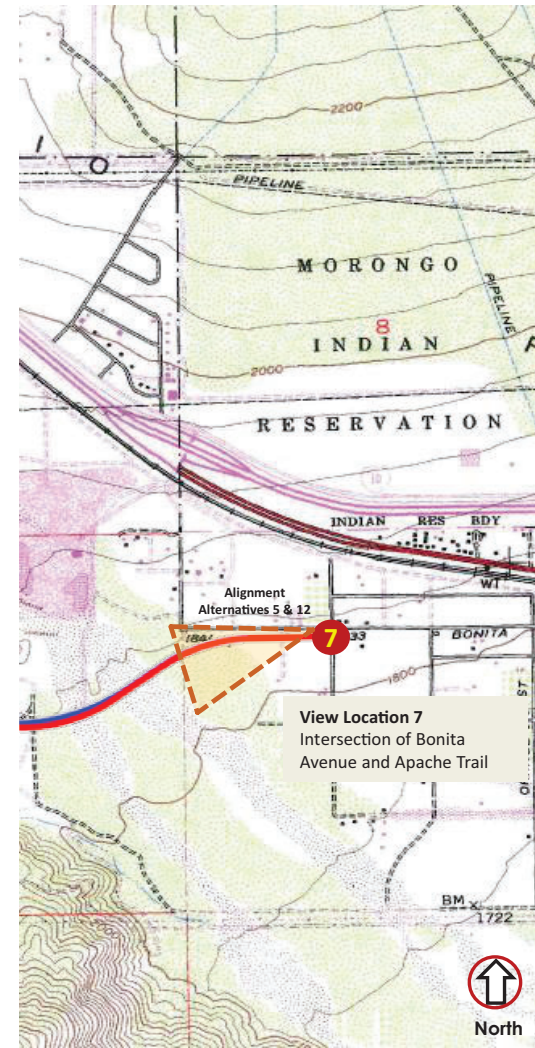


FIGURE 2.6-9

I-10 Bypass: Banning to Cabazon  
Key View 7: Alternatives 5 and 12 (Preferred Alternative)

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Viewer groups for the Project are broken down into two categories: viewer groups with views of the road and viewer groups with views from the road. The first category includes motorists on eastbound or westbound I-10, local residents, motorists on SR-243, and hotel/casino guests. The second category includes motorists and pedestrians/bicyclists on the new road. Neither of these viewer group categories is anticipated to have highly sensitive viewers for the Project due to the attributes listed above for each of these viewer groups.

## **2.6.5 Environmental Consequences**

### **2.6.5.1 Permanent Impacts**

#### ***Build Alternatives***

For both Build Alternatives, long-term impacts would result from permanent alteration of the visual environment as a result of the construction of a new road, graded slopes, and bridges. Table 2.10.2 in Section 2.10, Geology/Soils/Seismic/Topography, provides estimated amounts of cut and fill required for construction of the Build Alternatives. According to Section 1.4.2 of Chapter 1, Project Description, the road would be constructed as a two-lane facility, with two additional lanes to be constructed in approximately 20 years. All grading for the four-lane facility would be completed within the initial two-lane Project phase.

Table 2.6.1 provides the visual quality ratings for the key views for the Build Alternatives. These ratings are based on a conceptual idea of what the views would look like when the Project is completed. The overall visual quality rating (low to high) is an average of the three criteria ratings (i.e., vividness, intactness, and unity). Table 2.6.1 summarizes and compares the narrative ratings for visual resource change and viewer response. Each key view's existing visual quality rating provided in that table is based on the visual quality described earlier in Section 2.6.3.5. The higher the rating, the more substantial the visual impact (e.g., a high rating would have a greater visual impact than a low rating). These evaluations are described for each key view below.

**Table 2.6.1 Visual Quality Rankings**

Key View	Visual Assessment Unit (see Figure 2.6-1)	Alternative 5		Alternative 12 (Preferred Alternative)	
		Resource Change <sup>1</sup>	Viewer Response	Resource Change <sup>1</sup>	Viewer Response
1	Desert Flatlands/Westward Avenue	ML	L	L	L
	Smith Creek Bridge	ML	L	N/A	N/A
2	Foothill Knoll	M	L	N/A	N/A
3	Entire Corridor	M	L	L	L
4	Two Foothill Knolls	MH	L	MH	L
5	Foothill Knoll	MH	L	N/A	N/A
6	Disturbed Desert Flatland/Foothills	H	H	H	H
7	San Gorgonio River/Foothills	H	L	H	L

Source: *Visual Impact Assessment* (March 2015).

<sup>1</sup> The *Visual Impact Assessment* interchangeably uses the terms “resource change” and “change in visual quality/character.”

H = High  
L = Low  
M = Moderate  
ML = Moderate-Low  
N/A = Not Applicable

Table 2.6.2 provides a reference for determining levels of visual impact by combining resource change and viewer response.

**Table 2.6.2 Visual Impact Ratings Using Viewer Response and Resource Change**

Resource Change (RC) <sup>1</sup>	Viewer Response (VR)				
	Low (L)	Moderate-Low (ML)	Moderate (M)	Moderate-High (MH)	High (H)
Low (L)	L	ML	ML	M	M
Moderate-Low (ML)	ML	ML	M	M	MH
Moderate (M)	ML	M	M	MH	MH
Moderate-High (MH)	M	M	MH	MH	H
High (H)	M	MH	MH	H	H

Source: *Visual Impact Assessment* (March 2015; Errata, December 2017).

<sup>1</sup> The *Visual Impact Assessment* interchangeably uses the terms “resource change” and “change in visual quality/character.”

H = High  
L = Low  
M = Moderate  
ML = Moderate-Low  
N/A = Not Applicable

## Key Views

### Key View 1

The view simulation on Figure 2.6-3 represents the Project conditions for Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 1 depicts SR-243 as it rises up into the San Jacinto Mountains, but looking in a northerly direction to the proposed road in the Banning Pass below. The viewshed is the western part of the alignment until it breaches the foothill knoll; beyond that point, the proposed roadway is not visible from this vantage point.

### ***Alternative 5***

For the most part, the road follows existing natural grades in this area. From this vantage point, the viewer will see the road generally as a narrow east-west line in the middle-ground. As the road approaches Smith Creek, it will be elevated on fill, transitioning to a concrete bridge structure as it crosses Smith Creek. Immediately after the creek crossing, the road will breach a low foothill at a point approximately half its existing height.

Under Alternative 5, the introduction of the proposed road into this viewshed would not alter the visual character of Assessment Unit 1. It would appear as a thin line in the middle view and would not be remarkable given the other existing landscape features in the middle and long views.

Under Alternative 5, Assessment Unit 2 would be moderately altered with the addition of the bridge over Smith Creek and the breach of the foothill. The gradual elevation of the road approaching the bridge and the bridge itself would elevate the viewer's awareness of the road; however, the linear and horizontal nature of the alignment is only moderately intrusive. The view of the foothill breach would include the exposed slope along the north side of the road but would not be a dominant feature in the view given the distance from the vantage point and the backdrop mountain views to which a viewer's eye would likely be drawn.

Sensitivity to visual change in this key view under Alternative 5 would be moderate. Since there are many other features in the long view (including I-10, commercial buildings, and the distant San Bernardino Mountains) that are likely to draw the viewer's eye away from the proposed road, the overall viewer response to change would be low. In summary, the adverse change to visual quality and character would be moderate-low, viewer response would be low, and overall adverse effects would be moderate-low for Alternative 5.

### ***Alternative 12 (Preferred Alternative)***

Under Alternative 12 (Preferred Alternative), the Smith Creek Bridge crossing will not be visible from this viewpoint.

As with Alternative 5, under Alternative 12 (Preferred Alternative), the introduction of the proposed road into this viewshed would not alter the visual character of Assessment Unit 1. The road would appear as a thin line in the

middle view and would not be remarkable given the other existing landscape features in the middle and long views. Assessment Unit 2 would not change.

Under Alternative 12 (Preferred Alternative), the sensitivity to visual change would be moderate for this viewer group. The overall viewer response to change would be low given the unremarkable appearance of the proposed alignment in this view.

### *Key View 2*

The view simulation shown on Figure 2.6-4 represents with project conditions for Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 2 is looking east from Hathaway Street, south of Westward Avenue.

#### *Alternative 5*

Under Alternative 5, the viewshed is the western part of the alignment until it breaches the foothill knoll. Beyond that point, the proposed roadway is not visible from this vantage point; the viewer will see only the breach in the foothill knoll. The road surface will not be visible over the intervening structures in the foreground. Depending on the degree of cut and the treatment of the side slopes, this view has the potential to appear similar to other peaks and valleys in the foothill range. For the view simulation, the side slopes were assumed to be relatively steep to illustrate the greater visual impact to the landscape.

Under Alternative 5, the road would breach the foothill knoll and alter the visual character of Assessment Unit 1. Compared to existing conditions, local residents will notice this change. However, to a motorist, the change would not be notable unless the motorist was familiar with existing views of the knoll area.

Sensitivity to visual change would be high at this Key View under Alternative 5. The overall viewer response to change would be low. In summary, the resulting adverse change to visual quality and character would be moderate, viewer response would be low, and overall adverse effects would be moderate-low.



### *Alternative 12 (Preferred Alternative)*

Under Alternative 12 (Preferred Alternative), the road would not be visible from Key View 2. Therefore, there would be no visual impact at this Key View under Alternative 12 (Preferred Alternative).

### *Key View 3*

The view simulation shown on Figure 2.6-5 represents with project conditions for Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 3 is looking south to the study area from the south side of I-10 at the Malki Road undercrossing.

### *Alternative 5*

Under Alternative 5, the most notable Project features would be those points along the corridor where the proposed road breaches the foothills. Those parts of the road that are primarily along the desert lowlands would be only slightly visible due to the distance and intervening vegetation. The visibility of the road increases where the road breaches the foothills in three different locations. Motorists would have passing views of the foothill breaches, with the most visible feature being the cut to the slope along the south side of the road. The bridge over Smith Creek at the western end of the corridor would not be visible due to intervening vegetation, the distance from the vantage point, and the alignment in relationship to the foothills. The eastern bridge is also not visible due to intervening vegetation, mining equipment, and the foothills.

Sensitivity to visual change would be low, and the viewer response to change would be low. In summary, the resulting adverse change to visual quality and character in this key view under Alternative 5 would be moderate, viewer response would be low, and overall adverse effects would be moderate-low.

### *Alternative 12 (Preferred Alternative)*

Under Alternative 12 (Preferred Alternative), the Project features would be the same as for Alternative 5. From this vantage point, this alignment would be barely visible for the majority of its length, with the exception of the breach to one foothill knoll near the eastern end of the corridor. The sensitivity to visual change would be low and the viewer response to change would be moderate-low. In summary, the resulting adverse change to visual quality and character in this key view under Alternative 12 (Preferred Alternative) would be low, viewer response would be low, and overall adverse effects would be low.

### **Key View 4**

The view simulation shown on Figure 2.6-6 represents with project conditions for Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 4 is the view looking west from a residential area of the community of Cabazon on Magnolia Street.

#### ***Alternative 5***

Under Alternative 5, the viewer would see two of the proposed foothill knoll breaches: one to the far west and one to the east. Only the breach of the western knoll would be noticeable; the road would not be visible due to the distance and intervening vegetation. As the road comes through the easternmost knoll, both the roadway surface and the filled side slopes would be visible coming down out of the hill. The road would not be visible again due to existing vegetation.

Depending on the degree of cut and the treatment of the side slopes in the two breaches, the western foothill has the potential to appear similar to other peaks and valleys in the foothill range. The breach in the eastern foothill will have adverse effects on the view because of exposed slopes and the size of the fill section supporting the road as it descends from the foothills.

The character of the viewshed shown on Key View 4 would have a moderate-high alteration under Alternative 5. Compared to existing conditions, local residents would notice this change. The alignment of the road as it comes out of the knoll would increase the change in the visual character of the landscape.

The viewer group would be small and the viewer response to change would be low; the overall viewer response to change would also be low. In summary, the resulting adverse change to visual quality and character in Key View 4 under Alternative 5 would be moderate, viewer response would be low, and overall adverse effects would be moderate-low.

#### ***Alternative 12 (Preferred Alternative)***

Under Alternative 12 (Preferred Alternative), only the breach in the eastern foothill knoll (rather than the western foothill knoll with Alternative 5) would be visible. As with Alternative 5, the viewer group would be small, the viewer response to change would be low, and the overall viewer response to change would also be low. In summary, the resulting adverse change to visual quality and character in Key View 4 under Alternative 12 (Preferred Alternative)

would be moderate, viewer response would be low, and overall adverse effects would be moderate-low.

### **Key View 5**

The view simulation shown on Figure 2.6-7 represents with project conditions for Alternative 5. As previously noted, Key View 5 is looking east from the approximate midpoint of Alternative 5, from the perspective of a motorist or pedestrian along the roadway. The proposed alignment breaches the knoll to approximately half of its existing height. This section of the road is elevated slightly on fill as it approaches the knoll. From this vantage point, the motorist/pedestrian would see a moderately sized foothill breach on the right and a smaller breach on the left as the road rises slightly and makes the transition through the knoll. Both breaches would be noticeable.

### **Alternative 5**

Under Alternative 5, the character of the viewshed shown in Key View 5 would have a moderate-high level of alteration. Compared to existing conditions, the change would be substantial; however, few people have seen the existing condition because the location is not very accessible. The viewer group is large because it assumes all motorists traveling west on the proposed road would experience the view. Sensitivity to visual change and viewer response to change would be low because of the limited accessibility. In summary, the resulting adverse change to visual quality and character in this key view under Alternative 5 would be moderate-high, viewer response would be low, and overall adverse effects would be moderate.

### **Alternative 12 (Preferred Alternative)**

Under Alternative 12 (Preferred Alternative), the road would not be visible from Key View 5. Therefore, there would be no visual impact at this Key View under Alternative 12 (Preferred Alternative).

### **Key View 6**

The view simulation shown on Figure 2.6-8 keeps with project conditions of Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 6 is looking northwest from south of the proposed alignment and just west of the San Gorgonio River, near the eastern terminus of the proposed road at Apache Trail.

***Alternative 5 and Alternative 12 (Preferred Alternative)***

Under both Alternative 5 and Alternative 12 (Preferred Alternative), the viewer would see the long stretch of roadway constructed on a section of fill. On the left side of the simulation, the foothill breach would be visible on the north side of the road. Proposed culverts and the unpaved service access road would also be visible. The roadway surface is not expected to be visible because the road would be elevated through this section.

The character of the viewshed shown in Key View 6 under Alternative 5 and Alternative 12 (Preferred Alternative) would have a moderate-high alteration. Compared to existing conditions, the roadway will alter the landscape from this viewpoint. The change in view of the existing landscape would be greater en route to or from the residence than the change in view from the single-family home itself, which is set back into the hillside. The viewer group is small because there is only one single-family residence in this location; however, the residents' response to the change would be high. In summary, the resulting adverse change to visual quality and character at this key view under Alternative 5 and Alternative 12 (Preferred Alternative) would be high, viewer response would be high, and overall adverse effects would be high; therefore, resulting in an adverse impact under NEPA.

***Key View 7***

The view simulation shown on Figure 2.6-9 represents with project conditions for Alternative 5 and Alternative 12 (Preferred Alternative). As previously noted, Key View 7 is looking west from the proposed roadway at the Bonita Avenue/Apache Trail intersection. The visual simulation depicts a two-lane roadway with a striped median, paved shoulders, and a sidewalk on one side of the road. The fill section would accommodate two additional travel lanes and a second sidewalk in the future. The view is looking west at the proposed bridge over the San Gorgonio River. Beyond the bridge, the roadway makes a gradual incline up to a point between two moderate-to-large foothills, where it curves to the right and breaches the foothills, where the roadway is no longer visible to the northwest.

***Alternative 5 and Alternative 12 (Preferred Alternative)***

Under both Alternative 5 and Alternative 12 (Preferred Alternative), the character of the viewshed shown in Key View 6 would be highly altered. Compared to existing conditions, the change would be substantial. The impact, however, will be lessened by the transition of the fill section back to the

existing landscape character of the area. The viewer group is large because it assumes all motorists traveling west on the proposed road would experience the view. Sensitivity to visual change would be low because few people have seen this vantage point. Viewer response to change would be low. In summary, the resulting adverse change to visual quality and character in this key view under Alternative 5 and Alternative 12 (Preferred Alternative) would be high, viewer response would be low, and overall adverse effects would be moderate.

### *Light, Glare, Shade, and Shadow*

The proposed roadway traverses primarily undeveloped lands. Lighting is currently limited to street lighting at the east and west ends of the Project in populated areas, rural yard lights serving residences on larger tracts of land, interior lighting in residences and small commercial buildings, safety lighting on wind turbines and aboveground mining equipment, and Banning Municipal Airport runway lighting. Depending on the vantage point of the viewer, distant lighting includes I-10 roadway light standards and vehicle headlights, building and parking lot lighting at commercial uses north of I-10, casino/hotel tower lighting, and billboard lighting (primarily along I-10).

The proposed roadway will not be lit except for safety lighting along the bridges and at its intersections with Westward Avenue and Apache Trail. The only other source of lighting would be the headlights of vehicles traveling along the proposed roadway. These light sources will be viewed primarily by motorists traveling on I-10 and, to a lesser degree, from northbound SR-243, where the western part of the proposed road will be visible as vehicles descend from higher elevations into Banning. The lighting associated with the Project would be minimal when compared to the view of I-10 from the same location. Motorists on I-10 will observe headlights traversing the lowlands and foothills where the previous view was primarily of darkness. Overall, the impact of headlights will be low. The impact of these light sources on residents of Banning and Cabazon will also be low because very few residences are sited such that the signalized intersections or moving vehicles would be visible.

The limited amount of additional lighting associated with the Project roadway will create minimal glare. Lighting will be concentrated at intersections and bridge crossings.

Additionally, the road is proposed in a predominantly undeveloped area. Therefore, the Project would not create shade impacts on sensitive receptors.

### ***Summary of Visual Impacts for Alternative 5 and Alternative 12 (Preferred Alternative)***

Alternative 5 and Alternative 12 (Preferred Alternative) would have visual impacts. The breach of the foothills proposed in both the Build Alternatives is the main visual impact. Neither Build Alternative would have substantial lighting impacts. Alternative 5 proposes two bridges: one at the west end over Smith Creek and another at the east end over the San Gorgonio River. Alternative 5 would have the greatest impact on the foothills, creating five different breaches of various sizes. Elevated parts of Alternative 5 would have fill sections and visible side slopes as the road rises and falls through the foothills.

Alternative 12 (Preferred Alternative) also has two bridge structures. Under Alternative 12 (Preferred Alternative), the Smith Creek Bridge would be located more centrally within the length of the new corridor and would be significantly longer than the Alternative 5 bridge over Smith Creek. The primary difference between the Alternative 5 and Alternative 12 (Preferred Alternative) is that Alternative 12 (Preferred Alternative) remains close to the ground and within flat areas for approximately two-thirds of the alignment and breaches the foothills at only one location.

### ***No Build Alternative***

Under the No Build Alternative, there would be no construction-related or permanent visual impacts because no improvements would be implemented.

## **2.6.5.2 Temporary Impacts**

### ***Build Alternatives***

For both Build Alternatives, short-term visual impacts would occur during the construction period. Visual impacts due to construction would be moderate-high. The introduction of a roadway construction project would be prominent in many viewsheds and would include construction vehicles and equipment, clearing of existing vegetation, cut-and-fill grading activities, construction of the roadway and bridge, construction vehicles, and construction staging areas. The Project is intended to use excavated materials to the extent practicable for reuse on the site as fill and for rock slope protection. While this will reduce the amount of earthwork, periods of hauling materials through Banning and Cabazon are assumed. Construction activities are expected to occur over an approximately 2-year-long period. The adverse visual effects related to the construction activities would cease after the completion of construction. These visual impacts will be reduced somewhat by the distance from the



locations where the majority of viewers are anticipated (I-10 and SR-243).

Construction activities should have a low visual impact to area residents other than casual motorists using local roads at either end of the corridor, where the construction elements will be visible.

### **No Build Alternative**

The No Build Alternative would have no temporary visual impacts because there would be no construction activities.

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

The following measures would substantially reduce the short- and long-term adverse visual effects under the Build Alternatives.

**V-1 Structure Elements.** The County of Riverside's (County) Project Engineer/Resident Engineer will ensure the mitigation and minimization elements, and enhancements (below) are incorporated into final design and construction of the Project, and that they are consistent with applicable goals and policies of the County, the City of Banning (City), the community of Cabazon, and the Morongo Band of Mission Indians. These are anticipated to include the following:

- a. Architectural treatment on bridge elements visible from the roadway will incorporate detailing-to-scale elements to adjacent features and site-specific aesthetic features (local or historic references) to minimize/mitigate community impact by enhancing the regional sense of place.
- b. Gore paving will incorporate contrasting paving treatment both as a safety feature and as mitigation to reduce the visual mass of proposed paving areas. Any pedestrian pathway will incorporate materials and colors that resemble natural surroundings.
- c. Selective rock/boulder placement will be incorporated into fill slopes and cut areas to mimic the natural landscape.
- d. Slopes, particularly those abutting undisturbed areas, will include rounded contour grading rather than rectilinear grading. This will provide easing edges and slope rounding (California Department of Transportation [Caltrans] Highway Design Manual, 304.4 and 109.3). Contour grading with slope rounding and landforming will be provided to minimize the adverse visual effects of graded slopes

against existing landforms and to mitigate for loss of unity between native surroundings and graded areas.

- e. During construction, the Resident Engineer will ensure that the Contractor constructs the Project consistent with aesthetic and design features included in the Project specifications.

**V-2 Landscaping/Plantings.** The County's Project Engineer/Resident Engineer will ensure that planting to mitigate the loss of existing vegetation will be included in final design. The following revegetation measures will be included in final design and during project construction. They will take place at appropriate times of the year for vegetative success, but will not be deferred more than 8 months after construction is complete:

- a. All graded slopes will be revegetated so that drought-tolerant native species cover is established to the extent possible.
- b. Planting will be site-specific and will vary according to slope aspect and elevation.
- c. Temporary irrigation will be used as necessary to establish planting. Permanent irrigation systems are not anticipated.
- d. Seeding and revegetation will be provided for all disturbed ground and graded slopes to restore the visual unity of the site and the integrity of the setting.
- e. Drainage and storm water elements (i.e., swales, basins) will be addressed as visually integrated elements of the revegetation planting. Riprap and other constructed elements will be colored to match the native soil to minimize visual intrusion. Basins will be graded to provide a natural rather than man-made appearance.
- f. Trees removed during project construction will be replaced with native desert trees at a ratio of 5:1 (5 caliper inches of newly installed trees for each 1-caliper inch of trees removed).

**V-3 Light and Glare.** Due to the rural character and sensitivity of the area, the County's Project Engineer will ensure that final Plans, Specifications, and Estimates (PS&E) specify the use of lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the roadway or bridge deck, as applicable. Lighting will be limited to only those locations where it is absolutely necessary for safety, such

as intersections on each end of the Project. Lighting will only be provided at the bridges if absolutely necessary for safety, and light will be excluded from wildlife corridors below (possibly by being recessed or closer to the bridge deck). In most cases, lighting will consist of County or City of Banning lighting standards that are up to 35 feet in height, and the minimum required for driver safety.

Lighting will be designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association-approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that are shielded and direct the light only toward objects requiring illumination. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties or open spaces, or backscatter into the nighttime sky. The lowest allowable wattage will be used for all lighted areas, and the number of nighttime lights needed to light an area will be minimized.

Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency, with daylight sensors or timers with an on/off program. Lights will provide good color rendering with natural light qualities, with the minimum intensity needed for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing. Light-emitting diode (LED) lighting will avoid the use of blue-rich white light lamps (BRWL) and use a correlated color temperature that is no higher than 3,000 Kelvin, consistent with the International Dark-Sky Association's Fixture Seal of Approval Program. In addition, LED lights will use shielding to ensure that nuisance glare and light spill does not affect sensitive residential viewers. Technologies to reduce light pollution evolve over time; design measures that are currently available may help but may not be the most effective means of controlling light pollution once the project is designed. Therefore, all design measures used to reduce light pollution will use the technologies available at the time of project design to allow for the highest potential reduction in light pollution.

The County's Resident Engineer, or Project Engineer under contract to the County, will ensure that the Lighting Plan included in the PS&E is implemented by the County's Construction Contractor, or Project Construction Contractor under contract to the County, during construction.

- V-4**      **Selected Material.** Topsoil will be stockpiled and spread over disturbed areas once construction is completed and before any permanent erosion control or seed mixes are applied to assist in success of plant growth for this sensitive landscape.

## 2.7 Cultural Resources

### 2.7.1 Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

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 (NRHP). 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 (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the California Department of Transportation (Caltrans) went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the “use” of land from historic properties (in Section 4(f) terminology—historic sites).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are

defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU)<sup>1</sup> between Caltrans and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

### **2.7.1.1 Assembly Bill 52**

On September 25, 2014, Governor Edmund G. Brown, Jr., signed Assembly Bill (AB) No. 52 into law. The new law expanded CEQA to provide that any public or private “project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” The law applies to any project that has a Notice of Preparation (NOP), a notice of negative declaration, or a notice of mitigated negative declaration filed on or after July 1, 2015. The law created a new category of resources in CEQA called “tribal cultural resources” and seeks to engage the expertise of Native American tribes in the protection and preservation of those resources. To fulfill that purpose, the new law requires the lead agency to consult with a local Native American tribe as part of the environmental review process. During consultation, the

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<sup>1</sup> The MOU is located on the SER at [http://www.dot.ca.gov/ser/vol2/5024\\_mou\\_15.pdf](http://www.dot.ca.gov/ser/vol2/5024_mou_15.pdf).



parties may discuss possible mitigation measures to avoid or lessen the impact on tribal cultural resources.

Because the NOP for the Project was issued in November 2013, more than a year prior to the effective July 1, 2015, date specified in the law, the procedural requirements of AB 52 do not apply to the Project. However, Riverside County intends to comply with the spirit and intent of the law through consultation with Native American tribes conducted in accordance with Section 106 of the NHPA.

### **2.7.2 Affected Environment**

This section is based on the *Historic Property Survey Report* (August 2016, Errata December 2017), the *Historical Resources Evaluation Report* (June 2016), the *Archaeological Survey Report* (February 2016), and the *Extended Phase I Report* (February 2016, Errata December 2017).

The Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) has the potential to affect prehistoric and historic period cultural resources (i.e., 45 years of age or older) both directly and indirectly. Consistent with general cultural resources practices and in order to account for lead time between preparation of Section 106 compliance and actual Project construction, buildings 45 years of age or older (rather than 50 years of age and older) are being considered for this Project.

The Area of Potential Effects (APE) defines the geographic area within which the Project has the potential to directly or indirectly affect cultural resources. The APE was established in consultation with Caltrans District 8 Cultural Studies staff. The APE consists of all areas that would be temporarily and permanently impacted by construction activities, including construction lay-down and staging areas as well as potential cultural resources that could be visually impacted by the two Build Alternatives under consideration. The areas of direct effects include the areas where physical impacts would occur and is based on the horizontal and vertical extents of anticipated ground-disturbing activities. If a portion of a potential prehistoric or historic cultural resource was determined to fall within the APE, the APE was expanded to include the entire boundary of the resource.

The Project is located in Caltrans District 8 in the San Gorgonio Pass area of Riverside County, California. The eastern and western ends of the APE lie in developed areas, while the majority of the APE crosses undeveloped land that has been grazed by cattle since the late 1700s. The APE encompasses a portion of the lower slope of the San Jacinto Mountains, which supports chaparral and some desert

transitional species. Two major drainages flow through the region: Smith Creek and the San Gorgonio River.

Vertically, the APE extends to a maximum depth of 100 feet (ft) where bridge pilings would be driven into the banks on either side of Smith Creek or the San Gorgonio River. The depth of excavation for roadways where the alignment is generally within flatter areas is anticipated to be 3 to 5 ft below the existing surface. In areas where the alignment cuts through the hillside, primarily in Alternative 5, the vertical APE extends up to 130 ft. In limited areas where underground utility relocations are required, primarily along Alternative 12 (Preferred Alternative), resulting trenching depths are anticipated to be up to 10 to 15 ft deep. In areas of overhead power line relocations, power poles will likely require foundations up to 100 ft below the existing surface.

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.

If human remains are discovered, California Health and Safety Code (H&SC) 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. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the District 8 Environmental Branch Chief so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

### **2.7.2.1 Records Search**

In August 2012, a records search was conducted by the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS) located at the University of California, Riverside. The records search included a review of the EIC electronic databases for previously identified historical/archaeological resources in or near the APE and existing cultural resources reports pertaining to the Project vicinity and other standard sources. These standard sources included the National Register of Historic Places (NRHP), the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility (ADOE), and the OHP Directory of Properties in the Historic Property Data File (HPD), which includes information

relating to the NRHP, the California Register of Historical Resources (CRHR), California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Other standard sources consulted include the California Inventory of Historical Resources (1976) and the Caltrans Bridge Inventory.

The repositories and resources that were accessed include City and County sources, historical societies, local residents, the Morongo Band of Mission Indians, and individuals formerly connected to the Deutsch Company. Some of the individuals who were interviewed provided information about the ranching industry, which specifically relates to the general area which encompasses the Project. These interviewees also provided general background information about the aerospace industry in southern California, the Deutsch Company, and Banning Tool and Machine.

See Section 2.7.2.3 (below) for information regarding Native American consultation conducted per Section 106 of the NHPA.

### **2.7.2.2 Field Surveys**

#### ***Archaeological Field Survey***

An archaeological field inventory began in February 2014 and continued intermittently through April 2014 (*Revised Archaeological Survey Report* [Revised ASR] 2016). As the APE had not been established by the time the survey was conducted, a wide corridor was defined that encompassed all possible direct impacts related to the construction of Alternative 5 and Alternative 12 (Preferred Alternative).

Additional Project fieldwork included shovel test excavations that were completed in January 2015. This included data collection from previously surveyed sites CA-RIV-8364H and CA-RIV-11801 as well as visits to the other sites covered in the *Historical Resources Evaluation Report* (April 2016). Further field review occurred during a field meeting with representatives of the Morongo Band of Mission Indians on January 13, 2016.

In total, 14 archaeological resources were identified as a result of the archaeological field surveys. These archaeological resources consist of eight prehistoric milling sites (i.e., milling slick boulders) and six historic period resources including a rock and concrete drainage structure with artifacts; wooden corrals with a metal cistern and artifacts; a stone corral; a concrete building with wooden corrals and a refuse deposit; and two domestic refuse deposits. None of the archaeological resources are located on the Morongo Indian Reservation portion of the Project.

### **Built Environment Survey**

As documented in the *Historical Resources Evaluation Report* (April 2016), built environment reconnaissance surveys were conducted on February 28 and November 11, 2014. Properties needing documenting were examined and photographed from the edge of public right-of-way. As a result of the surveys, six buildings were exempted from evaluation and an additional three properties were evaluated.

#### **2.7.2.3 Native American Consultation**

Section 106 of the NHPA requires the federal lead agency to consult reasonably and in good faith with interested tribes, in accordance with 36 CFR Part 800 (regulations implementing Section 106 of the NHPA).

A Sacred Lands File search and a list of Native American contacts were requested from the California Native American Heritage Commission (NAHC) on July 26, 2012. On July 30, 2012, the NAHC responded that no Native American sacred sites were identified within a 0.5-mile (mi) radius of the Project, but that Native American sacred sites exist in proximity to this area. The NAHC provided a list of Native American contacts, and each was contacted. Details may be found in the Revised ASR (2016); however, none of the Native American contacts provided information regarding specific resources. William Madrigal (Morongo Band of Mission Indians) requested a copy of the records search (sent January 2, 2014) and that the Morongo Band of Mission Indians provides Tribal Monitors to be present during surveys.

#### **Field Meeting with the Morongo Band of Mission Indians**

The Project alignments are either within or approximately 1 mi from the Morongo Band of Mission Indians Tribal Lands. Mr. Ray Huaute, the Cultural Heritage Program Director of the Morongo Band of Mission Indians, was contacted upon his appointment in July 2015. Mr. Huaute requested copies of cultural reports, which identify the location of archaeological sites, including the eight prehistoric milling sites identified in the Revised ASR (2016). Mr. Huaute indicated that he wished the milling slick boulders be relocated and preserved prior to the construction of the Project. As a result of that conversation, a field visit was arranged for January 13, 2016, during which time a new bedrock milling resource was identified by Mr. Huaute, recorded, and subsequently listed by the EIC as CA-RIV-12311 (included in the 2016 ASR). The participants in the site visit agreed on a plan to relocate and preserve the bedrock milling sites.

#### **2.7.2.4 Cultural Resources within the APE**

##### ***Previously Recorded Resources***

The records search determined that one historic site (a debris scatter) and two isolated historic artifacts had been previously identified within the APE, with an additional 22 historic resources within a 0.5 mi radius of the APE. Historic sites within a 0.5 mi radius of but outside the APE include historic refuse scatters, historic landscape features, and residential buildings 50 years of age or older.

##### ***Resources Identified as a Result of This Project***

Surveys undertaken for this Project identified eight archaeological resources and nine built environment resources within the APE.

##### ***Archaeological Resources***

Archaeological surveys resulted in the identification of eight bedrock milling sites within the APE. Four of these sites (CA-RIV-1398, CA-RIV-1399, CA-RIV-1400, and CA-RIV-1403) would be located solely within the construction footprint of Alternative 5, while the remaining four sites (CA-RIV-1397, CA-RIV-11796, CA-RIV-11797, and CA-RIV-12311) would be located within the construction footprint common to both Alternative 5 and Alternative 12 (Preferred Alternative). The physical characteristics of each milling feature were recorded and no artifacts, features, or indicators of other uses were observed at any of the bedrock milling sites during an archaeological subsurface testing program.

Caltrans determined that all eight bedrock milling sites identified as a result of this Project are not eligible for the NRHP. SHPO concurred with this determination in a letter to Caltrans dated May 4, 2017. This letter is included in Chapter 4, Comments and Coordination.

##### ***Built Environment Resources***

Nine built environment resources were identified within the APE and discussed in the *Historical Resources Evaluation Report* (June 2016). These include the Banning Tool and Machine Office shed (built in 1958), a residence, historic debris scatters from the 1920s, ranching structures, and the Deutsch Company Complex in Banning.

Of the nine built environmental resources, only one resource within the APE, the Deutsch Company Complex (P-33-024164), was evaluated for listing in the National Register and California Register at the local level. Caltrans determined that the resource is eligible for listing due to its participation in an important Southern California industry, its importance to the City of Banning, its development of

elements of a planned worker community, and the architectural design of its Administration Building. SHPO concurred with this determination of eligibility in a letter to Caltrans dated May 4, 2017.

Caltrans determined that the other eight built environment resources identified within the APE are not eligible for the NRHP. SHPO concurred with this determination in a letter to Caltrans dated May 4, 2017.

### **2.7.3 Environmental Consequences**

#### **2.7.3.1 Temporary and Permanent Impacts**

##### ***No Build Alternative***

Under the No Build Alternative, no improvements would be implemented. The No Build Alternative would not result in ground disturbance or excavation; therefore, no impacts to cultural resources would occur.

##### ***Build Alternatives***

###### ***Built Environment Resources***

One resource within the APE, the Deutsch Company Complex, has been found eligible for listing in the National Register and California Register. The Deutsch Company Complex would not be physically modified as a result of construction of the Project. Indirect visual impacts would occur as a result of adding a turn lane and signalization of the South Hathaway Street/East Westward Avenue intersection. Because the area surrounding the Deutsch Company Complex is already developed with a wide modern road and modern buildings within sight of the Deutsch Company Complex, the Project would not result in an adverse impact to the viewshed of this historic property.

On September 18, 2017, Caltrans consulted with SHPO, asking for concurrence with the definition of the undertaking and the finding of No Historic Properties Affected. SHPO concurred in a response dated October 5, 2017. Therefore, the undertaking will have a finding of No Historic Properties Affected.

###### ***Archaeological Resources***

In the September 18, 2017, concurrence request to SHPO, Caltrans recommended a finding of No Historic Properties Affected for all archaeological resources identified in the APE based on the findings of the *Archaeological Survey Report* (February 2016) and the *Extended Phase I Report* (February 2016, Errata December 2017). SHPO replied by letter on October 5, 2017, concurring with Caltrans identification efforts, eligibility findings, and finding of effect. Therefore, the undertaking will have



a finding of No Historic Properties Affected. The October 5, 2017 SHPO letter is included in Chapter 4, Comments and Coordination.

Although considered unlikely, there is a potential to encounter unknown buried cultural materials or human remains within the APE during construction of the Project. In the event that previously unknown buried cultural materials or human remains are encountered during construction, compliance with standard avoidance and minimization Measures CR-1 and CR-2, provided below, would avoid and/or minimize potential impacts to previously unknown cultural resources or human remains. In addition, avoidance and minimization Measure CR-4 is recommended to assist in the identification of resources discovered during ground-disturbing activities. Avoidance and minimization Measures CR-1 and CR-2 are standard Caltrans cultural resources measures that have been developed in coordination with Caltrans District 8 Native American Coordinator, Gary Jones, to address concerns by the Morongo Band of Mission Indians. Measures CR-1 and CR-2 were developed as a result of the Caltrans Section 106 consultation process. Measures CR-3 and CR-4 were developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians.

There are no National Register-listed or eligible resources in the Project area that would trigger the requirements for protection under Section 4(f). The Deutsch Complex is the only *National Register listed/eligible property* in the APE, and is located in the Indirect APE. Proposed work in the vicinity of the Deutsch Complex is limited to street widening with no temporary or permanent impacts to the Deutsch Complex parcels. As currently proposed, the Project will not result in the permanent or temporary use of land from that historic property and would not result in any constructive use of the property. Therefore, the Project will not result in the use of any Section 4(f) resources.

As noted above, a field visit was held on January 13, 2016, to examine the various prehistoric resource (bedrock milling features) locations, discuss actual Project effects, and determine the feasibility of resource preservation or relocation on a site-by-site basis. Participants included representatives of Riverside County, Caltrans, LSA Associates, Inc., the Morongo Band of Mission Indians, the Bureau of Indian Affairs, Kimley-Horn and Associates, Inc., and AES. Although these sites are not eligible for listing on the National Register or the California Register, the representatives of the Morongo Band of Mission Indians requested that each site be further considered if it were to be affected by construction. A list of potential

avoidance and preservation measures (in order of desirability) was developed, and each feature was evaluated accordingly. The avoidance and preservation included the following possibilities:

- Avoidance
- Burial
- Relocation
- Cutting out and relocating the milling features

As the Project sponsor, the County agreed to these proposals. Avoidance and minimization Measure CR-3 was developed as a result of the January 13, 2016, field visit with the County, Caltrans, LSA, KHA, AES, the Morongo Band of Mission Indians, and the Bureau of Indian Affairs to address specific considerations for each of the eight sites listed in avoidance and minimization Measure CR-3.

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

The measures/practices below are required to avoid or minimize potentially adverse effects/impacts of the Project related to the discovery of previously unknown cultural materials and human remains during construction. Measures CR-1 and CR-2 were developed as a result of the Caltrans Section 106 consultation process. Measures CR-3 and CR-4 were developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians.

**CR-1 Cultural Materials.** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a California Department of Transportation (Caltrans) qualified archaeologist can assess the nature and significance of the find.

**CR-2 Human Remains.** If human remains are discovered, California Health and Safety Code (H&SC) 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. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact the Caltrans District 8 Environmental Branch Chief so that they may work with the MLD on

the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

**CR-3**

**Avoidance and Preservation.** Prior to project construction, the County, or their duly-appointed representative shall develop a Cultural Resources Mitigation and Monitoring Plan (CRMMP) in consultation with the Morongo Band of Mission Indians THPO that (a) identifies types and locations of resources likely to be encountered; (b) testing/evaluation/treatment measures for each resource type; (c) documentation requirements; and (d) a list of acceptable and prescribed study techniques; as stated in the response to Comment III, any artifacts recovered must be sent to either the Western Science Center or the San Bernardino County Museum after studies completed under the CRMMP are completed.

During the preparation of final Plans, Specifications and Estimates (PS&E), the County Resident Archaeologist, or Project Archaeologist under contract to the County, in consultation with the Morongo Band of Mission Indians THPO, shall develop specific avoidance and preservation actions for the following prehistoric resource (bedrock milling features) locations, consistent with the listed requirements:

- CA-RIV-1397: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])
- CA-RIV-1398: Avoid or bury (Alternative 5 only)
- CA-RIV-1399: Avoid, bury, or relocate nearby (Alternative 5 only)
- CA-RIV-1400: Avoid, bury, or relocate (Alternative 5 only)
- CA-RIV-1403: Avoid, bury, relocate, or excise milling feature and relocate (Alternative 5 only)
- CA-RIV-11796: Avoid, bury, or relocate nearby (both Alternative 5 and Alternative 12 [Preferred Alternative])
- CA-RIV-11797: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])
- CA-RIV-12311: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])

Prior to approval of final PS&E, the County and the Morongo Band of Mission Indians shall consult to develop final disposition sites for each of the impacted sites.

For sites with “relocate” or “excision” measures, such measures shall be accomplished as one of the first items of work during construction.

For sites with “avoid or bury” measures, final project plans shall include plans and specifications to accomplish the measure.

Archaeologists appointed by the County and Tribal Monitors shall oversee the implementation of all such measures throughout the duration of all ground-disturbing activities.

**CR-4 Construction Monitoring.** Prior to the beginning of construction, all construction workers shall receive training by a qualified professional archaeologist and a representative of the Morongo Band of Mission Indians. The training shall focus on the types of resources which could be uncovered during construction and what to do if and when they are found. A pamphlet shall be produced which includes pictures of typical archaeological resources, a summary of cultural resources laws, and a list of contacts (with telephone numbers) in the event of a discovery.

All construction monitoring shall be completed in teams minimally comprised of a qualified professional archaeologist and a representative of the Morongo Band of Mission Indians.

## **PHYSICAL ENVIRONMENT**

### **2.8 Hydrology and Floodplains**

#### **2.8.1 Regulatory Setting**

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 for a proposed action. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

In order 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 impacted 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.”

#### **2.8.2 Affected Environment**

This section is based on the following documents prepared for the Project:

- *Location Hydraulic Study I-10 Bypass – Banning to Cabazon* (May 2015)
- *Water Quality Assessment Report I-10 Bypass – Banning to Cabazon Project* (April 2015)
- *Drainage Report I-10 Bypass – Banning to Cabazon Project* (January 2020)
- *Summary Floodplain Encroachment Report* (May 2017)

##### **2.8.2.1 Floodplains**

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Project is within Panel 837 G of the FIRM for the City of Banning (Banning), Community No. 060246; and within Panel 845 G of the FIRM for Riverside County (County), Community No. 060245.

The FEMA maps are from 2008 and have not been updated to reflect the existing levee located along the sand and gravel mine because it is not an accredited levee. In addition, the FEMA maps do not cover the part of the Project that is on the Morongo Band of Mission Indians Tribal Lands. However, that area was mapped by the United States Army Corps of Engineers (USACE) as part of its *Flood Plain Information – San Gorgonio River and Smith Creek* report (USACE, June 1973).

As shown on Figure 2.8-1, the Project study area is in FEMA Zones A, X (shaded), Zone X (unshaded), AE, and D. Zones A and D are Special Flood Hazard Areas that would be inundated by a 100-year flood. FEMA made this finding by approximate methods; no base flood elevations are shown on the FIRM. Zone X (shaded) depicts areas of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods, areas protected by levees from the 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than one square mile. Zone X (unshaded) depicts areas of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone D is an area of undetermined flood hazard within Morongo Band of Mission Indian Tribal Land.

### **2.8.2.2 Natural and Beneficial Floodplain Values**

Floodplains and wetlands in their natural or relatively undisturbed states serve water resource values (e.g., natural moderation of floods, water quality maintenance, and groundwater recharge), living resource values (e.g., fish, wildlife, and plant species), and cultural resource values (e.g., open space, archaeological resources, historical natural beauty, scientific study, outdoor education, and recreation).

The Project area is in the Whitewater River watershed. Most of the runoff upstream of the Project area is from the San Bernardino Mountains and is conveyed through the Project area via Smith Creek and the San Gorgonio River. Smith Creek conflues with the San Gorgonio River near the eastern part of the Project. The San Gorgonio River then continues south and discharges to the Whitewater River and eventually to the Salton Sea. The land in this watershed is a mixture of developed and undeveloped areas.

The following beneficial uses have been identified for San Gorgonio River and Smith Creek:



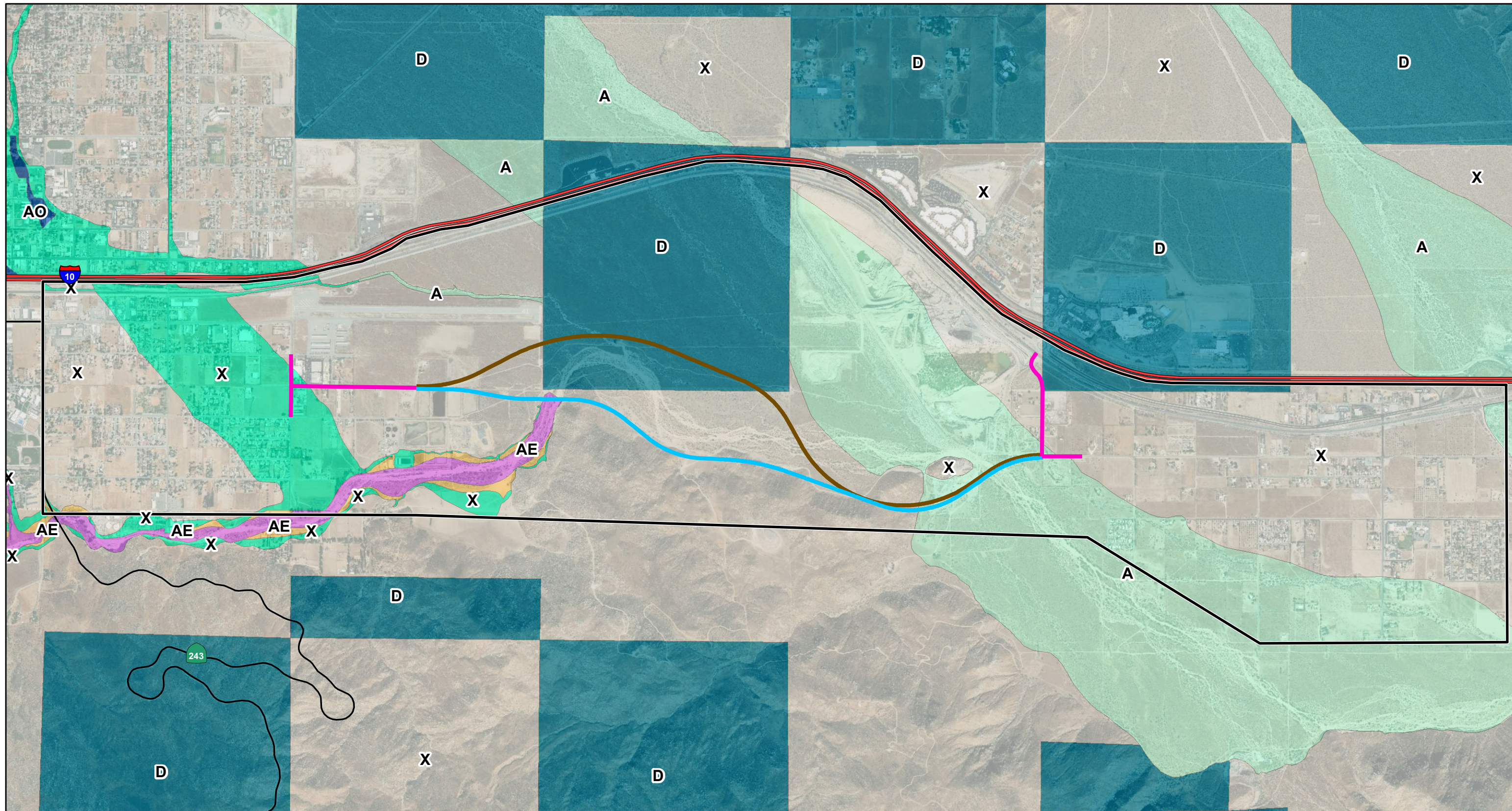


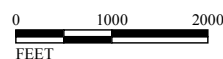
FIGURE 2.8-1

LEGEND

- Study Area
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)

- FEMA FIRM and Flood Hazard Area
- X: 0.2% Annual Chance Flood Hazard
  - X: Area with Minimal Flood Hazard
  - A: 1% Annual Chance Flood Hazard

- AE: 1% Annual Chance Flood Hazard
- AE: Regulatory Floodway
- AO: 1% Annual Chance Flood Hazard
- D: Area of Undetermined Flood Hazard



SOURCE: ESRI (2014); KHA (2015); FEMA (2016)

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I-10 Bypass: Banning to Cabazon  
Flood Hazard Areas



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- **Agricultural Water Supply (AGR):** Waters used for farming, horticulture, or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- **Cold Freshwater Habitat (COLD):** Uses of water that support cold-water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife (including invertebrates).
- **Freshwater Replenishment (FRSH):** Uses of water for natural or artificial maintenance of surface water quantity or quality.
- **Groundwater Recharge (GWR):** Waters used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality, or halting saltwater intrusion into freshwater aquifers.
- **Municipal and Domestic Water Supply (MUN):** Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply.
- **Non-Contact Water Recreation (REC2):** Waters used for recreational activities involving proximity to water but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with those types of activities.
- **Water Contact Recreation (REC1):** Waters are used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
- **Wildlife Habitat (WILD):** Waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
- **Warm Freshwater Habitat (WARM):** Waters support warm-water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.

## **2.8.3 Environmental Consequences**

### **2.8.3.1 Permanent Impacts**

#### ***Build Alternatives***

##### ***Water Surface Elevation***

The *Location Hydraulic Study* (May 2015) analyzed the potential impacts of the Build Alternatives (Alternative 5 and Alternative 12 [Preferred Alternative]) on existing floodplains and evaluated whether the Project is consistent with the existing watershed and floodplain management program, would result in an increase in the base flood elevation, and/or would result in an adverse effect on natural or beneficial floodplain values.

Hydraulic modeling was conducted as part of the *Location Hydraulic Study* using USACE Hydrologic Engineering Center River Analysis System (HEC-RAS) software with published flow rates from FEMA for Smith Creek and the San Gorgonio River. This modeling considers ground elevations and terrain to estimate flooding depths and horizontal limits (spread) due to the 100-year design storm event, which is especially beneficial in areas such as FEMA Zone A (no base flood elevation determined) found along the San Gorgonio River within the Project limits. This evaluation determined that the Project bridges on Smith Creek and San Gorgonio River would not affect the water surface elevation of those water courses during a 100-year storm event.

While the 100-year storm event is required for the design of the bridges and the roadway, larger flood frequencies will be considered as required or allowed by funding parameters during final design for elements such as scour at bridge foundations, which typically considers the 200-year check flood event.

As a result of the profile constraints incorporated into the design of this Project, including reducing overall cut through the adjacent hills, the Project bridges at Smith Creek and San Gorgonio River for the Build Alternatives would clear the 100-year water surface elevation with greater than the minimum freeboard of 4 feet (ft) under the bridge under the 100-year storm condition as recommended by the California Department of Transportation (Caltrans), FEMA, and the Riverside County Flood Control and Water Conservation District (RCFCWCD). “Freeboard” is defined as the amount of clearance between the estimated flood elevation and the feature being referenced (in this case, the bridges).

### Longitudinal Encroachment

A “significant encroachment,” as defined by 23 CFR 650.105, is a highway encroachment and any direct support of likely base floodplain development that would involve one or more of the following construction- or flood-related impacts:

- A significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or that provides a community’s only evacuation route;
- A significant risk (to life or property); or
- A significant adverse impact on natural and beneficial floodplain values.

A longitudinal encroachment is an action within the limits of the base floodplain that is parallel to the direction of the flow. Such an encroachment could occur where the proposed roadway alignments are adjacent to and parallel with Smith Creek.

The alignment for Alternative 5 would be along the south side of Smith Creek, and the Alternative 12 (Preferred Alternative) alignment would be along the north side of Smith Creek. The roadway embankment for Alternative 5 would be within the base floodplain of Smith Creek. Alternative 5 would result in one longitudinal encroachment approximately at the mid-point of the proposed roadway at the south end of the prominent bend in the creek adjacent to the foothills. This encroachment would result in an increase in the 100-year water surface elevation of less than 0.5 ft. Due to this minimal rise in water surface elevation and the surrounding undeveloped land, this impact would not be adverse. Table 2.8.1 identifies the minor increase in water surface elevation under Alternative 5. That roadway encroachment is based on the project-specific hydraulic channel analysis and is not an encroachment into a mapped FEMA zone.

**Table 2.8.1 Alternative 5 Longitudinal Encroachment**

	Station	Existing Water Surface Elevation (ft)	Alternative 5 Water Surface Elevation (ft)
Smith Creek	62+86.68	80.45	80.83

Source: *Location Hydraulic Study* (May 2015).  
ft = foot/feet

Alternatives 1, 2, 3, 4, and 6 were evaluated in order to avoid longitudinal encroachment. To avoid this encroachment at Smith Creek, the road alignment would need to be shifted approximately 200 ft to the south. This change would require

tighter, non-standard, horizontal curve radii and would place the alignment significantly farther into the hillside, thereby resulting in additional cut-slope heights. In addition, the increased water surface elevation of less than 0.5 ft at a localized area along Smith Creek would not result in a noticeable change when considering the magnitude of flow being several feet deep and over 500 ft wide. For these reasons, variations of Alternative 5 to avoid the longitudinal encroachment at Smith Creek are not considered feasible or appropriate.

Alternative 12 (Preferred Alternative) would be far enough north of Smith Creek and high enough in elevation to avoid longitudinal encroachment at Smith Creek.

In summary, the Build Alternatives would not result in a significant encroachment and would have no adverse effect as a result of risks due to surface elevational changes.

#### *Incompatible Floodplain Development*

The Project would be in a generally undeveloped area and is not anticipated to support incompatible floodplain development within the 100-year floodplain. In addition, it is anticipated that FEMA floodplain regulations would prevent incompatible floodplain development in this area. Therefore, the Build Alternatives would not promote incompatible floodplain development.

#### *Potential Risks to Life and Property*

San Gorgonio River and Smith Creek are considered significant conveyances for drainage in the Banning Pass area. When significant storm events occur, these drainages are known to receive very large flows in a short period of time (i.e., flash flooding), which present risks to life and property for those trying to cross under unprotected conditions. These watercourses meander through the Project area and change course based on flows and erosion.

The Build Alternatives would comply with applicable agency requirements for Project features (e.g., bridges, cross culverts, drainage inlets, and rock slope protection) to prevent damage to the Project and/or its users during estimated storm events.

Maintenance and monitoring after storm events would be necessary to minimize risks to life and property. These activities would involve removal of silt and debris at cross culverts and inlets, maintaining graded ditches and swales, and monitoring scour at bridge foundations and along slope protection areas.



### **Summary of Floodplain Encroachments**

In summary, the Build Alternatives do not constitute significant floodplain encroachment as defined in 23 CFR 650.105. The Project would require construction of rock slope protection to establish stable banks where the roadway is immediately adjacent to and/or crosses Smith Creek and the San Gorgonio River and new cross culverts within the 100-year floodplain. The Project would not result in a substantial change in the capacity of Smith Creek or the San Gorgonio River to convey water. The Project would result in a minimal increase in flood heights and flood limits. This minimal increase would not result in a significant change in flood risks or damage. The proposed encroachments would not result in adverse effects on the natural and beneficial floodplain values, would not result in an adverse change in flood risks or damage, and would not have the potential to cause interruption or termination of emergency services or emergency routes. Therefore, the project-related floodplain encroachments would not be significant under 23 CFR 650.105(q).

### **Agency Coordination**

As noted in Table 2.8.1, Alternative 5 would result in minor increases in 100-year water surface elevation. In addition, as shown on Figure 2.8-1, Alternative 5 would cross through a portion of FEMA Zone AE, Regulatory Floodway. Therefore, a Letter of Map Revision may be required under Alternative 5. Coordination with FEMA for a Letter of Map Revision would be required during the Plans, Specifications, and Estimates (PS&E) phase if Alternative 5 is selected for construction. The Final Drainage Report completed during PS&E would confirm coordination required with FEMA.

### **No Build Alternative**

Under the No Build Alternative, no Project improvements would be constructed. Therefore, no adverse effects related to hydrology or floodplains would occur under the No Build Alternative. The existing surface hydrology and floodplains would not change from their existing conditions. The No Build Alternative would not result in substantial adverse effects to natural and beneficial floodplain values.

## **2.8.3.2 Temporary Impacts**

### **Build Alternatives**

The possibility of erosion during construction of the Project is discussed in detail later in Section 2.9, Water Quality and Storm Water Runoff. Best Management Practices (BMPs) would be used to control erosion during construction. Existing general drainage patterns would be maintained during construction, although temporary

detours around facilities undergoing reconstruction (i.e., Westward Avenue, Bonita Avenue, and Apache Trail) would occur. If necessary, temporary detention basins would be used to prevent localized flooding. The BMPs used to control direct impacts would be effective at controlling indirect impacts related to erosion, drainage patterns, and flooding during construction of the Build Alternatives. As a result, the Build Alternatives would not result in adverse effects related to hydrology and floodplains.

### ***Impacts to Natural and Beneficial Floodplain Values***

Construction of the Build Alternatives could potentially result in temporary impacts to natural and beneficial floodplain values. Sediment releases during construction could result from exposing soils to potential erosion by rainfall/runoff and wind. Additionally, removal of vegetation from the site, grading and excavation of the site, and construction of new road surfaces and structures could create the potential for sediment to be transported outside the Project limits through storm water runoff. This sediment release could potentially impair the beneficial uses of receiving waters. Within the channels of Smith Creek and the San Gorgonio River, construction equipment would be limited to only the areas needed to accomplish construction. In addition, grades within the channels would be restored to their existing conditions, and impacted vegetation would be restored as appropriate.

Non-sediment-related pollutants of concern during construction include waste construction materials; chemicals, liquid products, and petroleum products (e.g., paints, solvents, and fuels) used in construction or the maintenance of heavy equipment; and concrete-related waste streams. These construction-related pollutants may be spilled, leaked, or transported via storm water runoff into receiving waters and may potentially impair beneficial uses.

### ***No Build Alternative***

Under the No Build Alternative, the Project would not be constructed, and temporary impacts to hydrology and floodplains would not occur.

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

The following measures are proposed to avoid and minimize adverse effects to hydrology and floodplains:

**HYD-1 Bridge Design.** During final design, the County of Riverside (County) Project Engineer shall ensure the low chords of bridges at Smith Creek and the San Gorgonio River will be designed to be above the 100-year

water surface elevation, and the number, size, and shape of piers will be designed to minimize obstructions to the potential floodplain flows. Two-dimensional hydraulic modeling will occur early in the final design (prior to 60 percent submittal) to establish bridge abutment locations more accurately with the intent to remain outside of the 100-year storm event. More specifically, the primary flow during the 100-year flood event will not encroach into the bridge abutments.

**HYD-2 Channel Construction Work.** During construction, the County's Resident Engineer shall ensure that areas allowed for construction equipment within the San Geronio River and Smith Creek channels will be limited to those areas needed to construct the Project improvements. In addition, the County Project Engineer would ensure that grades and impacted vegetation would be restored to the existing conditions within the channels after the completion of construction activities (see requirements in avoidance and minimization Measure V-2).

In addition, as discussed in Section 2.9, Water Quality and Storm Water Runoff, construction site, design pollution prevention, and treatment BMPs will be implemented to minimize water quality-related impacts. As discussed in Section 2.15, Natural Communities, and Section 2.16, Wetlands and Other Waters, measures to minimize adverse effects and preserve natural and beneficial floodplain values include installation of construction fencing around riparian/riverine vegetation to be preserved and compensatory mitigation for temporary and permanent adverse effects to riparian and aquatic habitats.

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## 2.9 Water Quality and Storm Water Runoff

### 2.9.1 Regulatory Setting

#### 2.9.1.1 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 source<sup>1</sup> 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 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 (RWQCBs) 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 U.S. 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 Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal

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<sup>1</sup> A point source is any discrete conveyance such as a pipe or a man-made ditch.

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 Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Individual permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA'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 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 effluent<sup>1</sup> 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 permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in section 2.15 Wetlands and Other Waters.

### **2.9.1.2 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

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<sup>1</sup> The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."



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, and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on their designated uses and vary depending on those uses. 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.

### **2.9.1.3 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. RWCQB's are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

### **2.9.1.4 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 Caltrans

as an owner/operator of an MS4 under federal regulations. Caltrans' MS4 permit covers all Caltrans 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.

Caltrans' MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012, and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans 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, Caltrans 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 Caltrans 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 Caltrans 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 BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

### **Construction General Permit**

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009, and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17,

2012). 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 (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 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 SWPPP. In accordance with Caltrans SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

### **Local Agency Construction Activity Permitting**

For local agency transportation projects off the State Highway System (SHS), the local agency (as owner of the land where the construction activity is occurring) is responsible for obtaining NPDES permits if required, and for signing certification statements (when necessary). Local agencies contact the appropriate RWQCB to determine what permits are required for their construction activity. The local agency is also responsible for ensuring that all permit conditions are included in the construction contract and fully implemented in the field. As the local agency and lead agency under CEQA, the County of Riverside will obtain coverage under the Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009, and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The County will also obtain coverage under the Federal Construction General Permit No. CAR12000I, which is discussed in further detail in Section 2.9.1.5 below.

The County will obtain coverage under the permits discussed in Section 2.9.1.5 during the Project Specifications and Estimates (PS&E) phase after approval of the Final EIR/EA.

### **Section 401 Permitting**

Under Section 401 of the Clean Water Act (CWA), any project requiring a federal license or permit that may result in a discharge to a water of the U.S. 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 Regional Water Quality Control Board (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.

### **2.9.1.5 Additional Regulations**

Because the Project is not located within Caltrans right-of-way, the Caltrans MS4 Permit, discussed above in Section 2.9.1.4, is not applicable to the Project. However, because the Project is located partially within the jurisdiction of the County of Riverside (County), partially within the City of Banning (Banning), and partially within the Morongo Band of Mission Indians Tribal Lands, the Project must comply with the requirements discussed below.

### **Whitewater River Watershed MS4**

The Project is located within the Whitewater River Watershed, which is part of the Colorado River Basin. Therefore, the Project will comply with Colorado River Basin Region Order No. R7-2013-0011 and NPDES No. CAS617002 (MS4 Permit) for discharges from the MS4s. For local agency projects off the State Highway System (SHS), such as the Project, the County as the local agency will be responsible for obtaining the NPDES permit and for signing certification statements. The MS4

Permit requires Priority Development Projects to prepare and implement a Water Quality Management Plan (WQMP).

Priority Development Project Categories include the following:

1. Single-family hillside residences that create 10,000 square feet (sf), or more, of impervious area where the natural slope is 25 percent or greater;
2. 100,000 sf commercial and industrial developments;
3. Automotive repair shops;
4. Retail gasoline outlets;
5. Restaurants disturbing greater than 5,000 sf;
6. Home subdivisions with 10 or more housing units; and
7. Parking lots 5,000 sf or larger in size.

The Project does not fall into any of the Priority Development Project categories specifically listed above and therefore will not be subject to the preparation of a WQMP. However, the MS4 Permit does require the Project to implement BMPs to the Maximum Extent Practicable (MEP) to reduce the discharge of pollutants through good management practices; control techniques; design and engineering methods; and such other provisions that are appropriate.

### ***Tribal Regulations***

#### ***Section 518(e) of the CWA***

Section 518(e) required the U.S. EPA to issue regulations to specify how the U.S. EPA would treat tribes in a manner similar to states for certain CWA programs, including the water quality standards (WQS) program. 40 CFR Part 131 contains the requirements and procedures for U.S. EPA to promulgate water quality standards for tribes; for the U.S. EPA to approve or disapprove tribal applications for treatment as State status to develop U.S. EPA-approved for water quality standards. For Indian Country in the State of California, the U.S. EPA is the permitting authority for Construction General Permit No. CAR12000I, which became effective on February 16, 2012. Operators of the construction project need to obtain coverage under this permit when a project will disturb one or more acres of land, or will disturb less than one acre of land but is a part of a common plan of development or sale that will ultimately disturb one or more acres of land; or a project discharges have been designated by the U.S. EPA as needing a permit under Section 122.26(a)(1)(v) or Section 122.26(b)(15)(ii).

### **Federal Construction General Permit**

For projects within the Morongo Band of Mission Indians Tribal Lands, Federal Construction General Permit No. CAR12000I applies. The Project will need to comply with the Federal Construction General Permit requirements, which include preparation of a SWPPP using the permit guidelines with defined effluent limitations applicable to all discharges from construction sites and water quality-based effluent limitations for the permanent project condition. To be covered by the Federal Construction General Permit, a complete and accurate Notice of Intent (NOI) will need to be filed using the EPA's electronic NOI system, or "eNOI system" prior to commencing construction activities. The applicant is required to comply with all conditions and effluent limitations in the permit until a Notice of Termination (NOT) is filed.

## **2.9.2 Affected Environment**

The information in this section is based on the *Water Quality Assessment Report* (April 2015) for the proposed Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project).

### **2.9.2.1 Regional Hydrology**

The Project is within the RWQCB Colorado River Basin Region. This region covers approximately 13 million ac (20,000 square miles) in southeastern California and includes all of Imperial County and parts of San Bernardino, Riverside, and San Diego Counties. It is bounded on the northeast by the State of Nevada; the east by the Colorado River and State of Arizona; the south by the international border with Mexico; the west by the Laguna, San Jacinto, and San Bernardino Mountains; and to the north by the New York, Providence, Granite, Old Dad, Bristol, Rodman, and Ord Mountain Ranges.

The Project is within the San Gorgonio subunit of the Whitewater River Watershed, which is part of the Colorado River Basin. The Whitewater River and its tributaries, including the San Gorgonio River and Smith Creek, are ephemeral drainage courses. Much of the Whitewater River Watershed consists of sparsely populated mountain, desert, and agricultural lands. Urbanized areas are principally located on the valley floor between Banning and Indio along I-10, and from Palm Springs to Coachella along State Route 111 (SR-111).



### **2.9.2.2 Local Hydrology**

The Project is adjacent to Smith Creek. Smith Creek converges with the San Gorgonio River at the eastern end of the Project, where the San Gorgonio River continues until it joins with the Whitewater River and eventually discharges to the Salton Sea.

### **2.9.2.3 Surface Waters**

Smith Creek is a sandy-bottomed channel that is fairly well defined and conveys flows from the west to the east through the Project until it converges with the San Gorgonio River at the eastern end of the Project. The tributary area for Smith Creek largely consists of developed lands. The upper part of the drainage area is on an alluvial fan; the middle part passes through the City of Banning in some improved and some natural channels; and the lower portion near the Project consists of some deeply incised channels and some braided channels near the confluence with the San Gorgonio River. Through the Project, Smith Creek is bordered on the south by the San Jacinto Mountain foothills. After the confluence with the San Gorgonio River, the floodplain opens up into a wide, braided channel.

The San Gorgonio River conveys flows from north to south, with most runoff contributed from the San Bernardino Mountains. In the vicinity of the Project, the San Gorgonio River is a wide, sandy alluvial waterway with a watercourse that is fairly well defined due to the presence of the levee along the eastern edge (along the sand and gravel mining operation). The levee has restricted the eastern bank from meandering between the I-10/Union Pacific Railroad (UPRR) bridge and the confluence with Smith Creek. As a result, the opposite side (western bank) is beginning to incise and has created nearly vertical banks in some areas along this watercourse.

### **Surface Water Beneficial Uses**

The beneficial uses of the receiving waters in the Project are identified as being intermittent, meaning they are only applicable if flows are sufficient to support those uses. According to the Colorado River Basin Regional Water Quality Control Plan (Basin Plan)<sup>1</sup>, the following beneficial uses have been identified for the San Gorgonio River and Smith Creek:

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<sup>1</sup> Colorado River Water Basin Regional Water Quality Control Board. 2006. Basin Plan – Region 7.

- Freshwater Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Non-Contact Water Recreation (REC2)
- Wildlife Habitat (WILD)

In addition to the beneficial uses listed above, the San Gorgonio River also has the following beneficial uses:

- Municipal and Domestic Water Supply (MUN)
- Agricultural Water Supply (AGR)
- Cold Freshwater Habitat (COLD)
- Water Contact Recreation (REC1)
- Warm Freshwater Habitat (WARM)

### **Surface Water Quality Objectives**

The Colorado River Basin Plan contains narrative and numeric water quality objectives. That Basin Plan states: “Controllable water quality factors shall conform to the water quality objectives contained herein. When other factors result in the degradation of water quality beyond the levels or limits established herein as water quality objectives, the controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from people's activities which may influence the quality of the waters of the State and which may feasibly be controlled.” (Basin Plan, Chapter 3).

### **Surface Water Quality**

The Whitewater River and its tributaries (the San Gorgonio River and Smith Creek) are not listed on the 303(d) list as impaired for any pollutants. In addition, there are no existing or proposed TMDLs for the Whitewater River, Smith Creek, and San Gorgonio River.

#### **2.9.2.4 Groundwater**

The Project site is located in the San Gorgonio hydrologic subunit. Groundwater is estimated to be more than 200 feet (ft) below the ground surface along the alignment of the Project. A review of the water data available from the State Department of Water Resources indicates that the groundwater level in a nearby well (#03S02E18K001S) was 1,157 ft above mean sea level (amsl) or approximately 268 ft below the ground surface elevation near the Project. A geotechnical

investigation was performed for the Project. That investigation did not encounter groundwater in any of the borings performed as part of the geotechnical investigation. One of the borings taken at the San Gorgonio River Bridge within the river bed extended to 41 ft below ground surface without encountering groundwater.

### **Groundwater Beneficial Uses**

The beneficial uses for groundwater identified in the Basin Plan for the San Gorgonio hydrologic subunit are:

- Municipal and Domestic (MUN)
- Agricultural Supply (AGR)
- Industrial Service (IND)

### **Groundwater Quality Objectives**

The Basin Plan has narrative groundwater quality objectives, which state in relevant part: “The Regional Board’s objective is to minimize the quantities of contaminants reaching any groundwater basin. This could be achieved by establishing management practices for major discharges to land. Until the Regional Board can complete investigations for the establishment of management practices, the objective will be to maintain the existing water quality where feasible” (Basin Plan, Chapter 3, Section IV).

## **2.9.3 Environmental Consequences**

### **2.9.3.1 Permanent Impacts**

#### **Build Alternatives**

Based on the highway storm water runoff data collected by the Caltrans Storm Water Research and Monitoring Program, typical pollutants from highways and roadways include heavy metals, sediment, litter, and oil and grease. As traffic increases, the amount of pollutants originating from cars and trucks (i.e., tire and brake lining wear, litter, and spills during vehicle accidents) is also expected to increase. Increased storm water runoff rates and volumes as a result of the increase of impervious area can cause increased risk of erosion and hydromodification.

Because the roadway does not currently exist, the Build Alternatives would increase the impervious surface area. As part of the Project, BMPs will be implemented in accordance with Whitewater River Watershed MS4 NPDES Permit requirements to target constituents of concern in runoff from road and bridge facilities during project operation. Some of the drainage from the facilities would be treated by permanent storm water treatment BMPs (e.g., infiltration swales/strips, basins) to minimize the

discharge of highway pollutants to Smith Creek and the San Geronio River. In addition to treatment through infiltration, these BMPs would also serve to reduce increased flows from added impervious areas through longer travel paths and storage. Therefore, the operation of the Build Alternatives would not result in substantial adverse water quality impacts from increased storm water runoff rates and volumes and increased storm water pollutant loading based on compliance with the applicable permits and implementation of permanent BMPs.

The main difference in water quality impacts between the two Build Alternatives is related to the cut slopes. Alternative 5 includes more cut-slope surface area, and some slopes are up to 130 ft. in height. Alternative 12 (Preferred Alternative) has less cut-slope surface area, with some slopes up to 90 ft. in height.

Large cut slopes can result in erosion, and sediment and debris runoff, which may create impacts to drainage morphology and water quality. The Project will be designed to permanently stabilize the cut slopes with hydroseed or other means, minimize concentrated storm water runoff, and minimize changes to runoff volume. Sediment controls, such as swales/strips combined with desilting, will be incorporated into the Project. The slopes will be graded to minimize concentrated flows and promote sheet-flow, and frequent outlets to the adjacent drainages will be provided. Changes in runoff will be reduced by minimizing the addition of impervious areas and incorporating detention basins as necessary. Therefore, the operation of the Build Alternatives would not result in substantial adverse water quality impacts from erosion and sedimentation with implementation of erosion and sediment control BMPs, and slope design.

The Project includes culverts and bridges. Culverts can exacerbate scouring of drainage courses. Localized scouring of the waterways may also be worsened by localized increases in impervious surfaces that result in greater water volume and flow rates. Changes to a drainage course geomorphology (i.e., hydromodification) can be caused by erosion and sedimentation downstream. Rock slope protection will be placed at the culvert inlets and outlets to minimize scour. Changes to channel geomorphology will be minimized by designing bridges to pass flood waters and allow unimpeded flow of the drainage course. Bridges will also be designed to match upstream and downstream channel conditions. Bridge foundations will extend deep enough to avoid impacts due to scour. Therefore, the operation of the Build Alternatives would not result in substantial adverse water quality impacts from scour based on implementation of rock slope protection at culverts and bridges.

### **No Build Alternative**

Under the No Build Alternative, no improvements would be made. Therefore, the No Build Alternative would not result in long-term adverse water quality effects compared to existing conditions.

#### **2.9.3.2 Temporary Impacts**

##### **Build Alternatives**

Potential pollutant sources during construction include soil disturbance caused by construction equipment and construction materials (concrete, asphalt, excavated soil, etc.). These pollutants could potentially enter Smith Creek and the San Gorgonio River. Unmaintained leaky construction equipment has the potential to drip or spill fuels, petroleum products, and hydraulic fluids. If not controlled, the use of asphalt, concrete, and other materials may add to the potential for these substances to enter the Smith Creek and San Gorgonio River channels during construction activities.

The largest anticipated construction pollutant risk for this Project is sediment runoff caused by grading activities. This can occur during rain events when slopes or other areas being graded are not stabilized. Sediment runoff could impact existing drainage courses downstream, especially if transferred into Smith Creek or the San Gorgonio River.

Construction activities will encompass grading of approximately 82 ac for Alternative 5 and 80 ac for Alternative 12 (Preferred Alternative).

Both Build Alternatives are required to obtain coverage under the Construction General Permit from the SWRCB and implement a SWPPP for the duration of construction activities. The construction of Alternative 12 (Preferred Alternative) will also need to comply with the Federal Construction General Permit requirements, and would be required to implement a SWPPP that is compliant with both the State and Federal General Construction Permit provisions because this alternative traverses Morongo Band of Mission Indians Tribal Lands. The SWPPP will specify the Erosion Control, Sediment Control, and Good Housekeeping BMPs to be implemented during construction of the Project to reduce the risk of erosion and sedimentation and unauthorized non-storm water discharges.

The construction-related adverse effects on water quality will be minimized based on the implementation of construction BMPs (e.g., fiber rolls, silt fencing, stabilized construction entrances/exits, sediment basins, and concrete washouts). With the

BMPs properly designed, implemented and maintained, no adverse effects are anticipated to water quality during construction of the Project.

### **No Build Alternative**

Under the No Build Alternative, no improvements would be made. Therefore, the No Build Alternative would not result in short-term adverse water quality effects from construction activities.

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

The measures below are required to reduce potentially adverse project effects to water quality and storm water runoff from construction and operation of the Build Alternatives.

#### **WQ-1 Construction Storm Water Pollution Prevention Plan (SWPPP).**

During construction, the County of Riverside's (County) Project Engineer will require the Resident Engineer to comply with the State Water Resources Control Board (SWRCB) Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2012-0006-DWQ) and United States Environmental Protection Agency (EPA) Construction General Permit No. CAR12000I (for Alternative 12 [Preferred Alternative]) by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP).

#### **WQ-2**

**Treatment Control BMPs.** The County's Project Engineer will ensure that the final Plans, Specifications and Estimates (PS&E) comply with Colorado River Basin Region MS4 Permit Order No. R7-2013-0011, NPDES No. CAS617002. Based on the permit, the Project Engineer will incorporate storm water treatment BMPs for pollutants of concern while preserving the existing hydrology to the maximum extent practical into the final project specifications. This will include pervious roadside ditches along much of the alignment to filter storm water prior to being discharged from the Project site. Areas without pervious roadside ditches will consider similar pervious graded swales, natural ditches, and basins to promote infiltration prior to discharging from the Project site.

#### **WQ-3**

**Debris and Sediment Control.** The County's Project Engineer will incorporate measures to control debris and sediment from comingling with storm water run-off. These measures could include, but not be



limited to, debris fences for hillsides where required by the Geotechnical Engineer, drainage ditches at the top of slopes, and desilting basins for sediment-prone areas.

In addition to the measures above, a 401 Certification, 404 Permit, and Section 1602 Streambed Alteration Agreement will be obtained for the Project as specified in avoidance and minimization Measures WET-2 through WET-4 in Section 2.15, Wetlands and Other Waters. These permits will include conditions that are discussed and agreed upon with the resource agencies via the permit processes to minimize adverse effects on water quality.

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## **2.10 Geology/Soils/Seismic/Topography**

### **2.10.1 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).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. California Department of Transportation (Caltrans) Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. Structures are designed using Caltrans’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 Caltrans Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

### **2.10.2 Affected Environment**

This section discusses the existing geologic and soils environment in the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) area and provides analysis of the potential effects of the Project related to geology and soils. This section also addresses the potential for structural damage to Project facilities due to the local geology underlying the Project site, as well as slope stability, ground settlement, soil conditions, grading, and regional seismic conditions. This section summarizes the information in the following studies:

- *Preliminary Geotechnical Design Report I-10 Bypass: Banning to Cabazon, Riverside County, California* (August 2014)
- *Preliminary Foundation Report, I-10 Bypass Project, Smith Creek Bridge, Banning, California* (August 2014)
- *Preliminary Foundation Report, I-10 Bypass Project, San Gorgonio River Bridge, Banning, California* (August 2014)

A geotechnical site reconnaissance, subsurface field investigation, and laboratory investigation in September 2012 was conducted in support of the *Preliminary Geotechnical Design Report* (August 2014).

### **2.10.2.1 Geographic/Geologic Setting**

The Project is located in the narrowest part of the San Gorgonio Pass. Created by the movement of the San Andreas Fault, the San Gorgonio Pass is one of the deepest mountain passes in the 48 contiguous states and provides a gap between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. Mount San Gorgonio, the tallest peak in southern California at 11,503 feet (ft), is located 11 miles (mi) north of the San Gorgonio Pass. Mount San Jacinto, at 10,834 ft, is located 6 mi south of the pass. The San Gorgonio Pass provides the only low-elevation crossing of the mountains between the Los Angeles Basin and destinations to the east, including the Coachella Valley, the Colorado River, Arizona, and states farther east.

### **2.10.2.2 Geographic and Topographic Features**

The *Preliminary Geotechnical Design Report* (August 2014) identifies the San Gorgonio River, Smith Creek, and granitic bedrock as natural features in the Project area.

### **2.10.2.3 Topography**

There are 11 geomorphic provinces in California, as defined by the California Geological Survey (CGS). Geomorphic provinces are geologic regions with distinct landforms and geology. The Project area is in the northern Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges are a series of northwest-southeast-trending mountain ranges separated by similarly trending valleys. The northern part of the Peninsular Ranges province is divided into three major fault-bounded blocks: the Santa Ana Mountains, the Perris Block, and the San Jacinto Mountains. The Project area is adjacent to the San Jacinto Mountains.

The Project area consists of alluvial plains, streambeds, and granitic outcrops. Existing surface elevations range from approximately 2,130 ft above mean sea level (amsl) to the west to approximately 1,837 ft amsl to the east. The elevation at Smith Creek is approximately 2,070 ft amsl near the approximate eastern limit of the Project bridge, and at the San Gorgonio River, the elevation is approximately 1,898 ft amsl near the western limit of the Project bridge. The approximate elevations throughout the granitic outcrops from east to west range from 1,990 ft amsl to 2,200 ft amsl. The

topography of the majority of the surrounding area descends eastward with gently sloping terrain except for the southern portion of the Project area, which ascends into the San Jacinto Mountains.

#### 2.10.2.4 Geology

The areas of the Project alignment associated with Westward Avenue and Bonita Avenue consist primarily of undocumented fill (Qudf). The San Gorgonio River and Smith Creek are composed of Quaternary-age alluvial gravel (Qa) and sand-stream channel deposits (Qg). The areas outside these watercourses are composed of Quaternary-age alluvial gravel and sand-floodplain deposits. The areas west, north, and east of these watercourses are composed of Quaternary-age alluvial fan deposits (Qf). The southern portion of the area consists predominantly of Cretaceous-age granitic bedrock (Kqdi), with lesser amounts of metasedimentary bedrock (ms) and dike rock (mig). Refer to Figure 2.10-1 for an overview of the geology within the Project area and vicinity.

#### 2.10.2.5 Soils

As shown in Table 2.10.1 and on Figure 2.10-2, there are several types of soils in the Project area.

**Table 2.10.1 Soils Within the Project Area**

Map Unit Symbol	Map Unit Name	Approximate Percentage of the Site
GmD	Gorgonio gravely loamy fine sand, 2 to 15 percent slopes	25
CkF2	Cieneba rocky sandy loam, 5 to 15 percent slopes, eroded	22
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	14
SsD	Soboba stony loamy sand, 2 to 15 percent slopes	10
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes, eroded	8
RsC	Riverwash	8
GnD	Gorgonio cobbly loamy fine sand, 2 to 15 percent slopes	5
HdD2	Hanford cobbly coarse sandy loam, 2 to 15 percent slopes, eroded	5
TwC	Tujunga gravelly loamy sand, 0 to 8 percent slopes	3

Source: Preliminary Geotechnical Design Report (August 2014).

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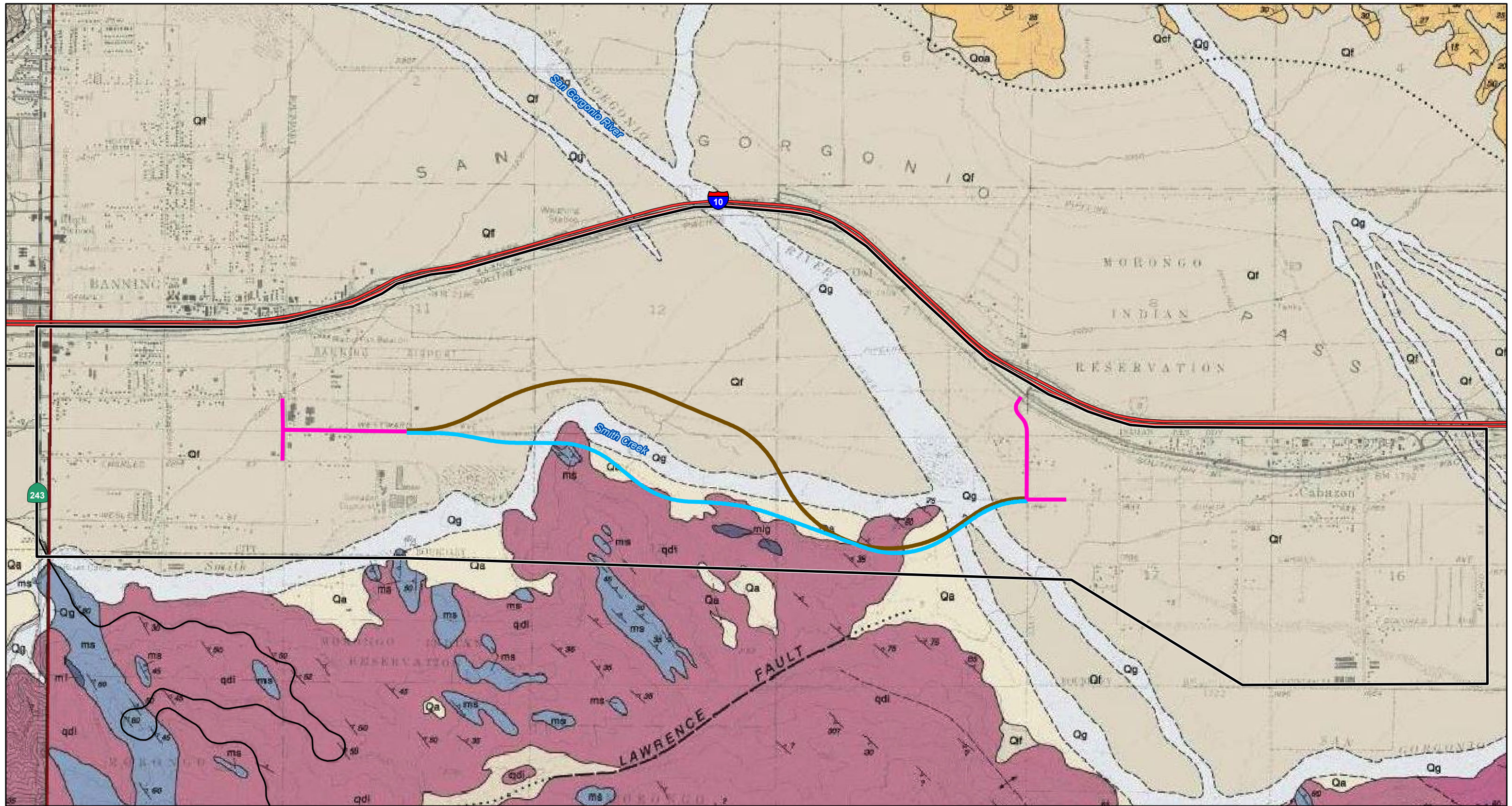


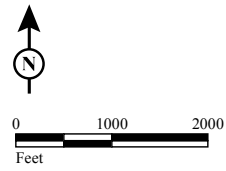
FIGURE 2.10-1

LEGEND

- Study Area
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)

Geology

- |   |   |  |  |
|---|---|--|--|
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #f5deb3; margin-right: 5px;"></span> Qa - Alluvial sand and gravel         | <span style="display: inline-block; width: 15px; height: 10px; background-color: #d3d3d3; margin-right: 5px;"></span> Qg - Alluvial gravel and sand   | <span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; margin-right: 5px;"></span> Qoa - Old axial channel deposits | <span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; margin-right: 5px;"></span> Mig - Migmatic rocks |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #e0e0e0; margin-right: 5px;"></span> Qf - Alluvial fan of San Geronio Pass | <span style="display: inline-block; width: 15px; height: 10px; background-color: #c0c0c0; margin-right: 5px;"></span> Qof - Old alluvial fan deposits | <span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; margin-right: 5px;"></span> Qdi - Granite rocks              | <span style="display: inline-block; width: 15px; height: 10px; background-color: #66b3ff; margin-right: 5px;"></span> Ms - Mica schist     |



SOURCE: KHA (2012); ESRI (2014); Jennings (1994); Dibblee (2003/2004)  
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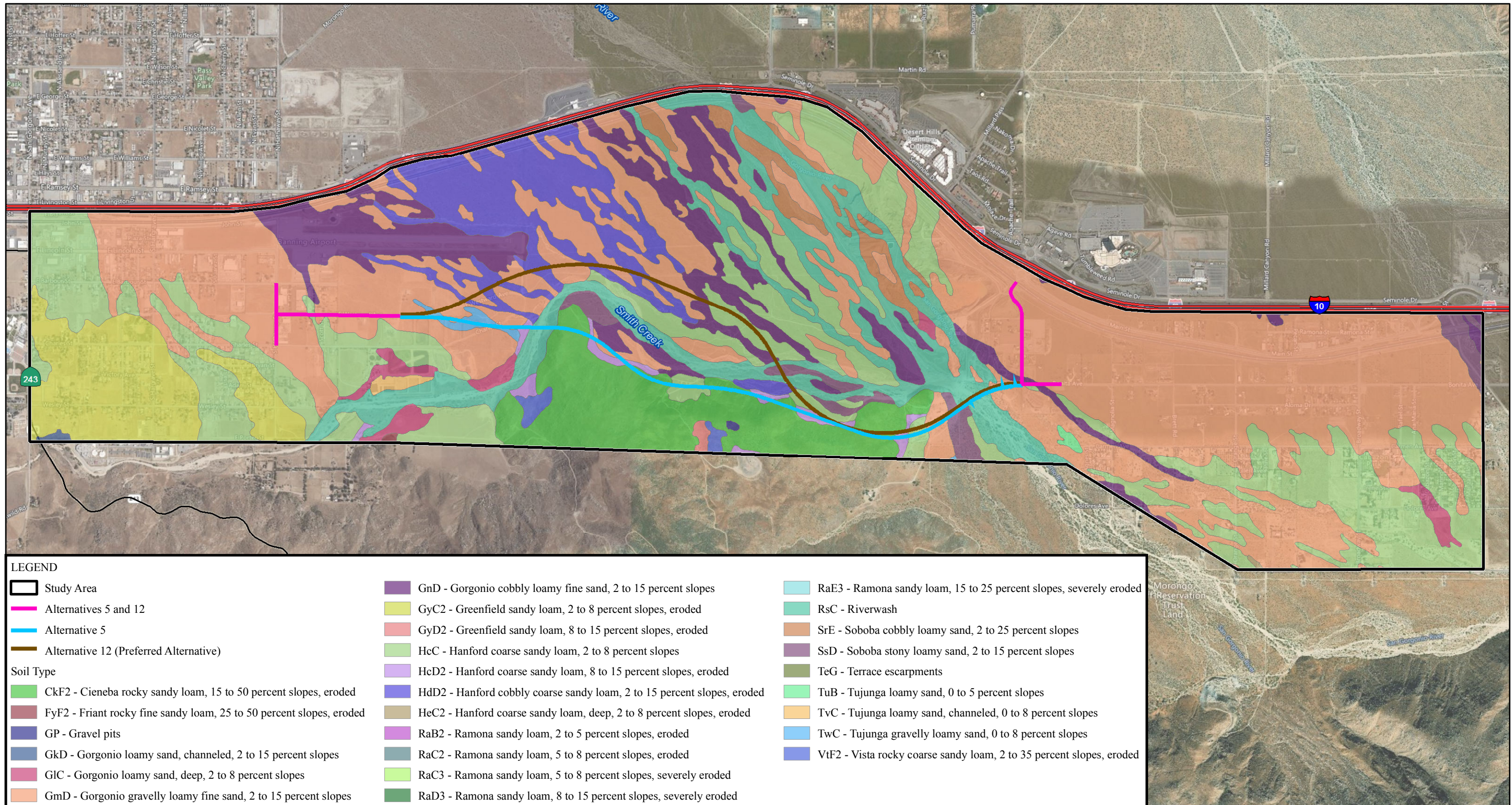


FIGURE 2.10-2



0 1000 2000  
Feet

SOURCE: KHA (2012); ESRI (2014); Jennings (1994); NRCS (2014)

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### **Corrosive Soils**

Section 5.5 of the Caltrans Corrosion Guidelines states that Caltrans considers a site to be corrosive if one or more of the following conditions exist for soil and/or water samples taken from the site:

- Chloride concentration is  $\geq 500$  parts per million (ppm)
- Sulfate concentration is  $\geq 2,000$  ppm
- Percentage of hydrogen (pH) is  $\leq 5.5$

Based on laboratory test results from the *Preliminary Geotechnical Design Report* (August 2014), the soils in the Project area do not meet Caltrans criteria for corrosive soils.

#### **2.10.2.6 Faulting and Seismicity**

The entire Southern California region is seismically active due to the influence of several earthquake fault systems resulting from interaction between the Pacific and North American crustal plates. An active fault is defined by the State of California as a “sufficiently active and well defined fault that has exhibited surface displacement within the last 11,000 years.” A potentially active fault is defined by the State as a “fault with a history of movement between 11,000 and 1.6 mya [million years ago].” The active and potentially active faults in the Project area are capable of producing seismic shaking that could be damaging to bridges and other structures. Figure 2.10-3 illustrates the locations of the major fault zones in the Project area.

Local active faults that have the potential to influence the Project area are the San Gorgonio Pass Fault Zone and the San Andreas Fault. The San Andreas Fault is approximately 2.7 mi north of the Project area, and the San Gorgonio Pass fault is approximately 1.5 mi north of the Project area.

The San Andreas Fault Zone is a 745 mi long network of predominantly strike-slip faults. The average annual geologic slip rate on the San Andreas Fault is estimated to have been 0.70–1.38 inches per year during the past several thousand years. The maximum probable magnitude of an earthquake on the San Andreas Fault is estimated to be 8.0 maximum moment magnitude ( $M_{max}$ ). Recurrence of earthquakes on the San Andreas Fault is highly variable and ranges from approximately 20 years at Parkfield, California, to an estimated 300 years at various other points along the fault. The average interval for major ruptures in the vicinity of the Project is thought to be approximately 140 years.

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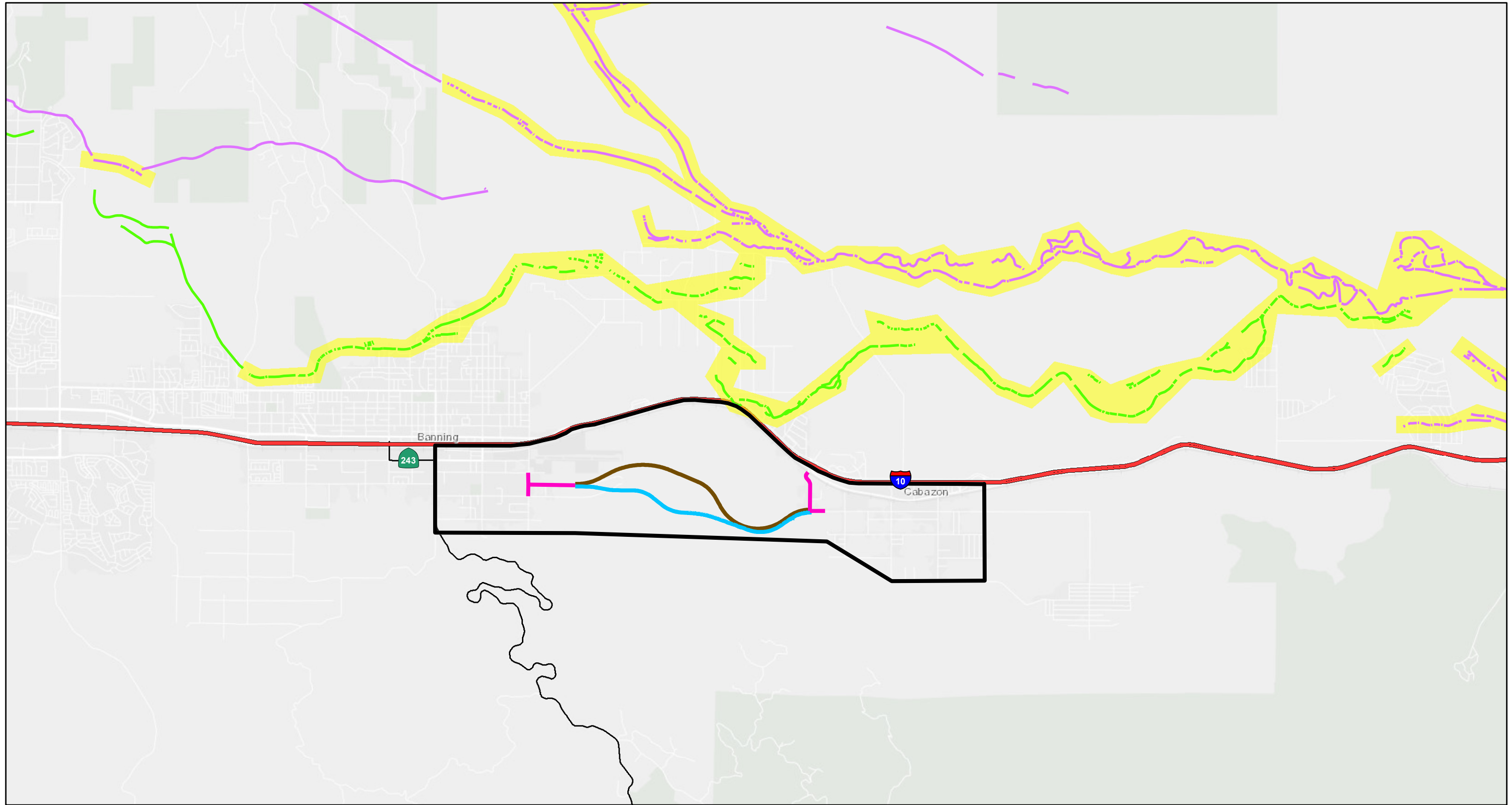
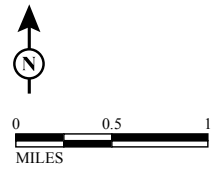


FIGURE 2.10-3

LEGEND

- Study Area
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)
- Alquist-Priolo Earthquake Fault Zones
- San Andreas Fault Zone
- San Gorgonio Fault Zone



SOURCE: KHA (2012); ESRI (2014); Jennings (1994)  
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The San Gorgonio Pass Fault Zone is an approximately 21 mi long thrust fault. The average annual geologic slip rate for the fault is uncertain. The maximum probable magnitude of an earthquake on the San Gorgonio Pass fault is estimated to be 7.0  $M_{max}$ . Recurrence of earthquakes on the San Gorgonio Pass fault is uncertain and highly variable.

As shown on Figure 2.10-3, the Project area is not located within an Alquist-Priolo Earthquake Study Zone, as established by the State Geologist, and there are no active fault traces that occur within the Project area.

### **2.10.2.7 Landslides**

Landslides are rock, earth, or debris flows on slopes due to gravity. Landslides constitute a major geologic hazard because they are widespread and can cause substantial damage to life and property. The expansion of urban and recreation uses into hillside areas leads to more people being potentially threatened by landslides each year. Although landslides commonly occur in connection with other major natural disasters (e.g., earthquakes, volcanoes, wildfires, and floods), they can occur on any terrain given the right conditions of soil, moisture, and angle or slope. Steep bare slopes, clay-rich rock, deposits of stream or river sediment, and heavy rains can also contribute to landslides.

No landslides were encountered in the Project area during the investigations conducted for the *Preliminary Geotechnical Design Report* (August 2014). The natural slopes in granitic bedrock within the Project area appear to be in adequate, stable condition. A potential rockfall hazard may exist at several locations throughout the Project area.

### **2.10.2.8 Liquefaction, Lateral Spreading, and Seismic Compaction**

Soil liquefaction occurs when saturated, loose soils lose their strength due to excess water in the soils. The space between the soil particles is completely filled with water, which exerts pressure on the soil particles, thereby influencing how tightly the soil particles are pressed together. Prior to an earthquake, the water pressure is relatively low. However, the shaking caused by an earthquake can cause the water pressure to increase to the point where the soil particles can readily move with respect to each other. When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support building and bridge foundations is reduced. The potential effects of liquefaction may include settlement of the ground surface, additional forces pushing down on foundation piles as a result of soil settlement above the liquefied layers, and

reduction of the shear strength of the liquefied soil, resulting in reduced load-carrying capacity. Liquefied soils can also exert pressure on retaining walls, which can cause them to tilt or slide.

The primary factors affecting the possibility of liquefaction in a soil deposit are the intensity and duration of the earthquake shaking, the soil type, the relative density of that soil, the pressures of material above that soil, and the depth to groundwater. Soils most susceptible to liquefaction are clean, loose, uniformly graded, fine-grained sands; non-plastic silts that are saturated; and silty sands. The potential for liquefaction is anticipated to be very low for the Project area due to the lack of permanent, near-surface groundwater. Additionally, the majority of the soil in the Project area has a low expansion potential (Expansion Index [EI] of 50 or less) as described in the Uniform Building Code (UBC).

#### **2.10.2.9 Water**

Surface water and groundwater are discussed briefly in this section as they relate to potential geological/geotechnical conditions such as scour and liquefaction. Detailed discussions of surface water and groundwater are provided in Section 2.8, Hydrology and Floodplains, and Section 2.9, Water Quality and Storm Water Runoff.

##### ***Surface Water***

Surface water was not observed during field explorations conducted in support of the *Preliminary Geotechnical Design Report* (August 2014). Surface water in the Project area flows into Smith Creek and the San Gorgonio River during rain events. During the rainy season, moderate to heavy flows occur in Smith Creek and the San Gorgonio River. During spring, snowmelt from the San Jacinto Mountains also flows downslope into Smith Creek and the San Gorgonio River. Unnamed drainages on the flanks of the mountains could also experience moderate channelized flow during rain events. Erosion or degradation may occur when moving water lifts and rolls or carries sand and rocks (streambed material) in the streamflow direction through a condition called scour, which is evaluated further in the hydrology/floodplains discussion in Section 2.8.

##### ***Groundwater***

No groundwater was observed during field explorations conducted in support of the *Preliminary Geotechnical Design Report*. As discussed in Section 2.9.2.5, groundwater is estimated to be more than 200 ft below ground surface. According to the State Department of Water Resources, the groundwater level at a nearby well

(#03S02E18K001S) was 1,557 ft, or approximately 268 ft below the ground surface elevation of the Project site. Groundwater levels are subject to seasonal fluctuations and may vary over time. Locally perched groundwater or surface water may also occur during or following periods of intense rainfall.

### **2.10.3 Environmental Consequences**

#### **2.10.3.1 Permanent Impacts**

##### ***Build Alternatives***

The Build Alternatives would alter existing landforms due to grading and cut-and-fill slopes. Those impacts would not be substantial because grading would be limited and wing walls and bridge abutments would be used in many locations to minimize cut and fill. The road, structures, slopes, and other features of the Build Alternatives could be impacted by ground motion during seismic events. The primary geologic and geotechnical constraints potentially affecting the design and construction of the Build Alternatives are:

- Severe ground-shaking accelerations due to the presence of nearby active faults, including the San Gorgonio Fault Zone and the San Andreas Fault Zone,
- Slope stability in areas of rockfalls, and
- Erosion and surface instability in areas adjacent to Smith Creek and the San Gorgonio River.

##### ***Topographic Features***

Under the Build Alternatives, the San Gorgonio River and Smith Creek would be impacted by the construction of bridges. Cuts of up to 100 ft would be required into granitic bedrock, and fills of up to 60 ft are anticipated along the proposed roadway alignment.

The *Preliminary Geotechnical Design Report* (August 2014) did not identify any geologic or topographic features potentially requiring protection adjacent to or within the Project area. Therefore, the Build Alternatives would not result in adverse effects to those types of resources.

##### ***Ground Surface Rupture***

Active and potentially active faults are located within the Project vicinity. According to the CGS, there are no Alquist-Priolo Earthquake Fault Zone crossings in the Project area. Therefore, the risk for ground surface rupture is low.

### ***Faulting/Seismicity***

Severe seismic shaking is likely to occur in the Project area during the life of the improvements under the Build Alternatives. The Project area is located in seismically active Southern California and is within the influence area of several fault systems that are considered active (e.g., San Gorgonio and San Andreas Fault Zones). In general, the Project facilities will be designed to accommodate the expected ground accelerations through compliance with applicable building and seismic codes, including Caltrans Standard Specifications. As a result, the potential for structural damage can be substantially reduced or avoided through seismic engineering design.

### ***Corrosive Soils***

Soils within the Project area do not meet the Caltrans criteria for corrosive soils.

### ***Landslides and Cut-and-Fill Slopes***

Cut slopes of up to 100 ft into granitic rock would be required for the improvements under the Build Alternatives. Bridge abutments and fly walls are anticipated to be required to ensure slope stability for the Build Alternatives. In addition, new embankments and fill slopes will be required in various areas along the Project alignment. The embankments and fills may have slopes constructed at 2H:1V (horizontal to vertical) slope gradients.

The soil and rock material excavated (cut) during construction of the Build Alternatives would be used as fill elsewhere in the Project's construction. The amounts of excavated material anticipated to be used as fill in the Project construction under the Build Alternatives are summarized in Table 2.10.2. In addition to the anticipated amount of cut from the Project site, soil material would be imported for areas needing additional fill material. The amounts of imported fill material anticipated to be used during the construction of the Build Alternatives are also summarized in Table 2.10.2.

**Table 2.10.2 Summary of Cut-and-Fill Amounts**

<b>Alternative</b>	<b>Cut Material<sup>1</sup> (cubic yards)</b>	<b>Additional Imported Fill (cubic yards)</b>
Alternative 5	1,201,700	6,200
Alternative 12 (Preferred Alternative)	412,200	533,100

Source: Kimley-Horn and Associates, Inc. (2016).

<sup>1</sup> The cut material would be used as fill material elsewhere on the Project site during construction of Alternative 5 and Alternative 12 (Preferred Alternative).



### *Liquefaction and Seismic Compaction*

As stated above, the potential for liquefaction or seismic compaction within the Project area is very low. Therefore, the potential for adverse effects on structures associated with the Project as a result of liquefaction and/or seismic compaction is very low.

### *Erosion*

Impacts related to erosion occurring after the completion of construction that may affect the traveling public or the Project facilities can be substantially reduced through design and grading techniques. Refer to avoidance and minimization Measures WQ-1 and WQ-2 in Section 2.9, Water Quality and Storm Water Runoff, for additional discussion regarding construction-related water quality issues and mitigation, including Best Management Practices (BMPs). Both Build Alternatives would result in a potential for erosion and a need for sensitive design and grading techniques to reduce erosion.

### *Tsunami and Seiches Potential*

The Project area is approximately 60 mi from the Orange County coastline. Therefore, the Project is not at risk of inundation due to a tsunami. In addition, because there are no large bodies of water near the Project area, the Project is not at risk of seiches.

### *Bridge Design*

A multi-span structure is proposed for the crossings over the San Gorgonio River and Smith Creek. Based on preliminary Project information and subsurface condition data, the proposed bridges may be supported by a deep foundation system in very dense soil and/or competent bedrock. Due to the potential for the soil and/or bedrock to resist pile-driving, cast-in-drilled hole (CIDH) piles are proposed for supporting the bridges. Alternative foundations for both bridges include other deep-pile foundation systems embedded in dense alluvial materials or granitic rock, such as driven-steel H-piles, driven-steel pipes, or large-diameter shafts drilled into dense alluvial materials or granitic rock.

### **No Build Alternative**

Under the No Build Alternative, existing seismic and other geologic hazards would continue to potentially affect the existing Project area. However, the grading and use of cut-and-fill slopes that are required for the Project would not occur under the No Build Alternative.

### **2.10.3.2 Temporary Impacts**

#### ***Build Alternatives***

Construction activities may temporarily disturb soil within or immediately adjacent to the Project area, primarily in the areas immediately adjacent to work areas, heavy equipment traffic areas, and material laydown areas.

During construction of the Build Alternatives, excavated soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The Project would be required to adhere to the requirements of the Construction General Permit and implement erosion and sediment control BMPs specifically identified in the Project's Storm Water Pollution Prevention Plan (SWPPP) to keep sediment from moving off site into receiving waters. Refer to Section 2.9, Water Quality and Storm Water Runoff, for additional information regarding construction-related water quality issues and mitigation.

Worker safety hazards resulting from erosion during construction activities would be minimized with implementation of the requirements outlined in the General Construction Permit and the erosion and sediment control BMPs identified in the SWPPP.

Construction activities for the Build Alternatives could be impacted by ground motion from seismic activities if an earthquake were to occur during construction. Implementation of safe construction practices and compliance with Caltrans and California Division of Occupational Safety and Health Administration (Cal-OSHA) requirements would minimize any impacts to worker safety during construction activities.

In general, surface boulders and core stones within the upper 7 ft of granitic rock should be rippable. From approximately 7–15 ft, granitic rock will require moderate to heavy ripping. Non-rippable granitic bedrock may be present in areas where excavations would be deeper than 15 ft. Blasting would be required for non-rippable granitic rock for excavations deeper than 15 ft.

The Build Alternatives may require blasting in areas underlain by granitic bedrock. If, during final design, it is determined that blasting is required, avoidance and minimization Measure GEO-3 requires the preparation of a blasting plan that will identify specific requirements (e.g., hours that activities may occur, notification of

activities to nearby property owners, and measures to minimize noise, vibration, and dust).

### **No Build Alternative**

Under the No Build Alternative, the temporary impacts discussed above for the Build Alternatives would not occur because there would be no construction of the Project improvements under this alternative.

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

The following avoidance and minimization measures are proposed to reduce or avoid potentially adverse effects to the Project as a result of seismic and geologic conditions in the Project area:

**GEO-1** During final design, the County of Riverside's (County) Project Engineer, or a Project Geotechnical Engineer or Project Geologist under contract to the County, will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards (e.g., rock falls, seismic shaking, or related secondary seismic impacts) that may be present along the Project alignment. The performance standard for this report will be the geotechnical design standards of the State of California and the California Department of Transportation (Caltrans), as applicable.

The report will include, but not be limited to, the following:

- Evaluation of potential ground shaking and recommendations regarding construction procedures and/or design criteria to minimize the effect of ground shaking and effects related to ground shaking in the long term.
- Demonstration that stabilization measures such as abutments, flywalls, or excavations will be implemented in the existing rockfall areas, or that stabilization measures independent of the abutments and/or flywalls are included in the final design.
- Demonstration that the design of all proposed abutments and/or flywalls is geotechnically suitable for project-area soils, and verification that the Project design has considered and addressed the possibility of scour associated with the San Gorgonio River and Smith Creek.

- Demonstration that side slopes can be designed and graded so that surface erosion of the engineered fill is not increased compared to existing natural conditions.

The County's Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications. The County's Resident Engineer will require the Construction Contractor to implement the measures recommended in the design-level geotechnical report as included in the Project specifications.

**GEO-2** The County's Resident Engineer will maintain a quality assurance/quality control plan during construction. The plan will include observing, monitoring, and testing by the Project Geotechnical Engineer and/or the Project Geologist under contract to the County prior to and during construction. The purpose of the plan is to confirm that the geotechnical/geologic recommendations from the design-level geotechnical report and from standard design and construction practices are fulfilled by the Construction Contractor. Additionally, if different site conditions are encountered, the plan shall allow appropriate changes to be made to accommodate such issues. The geotechnical engineer or geologist will submit weekly reports to the County (activities within County jurisdiction), the City (activities within City jurisdiction), and the Morongo Band of Mission Indians (activities within Tribal jurisdiction) during all project-related grading, excavation, and construction activities.

**GEO-3** If blasting is required, the County's Project Engineer will require the Construction Contractor to prepare a blasting plan to minimize potential blasting hazards related to blasting activities. The blasting plan will address all applicable standards in accordance with the United States Department of the Interior, Office of Surface Mining. The issues to be addressed in the blasting plan include, but are not limited to: the hours of blasting activity, notification of adjacent property owners, noise and vibration, and dust control.

**GEO-4** During construction, foundation excavations will be observed by a representative of the Project Geotechnical Engineer to evaluate

whether the exposed soil conditions are consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required. Excavation depths greater than 5 feet (ft) will need to be sloped and shored in accordance with California Division of Occupational Safety and Health Administration (Cal-OSHA) guidelines. For temporary construction purposes, a slope ratio of 1H:1V (horizontal:vertical) may be used for cuts in existing fill not exceeding 20 ft to a depth 5 ft above the water table. The top of the excavation will be a minimum of 15 ft from the edge of the existing improvements. Excavations steeper than those recommended or closer than 15 ft from an existing improvement will be shored in accordance with applicable Cal-OSHA codes and regulations.

**GEO-5** Upon development of the final bridge plans, the County's Project Geotechnical Engineer or Project Geologist under contract to the County will conduct a field investigation with one boring located near each proposed abutment and/or bent location where no borings have been previously drilled. These borings will be drilled to a depth of 60–100 ft or to Standard Penetration Test, and modified California split-spoon/barrel sampling at 5 ft intervals to evaluate the soil profile type. Additional sampling will be needed within the structure backfill to evaluate potential settlement.

Laboratory testing will also need to be conducted for shear strength, unit weight, moisture content, and if necessary, consolidation (compression) testing of the on-site soil and granitic rock to evaluate soil bearing capacity, settlement, and the use of spread footings and/or deep foundation systems. Appropriate tests will be conducted to evaluate the suitability of on-site materials for backfill. Corrosion testing will be performed on soils expected to be in contact with proposed structures.

Refer also to Section 2.9, Water Quality and Storm Water Runoff, for additional measures related to soil erosion, including BMPs.

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## 2.11 Paleontology

This section is based on the *Paleontological Resources Technical Memorandum* (February 2017).

### 2.11.1 Regulatory Setting

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.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

- 23 United States Code (USC) 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.
- 23 United States Code (USC) 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

### 2.11.2 Affected Environment

Project plans, geologic maps of the Project area, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the Project area and whether fossils have been recovered within the Project area or from those or similar geologic units elsewhere in the region.

Geologic mapping indicates the Project area contains Holocene (less than 11,700 years ago) Surficial Sediments, Pleistocene (11,700–2.588 million years ago [Ma]) Older Surficial Sediments, Cretaceous (66.0–145.0 Ma) plutonic rocks, and Paleozoic (251.9–541.0 Ma) metasedimentary rocks (Figure 2.11-1). The Surficial Sediments consist of poorly to moderately sorted gravel, sand, and silt. The Surficial Sediments are composed of sand and gravel eroded from the surrounding higher elevations and deposited along stream channels and across flood plains and valleys in the area. The Older Surficial Sediments consist of sand and gravel eroded from the San Bernardino Mountains to the north and deposited in a fan or lobe shape in the San Gorgonio Pass area. The plutonic rocks are light gray in color and composed mainly of quartz diorite; they formed as magma intruded older rocks and cooled below the surface.

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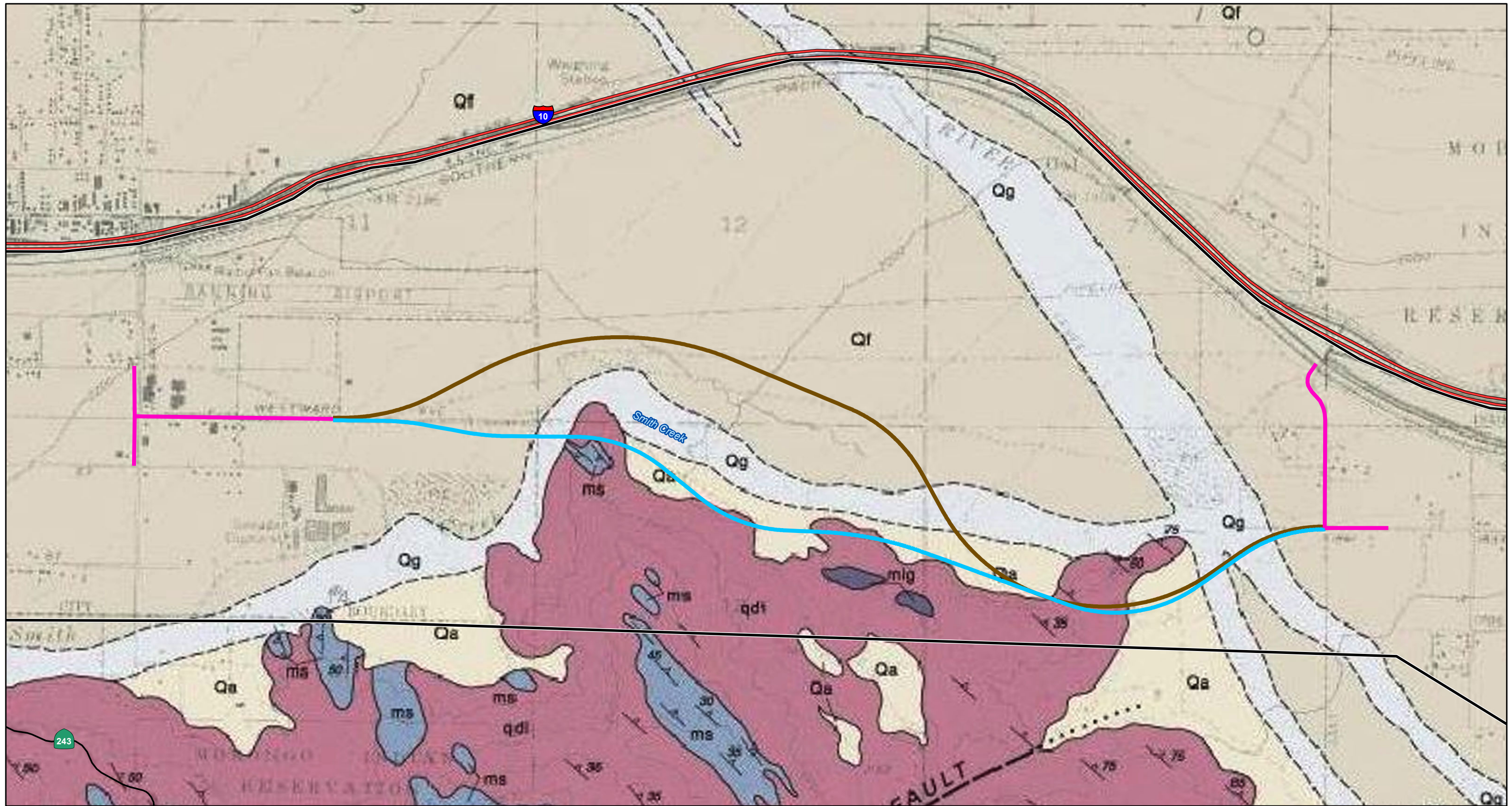


FIGURE 2.11-1

LEGEND

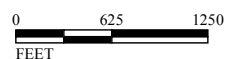
- Study Area
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)

Geology

- Qa - Alluvial sand and gravel
- Qg - Alluvial gravel and sand
- Older Surficial Sediments**
- Qf - Alluvial fan of San Gorgonio Pass
- Qoa - Alluvial fans

Dike Rocks

- mig - Migmatic rocks
- Plutonic Rocks**
- qdi - Granitic rock
- Metasedimentary Rocks**
- ms - Mica schist-phyllite



SOURCE: KHA (2012); ESRI (2014); Jennings (1994); Dibblee (2003/2004)

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The metasedimentary rocks are predominantly schist-phyllite with thin lenses of marble in some places. These rocks were originally deposited in a marine environment and were later metamorphosed through heat and pressure, resulting in physical and/or chemical changes to the original rock.

### **2.11.3 Environmental Consequences**

#### **2.11.3.1 Temporary Impacts**

##### ***No Build Alternative***

Under the No Build Alternative, none of the proposed improvements would be constructed. The No Build Alternative would maintain the existing conditions; therefore, the No Build Alternative would not result in temporary impacts to paleontological resources as a result of construction activities.

##### ***Build Alternative***

The construction of the Build Alternative would not result in temporary impacts to paleontological resources because the impacts to those types of resources during construction would be considered permanent as described in Section 2.11.3.2.

#### **2.11.3.2 Permanent Impacts**

##### ***No Build Alternative***

Under the No Build Alternative, none of the proposed improvements would be constructed. The No Build Alternative would maintain the existing conditions; therefore, the No Build Alternative would not result in permanent impacts to paleontological resources as a result of construction activities.

##### ***Build Alternative***

Scientifically important fossils from the Surficial Sediments are not expected, and therefore, this geologic unit is considered to have low paleontological sensitivity. However, Pleistocene deposits similar to the Older Surficial Sediments have produced a variety of scientifically important fossils elsewhere in the County and the region. These fossils include large and small mammals, reptiles, fish, invertebrates, and plants. Because there is a potential to find these types of fossils, the Older Surficial Sediments have high paleontological sensitivity. The plutonic rocks formed from magma below the surface, and the metasedimentary rocks have been altered by intense heat and pressure. As such, both of these rocks have no paleontological sensitivity.

Similar methods and depths of excavation are expected for development of Alternative 5 and Alternative 12 (Preferred Alternative) and would occur in deposits

with no, low, and high paleontological sensitivity along the alignments for both alternatives. However, while Alternative 5 passes through the hills and would involve more substantial cuts into the hillsides, the majority of this alignment is located in deposits with low or no paleontological sensitivity. The majority of Alternative 12 (Preferred Alternative) passes through deposits with high paleontological sensitivity. Therefore, while development of either alternative has the potential to impact scientifically important paleontological resources, development of Alternative 12 (Preferred Alternative) has more potential to impact paleontological resources.

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

The following measure is proposed to avoid and minimize potentially adverse effects to paleontological resources:

- PAL-1** The County of Riverside (County) shall appoint a qualified paleontologist that shall implement a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP should be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) and include, but not be limited to, the following:
1. The paleontologist, or his/her representative, shall attend a preconstruction meeting.
  2. Excavation and grading activities in geologic units with high paleontological sensitivity (Older Surficial Sediments) shall be identified and monitored by a qualified paleontological monitor. Deposits with low paleontological sensitivity (Surficial Sediments) shall be monitored on a spot-check basis. No paleontological monitoring is required in geologic units with no paleontological sensitivity (plutonic rocks, metasedimentary rocks).
  3. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and the paleontologist contacted to assess the find for scientific significance. If any fossil remains are discovered in sediments with a low paleontological sensitivity rating (Surficial Sediments), the paleontologist shall make recommendations as to whether monitoring shall be required in these sediments as well.



4. Collected resources that are scientifically significant shall be prepared to the point of identification and permanent preservation. This includes washing and picking of mass samples to recover small vertebrate and invertebrate fossils and removal of surplus sediment around larger specimens to reduce the storage volume for the repository and the storage cost for the Project.
5. Scientifically significant resources shall be identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of an appropriate facility that will make them available for study by qualified individuals.
6. At the conclusion of the monitoring program, a report of findings with an appended itemized inventory of specimens shall be prepared. When submitted to the County, the report and inventory will signify completion of the program to mitigate impacts to paleontological resources.

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## 2.12 Hazardous Waste

### 2.12.1 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 cleanup 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 cleanup of

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 construction of the Project.

### 2.12.2 Affected Environment

This section is based on the *Initial Site Assessment* (February 2016, updated September 2020) prepared for the Project. The following activities were conducted as part of the assessment:

- **Environmental Database Review (EDR):** A records search of selected federal, State, local, and EDR proprietary databases in accordance with the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments (E-1527-05) was conducted in December 2015 and September 2020 for properties within a 1-mile (mi) radius of the Project site.
- **Agency Records Review:** Review of data contained on the Department of Oil Gas and Geothermal Resources website, California Regional Water Quality Control Board (RWQCB) Geotracker online database, and Department of Toxic Substances Control (DTSC) online EnviroStor database.
- **Historical Research:** Review of aerial photographs and historical topographic maps.
- **Interviews:** Interviews were conducted with representatives from the local Morongo Band of Mission Indians, the City of Banning (Banning), and other property owners.
- **Previous Environmental Documents:** Review of the *Historical Resources Evaluation Report, Interstate 10 Bypass: Banning to Cabazon Project, Riverside County, California DEMO03L-5956 (210), Caltrans District 8, San Bernardino* (April 2016).
- **Site Reconnaissance:** Conducted a site visit of the study area on December 16, 2015, to search for visual indications of previous or current contamination. The goal of the *Initial Site Assessment* (February 2016, updated September 2020) was to determine the potential presence of recognized environmental conditions defined as the presence or likely presence of hazardous substances or petroleum products in, on, or at a property from a release, or indicative of a release to the

environment, or under conditions that pose a material threat of a future release to the environment. No recognized environmental conditions, visual indicators of potential hazardous substances, or petroleum product disposal or releases were found within the Project footprint.

Table 2.12.1 provides a listing of properties and/or facilities located either within the Project footprint or adjacent to it. These properties/facilities were identified in the database search as sites of potential concern. Figure 2.12-1 shows the location of the sites within or adjacent to the Project.

The *Initial Site Assessment* identified the following four areas of potential concern where previous practices could have resulted in soil contamination. All of these areas are in or adjacent to the Alternative 5 alignment.

- **Former Banning Rifle Range:** This site is located on the east end of Westward Avenue and just south of Alternative 5. According to the EnviroStor website, this site is listed in the Formerly Used Defense Sites (FUDS) database as “Inactive-action required as of September 13, 2012” for its use as a rifle range during World War II. Potential contaminants of concern in the soil include explosives, lead, perchlorate, and ammunition debris.
- **Former Orchards:** Based on historical information, interviews with property owners, and previous reports, two former orchards are located adjacent to Alternative 5. One is now within the Banning Water Reclamation Facility property along Westward Avenue and another is farther east near the center of the Alternative 5 alignment. No known assessment of soil in these portions of the Project area has been conducted for pesticides, herbicides, or heavy metals.
- **Sheep Dip:** Based on historical information, interviews with property owners, and previous reports, it appears that a concrete structure associated with a wooden corral was used as a sheep dip to kill parasites. This area is located approximately west of the former orchard near the center of the Alternative 5 alignment.
- **Informal Dump Sites:** Several areas with debris consisting of tires, household refuse, and other materials were encountered east of the end of Westward Avenue along the Alternative 5 alignment. The area seems to have been used as a public dump site prior to development of the Lamb Canyon Dump. It is possible that these areas could contain hazardous materials with the potential to impact nearby soils.

**Table 2.12.1 Potential Properties/Facilities with Hazardous Waste Concerns**

Figure ID <sup>1</sup>	Property Name	Address/Location (Approximate Distance and Direction from the Project Site)	Databases	Pertinent Information/Potential to Impact the Site
1	Jack Stanfield Co. Inc.	1910 East Westward Avenue (western side of the Project site)	<ul style="list-style-type: none"> <li>Emissions Inventory Data (EMI)</li> <li>Facility Index System (FINDS)</li> </ul>	This facility released organic hydrocarbon emissions between 1990 and 2004. No additional information has been provided. Based on the type of discharge, the potential for this facility to have affected the Project site is low.
2	Banning Rifle Range	Southwest of the Project site	<ul style="list-style-type: none"> <li>Formerly Used Defense Sites (FUDS)</li> </ul>	Inactive-action required as of September 13, 2012, for use as a firing range during World War II.
3	Banning Water Reclamation Facility (City of Banning Sewer Treatment Plant, Banning Wastewater Treatment Facility, and Banning STP-Non NPDES 01-0222)	2242 East Charles Street (southwestern portion of the Project site and the southern adjacent property)	<ul style="list-style-type: none"> <li>FINDS</li> <li>EMI</li> <li>California Hazardous Material Incident Report System (CHMIRS)</li> <li>Hazardous Materials Facility and Manifest Data (HAZNET)</li> <li>Waste Discharge System (WDS)</li> <li>National Pollutant Discharge Elimination System (NPDES)</li> </ul>	<ul style="list-style-type: none"> <li>This facility released total organic hydrocarbon gases and reactive organic gases in 1987.</li> <li>A historic spill occurred November 9, 2002. Reportedly, approximately 1,000 gallons of an unspecified substance was bypassed from the primary effluent and was released into a pond that is supposed to receive secondary effluent. The effluent was treated at the facility.</li> <li>The following wastes have been generated at this facility from 2004 and 2014: <ul style="list-style-type: none"> <li>Waste oil and mixed oil (reclaimed for reuse, including acid regeneration, organics recovery, etc. or recycled)</li> <li>Unspecified aqueous solution (recycled)</li> <li>Unspecified oil-containing waste (fuel blend and recovery and reclamation for use at another facility)</li> <li>Other organic solids (storage, bulking, and/or transfer off site)</li> <li>Off-specification, aged, or surplus organics (fuel blending and recovery at another facility)</li> <li>Other inorganic solid wastes</li> </ul> </li> <li>The facility actively treats domestic sewage combined with industrial waste. Sixteen notice of noncompliance</li> </ul>



**Table 2.12.1 Potential Properties/Facilities with Hazardous Waste Concerns**

Figure ID <sup>1</sup>	Property Name	Address/Location (Approximate Distance and Direction from the Project Site)	Databases	Pertinent Information/Potential to Impact the Site
				<p>letters were issued from November 1999 to May 2009 for various violations including the following: excess iron, chloride, and total dissolved solids, and failure to submit a design plan.</p> <ul style="list-style-type: none"> <li>The NPDES database controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Association with this database is not considered an environmental concern for the site.</li> </ul> <p>Based on the above listings, the potential for this facility to affect the Project site is low.</p>
4	Morongo Band of Mission Indians Tribal Land	Northern central portion of the Project site	<ul style="list-style-type: none"> <li>Indian Reservation Database (IDR)</li> <li>Indian Underground Storage Tank Database (IUST)</li> </ul>	<p>Two diesel underground storage tanks (USTs) were installed at “BIA Morongo” near Thunder Road and Seminole Drive in 1941 but are no longer in use. The location of the two USTs does not appear to be located on the Project site. Based on the type of database listing and the distance of the USTs from the Project, this facility is not considered an environmental concern for the Project site.</p>
5	Banning Airport	200 South Hathaway Street (500 feet north of the western portion of the Project site)	<ul style="list-style-type: none"> <li>WDS</li> <li>NPDES</li> <li>Statewide Environmental Evaluation and Planning System (SWEEPS) UST</li> <li>ENVIROSTOR (DTSC’s Site Mitigation and Brownfield Reuse Program EnviroStor Database)</li> </ul>	<p>A 10,000-gallon aviation gas UST and a 6,000-gallon aviation gas UST are located at the Banning Airport.</p> <p>The site may have a FUDS listing after a military evaluation.</p> <p>Based on these listings, it is unlikely for this facility to have impacted the Project site due to lack of reported spills or leaks.</p>

**Table 2.12.1 Potential Properties/Facilities with Hazardous Waste Concerns**

Figure ID <sup>1</sup>	Property Name	Address/Location (Approximate Distance and Direction from the Project Site)	Databases	Pertinent Information/Potential to Impact the Site
6	Chevron Station No. 9-7410	48690 Seminole Drive (950 feet north of Apache Trail)	<ul style="list-style-type: none"> <li>California Environmental Protection Agency Listing (HIST CORTESE)</li> <li>Leaking Underground Storage Tank (LUST)</li> <li>California State Water Resources Control Board UST List CA FID UST</li> <li>SWEEPS UST</li> <li>Historic Underground Storage Tank (HIST UST)</li> </ul>	<p>A gasoline release occurred in July 1992, and the resulting case was closed in April 1994.</p> <p>There are active USTs at the facility.</p> <p>Based on these listings, it is unlikely for this facility to have impacted the Project site due to the status of the LUST case and lack of additional reported spills or leaks.</p>
7	Perfection Plating	1284 East Lincoln Street (940 feet northwest of the Project site)	<ul style="list-style-type: none"> <li>Resource Conservation and Recovery Act –Small Quantity Generator (RCRA-SQG)</li> <li>ENVIROSTOR</li> </ul>	<p>This facility is listed as generating corrosive waste, chromium, and wastewater treatment sludge from electroplating operations. No violations are found.</p> <p>Case listed as no further action in September 2010. Contaminants of concern (COCs) impacting soil included tetrachloroethylene (PCE), trichloroethylene (TCE), and Chromium VI.</p>
8	TYCO Electronics Corporation (Deutsch Engineered Connecting Devices)	700 South Hathaway Street (470 feet north of Project site)	<ul style="list-style-type: none"> <li>CHMIRS</li> <li>Voluntary Cleanup Program (VCP)</li> <li>ENVIROSTOR</li> <li>RCRA-SQG</li> <li>FINDS</li> </ul>	<p>Ten pounds of neutralized lime scale spilled at this facility in 1994.</p> <p>Inactive as of March 2015. March 2015 site characterization report identified PCE, TCE, and cadmium.</p>
9	Robertson's Ready mix (Match Corporation Cabazon Plant, Beaumont Concrete Company, Cabazon Plant 11, Shank Balsour Beatty)	13990 Apache Trail (northeastern adjacent property)	<ul style="list-style-type: none"> <li>UST</li> <li>EMI</li> <li>RGA LUST</li> <li>Recovered Government Archive Landfill (RGA LF)</li> <li>CA FID UST</li> <li>TRIS</li> </ul>	<p>Listed from 2000 to 2012 as an RGA LUST.</p> <p>Listed as an RGA Landfill in 2000.</p> <p>A LUST case closed as of January 2000.</p> <p>Diesel, waste oil, hydraulic, or lubricating oil potentially impacted soil at the facility.</p>

**Table 2.12.1 Potential Properties/Facilities with Hazardous Waste Concerns**

Figure ID <sup>1</sup>	Property Name	Address/Location (Approximate Distance and Direction from the Project Site)	Databases	Pertinent Information/Potential to Impact the Site
			<ul style="list-style-type: none"> <li>• HAZNET</li> <li>• NPDES</li> <li>• HIST CORTESE</li> <li>• LUST</li> <li>• SWEEPS UST</li> <li>• WDS</li> <li>• FINDS</li> </ul>	<p>Active USTs are at the facility.</p> <p>Based on these listings, it is unlikely for this facility to have impacted the Project site due to the status of the LUST case and lack of additional reported spills or leaks.</p>
10	L to Z ENT Inc. (D&W Law)	896 South Hathaway Street (southwestern adjacent property)	<ul style="list-style-type: none"> <li>• FINDS</li> <li>• WDS</li> <li>• HAZNET</li> <li>• NPDES</li> </ul>	<p>This is an industrial facility that treats and/or disposes of liquid or semisolid wastes.</p> <p>Based on this listing, it is unlikely for this facility to have impacted the Project site due to lack of reported spills or leaks.</p>
11	Informal Dump Sites (debris scatter)	There are 3 dump sites. From west to east, one site is bisected by Alternative 5, one site is 370 ft from the Alternative 5 alignment, and one site is 423 ft from the Alternative 5 alignment.	<ul style="list-style-type: none"> <li>• Historical information</li> <li>• Interview with City of Banning employees</li> <li>• Field observation</li> <li>• Historical Property Survey Report (HPSR) (August 2016) data</li> </ul>	<p>Consists of tires, household refuse, and potentially other "surface layer of artifacts," dating back to the 1920s and 1930s.</p> <p>Alternative 5 bisects and directly impacts the westernmost of the 3 dump sites. It is possible that Alternative 5 would impact the two eastern informal dump sites due to their proximity to Alternative 5. This will be further evaluated during future Phase II site investigations. Soil sampling is recommended to determine if liability is associated with a right-of-way parcel acquisition and to determine the nature of suspected impacts, and construction worker health and safety protocols, if special handling of materials is necessary, and if disposal alternatives may be necessary.</p>
12	Former Sheep Dip	407 ft from the Alternative 5 alignment	<ul style="list-style-type: none"> <li>• Historical information</li> <li>• Interview with property owners</li> <li>• HPSR (August 2016) data</li> </ul>	<p>A concrete structure used as a sheep dip to kill parasites.</p> <p>No known assessment of soil adjacent to the sheep dip has been conducted for pesticides.</p>

**Table 2.12.1 Potential Properties/Facilities with Hazardous Waste Concerns**

Figure ID <sup>1</sup>	Property Name	Address/Location (Approximate Distance and Direction from the Project Site)	Databases	Pertinent Information/Potential to Impact the Site
13	Former Orchards	South of E. Westward Avenue (158 ft from Alternative 5 alignment), and 150 ft from Alternative 5 alignment	<ul style="list-style-type: none"> <li>• Historical information</li> <li>• Interview with property owners and other individuals</li> <li>• HPSR (August 2016) data</li> </ul>	<p>Two former orchard locations, existing approximately between 1941–1956 (central location) and 1953–1978 (western location, south of E. Westward Avenue)</p> <p>No known assessment of soil on this portion of the site has been conducted for pesticides.</p>

Sources: *Initial Site Assessment* (February 2016, updated September 2020).

<sup>1</sup> The locations of these facilities are shown on Figure 2.12-1.



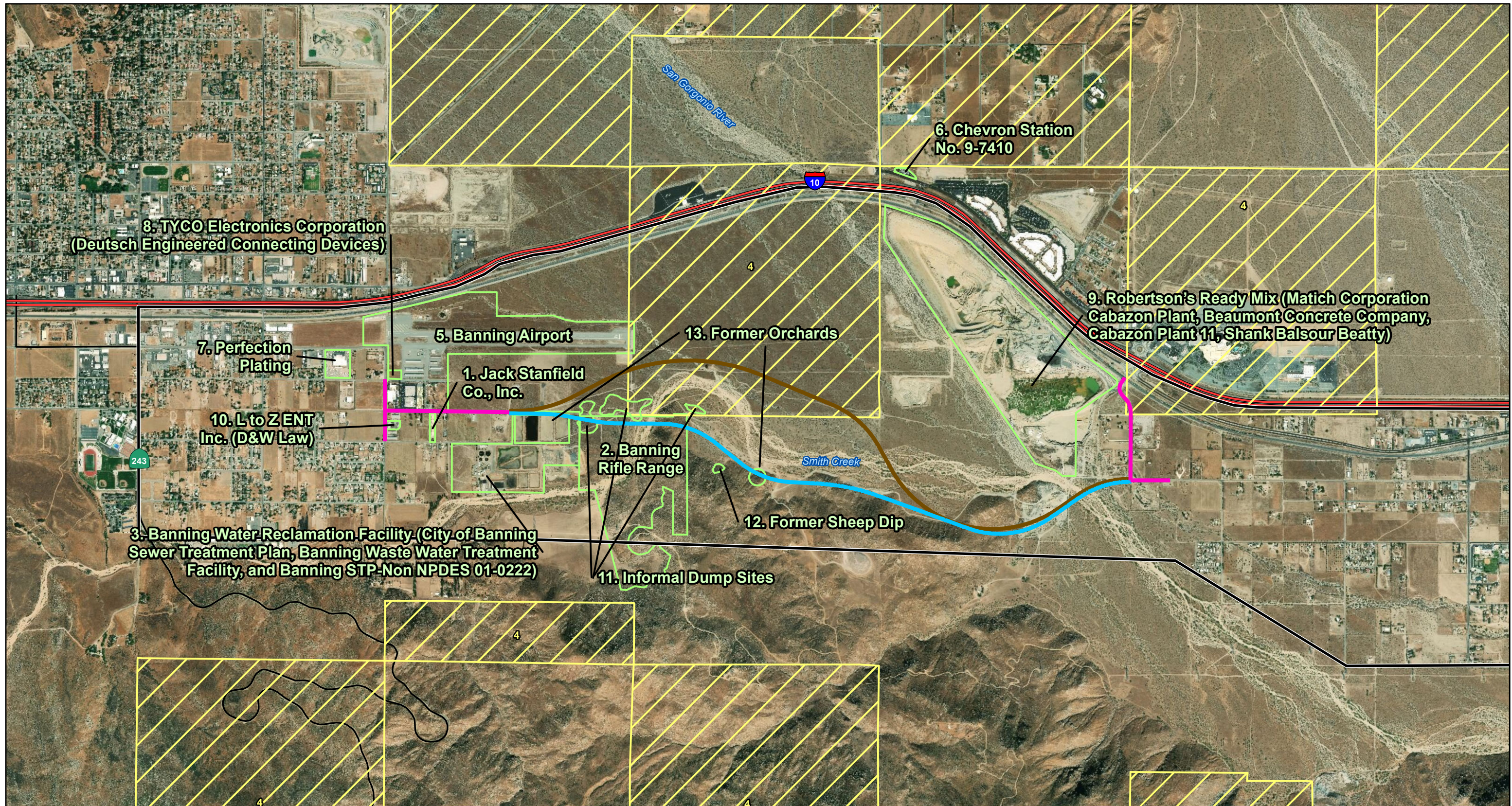


FIGURE 2.12-1

LEGEND

- Study Area
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)
- Potential Hazardous Waste Concern Site
- Morongo Reservation

Note: The approximate location of the two diesel underground storage tanks (USTs) (number 4) on Morongo Band of Mission Indian Tribal Land are unknown. Therefore, they are not included on this figure.



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## **2.12.3 Environmental Consequences**

### **2.12.3.1 Temporary Impacts**

#### ***No Build Alternative***

The No Build Alternative does not include any improvements in the study area. The No Build Alternative would not involve ground disturbance or construction activities in the study area; therefore, no temporary adverse effects related to hazardous waste/materials would occur.

#### ***Alternative 5***

Pesticides could remain in undeveloped areas of historical pesticide use in the Project area (e.g., orchards, sheep dip), and construction workers could be exposed to them. Potential contaminants of concern in the soil in the former Banning Rifle Range area could include explosives, lead, perchlorate, and munitions debris. However, based on information from a site investigation of this property in 2011, munitions debris or explosives of concern are not expected to be encountered during construction. If they are, an environmental consultant and/or ordnance expert should be retained to assess the conditions and make recommendations for further assessment or action.

The informal dump site areas located in the western portion of the Project could have resulted in contamination of nearby soils. During grading or excavation within the area, hazardous concentrations of contaminants could be released into the environment and could potentially affect construction workers.

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures. There are standard regulations and California Department of Transportation (Caltrans) policies that must be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction to protect human health and the environment.

Measure HAZ-1 to avoid and/or minimize adverse effects is listed in Section 2.12.4 and includes conducting Site Investigations and soil sampling, and identifies potential remediation/avoidance procedures. Proper handling and disposal of hazardous waste and materials in accordance with local, State, and federal regulations prior to and during construction of Alternative 5, as applicable, would be conducted. With implementation of Measure HAZ-1, after selection of the preferred alternative, potential adverse effects related to hazardous materials would be addressed.

### **Alternative 12 (Preferred Alternative)**

No potential environmental concerns were identified in or adjacent to the Alternative 12 (Preferred Alternative) alignment. However, if hazardous materials or soil contamination should be uncovered during construction of Alternative 12 (Preferred Alternative), implementation of the measures listed in Section 2.12.4 would address potential adverse effects.

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures and regulations as discussed above for Alternative 5 to eliminate or reduce adverse effects.

#### **2.12.3.2 Permanent Impacts**

##### **No Build Alternative**

The No Build Alternative does not include improvements in the study area, and no adverse effects would result.

##### **Build Alternatives**

Routine operation and maintenance of either Build Alternative would not introduce new sources of hazardous materials or waste, with the exception of potential hazardous waste spills during vehicle transport. However, the transport of hazardous waste and/or materials is heavily regulated and is anticipated to continue to occur on Interstate 10 (I-10) rather than on the new bypass roadway. Therefore, no adverse effects related to hazardous wastes/materials (direct or indirect) beyond existing conditions would occur during operation of either Build Alternative.

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

The measures listed below apply to any hazardous waste or materials discovered during construction of the Build Alternatives.

**HAZ-1 Site Investigations.** Prior to completion of the Project Approval/ Environmental Document (PA/ED) phase, and following the selection of the preferred alternative, the County of Riverside (County) will conduct Site Investigations to determine the potential for contaminated soils at the following sites, if within the property being acquired for the Project (also included in Table 2.12.1):

- Jack Stanfield Co. Inc., 1910 East Westward Avenue (western side of the Project site; hydrocarbons).

- Banning Rifle Range southwest of the Project site; metals explosives, perchlorate, and ammunition debris)
- Banning Water Reclamation Facility (City of Banning Sewer Treatment Plant, Banning Wastewater Treatment Facility, and Banning STP-Non NPDES 01-0222). 2242 East Charles Street (southwestern portion of the Project site and the southern adjacent property; metals and solvents).
- Morongo Band of Mission Indians Tribal Land (northern central portion of the Project site; hydrocarbons).
- Banning Airport, 200 South Hathaway Street (500 feet [ft] north of the western portion of the Project site; hydrocarbons).
- Chevron Station No. 9-7410, 48690 Seminole Drive (950 ft north of Apache Trail; hydrocarbons).
- Perfection Plating, 1284 East Lincoln Street (940 ft northwest of the Project site; metals and solvents).
- TYCO Electronics Corporation (Deutsch Engineered Connecting Devices), 700 South Hathaway Street (470 ft north of project site).
- Robertson's Ready Mix (Matich Corporation Cabazon Plant, Beaumont Concrete Company, Cabazon Plant 11, Shank Balsour Beatty), 13990 Apache Trail (northeastern adjacent property; metals and solvents).
- L to Z ENT Inc. (D&W Law), 896 South Hathaway Street (southwestern adjacent property; metals, solvents, and hydrocarbons).
- Informal Dump Sites (debris scatter), (from west to east, 182 ft, 370 ft, and 423 ft from the Alternative 5 alignment; metals, solvents, and hydrocarbons).
- Former Sheep Dip (407 ft from the Alternative 5 alignment; pesticides).
- Former Orchards, South of E. Westward Avenue (158 ft from Alternative 5 alignment, and 150 ft from Alternative 5 alignment; pesticides, herbicides, or heavy metals).

The results of the Site Investigations soil sampling will determine if any liabilities or environmental concerns are associated with the right-of-way parcel acquisitions as a result of hazardous materials/wastes. Based on the results of the soil sampling, avoidance, minimization or mitigation measures may include, removal and disposal of impacted soils, or realignment of the Project to avoid impacted soils.

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## **2.13 Air Quality**

### **2.13.1 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 (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the 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 criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM<sub>10</sub>) and particles of 2.5 micrometers and smaller (PM<sub>2.5</sub>), lead (Pb), and sulfur dioxide (SO<sub>2</sub>). In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H<sub>2</sub>S), 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.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel “Conformity” requirement under the FCAA also applies.

#### **2.13.1.1 Conformity**

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS.

“Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional—or, planning and programming level—and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93

govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and in some areas (although not in California), sulfur dioxide (SO<sub>2</sub>). California has nonattainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO<sub>2</sub>, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP), and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and “open-to-traffic” schedule of a proposed transportation project are the same as described in the RTP and the FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

### **2.13.2 Affected Environment**

The information in this section is based on the *Air Quality Analysis* (December 2017) and the *Traffic Operational Analysis Revised Final Report* (April 2015) conducted for



the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project). The findings of those reports are summarized in this section.

### **2.13.2.1 Climatic Conditions**

Climate in the South Coast Air Basin (Basin) is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern boundary, and high mountains surround the rest of the Basin. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, and Santa Ana wind conditions do occur.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site that monitors temperature is the Banning Airport Station. The temperatures at this station are representative of those at the Project site. The annual average maximum temperature recorded at this station is 76.6°F, and the annual average minimum is 46.9°F. January is typically the coldest month in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin along the coastal side of the mountains. The climatological station closest to the site that monitors precipitation is the Banning Airport Station. The precipitation at this station is representative of that at the Project site. Average rainfall measured at this station varied from 3.5 inches in January to 0.65 inch or less between May and October, with an average annual total of 17.8 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific High. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed from midafternoon to late afternoon on hot summer days,

when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

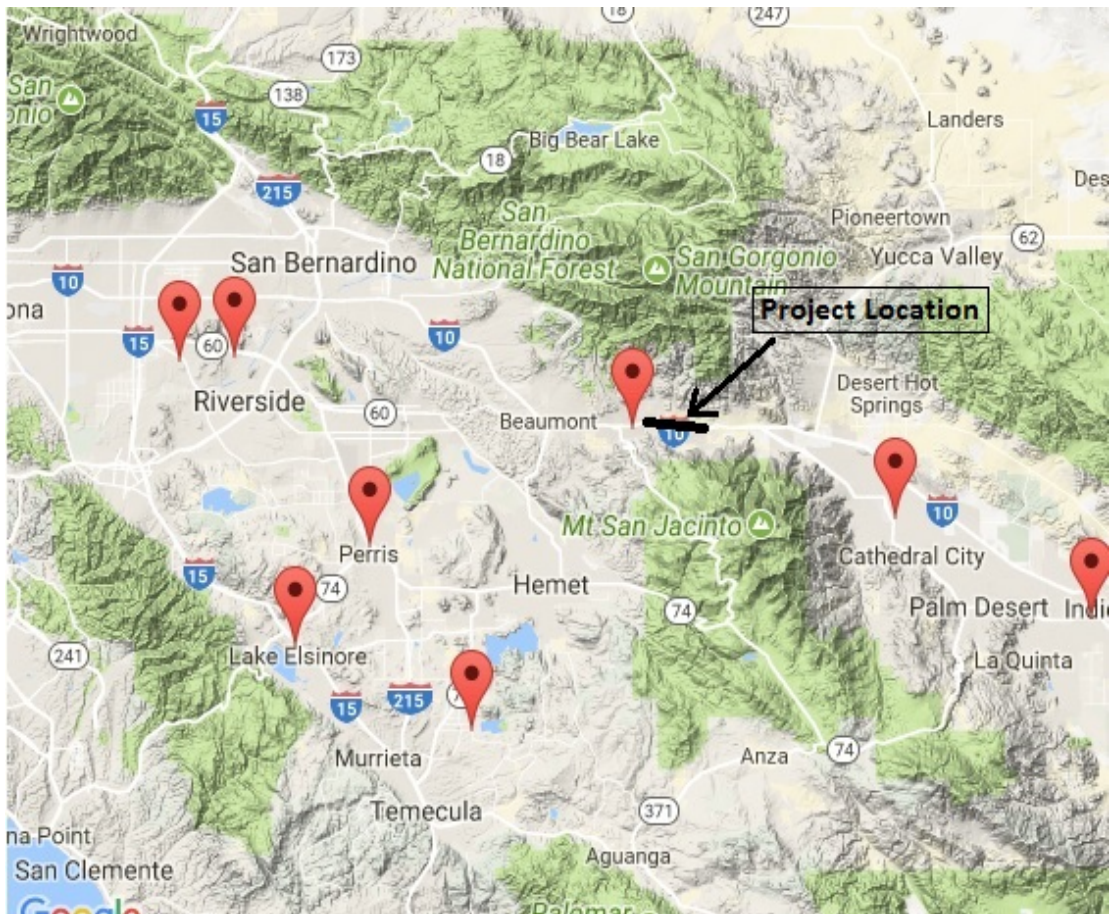
Inversion layers are significant in determining O<sub>3</sub> formation. O<sub>3</sub> and its precursors will mix and react to produce higher concentrations under an inversion. The inversion will also simultaneously trap and hold directly emitted pollutants such as CO. PM<sub>10</sub> is both directly emitted and created indirectly in the atmosphere as a result of chemical reactions. Concentration levels of these pollutants are directly related to inversion layers due to the limitation of mixing space.

Surface or radiation inversions are formed when the ground surface becomes cooler than the air above it during the night. The earth's surface goes through a radiative process on clear nights, when heat energy is transferred from the ground to a cooler night sky. As the earth's surface cools during the evening hours, the air directly above it also cools, while air higher up remains relatively warm. The inversion is destroyed when heat from the sun warms the ground, which in turn heats the lower layers of air; this heating stimulates the ground-level air to float up through the inversion layer.

The combination of stagnant wind conditions and low inversions produces the greatest concentration of pollutants. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in the urbanized areas in Los Angeles and Orange Counties are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and nitrogen oxides (NO<sub>x</sub>) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO<sub>x</sub> to form photochemical smog.

### **2.13.2.2 Monitored Air Quality**

The South Coast Air Quality Management District (SCAQMD) operates several air quality monitoring stations in the Basin. The Banning Airport Station monitors three of the five criteria pollutants: O<sub>3</sub>, NO<sub>2</sub>, and PM<sub>10</sub>. The closest monitoring station with SO<sub>2</sub> data is the Rubidoux Station. The closest monitoring station with CO and PM<sub>2.5</sub> data is the Palm Springs Station. Figure 2.13-1 shows the locations of the air quality monitoring stations near the Project. Air quality trends identified from data collected at all three air quality monitoring stations between 2015 and 2019 are listed in Table 2.13.1. The associated ambient air quality standards are provided in Table 2.13.2.



**Figure 2.13-1 Air Quality Monitoring Stations in Project Vicinity**

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**Table 2.13.1 Local Air Quality Levels**

Pollutant	Standard	2016	2017	2018	2019	2020
<b>Carbon Monoxide</b>						
Max 1-hour concentration (ppm)		3.1	1.0	1.1	1.3	0.8
No. days exceeded	State: 20 ppm	0	0	0	0	0
	Federal: 35 ppm	0	0	0	0	0
Max 8-hour concentration (ppm)		1.5	0.5	1.0	0.7	0.5
No. days exceeded	State: 9 ppm	0	0	0	0	0
	Federal: 9 ppm	0	0	0	0	0
<b>Ozone</b>						
Max 1-hour concentration (ppm)		0.128	0.128	0.119	0.119	0.150
No. days exceeded	State: 0.09 ppm	31	48	40	36	44
Max 8-hour concentration (ppm)		0.106	0.105	0.106	0.096	0.115
No. days exceeded	State: 0.07 ppm	45	59	52	46	53
	Federal: 0.07 ppm	45	59	52	46	53
<b>Particulates (PM<sub>10</sub>)</b>						
Max 24-hour concentration (mg/m <sup>3</sup> )		65	97	39	63	69
No. days exceeded	State: 50 mg/m <sup>3</sup>	3	1	0	2	2
	Federal: 150 mg/m <sup>3</sup>	0	0	0	0	0
Annual avg. concentration (mg/m <sup>3</sup> )		24.3	22.5	19.6	18.8	21.2
Exceeds Standard?	State: 20 mg/m <sup>3</sup>	Yes	Yes	No	No	Yes
<b>Fine Particulates (PM<sub>2.5</sub>)</b>						
Max 24-hour concentration (mg/m <sup>3</sup> )		14.7	14.5	30.2	15.5	23.9
No. days exceeded	Federal: 35 mg/m <sup>3</sup>	0	0	0	0	0
Annual avg. concentration (mg/m <sup>3</sup> )		5.5	6.1	6.0	6.1	6.4
Exceeds Standard?	State: 12 mg/m <sup>3</sup>	No	No	No	No	No
	Federal: 12 mg/m <sup>3</sup>	No	No	No	No	No
<b>Nitrogen Dioxide</b>						
Max 1-hour concentration (ppb):		46.9	56.3	50.6	56.0	51.1
No. days exceeded	State: 180 ppb	0	0	0	0	0
	Federal: 100 ppb	0	0	0	0	0
Annual avg. concentration (ppb):		7.9	8.0	8.5	7.5	8.5
Exceeds standard?	State: 30 ppb	No	No	No	No	No
	Federal: 53 ppb	No	No	No	No	No
<b>Sulfur Dioxide</b>						
Max 1-hour concentration (ppb)		5.6	2.5	1.7	1.8	2.2
No. days exceeded	State: 250 ppb	0	0	0	0	0
	Federal: 75 ppb	0	0	0	0	0

Sources: Environmental Protection Agency and California Air Resources Board (2015 to 2019).

\* = insufficient data available to determine the value.

µg/m<sup>3</sup> = micrograms per cubic meter

avg. = average

No. = Number

PM<sub>10</sub> = particulate matter less than 10 microns in size

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

ppb = parts per billion

ppm = parts per million

**Table 2.13.2 National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		Federal Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>2,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> )	1-Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> )	24-Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-		
Fine Particulate Matter (PM <sub>2.5</sub> )	24-Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Nondispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	None	Nondispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		-		
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>8</sup>	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (339 µg/m <sup>3</sup> )		100 ppb	None	
Lead <sup>12, 13</sup>	30-day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	-	-	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m <sup>3</sup>	Same as Primary Standard	
	Rolling 3-Month Average <sup>10</sup>	-		0.15 µg/m <sup>3</sup>		
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	0.14 ppm (for certain areas) <sup>10</sup>	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	-		-	0.5 ppm (1300 µg/m <sup>3</sup> )	
	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )		75 ppb (196 µg/m <sup>3</sup> )	-	
Visibility-Reducing Particles <sup>14</sup>	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	<b>No Federal Standards</b>		
Sulfates	24-Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>9</sup>	24-Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

Source: California Air Resources Board (May 4, 2016).

Table footnotes are provided on the following page.



Table 2.13.2 Footnotes:

- <sup>1</sup> California standards for O<sub>3</sub>, CO (except 8-hour Lake Tahoe), SO<sub>2</sub> (1- and 24-hour), NO<sub>2</sub>, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- <sup>2</sup> National standards (other than O<sub>3</sub>, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once per year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than 1. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current national policies.
- <sup>3</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- <sup>4</sup> Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- <sup>5</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- <sup>6</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- <sup>7</sup> Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
- <sup>8</sup> On October 1, 2015, the national 8-hour O<sub>3</sub> primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- <sup>9</sup> On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35 µg/m<sup>3</sup>, as was the annual secondary standard of 15 µg/m<sup>3</sup>. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150 µg/m<sup>3</sup> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- <sup>10</sup> To attain the 1-hour national standard, the 3-year average of the annual 98<sup>th</sup> percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- <sup>11</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99<sup>th</sup> percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
  
Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- <sup>12</sup> The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- <sup>13</sup> The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- <sup>14</sup> In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius

µg/m<sup>3</sup> = micrograms per cubic meter

ARB = California Air Resources Board

EPA = United States Environmental Protection Agency

mg/m<sup>3</sup> = milligrams per cubic meter

PM<sub>10</sub> = particulate matter less than 10 microns in size

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

ppm = parts per million

ppb = parts per billion

The following section briefly describes the types of pollutants monitored in the Project study area.

### **Carbon Monoxide**

CO is formed by the incomplete combustion of fossil fuels and is emitted almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is in attainment/maintenance for the federal CO standard and attainment for the State CO attainment standard. State and federal standards were not exceeded between 2012 and 2016.

### **Ozone**

O<sub>3</sub>, a colorless gas with a sharp odor, is one of a number of substances called photochemical oxidants (highly reactive secondary pollutants). These oxidants are formed when hydrocarbons, NO<sub>x</sub>, and related compounds interact in the presence of ultraviolet sunlight. The Basin is a non-attainment area for both the federal and State O<sub>3</sub> standards. The State 1-hour O<sub>3</sub> standard was exceeded 24 to 40 times per year in the last 5 years. The State 8-hour O<sub>3</sub> standard was exceeded 58 to 71 times per year in the last 5 years. The federal 8-hour O<sub>3</sub> standard was exceeded 38 to 53 times per year in the last 5 years.

### **Nitrogen Dioxide**

NO<sub>2</sub> is a reddish-brown gas with an odor similar to bleach and is a byproduct of fuel combustion that results from mobile and stationary sources. It has complex daily (diurnal) concentrations that are typically higher at night. The Basin has relatively low NO<sub>2</sub> concentrations, as very few monitoring stations have exceeded the State standard of 0.25 parts per million (ppm) (1-hour) since 1988. NO<sub>2</sub> is itself a regulated pollutant, but it also reacts with hydrocarbons in the presence of sunlight to form O<sub>3</sub> and other compounds that make up photochemical smog. NO<sub>2</sub> decreases lung function and may reduce resistance to infection. The entire Basin has not exceeded either the federal or State standards for NO<sub>2</sub> in the past 5 years according to published monitoring data. It is designated as a maintenance area under the federal standards and a non-attainment area under the State standards.

### **Sulfur Dioxide**

SO<sub>2</sub> is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO<sub>2</sub> levels. SO<sub>2</sub> irritates the respiratory tract, can injure lung tissue when combined with fine

particulate matter (PM<sub>2.5</sub>), and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO<sub>2</sub> standards. SO<sub>2</sub> levels are so low that the State no longer publishes monitoring data.

### **Coarse Particulate Matter**

PM<sub>10</sub> occurs from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM<sub>10</sub> scatters light and substantially reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. The State 24-hour PM<sub>10</sub> standard was exceeded 5 days over the last 5 years. The federal 24-hour PM<sub>10</sub> standard was not exceeded in the last 5 years. The annual average concentration exceeded the State standard in two of the past 5 years.

Over 99 percent of inhaled particulate matter is either exhaled or trapped in the upper areas of the respiratory system and expelled. The balance enters the windpipe and lungs, where some particulates cling to protective mucus and are removed up and out of the throat through the movement of bronchia and bronchioles. Other mechanisms, such as coughing, also filter out or remove particles. Collectively, these pulmonary clearance mechanisms protect the lungs from the majority of inhalable particles.

Irritating odors are often associated with particulates. Some examples of sources of these types of odors are gasoline and diesel engine exhausts, paint spraying, street paving, and trash burning.

### **Fine Particulate Matter**

PM<sub>2.5</sub> consists of fine particles and is believed to pose the greatest health risks. Because of their small size (approximately one-thirtieth the average width of a human hair), fine particles can lodge deeply in the lungs. Particulate matter primarily affects infants, children, the elderly, and those with pre-existing cardiopulmonary disease. The federal standard, which was challenged in the United States Court of Appeals for the District of Columbia Circuit on May 9, 2014, strengthened the annual PM<sub>2.5</sub> standard from 15 micrograms per cubic meter (µg/m<sup>3</sup>) to 12 µg/m<sup>3</sup>. The federal 24-hour standard was not exceeded in any of the past 5 years. The annual average concentration did not exceed the State standard over the past 5 years.

### **Volatile Organic Compounds and Reactive Organic Gases**

Hydrocarbon compounds are compounds containing various combinations of hydrogen and carbon atoms that exist in the ambient air. Volatile organic compounds (VOCs) contribute to the formation of smog and/or may themselves be toxic. VOCs

often have an odor (e.g., gasoline, alcohol, and solvents used in paints). There are no specific State or federal VOC thresholds because they are regulated by individual air districts as O<sub>3</sub> precursors. Reactive organic gases (ROGs) are a form of VOCs.

### Lead

Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the bloodstream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. With the exception of Los Angeles County, which is in non-attainment for the State and federal standards, the entire Basin is in attainment for the federal and State lead standards.

Historical ambient air quality data are used to classify the attainment status for the Basin. More specifically, the data collected at the air quality monitoring stations are used by the EPA to identify regions as attainment or non-attainment, depending on whether the region met the requirements in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The Basin’s attainment status for each of the criteria pollutants is listed in Table 2.13.3.

**Table 2.13.3 Attainment Status of Criteria Pollutants in the South Coast Air Basin**

Pollutant	State	Federal
O <sub>3</sub> (1-hour)	Nonattainment	Revoked June 2005
O <sub>3</sub> (8-hour)	Nonattainment	Extreme Nonattainment <sup>1</sup>
PM <sub>10</sub>	Nonattainment (24-Hour) Nonattainment (Annual)	Attainment/Maintenance (24-Hour)
PM <sub>2.5</sub> (1997 Standard)	Nonattainment (Annual)	Nonattainment (24-Hour) Nonattainment (Annual)
PM <sub>2.5</sub> (2006 Standard)	Nonattainment (Annual)	Nonattainment (24-Hour) Nonattainment (Annual)
PM <sub>2.5</sub> (2012 Standard)	Nonattainment (Annual)	Serious Nonattainment (24-Hour) Moderate Nonattainment (Annual)
CO	Attainment (1-Hour) Attainment (8-Hour)	Attainment/Maintenance (1-Hour) Attainment/Maintenance (8-Hour)
NO <sub>2</sub>	Attainment (1-Hour) Attainment (Annual)	Attainment/Unclassified (1-Hour) Attainment/Maintenance (Annual)
SO <sub>2</sub>	Attainment (1-hour) Attainment (24-hour)	Attainment/Unclassified (1-hour) Attainment/Unclassified (Annual)
Lead	Attainment (30-day average)	Attainment/Unclassified (3-month rolling)
All others	Attainment/Unclassified	Attainment/Unclassified

Source: *Air Quality Standards and Area Designations* (California Air Resources Board 2015).

<http://www.arb.ca.gov/design/design.htm> (accessed May 27, 2020).

<sup>1</sup> Effective June 2010, the federal 8-hour O<sub>3</sub> non-attainment status was changed to extreme with an attainment date of 2024.

CO = carbon monoxide

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

NO<sub>2</sub> = nitrogen dioxide

PM<sub>10</sub> = particulate matter less than 10 microns in size

O<sub>3</sub> = ozone

### **2.13.2.3 Sensitive Receptors**

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. As shown in Figure 2.13-2, the majority of the sensitive receptors within or adjacent to the Project area are residential uses, primarily at the east and west ends of the Project.

## **2.13.3 Environmental Consequences**

### **2.13.3.1 Permanent Impacts**

#### ***Regional Emissions***

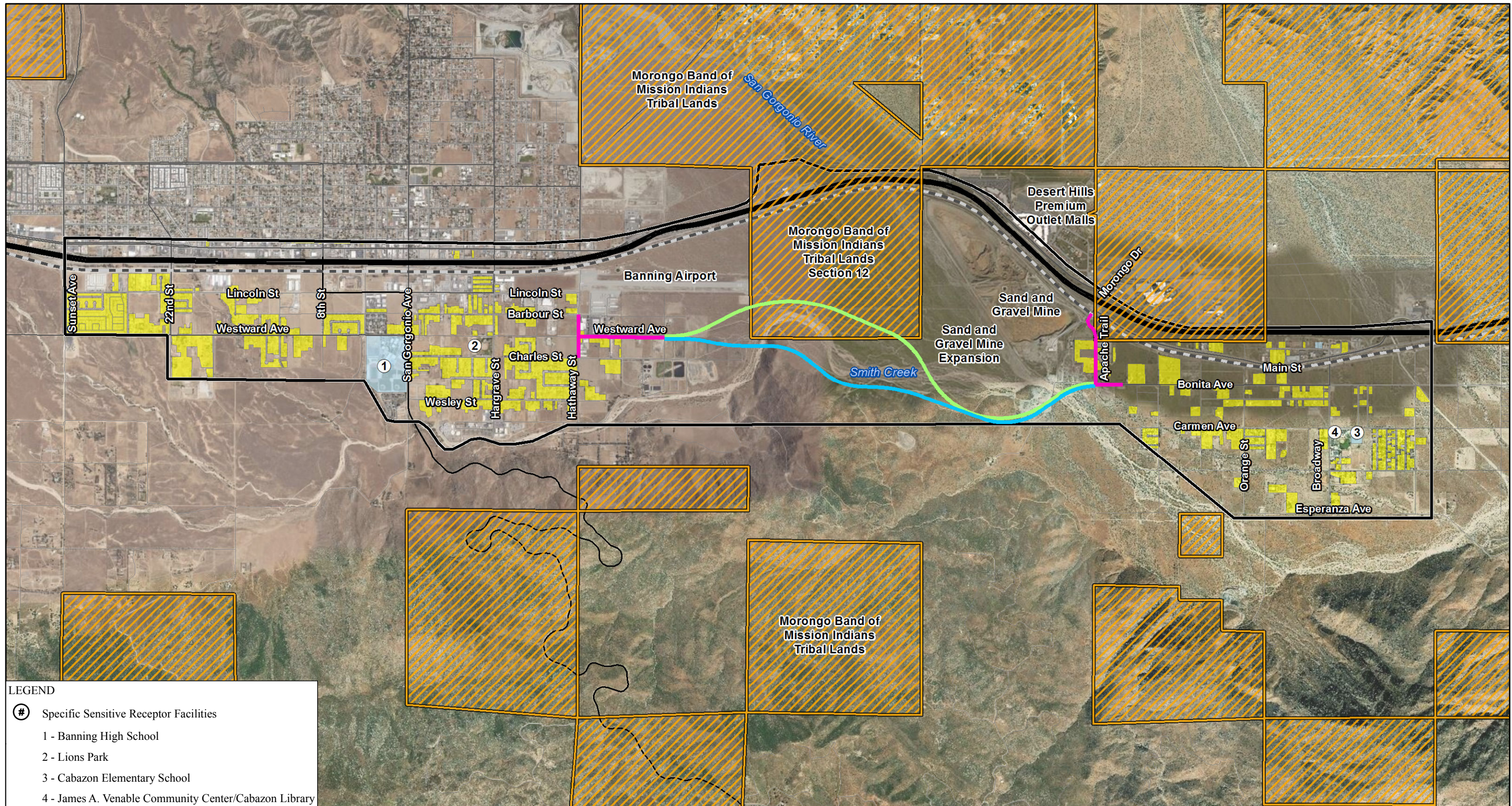
The purpose of the Project is to provide a local roadway connecting the City of Banning and the community of Cabazon and to provide a bypass for the I-10 in the event of freeway closures. The proposed I-10 Bypass does not generate new regional vehicular trips; therefore, no new regional vehicular emissions would occur. The Project would reduce the total vehicle miles traveled (VMT) within the Project area in addition to reducing the number of at-grade railroad crossings by almost 2,400 trips per day at Sunset Avenue and the UPRR. The removal of the at-grade crossing would eliminate the need for vehicles to idle while stopped at the railroad crossing and would increase the average vehicle speed along that corridor. Higher average vehicle speeds would generally result in lower rates of air pollutant emissions. As a result, the Project may have a beneficial effect by helping to reduce congestion within the area of the Project, which may result in a reduction in vehicle emissions.

#### ***Regional Conformity***

Conformity determinations require the analysis of direct and indirect emissions associated with the Project and their comparison to the without Project condition. If the total of direct and indirect emissions from the Project reaches or exceeds the emissions budgets, the Lead Agency must perform a conformity determination to demonstrate the positive conformity of the federal action.

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**LEGEND**

# Specific Sensitive Receptor Facilities

1 - Banning High School

2 - Lions Park

3 - Cabazon Elementary School

4 - James A. Venable Community Center/Cabazon Library

**LEGEND**

Project Area	Alternatives 5 and 12	Existing Land Use
Interstate 10	Alternative 5	Education
Arterial Highway	Alternative 12 (Preferred Alternative)	Residential
Union Pacific Railroad	Morongo Band of Mission Indians Tribal Lands	

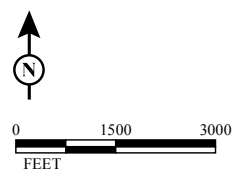


FIGURE 2.13-2

SOURCE: Bing Maps (2014); City of Banning (2016); County of Riverside (2015)  
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The Project is in the 2020 RTP/SCS<sup>1</sup>, which was found to be conforming by the FHWA/FTA on June 5, 2020. The Project is also in the 2019 FTIP,<sup>2</sup> which was found to be conforming by the FHWA/FTA on June 5, 2020 (Project ID: RIV031202).

Excerpts of the 2020 RTP and the 2019 FTIP are included in Appendix H.

Description: *I-10 Bypass South [formerly Ramsey St. Ext.]: Construct two lanes of roadway to provide a by-pass/network facility for the I-10, approx. 1/2 mile s/o I-10 between the eastern end of the city of Banning and Apache Trail in Cabazon. Other improvements include the construction of bridge crossings at Smith Creek and San Gorgonio River).* The Build Alternatives are consistent with the scope of design concept of the FTIP; therefore, the Build Alternatives are in conformance with the SIP.

### **Project-Level Conformity**

The Project is within an attainment/maintenance area for federal CO, a non-attainment area for federal PM<sub>2.5</sub>, and an attainment/maintenance area for federal PM<sub>10</sub>. Therefore, per 40 CFR 93, analyses are required for conformity purposes. However, the EPA does not require quantitative hot-spot analyses for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The Project-level particulate matter hot-spot analysis was presented to the Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG) for discussion and review on May 27, 2014. This Project was approved and concurred upon by Interagency Consultation at the TCWG meeting as a project that does not have adverse effects on air quality, and that meets the requirements of the FCAA and 40 CFR 93.116. The TCWG determined that the Project is not a project of air quality concern (POAQC). A copy of the TCWG finding is included in Appendix C of the *Air Quality Analysis* (December 2017). In addition, the FHWA provided the Conformity Determination on August 19, 2020. The FHWA Conformity Determination Letter and TCWG application form that includes the qualitative PM hot-spot analysis are provided in in Appendix H.

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<sup>1</sup> Southern California Association of Governments (SCAG). September 2020. *2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy* (2020 RTP/SCS). [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan\\_0.pdf](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf)

<sup>2</sup> Southern California Association of Governments (SCAG). September 2019. *Federal Transportation Improvement Program* (FTIP). <http://ftip.scag.ca.gov/Pages/2019/adopted.aspx>.

### **Carbon Monoxide**

The methodology required for a CO local analysis is summarized in the California Department of Transportation (Caltrans) Transportation Project-Level Carbon Monoxide Protocol (Protocol), Section 3 (Determination of Project Requirements) and Section 4 (Local Analysis). In Section 3, the Protocol provides two conformity requirement decision flowcharts that are designed to assist project sponsors in evaluating the requirements that apply to specific projects. Based on this Protocol, a screening analysis was conducted to determine whether the Project would result in any CO hot spots. As described in detail in the *Air Quality Analysis* (December 2017), and documented in Appendix A of that document, CO concentrations at the intersections under study will be lower than those reported for the maximum of the intersections analyzed in the CO attainment plan, because all of the conditions listed in Section 4.7.2 of the CO Protocol are satisfied. Thus, the Project is not expected to result in any concentrations exceeding the 1-hour or 8-hour CO standards. Therefore, the potential Project CO impact has been sufficiently addressed, and no further analysis is needed.

### **Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)**

The Project is within a non-attainment area for federal PM<sub>2.5</sub> and an attainment/maintenance area for federal PM<sub>10</sub> standards. Therefore, per 40 CFR 93, analyses are required for conformity purposes. However, the EPA does not require quantitative hot-spot analyses for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The Project does not qualify as a POAQC for the following reasons:

1. The Project would build a new two-lane roadway extending approximately 2.6 miles (mi) from the intersection of Hathaway Street/Westward Avenue in the City of Banning to the intersection of Bonita Avenue/Apache Trail in the unincorporated community of Cabazon. Based on the *Traffic Operations Analysis* (September 2014), the I-10 Bypass is anticipated to carry 5,179 average daily trips in 2022 and 17,900 average daily trips by 2038. Tables 5-2 and 5-3 in the *Air Quality Analysis* list the average daily traffic (ADT) and truck ADT volumes along I-10 and the proposed I-10 Bypass for the 2022 and 2038 conditions, respectively. The traffic volume along the proposed I-10 Bypass would not exceed the 125,000 average daily trip threshold or the 10,000 truck trip threshold for a POAQC. With the addition of the bypass road, volumes on I-10 will be slightly lower than what would be experienced if the Project were not built.
2. Tables 5-4, 5-5, 5-6, and 5-7 in the *Air Quality Analysis* lists the 2022 and 2038 intersection levels of service (LOS) for the No Build and Build conditions. As

shown, after mitigation, the Project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. As discussed in the *Traffic Operational Analysis Revised Final Report* (April 2015), it is recommended that Caltrans and the City of Banning monitor the intersection of I-10 eastbound ramps/8<sup>th</sup> Street to determine when intersection control should be revised to an all-way stop, as well as monitor the intersections of Charles Street/Hargrave Street and Barbour Street/Hathaway Street to determine when traffic signals are warranted.

3. The Project does not include the construction of a new bus or rail terminal.
4. The Project does not expand an existing bus or rail terminal.
5. The Project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

As stated above, the proposed Build Alternatives meet the FCAA requirements and 40 CFR 93.116. A *PM Conformity Hot Spot Analysis* for the I-10 Bypass Project was presented to SCAG TCWG on May 27, 2014. This Project was approved and concurred upon by Interagency Consultation at the TCWG meeting as a project that does not have adverse effects on air quality, and that meets the requirements of the FCAA and 40 CFR 93.116. A qualitative project level PM<sub>2.5</sub> and PM<sub>10</sub> hot-spot analysis has been conducted to assess whether the Project would cause or contribute to any new localized PM<sub>2.5</sub> or PM<sub>10</sub> violations, increase the frequency or severity of any existing violations, or delay timely attainment of the PM<sub>2.5</sub> and PM<sub>10</sub> NAAQS. Table 2.13.4 shows the PM<sub>10</sub> and PM<sub>2.5</sub> emissions using CT-EMFAC2014. A copy of the draft PM hot-spot analysis is included in Appendix E of the *Air Quality Analysis* (December 2017). The proposed Build Alternatives would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation, thus, the project will not delay the attainment or cause the area to become non-attainment for the Federal PM<sub>2.5</sub> and PM<sub>10</sub> standards.

### **Qualitative Project-Level Mobile Source Air Toxics**

In addition to the criteria air pollutants for which there are NAAQS, the EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries).

**Table 2.13.4 2038 PM<sub>10</sub> and PM<sub>2.5</sub> Emissions (lbs/day)**

Roadway / Pollutant		No Build		Build		Project Increase	
		Total Veh.	Trucks	Total Veh.	Trucks	Total Veh.	Trucks
I-10	PM <sub>10</sub>	1.76	0.28	1.65	0.26	-0.12	-0.02
	PM <sub>2.5</sub>	1.64	0.26	1.54	0.25	-0.11	-0.02
I-10 Bypass	PM <sub>10</sub>	0	0	0.12	0.02	0.12	0.02
	PM <sub>2.5</sub>	0	0	0.11	0.02	0.11	0.02

Compiled by LSA based on ADT from Table 5-3 in the Air Quality Analysis and CT-EMFAC2014.

Note: Using the Project roadway length of 3.3 miles to determine VMT

Assume the average speed along the I-10 would be 65 mph and along the I-10 Bypass would be 45mph

ADT = average daily traffic

PM<sub>10</sub> = particles of 10 micrometers or smaller

I-10 = Interstate 10

PM<sub>2.5</sub> = particles of 2.5 micrometers or smaller

lbs/day = pounds per day

Veh. = vehicle(s)

mph = miles per hour

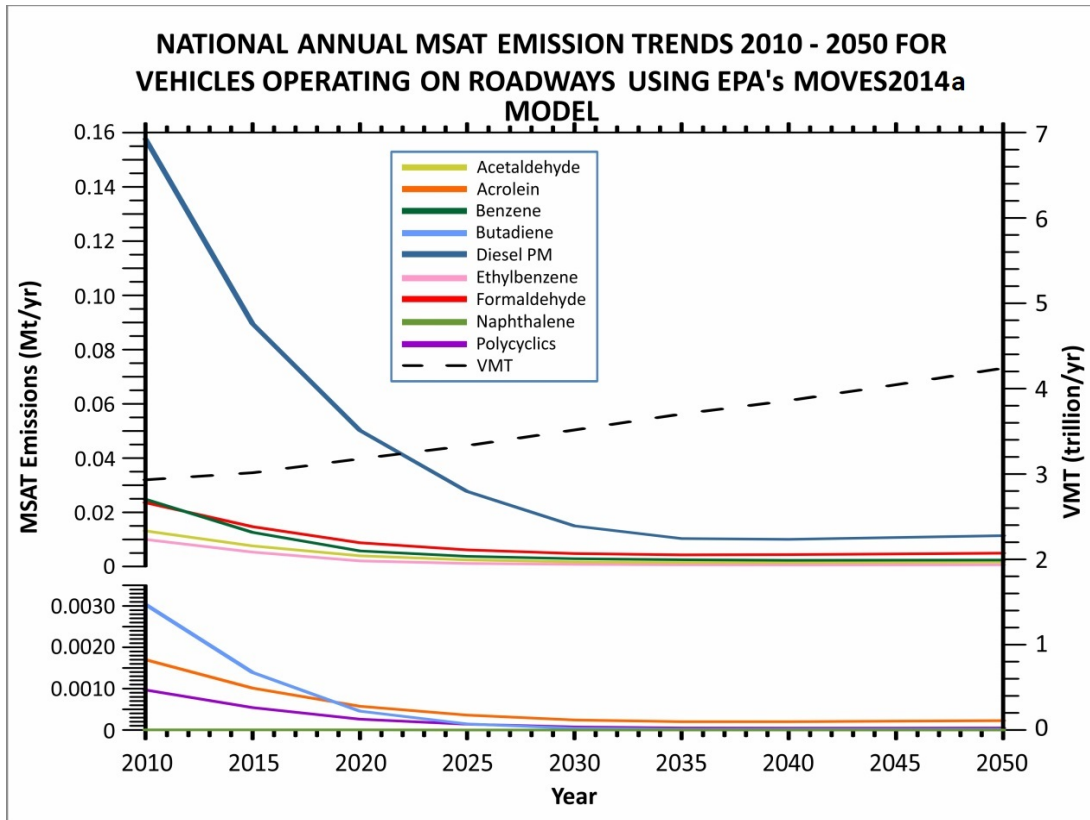
Controlling air toxic emissions became a national priority with the passage of the FCAA Amendments of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (*Federal Register*, Volume 73, No. 201, page 61,358, October 16, 2008) and identified a group of 93 compounds emitted from mobile sources that are listed in its Integrated Risk Information System (IRIS). In addition, the EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from its 2011 National Air Toxics Assessment (NATA): acrolein, benzene, 1,3-butadiene, acetaldehyde, diesel particulate matter (DPM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While the FHWA considers these nine compounds to be the priority Mobile Source Air Toxics (MSATs), the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2008 EPA rule requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines.

As shown on Figure 2.13-3, based on an FHWA analysis using the EPA's Motor Vehicle Emission Simulator, Version 2014a (MOVES2014a), even if VMT increases by 45 percent as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period. The projected reduction in MSAT emissions would be slightly different in California due to the use of the EMFAC emission model in place of the MOVES model.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered.





Source: Federal Highway Administration (2016).

Diesel PM = diesel particulate matter

EPA = United States Environmental Protection Agency

MOVES2014a = Motor Vehicle Emission Simulator, version 2014a

MSAT = Mobile Source Air Toxics

Mt/yr = million tons per year

NEPA = National Environmental Policy Act

trillion/yr = trillion per year

VMT = vehicle miles traveled

**Figure 2.13-3 National MSAT Emission Trends**

In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making in the context of NEPA.

Nonetheless, air toxics concerns continue to be raised regarding highway projects during the NEPA process. Even as the science emerges, transportation agencies are duly expected by the public and other agencies to address MSAT impacts in environmental documents. The FHWA, the EPA, the Health Effects Institute (HEI), and others have funded and conducted research studies in order to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the federal government be interpreted and administered in accordance with its

environmental protection goals. NEPA also requires federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely effects the environment. NEPA requires, and the FHWA is committed to, the examination and avoidance of potential adverse effects on the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, Caltrans must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA are contained in regulations in 23 CFR, Part 771.

On October 18, 2016, the FHWA issued guidance to advise FHWA division offices as to when and how to analyze MSATs in the NEPA process for highways. This document is an update to the guidance released in February 2006, September 2009, and December 2012. The guidance is described as interim because MSAT science is still evolving. As the science progresses, FHWA will update the guidance. This analysis follows the FHWA guidance.

### ***Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis***

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. The EPA is the lead authority for administering the CAA and its amendments and has specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. The agency maintains the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects."<sup>1</sup> Each report contains assessments of non-cancerous and

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<sup>1</sup> United States Environmental Protection Agency (EPA). Volatile Organic Compounds' Impact on Indoor Air Quality. Website: <https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality> (accessed October 2017).

cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analysis of the human health effects of MSAT, including the Health Effects Institute. Two Health Effects Institute studies are summarized in Appendix D of the FHWA's *Updated Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents* (2016). Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious are the adverse human health effects of MSAT compounds at current environmental concentrations or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling, dispersion modeling, exposure modeling, and then final determination of health impacts; each step in the process builds on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70-year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, because such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors including low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by the HEI. As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA and the HEI have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also a lack of national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the CAA to determine whether

more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards (e.g., benzene emissions from refineries). The decision framework is a two-step process. The first step requires the EPA to determine a “safe” or “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in 1 million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in 1 million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in 1 million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in 1 million. In a June 2008 decision, the United States Court of Appeals for the District of Columbia Circuit upheld the EPA’s approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision-makers, who would need to weigh this information against project benefits such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, which are better suited for quantitative analysis.

### ***MSAT Analysis Methodology***

Depending on the specific project circumstances, the FHWA has identified three levels of analysis: Projects with No Meaningful Potential MSAT Effects, or Exempt Projects; Projects with Low Potential MSAT Effects; and Projects with Higher Potential MSAT Effects. The Project is a project with No Meaningful Potential MSAT Effects.

The types of projects included in this category are:

- Projects qualifying as a Categorical Exclusion under 23 CFR 771.117(c) (subject to consideration whether unusual circumstances exist under 23 CFR 771.117(b));
- Projects exempt under the FCAA conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117(c), or that are exempt from conformity requirements under the FCAA pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. Documentation sufficient to demonstrate that the Project qualifies as a Categorical Exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is recommended. However, the Project record should document the basis for the determination of “no meaningful potential impacts” with a brief description of the factors considered.

As previously indicated, the Project would reduce the traffic volumes along I-10. In addition, the 2038 traffic volumes along the proposed I-10 Bypass would be less than 20,000 daily trips. Consequently, this Project meets the definition for the category of No Meaningful Potential MSAT Effects. Therefore, a quantitative analysis of MSAT emissions is not required (FHWA 2016<sup>1</sup>; ARB 2005<sup>2</sup>).

### **2.13.3.2 Temporary Impacts**

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO<sub>x</sub>, VOCs, directly emitted particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and toxic air contaminants such as DPM.

Site preparation and roadway construction would involve clearing, cut-and-fill activities, grading, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>2</sub>, NO<sub>x</sub>, and VOCs. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature

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<sup>1</sup> Federal Highway Administration, October 2016 *Updated Interim Guidelines on Mobile Source Air Toxic Analysis in NEPA Documents*. [http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/index.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)

<sup>2</sup> Air Resources Board, April 2005. *Air Quality and Land Use Handbook*. <https://www.arb.ca.gov/ch/handbook.pdf>

and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, the silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to dust-related PM<sub>10</sub> emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and some soot particulate (PM<sub>2.5</sub> and PM<sub>10</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO<sub>2</sub> is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting federal standards can contain up to 5,000 ppm of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, so SO<sub>2</sub>-related issues due to diesel exhaust would be minimal.

The maximum amount of construction-related emissions during a peak construction day is presented in Table 2.13.5. Table 2.13.5 presents construction-related emissions as calculated in the *Air Quality Analysis* (December 2017), which uses the Sacramento Metropolitan Air Quality Management District (SMAQMD) Road Construction Emissions Model, version 8.1.0.

**Table 2.13.5 Maximum Project Construction Emissions<sup>1</sup>**

Project Phases	ROG	CO	NO <sub>x</sub>	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
Grubbing/Land Clearing (lbs/day)	1.4	9.7	14.4	50.6	11.0
Grading/Excavation (lbs/day)	7.2	53.3	85.4	54.3	13.9
Drainage/Utilities/Sub-Grade (lbs/day)	5.4	42.4	52.9	52.7	12.9
Paving (lbs/day)	2.2	20.0	19.6	2.2	1.1
<b>Maximum (lbs/day)</b>	<b>7.2</b>	<b>53.3</b>	<b>85.4</b>	<b>54.3</b>	<b>13.9</b>
<b>Total (tons/construction project)</b>	<b>1.41</b>	<b>10.7</b>	<b>15.5</b>	<b>12.0</b>	<b>3.0</b>

Sources: LSA Associates, Inc. (2017) and SMAQMD Road Construction Emissions Model, version 8.1.0.

<sup>1</sup> This table demonstrates construction equipment emissions that would occur as a result of the Project.

Construction emissions projected in this table have been calculated using the current SMAQMD Construction Emissions model 8.1.0.

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = oxides of nitrogen

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

ROG = reactive organic gases

SMAQMD = Sacramento Metropolitan Air Quality Management District



The emissions presented in Table 2.13.5 are based on the best information available at the time of calculations and specify that the schedule for all improvements is anticipated to take approximately 24 months, beginning in 2020 and ending in 2022. While the emissions shown are for a construction schedule that would have started in 2018 and been completed in 2020, based on the project schedule at the time the analysis was conducted, because of ongoing improvements to construction equipment emissions controls over time, once construction begins, the actual construction emissions would be less than or equal to what was previously estimated. Caltrans Standard Specifications for construction (Section 14-9 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plant Emissions]) will be adhered to in order to reduce emissions generated by construction equipment. Additionally, the SCAQMD has established Rule 403 for reducing fugitive dust emissions. The best available control measures (BACM), as specified in SCAQMD Rule 403, shall be incorporated into the Project commitments. With the implementation of standard construction measures (providing 50 percent effectiveness), such as frequent watering (e.g., minimum twice per day), and avoidance and minimization Measures AQ-1 through AQ-5, fugitive dust and exhaust emissions from construction activities would not result in any adverse air quality effects.

### ***Naturally Occurring Asbestos***

The Project is located in Riverside County, which is not among the counties listed as containing serpentine and ultramafic rock. Therefore, the impact from naturally occurring asbestos during Project construction would be minimal to none.

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

The following measures will be implemented during construction activities:

- AQ-1** During clearing, grading, earthmoving, or excavation operations, the County of Riverside's (County) Resident Engineer will direct the Project Contractor to ensure excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust) and consistent with Wind Erosion Control Best Management Practices (BMPs) identified in Caltrans' Construction Site BMP Manual (May 2017):

- All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust.
- Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is completed for the day. More frequent watering may be required if dust is observed leaving the construction site.
- All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earth-moving, or excavation operations will be minimized to prevent excessive amounts of dust.
- Cease clearing, grading, earthmoving, and excavation operations within unpaved areas when wind speeds exceed 25 miles per hour.

These control techniques will be indicated in the Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

- AQ-2** Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications. Additionally, engine tampering to increase horsepower is prohibited.
- AQ-3** During construction, the County's Resident Engineer will direct the Project Contractor to ensure all trucks that haul excavated or graded material on site will comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.
- AQ-4** The County's Resident Engineer will direct the Project Contractor to adhere to California Department of Transportation (Caltrans) Standard Specifications for Construction (Sections 7-1.02C [Emissions Reduction], 10-5 [Dust Control], 14-9.02 [Air Pollution Control], 14-9.03 [Air Monitoring], and 18-1.03 [Construction]).
- AQ-5** Should the County's Project Geologist determine that asbestos-containing materials (ACMs) are present at the Project study area

during final inspection prior to construction, the appropriate methods will be implemented to remove ACMs.

#### **2.13.4.1 Construction Conformity**

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

#### **2.13.5 Climate Change**

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 greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter, Chapter 3, of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

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## **2.14 Noise**

### **2.14.1 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.

#### **2.14.1.1 California Environmental Quality Act**

CEQA requires a strictly baseline versus build analysis to assess whether a Project will have a noise impact. If a Project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the Project unless such measures are not feasible. The CEQA noise analysis is included in Chapter 3.

#### **2.14.1.2 National Environmental Policy Act and 23 CFR 772**

For highway transportation projects with FHWA (and Caltrans, 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 effects. The regulations require that potential adverse noise effects 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  $L_{eq}$ ) is lower than the NAC for commercial areas (72 dBA  $L_{eq}$ ). Table 2.14.1 lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

Table 2.14.2 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.

**Table 2.14.1 Noise Abatement Criteria**

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$ <sup>1</sup>	Description of Activities
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 <sup>2</sup>	67 (Exterior)	Residential.
C <sup>2</sup>	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.

Source: *Federal Highway Administration 23 CFR 772.*

<sup>1</sup> The  $L_{eq}(h)$  noise level values are for impact determination only and are not design standards for noise abatement measures. All values are in dBA.

<sup>2</sup> Includes undeveloped lands permitted for this activity category.

CFR = Code of Federal Regulations  
dBA = A-weighted decibels

$L_{eq}(h)$  = 1-hour A-weighted equivalent continuous sound level  
NAC = Noise Abatement Criteria



**Table 2.14.2 Noise Levels of Common Activities**

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

Source: California Department of Transportation (Caltrans) *Technical Noise Supplement* (September 2013).

According to Caltrans *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 adverse noise effects, 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 Caltrans *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 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. A minimum 7 dBA reduction in the future noise level must be achieved at one or more benefited receptor for an abatement measure to be considered reasonable. 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.

## **2.14.2 Affected Environment**

This section is based on the *Noise Study Report* (October 2016; Errata, December 2017) and the *Noise Abatement Decision Report* (April 2017; Errata, December 2017) prepared for Alternative 5 and Alternative 12 (Preferred Alternative) for the Interstate 10 (I-10) Bypass: Banning to Cabazon Project (Project).

### **2.14.2.1 Surrounding Land Use and Sensitive Receptors**

Land uses in the Project area include single-family residential, a campground, industrial/manufacturing, mining, and undeveloped/vacant land. Currently, there are no reasonably foreseeable planned or permitted developments located adjacent to the Project.

A total of 30 receptor locations, shown on Figures 2.14-1a through 2.14-1c, were selected to represent land uses in the Project vicinity. The receptor locations with outdoor active use areas include residences.

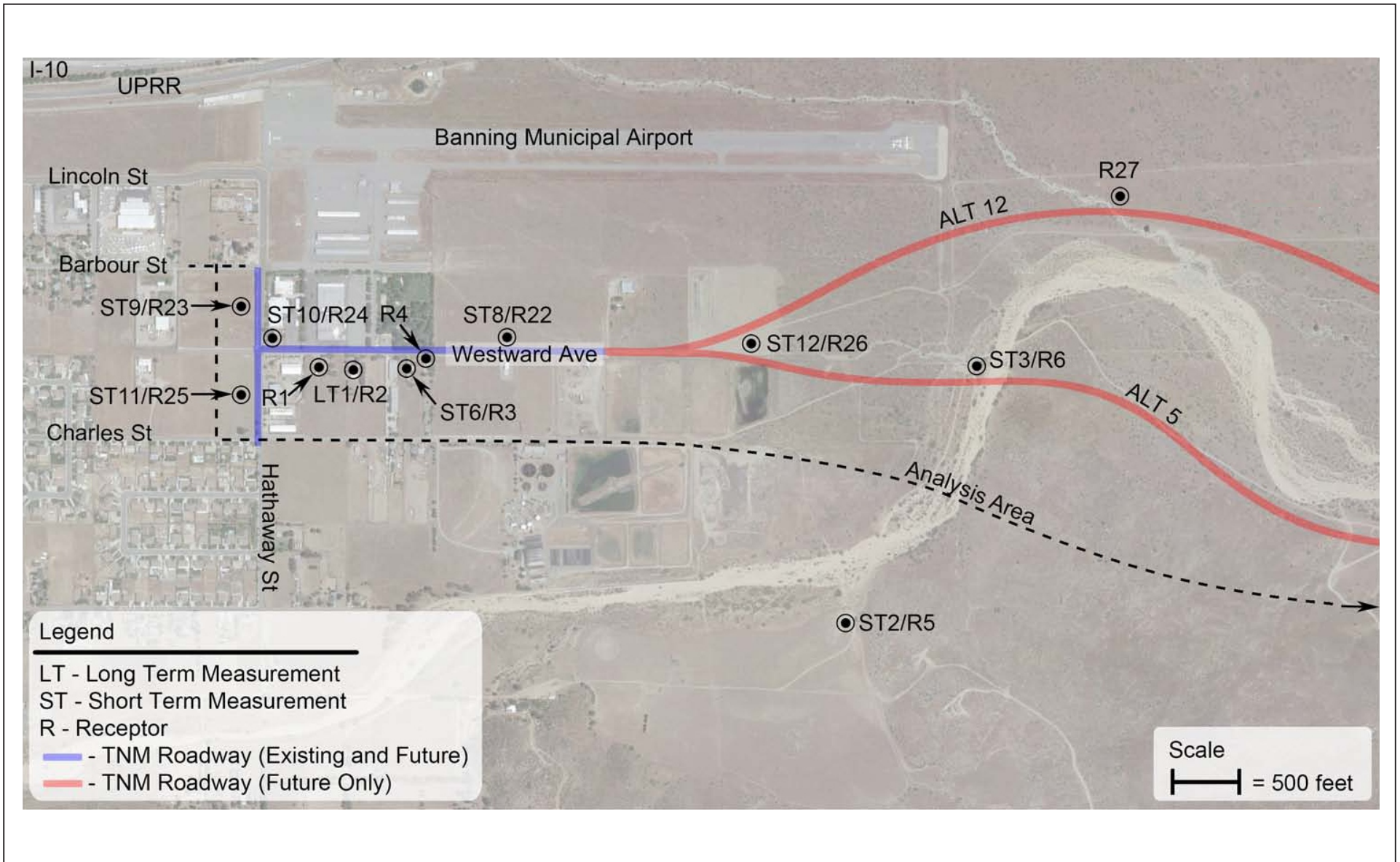
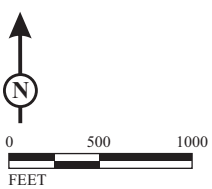


FIGURE 2.14-1a



SOURCE: dBF Associates, Inc.

I:\KHA1101\G\Noise\_Receptor\_Locations-A.cdr (4/12/2019)

I-10 Bypass: Banning to Cabazon  
Noise Measurement and Receptor Locations

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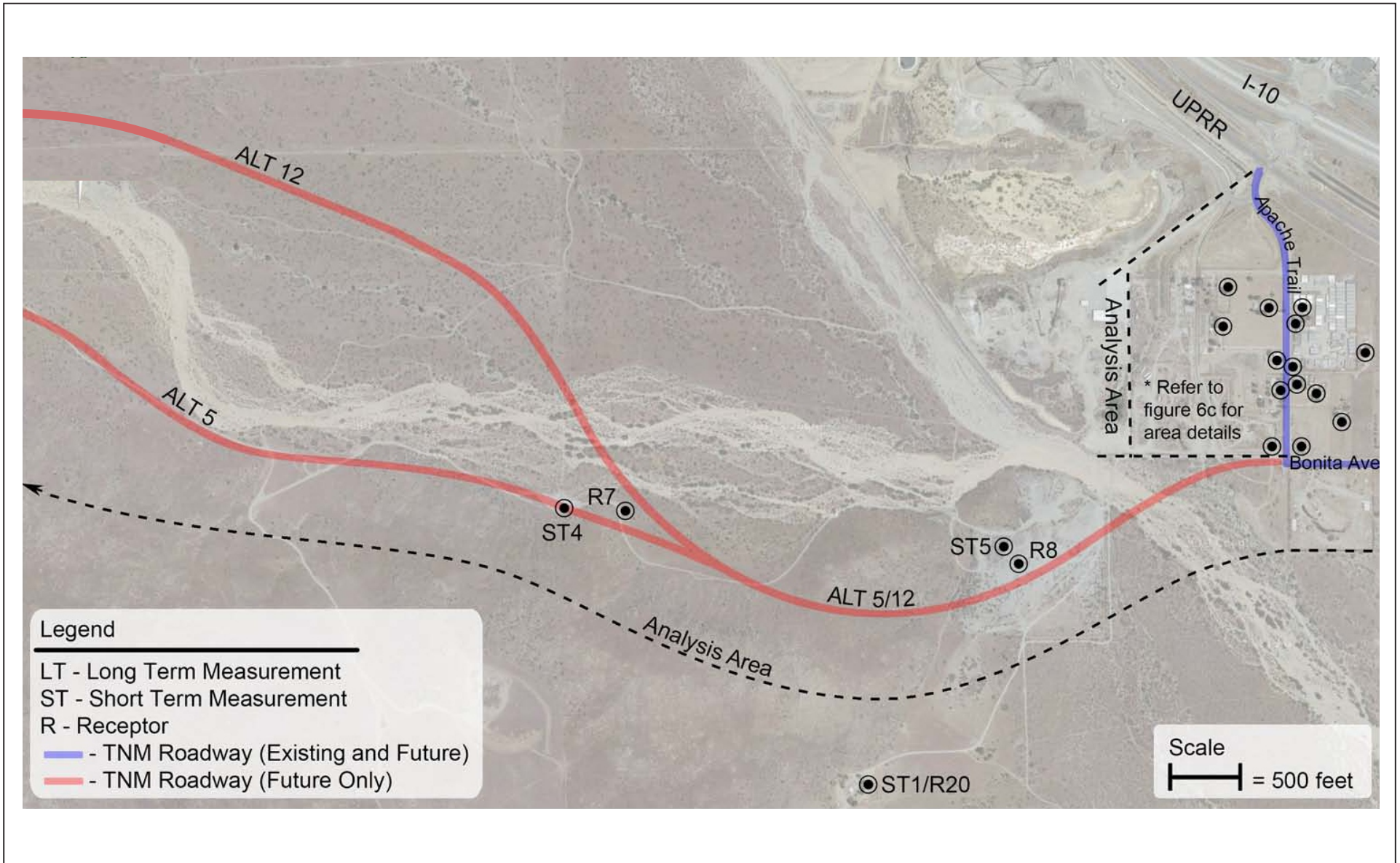
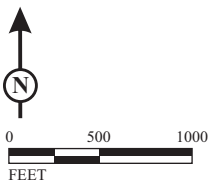


FIGURE 2.14-1b



SOURCE: dBF Associates, Inc.

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I-10 Bypass: Banning to Cabazon  
 Noise Measurement and Receptor Locations

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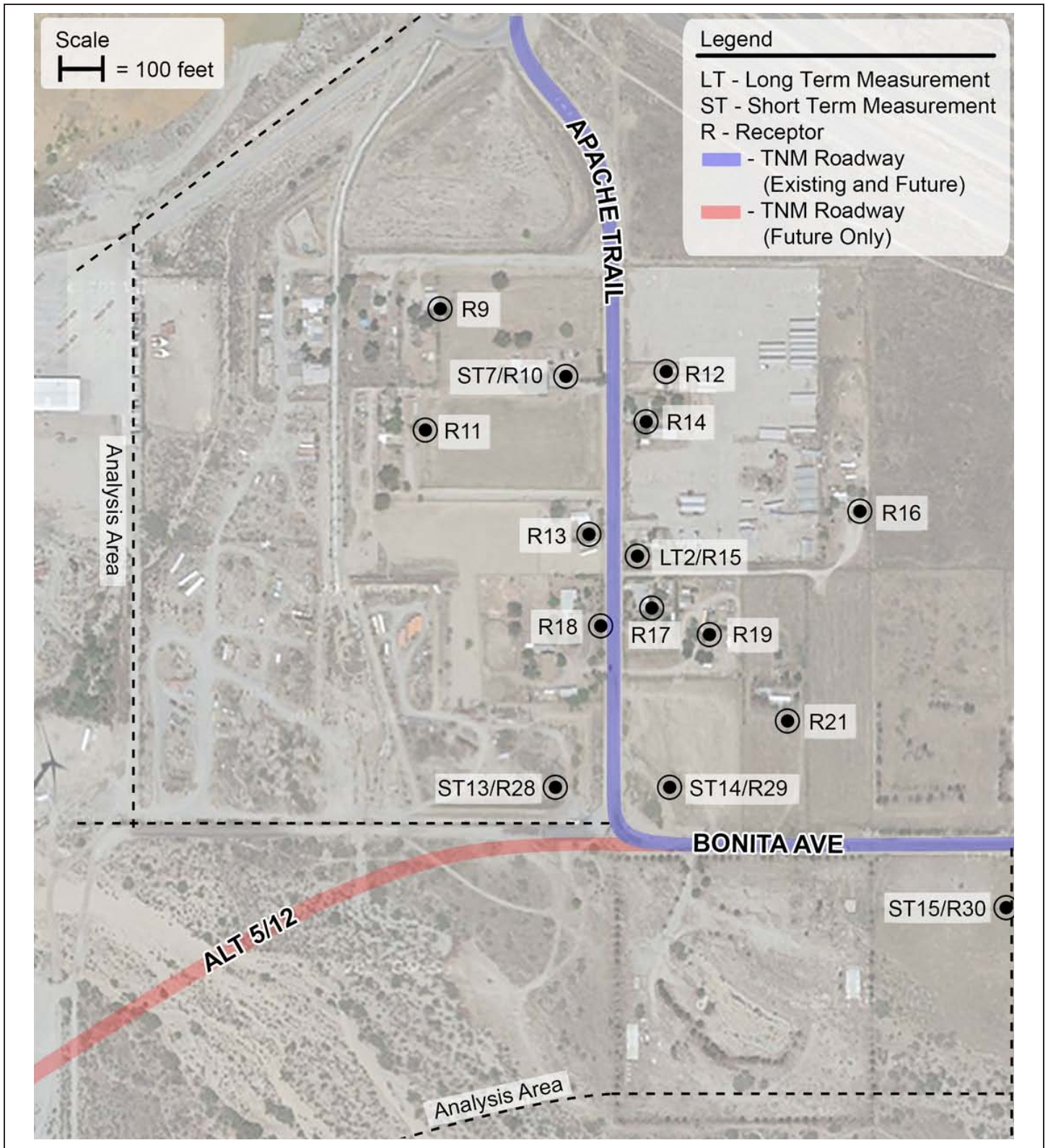


FIGURE 2.14-1c



NO SCALE

SOURCE: dBF Associates, Inc.

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I-10 Bypass: Banning to Cabazon  
 Noise Measurement and Receptor Locations

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### **2.14.2.2 Existing Noise Levels**

The primary source of noise in the Project area is distant traffic on I-10, Apache Trail, Bonita Avenue, and Hathaway Street. Although distant traffic noise on I-10 is a primary noise source in the Project area, traffic noise increase on I-10 under future 2038 conditions would range from 1.3 to 1.9 dBA based on the existing (2012) traffic volumes in the Traffic Operational Analysis Revised Final Report (April 2015) and the future worst-hour traffic volumes (1,775 to 1,950 vehicles per lane per hour (vplph) on I-10. Therefore, traffic noise increases on I-10 are considered minimal. Other sources of noise within the Project area include noise generated from the nearby sand and gravel operation, noise generated from the Union Pacific Railroad (UPRR) (including train horn noise), and distant aircraft noise. As detailed in the *Noise Study Report* (October 2016; Errata, December 2017), 15 short-term noise measurements were conducted to document the existing noise environment. In addition, calibration of the noise model was attempted using the results of the noise level measurements. However, no adjustments of the model were made due to various factors that include insufficient traffic noise in the noise level measurement, K-factors were within 3 dBA, and distant traffic noise contaminated the noise level measurement. The long-term and short-term noise level measurements, traffic volumes obtained from the *Traffic Operational Analysis Revised Final Report* (April 2015), and Traffic Noise Model (TNM) 2.5 were used to calculate noise levels at 30 receptor locations. The receptor locations are shown on Figures 2.14-1a through 2.14-1c.

### **2.14.3 Environmental Consequences**

The Project is considered a Type 1 project because a new roadway would be constructed at a new location. A noise analysis is required for all Type 1 projects. Therefore, the noise impacts of the No Build and Build Alternatives are analyzed below.

#### **2.14.3.1 Temporary Impacts**

##### ***No Build Alternative***

The No Build Alternative does not include construction or improvements in the Project area, and no temporary noise impacts would occur.

##### ***Build Alternatives***

Under both Alternative 5 and Alternative 12 (Preferred Alternative), two types of short-term noise effects would occur during project construction. During construction of the Project, noise from construction activities may intermittently dominate the

noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications Section 14-8.02, which pertains to nighttime construction: Noise Control, which states following:

- Control and monitor noise resulting from work activities.
- Do not exceed 86 dBA  $L_{max}$  at 50 feet from job site from 9:00 p.m. to 6:00 a.m.

Table 2.14.3 summarizes noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance.

**Table 2.14.3 Construction Equipment Noise**

Equipment	Maximum Noise Level (dBA at 50 feet)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: Federal Transit Administration (FTA) 2006

No adverse noise effects from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02. Construction noise would be short-term, intermittent, and overshadowed by local traffic noise.

### **2.14.3.2 Permanent Impacts**

#### ***No Build Alternative***

The No Build Alternative does not include the construction of a new local roadway connecting Banning and Cabazon within the Project area. As a result, no traffic would travel between Banning and Cabazon on local roadway other than the I-10 freeway. The Future No Build Alternative noise levels are provided in Table 2.14.4. Of the 30 modeled receptors, no receptors would continue to approach or exceed the NAC under the Future No Build conditions.

**Table 2.14.4 Alternative 5 Predicted Traffic Noise Levels (dBA L<sub>eq</sub>)**

Sound Wall No.	Receptor No.	Location	Existing Noise Level <sup>1</sup>	Design-Year <sup>2</sup> Noise Level Without Project	Design-Year <sup>2</sup> Noise Level with Project	Design-Year <sup>2</sup> Noise Level With Project Minus Existing Conditions	Design-Year <sup>2</sup> Noise Level with Project Minus No Project Conditions	Impact Type	Predicted Noise Level with Abatement						Reasonable and Feasible
									6 ft wall	8 ft wall	10 ft wall	12 ft wall <sup>3</sup>	14 ft wall	16 ft wall	
SW-1 + SW-2 + SW-3	R1	1750 East Westward Avenue	47	49	<b>68</b> <sup>4</sup>	21	19	E/SI	63	63	62	62	62	62	Feasible/ Not Reasonable
SW-1 + SW-2 + SW-3	R2	1862 East Westward Avenue	46	47	<b>66</b>	20	19	A/SI	62	61	61	60	60	59	Feasible/ Not Reasonable
SW-4 + SW-5 + SW-6	R3	1952 East Westward Avenue	47	48	<b>68</b>	21	20	E/SI	63	63	62	62	62	62	Feasible/ Not Reasonable
SW-4 + SW-5 + SW-6	R4	1990 East Westward Avenue	54	55	<b>74</b>	20	19	E/SI	67	65	64	64	63	63	Feasible/ Not Reasonable
None	R5	Banning, south of Smith Creek	47	47	47 <sup>5</sup>	0	0	None	-	-	-	-	-	-	-
None	R6	Banning, west of Smith Creek	48	48	58	10	10	None	-	-	-	-	-	-	-
None	R7	Cabazon, south of Smith Creek	41	41	61	20	20	None	-	-	-	-	-	-	-
None	R8	Cabazon, south of Smith Creek	45	45	59	14	14	None	-	-	-	-	-	-	-
None	R9	48911 Pipeline Road	40	43	48	8	5	None	-	-	-	-	-	-	-
None	R10	14030 Apache Trail	49	52	57	8	5	None	-	-	-	-	-	-	-
None	R11	14040 Apache Trail	37	41	48	11	7	None	-	-	-	-	-	-	-
None	R12	14044 Apache Trail	50	53	58	8	5	None	57	57	57	57	57	57	-
None	R13	14050 Apache Trail	59	62	65	6	3	None	-	-	-	-	-	-	-
SW-7	R14	14060 Apache Trail	60	63	<b>66</b>	6	3	A	61	60	59	59	58	58	Feasible/ Not Reasonable
SW-8	R15	14120 Apache Trail	59	63	<b>66</b>	7	3	A	61	59	59	58	58	58	Feasible/ Reasonable
None	R16	14136 Apache Trail	40	43	52	12	9	SI	-	-	-	-	-	-	Not Feasible
SW-9	R17	14140 Apache Trail	61	64	<b>67</b>	6	3	A	60	57	56	56	55	55	Feasible/ Reasonable
None	R18	14145 Apache Trail	56	59	63	7	4	None	-	-	-	-	-	-	-
None	R19	14170 Apache Trail	47	50	58	11	8	None	-	-	-	-	-	-	-
None	R20	14511 Apache Trail	48	48	48	0	0	None	-	-	-	-	-	-	-
None	R21	49070 Bonita Avenue	45	48	58	13	10	SI	-	-	-	-	-	-	No Feasible

**Table 2.14.4 Alternative 5 Predicted Traffic Noise Levels (dBA L<sub>eq</sub>)**

Sound Wall No.	Receptor No.	Location	Existing Noise Level <sup>1</sup>	Design-Year <sup>2</sup> Noise Level Without Project	Design-Year <sup>2</sup> Noise Level with Project	Design-Year <sup>2</sup> Noise Level With Project Minus Existing Conditions	Design-Year <sup>2</sup> Noise Level with Project Minus No Project Conditions	Impact Type	Predicted Noise Level with Abatement						Reasonable and Feasible
									6 ft wall	8 ft wall	10 ft wall	12 ft wall <sup>3</sup>	14 ft wall	16 ft wall	
None	R22	~ 2011 East Westward Avenue	45	46	66	21	20	None	-	-	-	-	-	-	-
None	R23	Banning, northwest of Westward Avenue/Hathaway Street	52	56	67	15	11	None	-	-	-	-	-	-	-
None	R24	770 S. Hathaway Street	53	56	71	18	15	None	-	-	-	-	-	-	-
None	R25	Banning, southwest of Westward Avenue/Hathaway Street	50	54	64	14	10	None	-	-	-	-	-	-	-
None	R26	Banning, east of end of Westward Avenue	66	66	66 <sup>5</sup>	0	0	None	-	-	-	-	-	-	-
None	R27	Cabazon, north of Smith Creek	48	48	48 <sup>5</sup>	0	0	None	-	-	-	-	-	-	-
None	R28	Cabazon, northwest of Apache Trail/Bonita Avenue	52	55	66	14	11	None	-	-	-	-	-	-	-
None	R29	Cabazon, northeast of Apache Trail/Bonita Avenue	55	58	68	13	10	None	-	-	-	-	-	-	-
None	R30	~ 49221 Bonita Avenue	54	57	68	14	11	None	-	-	-	-	-	-	-

Source: *Noise Study Report* (October 2016; Errata, December 2017).

Notes: All NAC are exterior unless noted.

<sup>1</sup> Existing noise levels were determined by a long-term noise measurement or a short-term noise measurement adjusted to the peak noise hour identified from long-term monitoring, or were estimated using a model with existing traffic volumes.

<sup>2</sup> The design year is 2038.

<sup>3</sup> The minimum height needed to break the line-of-sight between an 11.5-foot-high truck stack and first-row receptors.

<sup>4</sup> Bold numbers represent receptors that approach or exceed the NAC.

<sup>5</sup> Where an existing noise level is higher than a model-predicted design year noise level, because the Project would not lower noise levels, the design year noise level was assumed to be equal to the existing noise level.

A/E = Future noise conditions (A)pproach or (E)xceed the NAC

ft = foot/feet

NAC = Noise Abatement Criteria

SI = Substantial Increase



### **Build Alternatives**

Potential long-term noise impacts associated with Project operations are solely from traffic noise. Traffic noise impacts occur when either of the following occurs: (1) the traffic noise level at a sensitive receptor location is predicted to “approach or exceed” its NAC, or (2) the predicted traffic noise level is 12 dBA or more over its corresponding modeled existing noise level at the sensitive receptor locations analyzed. When traffic noise effects occur, noise abatement measures must be considered.

Future traffic noise levels at all 30 modeled receptor locations were determined using 2038 peak-hour traffic volumes obtained from the *Traffic Operational Analysis Revised Final Report* (April 2015). Tables 2.14.4 and 2.14.5 provide the existing and future with and without project noise levels under Alternative 5 and Alternative 12 (Preferred Alternative), respectively. As shown in both Tables 2.14.4 and 2.14.5 for Alternative 5 and Alternative 12 (Preferred Alternative), respectively, seven receptors would approach or exceed the NAC under both Build Alternatives. Of the seven receptors, four receptors (R1 through R4) would also experience a substantial noise increase of 12 dBA or more over their corresponding existing noise level for both the Build Alternatives.

The following receptor locations would be exposed to noise levels that approach or exceed the NAC under both Build Alternatives:

- **Receptors R1 and R2.** These receptor locations represent existing residences along Westward Avenue. Currently, there are no existing walls that shield this residence. Three sound walls (SW-1, SW-2, and SW-3) were modeled along the right-of-way to shield these residences.
- **Receptors R3 and R4.** These receptor locations represent existing residences along Westward Avenue. Currently, there are no existing walls that shield this residence. Three sound walls (SW-3, SW-4, and SW-5) were modeled along the right-of-way to shield these residences.
- **Receptor R14.** This receptor location represents an existing residence along Apache Trail. Currently, there are no existing walls that shield this residence. One sound wall (SW-7) was modeled along the right-of-way to shield this residence.
- **Receptor R15.** This receptor location represents an existing residence along Apache Trail. Currently, there are no existing walls that shield this residence. One sound wall (SW-8) was modeled along the right-of-way to shield this residence.
- **Receptor R17.** This receptor location represents an existing residence along Apache Trail. Currently, there are no existing walls that shield this residence. One sound wall (SW-9) was modeled along the right-of-way to shield this residence.

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**Table 2.14.5 Alternative 12 (Preferred Alternative) Predicted Traffic Noise Levels (dBA L<sub>eq</sub>)**

Sound Wall No.	Recept or No.	Location	Existing Noise Level <sup>1</sup>	Design-Year <sup>2</sup> Noise Level Without Project	Design-Year <sup>2</sup> Noise Level with Project	Design-Year <sup>2</sup> Noise Level With Project Minus Existing Conditions	Design-Year <sup>2</sup> Noise Level with Project Minus No Project Conditions	Impact Type	Predicted Noise Level with Abatement						Reasonable and Feasible
									6 ft wall	8 ft wall	10 ft wall	12 ft wall <sup>3</sup>	14 ft wall	16 ft wall	
SW-1 + SW-2 + SW-3	R1	1750 East Westward Avenue	47	49	<b>68<sup>4</sup></b>	21	19	E/SI	63	63	62	62	62	62	Feasible/ Not Reasonable
SW-1 + SW-2 + SW-3	R2	1862 East Westward Avenue	46	47	<b>66</b>	20	19	A/SI	62	61	61	60	60	59	Feasible/ Not Reasonable
SW-4 + SW-5 + SW-6	R3	1952 East Westward Avenue	47	48	<b>68</b>	21	20	E/SI	63	63	62	62	62	62	Feasible/ Not Reasonable
SW-4 + SW-5 + SW-6	R4	1990 East Westward Avenue	54	55	<b>74</b>	20	19	E/SI	67	65	64	64	63	63	Feasible/ Not Reasonable
None	R5	Banning, south of Smith Creek	47	47 <sup>5</sup>	47	0	0	None	–	–	–	–	–	–	–
None	R6	Banning, west of Smith Creek	48	48	49	1	1	None	–	–	–	–	–	–	–
None	R7	Cabazon, south of Smith Creek	41	41	61	20	20	None	–	–	–	–	–	–	–
None	R8	Cabazon, south of Smith Creek	45	45	59	14	14	None	–	–	–	–	–	–	–
None	R9	48911 Pipeline Road	40	43	48	8	5	None	–	–	–	–	–	–	–
None	R10	14030 Apache Trail	49	52	57	8	5	None	–	–	–	–	–	–	–
None	R11	14040 Apache Trail	37	41	48	11	7	None	–	–	–	–	–	–	–
None	R12	14044 Apache Trail	50	53	58	8	5	None	57	57	57	57	57	57	–
None	R13	14050 Apache Trail	59	62	65	6	3	None	–	–	–	–	–	–	–
SW-7	R14	14060 Apache Trail	60	63	<b>66</b>	6	3	A	61	60	59	59	58	58	Feasible/ Not Reasonable
SW-8	R15	14120 Apache Trail	59	63	<b>66</b>	7	3	A	61	59	59	58	58	58	Feasible/ Reasonable
None	R16	14136 Apache Trail	40	43	52	12	9	SI	–	–	–	–	–	–	Not Feasible
SW-9	R17	14140 Apache Trail	61	64	<b>67</b>	6	3	A	60	57	56	56	55	55	Feasible/ Reasonable
None	R18	14145 Apache Trail	56	59	63	7	4	None	–	–	–	–	–	–	–
None	R19	14170 Apache Trail	47	50	58	11	8	None	–	–	–	–	–	–	–
None	R20	14511 Apache Trail	48	48	48 <sup>5</sup>	0	0	None	–	–	–	–	–	–	–
None	R21	49070 Bonita Avenue	45	48	58	13	10	SI	–	–	–	–	–	–	Not Feasible
None	R22	~ 2011 East Westward Avenue	45	46	66	21	20	None	–	–	–	–	–	–	–

**Table 2.14.5 Alternative 12 (Preferred Alternative) Predicted Traffic Noise Levels (dBA L<sub>eq</sub>)**

Sound Wall No.	Recept or No.	Location	Existing Noise Level <sup>1</sup>	Design-Year <sup>2</sup> Noise Level Without Project	Design-Year <sup>2</sup> Noise Level with Project	Design-Year <sup>2</sup> Noise Level With Project Minus Existing Conditions	Design-Year <sup>2</sup> Noise Level with Project Minus No Project Conditions	Impact Type	Predicted Noise Level with Abatement						Reasonable and Feasible
									6 ft wall	8 ft wall	10 ft wall	12 ft wall <sup>3</sup>	14 ft wall	16 ft wall	
None	R23	Banning, northwest of Westward Avenue/Hathaway Street	52	56	67	15	11	None	–	–	–	–	–	–	–
None	R24	770 S. Hathaway Street	53	56	71	18	15	None	–	–	–	–	–	–	–
None	R25	Banning, southwest of Westward Avenue/Hathaway Street	50	54	64	14	10	None	–	–	–	–	–	–	–
None	R26	Banning, east of end of Westward Avenue	66	66	66 <sup>5</sup>	0	0	None	–	–	–	–	–	–	–
None	R27	Cabazon, north of Smith Creek	48	48	63	15	15	None	–	–	–	–	–	–	–
None	R28	Cabazon, northwest of Apache Trail/Bonita Avenue	52	55	66	14	11	None	–	–	–	–	–	–	–
None	R29	Cabazon, northeast of Apache Trail/Bonita Avenue	55	58	68	13	10	None	–	–	–	–	–	–	–
None	R30	~ 49221 Bonita Avenue	54	57	68	14	11	None	–	–	–	–	–	–	–

Source: *Noise Study Report* (October 2016; Errata, December 2017).

Notes: All NAC are exterior unless noted.

<sup>1</sup> Existing noise levels were determined by a long-term noise measurement, a short-term noise measurement adjusted to peak noise hour identified from long-term monitoring, or were estimated using a model with existing traffic volumes.

<sup>2</sup> The design year is 2038.

<sup>3</sup> The minimum height needed to break the line-of-sight between an 11.5-foot-high truck stack and first-row receptors.

<sup>4</sup> Bold numbers represent receptors that approach or exceed the NAC.

<sup>5</sup> Where an existing noise level is higher than a model-predicted design year noise level, because the Project would not lower noise levels, the design year noise level was assumed to be equal to the existing noise level.

A/E = Future noise conditions (A)pproach or (E)xceed the NAC

ft = foot/feet

NAC = Noise Abatement Criteria

SI = Substantial Increase

## 2.14.4 Avoidance, Minimization, and/or Abatement Measures

### 2.14.4.1 Noise Abatement Consideration

Sound walls were considered to shield noise-sensitive receptors within the Project area where receptors would continue to be exposed to traffic noise levels approaching or exceeding the NAC and/or experience a substantial noise increase of 12 dBA or more from existing noise levels. All properties requiring abatement consideration are within Category B (67 dBA  $L_{eq}$  NAC). In Tables 2.14.4 and 2.14.5, the numbers in bold show receptor locations that would approach or exceed the NAC under Alternative 5 and Alternative 12 (Preferred Alternative), respectively. Sound wall heights were analyzed from 6 ft to 16 ft at 2 ft increments (i.e., 6, 8, 10, 12, 14, and 16 ft). The locations of all the evaluated sound walls are shown on Figures 2.14-2a and 2.14-2b.

The following sound walls were analyzed to shield the receptor locations that would be exposed to traffic noise levels approaching or exceeding the NAC and/or experience a substantial noise increase of 12 dBA or more from existing noise levels for both Alternative 5 and Alternative 12 (Preferred Alternative):

- **SW-1, SW-2, and SW-3:** These sound walls have a length of 124 ft, 226 ft, and 146 ft, respectively. The sound walls are located along the south right-of-way of Westward Avenue/Bypass Road to shield Receptors R1 and R2.
- **SW-4, SW-5, and SW-6:** These sound walls have a length of 121 ft, 110 ft, and 78 ft, respectively. The sound walls are located along the south right-of-way of Westward Avenue/Bypass Road to shield Receptors R3 and R4.
- **SW-7:** A 100 ft long wall along the east right-of-way of Apache Trail was analyzed to shield Receptor R14.
- **SW-8:** A 71 ft long wall along the east right-of-way of Apache Trail was analyzed to shield Receptor R15.
- **SW-9:** A 75 ft long wall along the east right-of-way of Apache Trail was analyzed to shield Receptor R17.

### 2.14.4.2 Sound Wall Feasibility

The Caltrans *Traffic Noise Analysis Protocol* states that a minimum noise reduction of 5 dBA must be achieved at the impacted receptors in order for the proposed noise abatement measure to be considered feasible. The feasibility criterion is not necessarily a noise abatement design goal. Greater noise reductions are encouraged if they can be reasonably achieved. The following elements may restrict feasibility:

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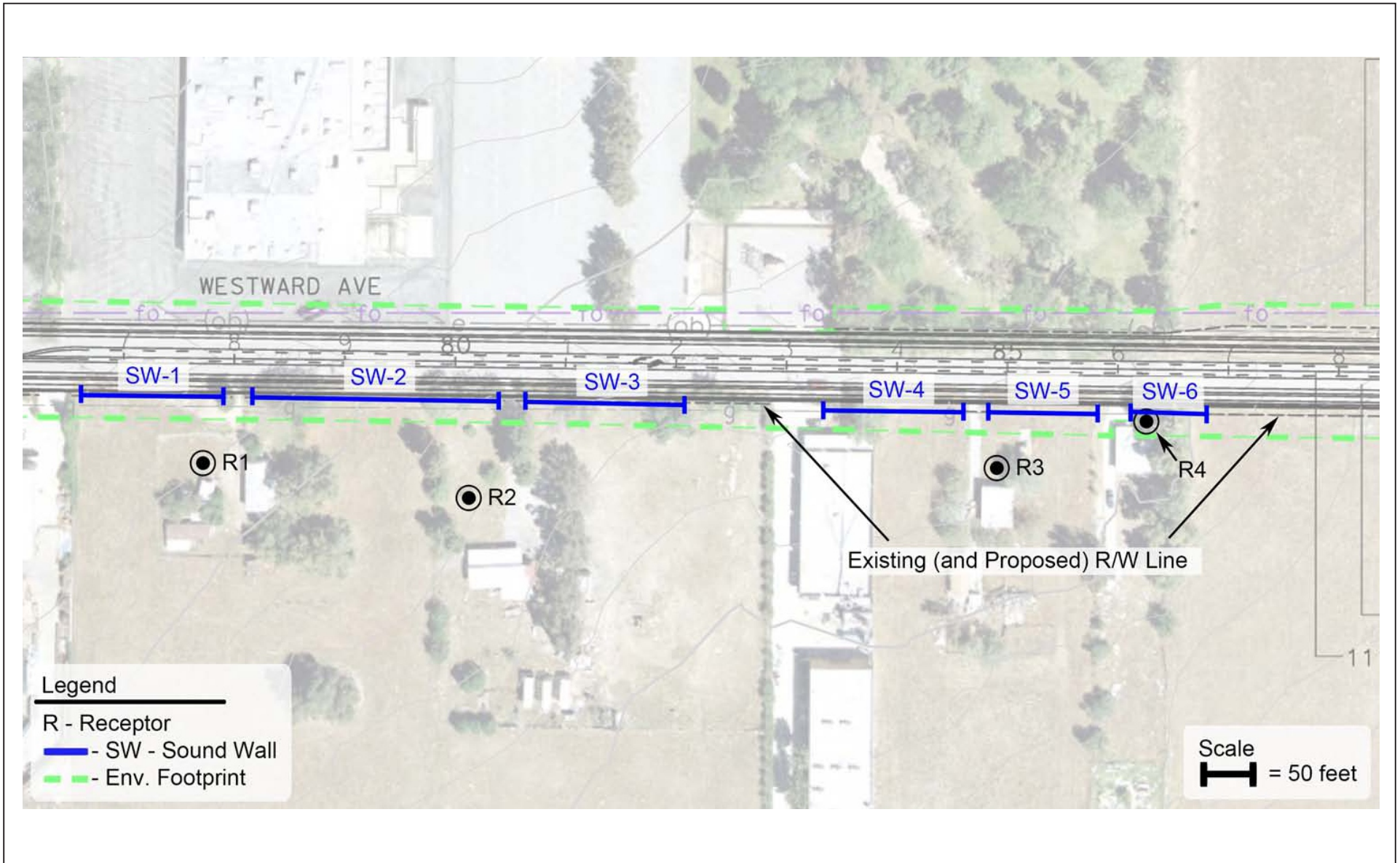
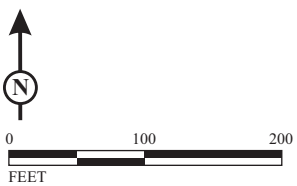


FIGURE 2.14-2a



SOURCE: dBf Associates, Inc.

I:\KHA1101\G\Proposed Noise Barrier Locations-A.cdr (4/12/19)

I-10 Bypass: Banning to Cabazon  
Noise Barrier Locations

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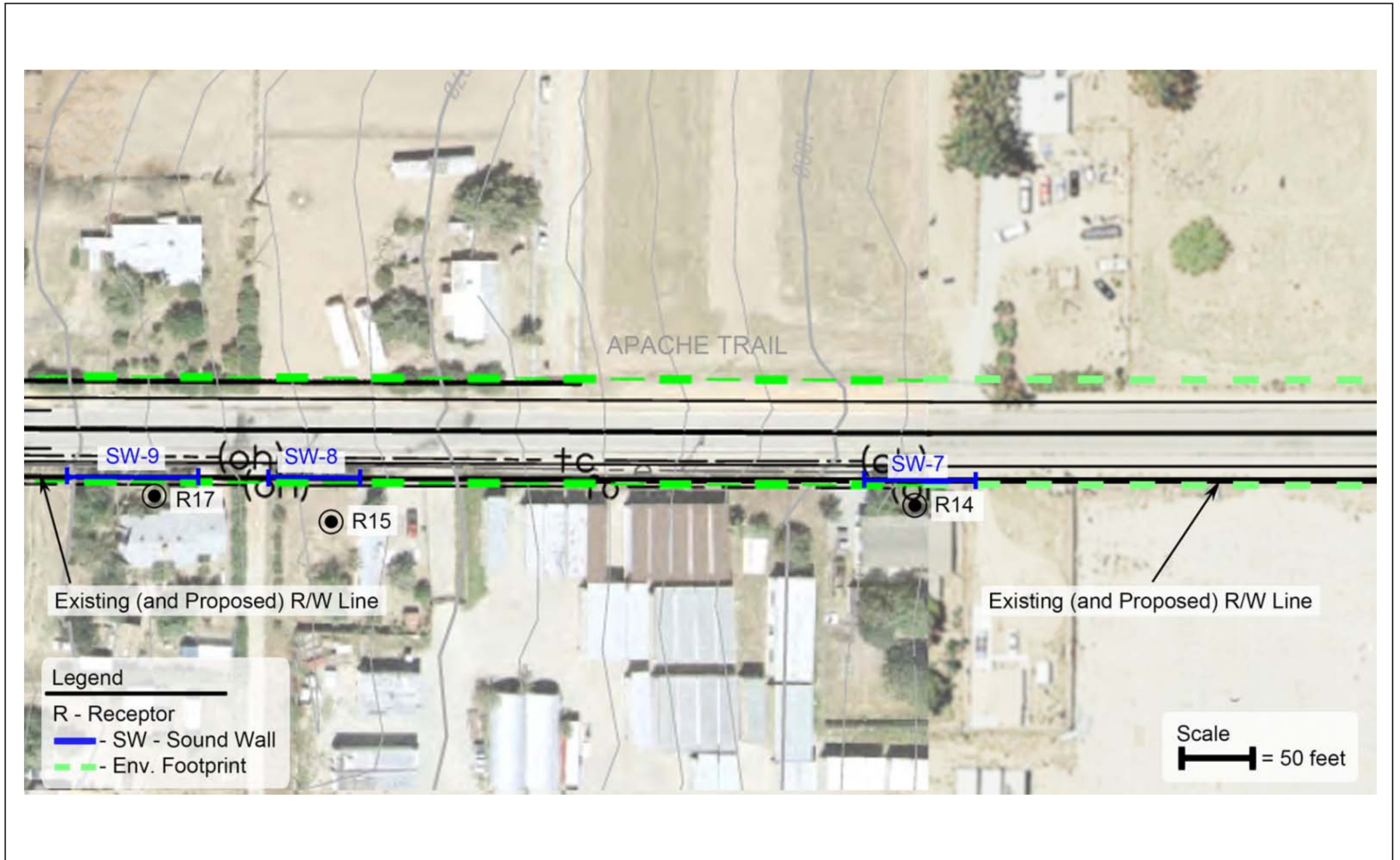
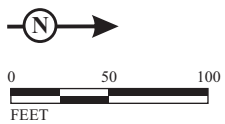


FIGURE 2.14-2b



SOURCE: dBF Associates, Inc.

I-10 Bypass: Banning to Cabazon  
Noise Barrier Locations

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- Topography
- Access requirements for driveways
- Local cross streets
- Underground utilities
- Other noise sources in the area
- Safety considerations

As shown on Tables 2.14.4 and 2.14.5, all of the nine sound walls evaluated were capable of reducing noise levels by 5 dBA or more, as required to be considered feasible for both Build Alternatives.

#### **2.14.4.3 Nonacoustical Factors Relating to Feasibility**

Both the City of Banning and the County have minimum front yard setbacks for walls. In the front yard setback area, walls cannot exceed a height of 48 inches. All walls evaluated within front yards are subject to this criterion since all are assumed to be located along the property line (i.e., zero-foot setback) with heights above 48 inches. This would require approval of a variance by the local agency within jurisdiction.

Current land uses along Apache Trail where sound walls are evaluated are Manufacturing-Service Commercial (M-SC) and Controlled Development Area-Mobile Homes (W-2-M). While the County does not indicate height requirements for walls in front yards, it does require a minimum front yard setback of 25 ft for M-SC land uses and 20 ft for W-2-M land uses.

Sound wall SW-8 is located across both parcel nos. 519-260-001 and 519-240-005. In addition to the setback variance for walls as noted above, both property owners impacted by this sound wall would need to be in agreement to consider the sound wall to be feasible. Also, SW-9 would eliminate a walkway to the existing residence, requiring all access to be through the driveway.

#### **2.14.4.4 Sound Wall Reasonableness**

The reasonableness of a sound wall is determined by comparing the estimated cost of the sound barrier construction against the total reasonable allowance. The total reasonable allowance is determined based on the number of benefited residences multiplied by the reasonable allowance per residence. Additionally, in accordance with the Caltrans *Traffic Noise Analysis Protocol*, each sound wall must provide at least 7 dBA of noise reduction at one or more benefited receptor(s) to be considered

reasonable. Therefore, if the estimated sound wall construction cost exceeds the total reasonable allowance or was not predicted to provide at least 7 dBA of noise reduction at one or more benefited receptor, the sound barrier is determined to be not reasonable. However, if the estimated sound wall construction cost is within the total reasonable allowance and is predicted to provide at least 7 dBA of noise reduction at one or more benefited receptor, the sound wall is determined to be reasonable. Based on this methodology described above, Table 2.14.6 shows that SW-1 through SW-3 were determined to be not reasonable because the barriers are not capable of achieving the noise reduction design goal of 7 dBA for heights of 6 ft to 16 ft. SW-4 through SW-7 were determined to be not reasonable because the barriers are either not capable of achieving the noise reduction design goal of 7 dBA or the estimated construction cost of the barriers exceeded the total reasonable allowance.

Table 2.14.6 shows that SW-8 at a height of 8 ft was determined to be reasonable because the barrier is capable of achieving the noise reduction design goal of 7 dBA, and the estimated construction cost of the barrier is within the total reasonable allowance. However, the recommendation is to not construct this barrier because it is not considered feasible from a non-acoustical perspective due to setback requirements and impacts to the adjacent property.

Table 2.14.6 shows that SW-9 at heights of 6 ft to 16 ft was determined to be reasonable because the barrier is capable of achieving the noise reduction design goal of 7 dBA and the estimated construction cost of the barrier is within the total reasonable allowance. However, the recommendation is to not construct this barrier because it is not considered feasible from a non-acoustical perspective due to setback requirements and the removal of an existing pedestrian access point.

The final decision of the noise abatement will be made upon completion of the Project design and the public involvement processes. If during final design, conditions have substantially changed, noise abatement may not be necessary.



**Table 2.14.6 Feasible and Reasonable Sound Walls**

Alternative	Sound Wall No.	Height (ft)	Approximate Length (ft)	Sound Wall Location	Noise Attenuation Range (dBA)	Number of Benefited Units <sup>1</sup>	Reasonable Allowance per Unit	Total Reasonable Allowance	Estimated Sound Wall Construction Cost <sup>2</sup>	Reasonable?
Alternative 5 and Alternative 12 (Preferred Alternative)	SW-1 + SW-2+ SW-3	6	124+ 226+ 146	ROW	5	1	\$80,000	\$80,000	-- <sup>3</sup>	No
		8			5	2	\$80,000	\$160,000	--	No
		10			6	2	\$80,000	\$160,000	--	No
		12 <sup>4</sup>			6	2	\$80,000	\$160,000	--	No
		14			6	2	\$80,000	\$160,000	--	No
		16			6	2	\$80,000	\$160,000	--	No
Alternative 5 and Alternative 12 (Preferred Alternative)	SW-4 + SW-5 + SW-6	6	121+ 110+ 78	ROW	7	2	\$80,000	\$160,000	\$231,158	No
		8			9	2	\$80,000	\$160,000	\$253,474	No
		10			10	2	\$80,000	\$160,000	\$279,035	No
		12 <sup>4</sup>			10	2	\$80,000	\$160,000	\$300,253	No
		14			11	2	\$80,000	\$160,000	\$321,471	No
		16			11	2	\$80,000	\$160,000	\$359,702	No
Alternative 5 and Alternative 12 (Preferred Alternative)	SW-7	6	100	ROW	5	1	\$80,000	\$80,000	--	No
		8			7	1	\$80,000	\$80,000	\$101,639	No
		10			7	1	\$80,000	\$80,000	\$109,911	No
		12 <sup>4</sup>			7	1	\$80,000	\$80,000	\$116,778	No
		14			8	1	\$80,000	\$80,000	\$123,644	No
		16			8	1	\$80,000	\$80,000	\$136,017	No
Alternative 5 and Alternative 12 (Preferred Alternative)	SW-8	6	71	ROW	5	1	\$80,000	\$80,000	--	No
		8			7	1	\$80,000	\$80,000	\$75,054	Yes
		10			7	1	\$80,000	\$80,000	\$80,927	No
		12 <sup>4</sup>			8	1	\$80,000	\$80,000	\$85,802	No
		14			8	1	\$80,000	\$80,000	\$90,678	No
		16			8	1	\$80,000	\$80,000	\$99,462	No
Alternative 5 and Alternative 12 (Preferred Alternative)	SW-9	6	75	ROW	7	1	\$80,000	\$80,000	\$59,313	Yes
		8			10	1	\$80,000	\$80,000	\$64,729	Yes
		10			11	1	\$80,000	\$80,000	\$70,933	Yes
		12 <sup>4</sup>			11	1	\$80,000	\$80,000	\$76,083	Yes
		14			12	1	\$80,000	\$80,000	\$81,233	Yes
		16			12	1	\$80,000	\$80,000	\$90,513	Yes

Source: *Noise Abatement Decision Report* (April 2017; Errata, December 2017).

<sup>1</sup> Number of units that are attenuated by 5 dBA or more by the modeled barrier.

<sup>2</sup> Sound wall construction cost information provided by Kimley-Horn and Associates, Inc.

<sup>3</sup> Sound walls were determined to be not reasonable because the barrier would not reduce noise levels by a minimum of 7 dBA at one or more benefited receptor.

<sup>4</sup> Minimum height needed to break the line-of-sight between an 11.5 ft truck exhaust stack and the first-row receptor.

dBA = A-weighted decibels

ft = foot/feet

ROW = right-of-way

No. = Number

The following measures are required to minimize adverse construction noise effects:

- N-1**            **Noise Control, California Department of Transportation (Caltrans) Standard Specifications and Standard Special Provisions Section 14-8.02.** To minimize construction noise impacts on sensitive land uses adjacent to the Project site, the County of Riverside's (County) Resident Engineer shall direct the Project Contractor to comply with Caltrans Standard Specifications and Caltrans Standard Special Provisions Section 14-8.02. The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 A-weighted decibels (dBA) maximum instantaneous noise level ( $L_{max}$ ) at a distance of 50 feet. In addition, the Contractor shall equip all internal combustion engines with their manufacturer-recommended muffler and shall not operate any internal combustion engine on the job site without the appropriate muffler. No internal combustion engine will be operated on the Project site without said muffler.

## **BIOLOGICAL ENVIRONMENT**

### **2.15 Natural Communities**

#### **2.15.1 Regulatory Setting**

This section of the document discusses natural communities of concern. The focus of this section is on biological communities rather than individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value. Laws and regulations dealing with natural communities include the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) and Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973 (FESA) and Natural Communities Conservation Plans (NCCP) under the NCCP Act of 2001. Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Section 2.19, Threatened and Endangered Species. Wetlands and other waters are also discussed below in Section 2.16.

The WRMSHCP and CVMSHCP serve as comprehensive, multi-jurisdictional Habitat Conservation Plans focused on the conservation of species and their associated habitats in Riverside County. The WRMSHCP allows participating jurisdictions to authorize “Take” of plant and wildlife species identified within the Plan Area. The United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) (hereafter “Wildlife Agencies”) have authority to regulate the Take of threatened, endangered and rare species. The CVMSHCP aids to minimize and mitigate the impacts of the Taking of species covered by the Plan and provides for conservation of the Covered Species. Under both MSHCPs, the Wildlife Agencies will grant “Take Authorization” for otherwise lawful actions, such as public and private development that may incidentally Take or harm individual species or their habitat outside of the MSHCP Conservation Area, in exchange for the assembly and management of a coordinated MSHCP Conservation Area; however, the MSHCPs are implemented quite differently, and the Project boundary crosses land located in both MSHCP Areas. For the purposes of natural communities of concern, the MSHCPs acquire the land needed for wildlife reserves to protect and preserve species of rare, threatened, and endangered plants, birds, and animals. These natural communities provide the habitats for the species to be covered under the Plan. Conservation of these natural communities also includes conservation

of the rich biological diversity of the Plan Area on an ecosystem-wide basis, consistent with the NCCP goals provided by CDFW. Portions of the Project are also located outside the Plan Areas on Tribal Land. Those lands have not been granted Take Authorization since the property owners are not signatories to either HCP. Tribal lands are subject to a Section 7 consultation with the USFWS. A Section 7 consultation is triggered if a federal action could affect listed species or critical habitat for a listed species. After consultation, the USFWS would issue a Biological Opinion (BO), which usually includes authorization for Incidental Take.

### **2.15.2 Affected Environment**

The analysis of the potential adverse effects of the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) on natural communities is based on the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020) prepared for the Project.

A biological study area (BSA) was established for the Project. The BSA includes the maximum grading extent (both temporary and permanent) of all the Build Alternatives, plus a buffer area that varies by location.

The BSA is located south of I-10 at the base of the foothills of the San Jacinto Mountains (Figure 2.15-1). Topography is relatively flat in the northern portions of the BSA, while elevations rise more abruptly on the south side of the BSA. Elevation ranges from approximately 1,800 feet (ft) above mean sea level (amsl) in Smith Creek to 2,700 ft amsl in the southern portion of the BSA and 2,500 ft amsl at the northern end of the BSA. Smith Creek conveys flows west to east through the BSA, where it converges with the San Gorgonio River, which flows from the northwest to the southeast.

The Project is within both the WRMSHCP and CVMSHCP Plan Areas and located on the Morongo Band of Mission Indians Tribal Land. The portions of the BSA that lie within the boundaries of the WRMSHCP are located in the Pass Area Plan within a Special Linkage Area, but not within a Criteria Area. Additionally, the Project is located within the WRMSHCP Narrow Endemic Plant Species Survey Area (NEPSSA), Burrowing Owl Survey Area, and Mammal Species Survey Area (Los Angeles Pocket Mouse).



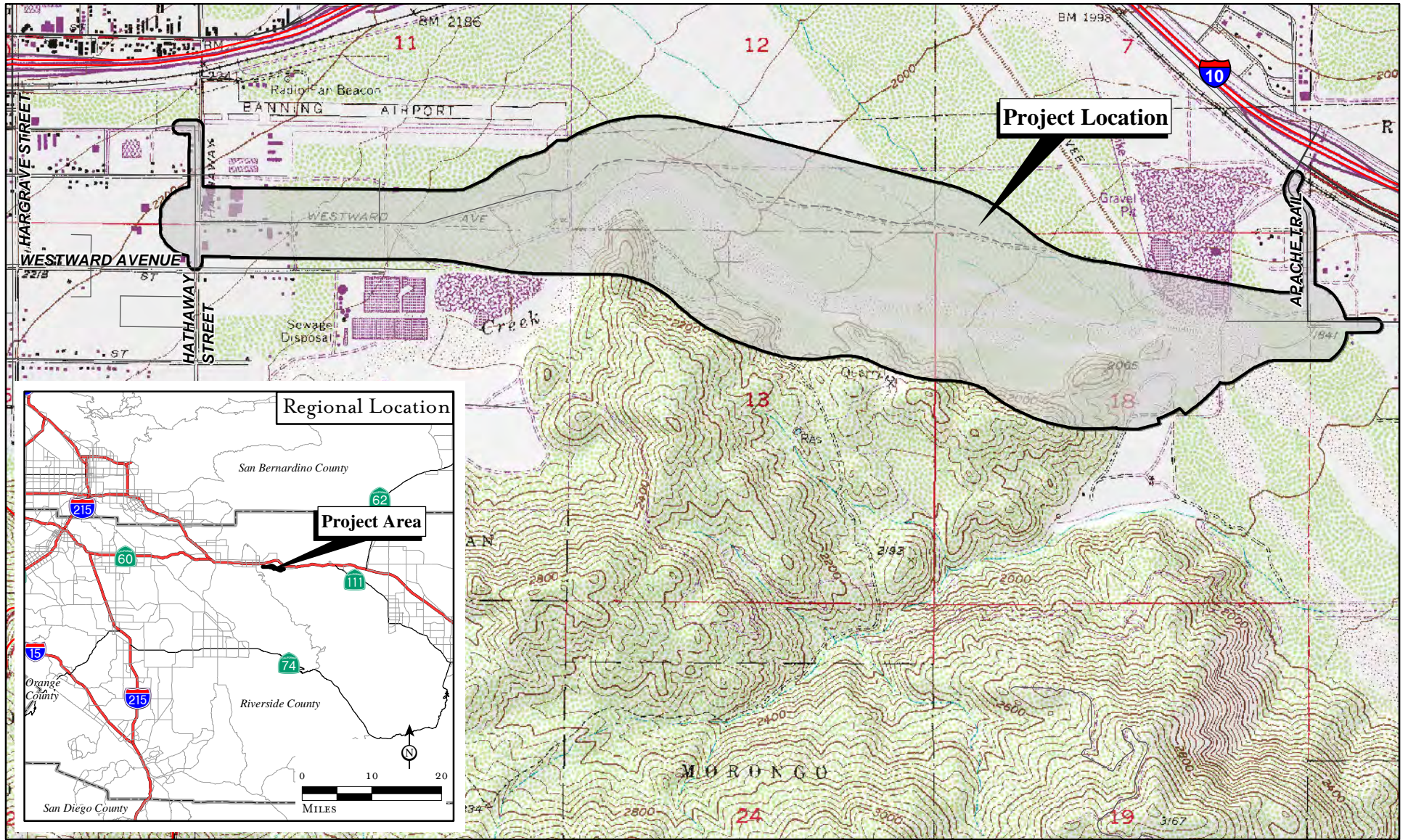
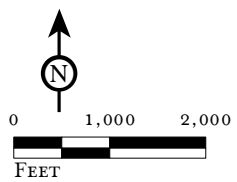


FIGURE 2.15-1



*I-10: Bypass Banning to Cabazon*  
Regional and Project Location

SOURCE: USGS 7.5' Quad: Cabazon (1988), CA; Riverside County, 2011

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Within the boundaries of the CVMSHCP, the BSA is located east of the Morongo Band of Mission Indians Tribal Land. This portion of the BSA is also within the CVMSHCP Cabazon Conservation Area. Within the BSA, the Cabazon Conservation Area serves to provide for an Essential Ecological Process Area for fluvial sand transport. Additionally, the Project lies within modeled habitat for the desert tortoise (*Gopherus agassizii*) and Le Conte's thrasher (*Toxostoma lecontei*). No CVMSHCP Core Habitat for covered species is present within the study area. Portions of Alternative 12 (Preferred Alternative) lie within the boundaries of the Morongo Band of Mission Indians Tribal Land. Such lands are not part of either the WRMSHCP or the CVMSHCP and will be subject to the requirements of FESA.

### 2.15.2.1 Vegetation/Natural Communities

Vegetation within the BSA has been affected by I-10, the adjacent concrete plant and associated infrastructure, livestock grazing, and residential and commercial development. Although the BSA has been disturbed, aside from the developed and disturbed/ruderal areas, the BSA contains six plant communities: disturbed *Acacia greggii* Shrubland Alliance, disturbed *Eriogonum fasciculatum* Shrubland Alliance, *Chilopsis linearis* Woodland Alliance, Coastal Sage Scrub (CSS), and Riversidean Alluvial Fan Sage Scrub (RAFSS). The predominant plant community within the BSA is RAFSS, which the CDFW considers a natural community of concern. The vegetation communities are described below.

- **Developed:** Developed areas within the BSA include the Robertson's Ready Mix concrete plant, I-10, residential and commercial development, local roads, a gas pipeline, and the Union Pacific Railroad (UPRR).
- **Disturbed/Ruderal:** Disturbed areas are present throughout the BSA. These disturbed areas are primarily devoid of vegetation. However, some nonnative vegetation is present. Dominant species include ripgut brome (*Bromus diandrus*) and foxtail chess (*Bromus madritensis*).
- ***Acacia greggii* Shrubland Alliance:** The *Acacia greggii* Shrubland Alliance community (Sawyer et al. 2009<sup>1</sup>) is present along the northern sections of the BSA, north of Smith Creek, and in a few scattered areas south of Smith Creek. The dominant species within this plant community include catclaw (*Acacia greggii*), emergent desert willow (*Chilopsis linearis*), California buckwheat

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<sup>1</sup> Sawyer, Keeler-Wolf, and Evens. 2009. A Manual of California Vegetation. Second Edition. California Native Plant Society Press, Sacramento, California.

(*Eriogonum fasciculatum*), California ephedra (*Ephedra californica*), and nonnative grasses.

- ***Eriogonum fasciculatum* Shrubland Alliance:** The *Eriogonum fasciculatum* Shrubland Alliance community (Sawyer et al. 2009) is present along the western portion of the BSA, south of Banning Municipal Airport. Dominant species include California buckwheat and nonnative grasses.
- ***Chilopsis linearis* Woodland Alliance:** The *Chilopsis linearis* Woodland Alliance community (Sawyer et al. 2009) is present along the southern portion of the BSA, interspersed within the RAFSS. Dominant species include desert willow (*Chilopsis linearis*), sweet bush (*Bebbia juncea*), cheesebush (*Hymenoclea salsola*), and nonnative grasses.
- **Coastal Sage Scrub:** CSS is present primarily on the cut slopes south of Smith Creek (Dudek and Associates, Inc. 2003<sup>1</sup>). This community does not contain the primary plant species components of the RAFSS community, such as scalebroom (*Lepidospartum squamatum*). This plant community is composed predominantly of California sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), California buckwheat, and white sage (*Salvia apiana*). In this vegetative community, there were areas where chamise (*Adenostoma fasciculatum*) was observed but not enough to distinguish it as an independent community.
- **Riversidean Alluvial Fan Sage Scrub:** RAFSS is present within the BSA and is a vegetation community adapted to the harsh conditions of the outwash environment (Dudek and Associates, Inc. 2003). It grows on sandy, rocky alluvia deposited by streams that experience infrequent episodes of severe flooding (Safford and Quinn 1998<sup>2</sup>). This vegetative community is distinctive because of the co-occurrence of evergreen shrubs, drought-deciduous shrubs, riparian species, and upland annual species (Hanes et al. 1989<sup>3</sup>). The only dominant species that has a strong fidelity to alluvial fan sage scrub is scalebroom, which is generally considered to be an indicator of RAFSS (Hanes et al. 1989). The

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<sup>1</sup> Western Riverside County Multiple Species Habitat Conservation Plan. Volume 1, The Plan, Parts 1 and 2 (Dudek and Associates, Inc. 2003).

<sup>2</sup> Safford, Joan M., and Ronald R. Quinn. 1998. Conservation Plan for the Etiwanda-Day Canyon Drainage System Supporting the Rare Natural Community of Alluvial Fan Sage Scrub.

<sup>3</sup> Hanes, T.L., R.D. Freisen, and K. Keane. 1989. Alluvial Scrub Vegetation in Coastal Southern California. USDA Forest Service Technical Report PSW-110. 1989.

RAFSS community within the BSA is dominated by scalebroom, California buckwheat, and desert willow.

RAFSS is especially valuable in terms of sustaining special-status species, particularly the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). Habitat for the Los Angeles pocket mouse is associated with the RAFSS habitat in the portion of the BSA located within the WRMSHCP Plan Area. Additionally, RAFSS is designated by the CDFW as a special-status plant community.

### **2.15.2.2 Wildlife Corridors**

The portion of the BSA within the WRMSHCP Plan Area is located in the Pass Area Plan area with a designated Special Linkage Area that will contribute to the assembly of the San Gorgonio River/San Bernardino-San Jacinto Mountains linkage. The primarily contiguous habitat within the WRMSHCP Special Linkage Area consists of desert scrub (672 acres [ac]) and CSS (93 ac).

The Project's impact on wildlife corridors was assessed by analyzing a regional report entitled, *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (CEHCP Report) (Spencer et al. 2010<sup>1</sup>), as well as a more detailed regional analysis that is consistent with the goals of the CEHCP, the 2005 *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (South Coast Wildlands [SCW] 2005<sup>2</sup>). Although the CEHCP Report is not specific to the Project, it provides general guidelines for analyzing impacts to wildlife corridors in the region where the Project is located.

The CEHCP Report, prepared for the California Department of Transportation (Caltrans), the CDFW, and the Federal Highway Administration (FHWA), identified large remaining blocks of intact habitat or natural landscapes, and modeled linkages between them that need to be maintained, particularly as corridors for wildlife. An "Essential Connectivity Area," is intended to connect the most ecologically intact and well-conserved lands generally across less intact and protected lands. The nearest Essential Connectivity Area is the San Jacinto Mountains – San Bernardino Mountains Connectivity Area, which is located in the Sonoran Ecoregion, four miles

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<sup>1</sup> Spencer et al. 2010. *The California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*

<sup>2</sup> South Coast Wildlands. 2005. *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino – San Jacinto Connection*.

east of Cabazon at the San Gorgonio Pass near the unincorporated area of Whitewater.

The *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* report (SCW 2005) evaluated wildlife habitat linkages, or corridors, between the San Bernardino Mountains and the San Jacinto Mountains, which link the Transverse and Peninsular Ranges. The South Coast Wildlands Linkage Design through the San Gorgonio-San Jacinto Pass area includes three elevation grades: (1) lower-elevation coastal foothills, which represent a mosaic of grassland, CSS, chaparral, oak savannas and woodlands, and riparian forest; (2) mid-elevation zones of montane chaparral interspersed with conifer hardwood forests dominated by Jeffrey pine, ponderosa pine, and sugar pine, mixed with patches of canyon live oak or black oak; and (3) high-elevation transitions to subalpine habitats with white fir, lodgepole pine, and limber pine being the most prominent species.

The San Bernardino-San Jacinto Mountains Linkage Design has five routes to accommodate various species and ecosystem functions. The branch of the Linkage Design that falls within the BSA encompasses the San Gorgonio River. This branch is a large alluvial fan that continues through the Banning Pass to the confluence of the Whitewater River. South Coast Wildlands (2005) reported that the southern portion of the branch, which lies south of I-10 and within the BSA, serves to provide a linkage for American badger (*Taxidea taxus*), Pacific kangaroo rat (*Dipodomys simulans*), large-eared woodrat (*Neotoma macrotis*) (previously considered a subspecies of *Neotoma fuscipes*), Merriam's kangaroo rat (*Dipodomys merriami*), and coast horned lizard (*Phrynosoma blainvillii [coronatum]*). It is presumed that these small-to-medium-sized species are the primary users of the San Gorgonio River branch of the South Coast Wildlands Linkage Design; however, it is acknowledged that larger species may on occasion use this linkage. South Coast Wildlands (2005) reported that black bears (*Ursus americanus*) observed within the San Jacinto Mountains presumably traveled from the San Bernardino Mountains along the San Gorgonio and/or Whitewater Rivers. Additionally, mountain lions (*Puma concolor*) are presumed to use the San Gorgonio River as a corridor because there have been sightings in Banning (SCW 2005).

Included in this branch of the Linkage Design is the confluence of Smith Creek and the San Gorgonio River. Smith Creek serves as an east/west wildlife corridor for various species that utilize habitats associated with Smith Creek. These species include mountain lion, mule deer (*Odocoileus hemionus*), rock wren (*Salpinctes*

*obsoletus*), tarantula hawk (*Pepsini*), and green hairstreak butterfly (*Callophrys rubi*). Even though only a portion of Smith Creek was in the Linkage Design, the South Coast Wildlands Report states that this branch shall be conserved through restrictions on floodplain development.

Additionally, the Project lies within a WRMSHCP Special Linkage Area. According to the WRMSHCP, this Special Linkage Area will contribute to the assembly of a portion of the San Gorgonio River/San Bernardino-San Jacinto Mountains linkage. Tribal coordination regarding Tribal Lands will be necessary in this area (under Alternative 12 [Preferred Alternative] only). The San Gorgonio River/San Bernardino-San Jacinto Mountains linkage includes locations within and outside the WRMSHCP Plan Area. The CVMSHCP states that the San Gorgonio River and associated tributaries provide value as a Biological Corridor between the San Bernardino Mountains and the San Jacinto Mountains.

The WRMSHCP San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage and the South Coast Wildlands San Bernardino-San Jacinto Mountains Linkage Design both cross I-10 to the north as well as the UPRR, the frontage road, and Johnson Lane. I-10 consists of four lanes of traffic in each direction separated by a concrete barrier, effectively creating a barrier for most wildlife movement across this transportation corridor. However, there are several drainage crossings underneath these three linear features, with San Gorgonio River being the largest. The I-10 crossing at the San Gorgonio River has a 250 ft bridge span length and immediately downstream, the UPRR bridge has a 200 ft bridge span length under which wildlife can cross. There is a 4–5 ft barbwire fence, with large welded wire mesh on the lower half, which runs along the I-10 right-of-way. The fence appears to primarily serve as a barrier for cattle and large tortoise; however, it may guide some species toward the bridges where they can cross under the freeway. Most of the small-to-medium-size wildlife species known to use the San Gorgonio River Linkage would likely be able to traverse over or through this fence. If mountain lion or black bear use this branch of the linkage, they would be able to jump or climb over the I-10 fence. Fencing for the I-10 Bypass Project would be similar to the existing fencing for I-10 discussed above. Fencing guidelines for the I-10 Bypass Project are discussed in Section 2.15.3.2 in avoidance and minimization Measures WC-3 and WC-4.

As required by the WRMSHCP, the openness ratio was utilized to assist in assessing the probability of wildlife use of proposed crossings within the BSA. The openness ratio quantifies the feeling of openness as an animal approaches the undercrossing's opening (from the animal's perspective), which is calculated in meters using the

undercrossing height multiplied by the undercrossing span, then divided by the road width. For large mammals, such as mule deer, the WRMSHCP requires an openness ratio, as calculated in meters, of approximately 0.6, with a minimum crossing height of 10–13 ft. The WRMSHCP describes the dimensions of these facilities as not needing to be as robust for the smaller species; however, the lengths of the facilities (particularly culverts) may need to be reduced to accommodate them. The WRMSHCP does not provide a minimum openness ratio for medium-sized mammals or smaller wildlife species, but recommends 3–5 ft culverts for medium-sized mammals (coyote, raccoon) and 2–3 ft culverts for small mammals, reptiles, and amphibians. The WRMSHCP further describes these smaller structures as preferred by mice, weasels, and other small wildlife and that the dimensions of these facilities do not need to be as robust for the smaller species; however, the lengths of the facilities (particularly culverts) may need to be reduced to accommodate them. For example, small mammals (vole-sized) have been shown to use culverts as long as 64 meters.

Smaller wildlife structures, including 36-inch corrugated steel pipe and reinforced concrete box culverts, generally suffice for a variety of small- to medium-sized species that dig holes, use burrows, or live or hunt in hollow logs or confined spaces. These include American badger, raccoon, skunks, weasels (*Mustella* sp.), gray fox, bobcat, and coyote (Clevenger et al. 2000<sup>1</sup>). A number of smaller mammals, reptiles, and amphibians also have been documented using culverts this size or smaller.

## **2.15.3 Environmental Consequences**

### **2.15.3.1 Vegetation Communities**

#### ***No Build Alternative***

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained. No temporary or permanent impacts to natural communities would occur.

#### ***Build Alternatives***

##### ***Temporary Impacts***

Alternative 5 and Alternative 12 (Preferred Alternative) would respectively result in approximately 12.51 ac and 12.43 ac of temporary effects to RAFSS. Temporary impacts include incidental disturbances in construction and equipment staging areas.

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<sup>1</sup> Clevenger, A.P., Waltho, and M. Hourdequin. 2000. Factors Influencing the Effectiveness of Wildlife Underpasses in Banff National Park, Alberta, Canada. *Conservation Biology* 14:47-56.



### ***Permanent Impacts***

Alternative 5 and Alternative 12 (Preferred Alternative) would respectively result in approximately 0.55 ac and 0.04 ac of permanent effects to RAFSS. Permanent effects are relatively minor and may result from the complete removal of existing vegetation, encroachment into existing vegetation, shading effects, and fill material (e.g., dirt for grading activities, and concrete and steel for bridge columns).

### **2.15.3.2 Wildlife Corridors**

#### ***No Build Alternative***

Under the No Build Alternative, no roadway improvements would be made, and existing conditions would be maintained.

#### ***Build Alternatives***

##### ***Temporary Impacts***

The Build Alternatives would result in temporary effects to wildlife corridors during construction resulting from noise and disturbance associated with construction personnel and equipment activity. However, because wildlife movement occurs primarily at night, Build Alternative construction would be limited to daylight hours to the extent feasible. Areas under active construction will be fenced to prevent wildlife from entering the area. Construction will be phased in a way that wildlife movement through the BSA will be maintained during the construction period via either a bridge or a section of road that is not currently under construction. Therefore, substantial temporary adverse effects on wildlife movement during construction are not expected. In addition, areas with temporary disturbance of vegetation will be restored to native habitat following construction to help provide refugia for wildlife approaching the wildlife crossings.

##### ***Permanent Impacts***

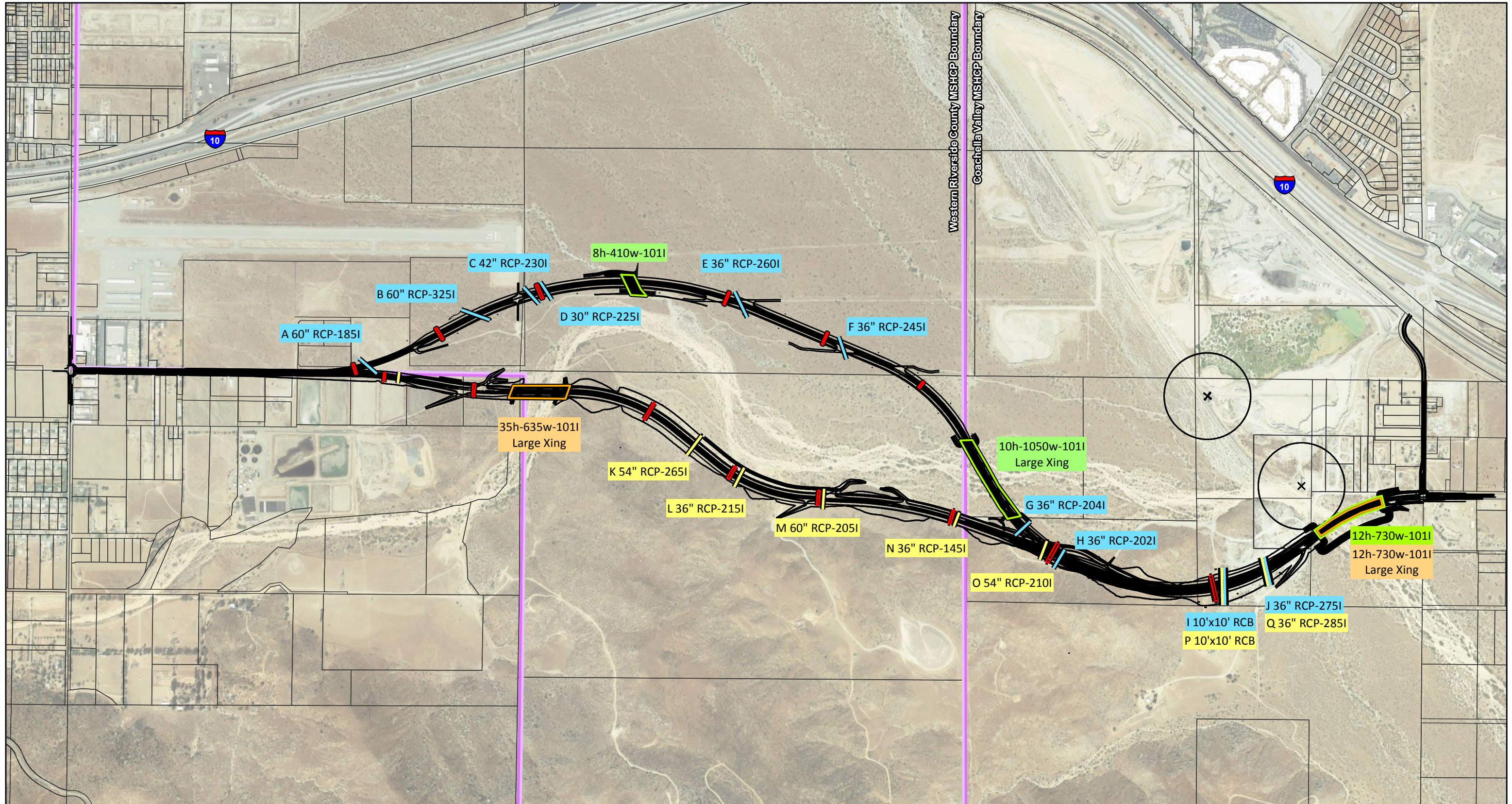
The Project is in a WRMSHCP Special Linkage Area. According to the WRMSHCP, this Special Linkage Area will contribute to assembly of a portion of the San Gorgonio River/San Bernardino-San Jacinto Mountains linkage. Under Alternative 12 (Preferred Alternative), Caltrans would be required to initiate a Section 7 consultation with the USFWS regarding potential Endangered Species Act Take authorization on Tribal Lands. The San Gorgonio River/San Bernardino-San Jacinto Mountains linkage includes locations within and outside the WRMSHCP Plan Area. The CVMSHCP states that the San Gorgonio River and associated tributaries provide value as a Biological Corridor between the San Bernardino Mountains and the San Jacinto Mountains.

Alternative 12 (Preferred Alternative) would bisect approximately 30 ac of contiguous desert scrub habitat within the WRMSHCP Special Linkage Area, and Alternative 5 would bisect approximately 3 ac of contiguous CSS habitat from the aforementioned pre-project contiguous habitat within the WRMSHCP Special Linkage Area. However, connectivity would be maintained by the large bridge spans that would allow for migratory movement and gene flow across the Project. Bridge spans range from 663 ft to 893 ft for Alternative 5 and from 133 ft to 1,072 ft for Alternative 12 (Preferred Alternative). The bridge spans for both Build Alternatives are larger than the upstream bridge spans at I-10 and the UPRR and would maintain regional wildlife movement in the BSA.

Neither Build Alternative would block the east/west wildlife movement within the South Coast Wildlands Linkage Design that runs along the northern San Jacinto foothills and San Gorgonio River. Both alternatives have been designed with large bridge structures that would maintain north/south connectivity along the San Gorgonio River and east/west connectivity along Smith Creek, thereby minimizing fragmentation across the WRMSHCP's San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage.

Alternative 12 (Preferred Alternative) includes three bridges that cross the San Gorgonio River, Smith Creek, and an unnamed tributary to Smith Creek. These bridges were designed to span the full width of the 100-year storm flow as modeled by the Hydrologic Engineering Center's River Analysis System (HEC-RAS) hydraulic model. These bridges will accommodate all sizes of wildlife species with openness ratios of 3.15 at the unnamed tributary to Smith Creek, an openness ratio of 31.8 for Smith Creek, and an openness ratio of 32.7 for the San Gorgonio River (refer to Table 2.15.1 and Figure 2.15-2). Alternative 12 (Preferred Alternative) also includes nine reinforced concrete pipe (RCP) culverts ranging from 30 inches in diameter to 60 inches in diameter and one reinforced concrete box (RCB) culvert at 10 ft by 10 ft that could potentially be used by small-to-medium-sized animals; however, they are not specifically designed for wildlife. The openness ratios for the bridges and culvert and their respective locations are shown on Figure 2.15-2 and listed in Table 2.15.1. Although not required by either the WRMSHCP or the CVMSHCP, an additional eight dedicated wildlife crossings are shown on Figure 2.15-2 for small-to-medium-size wildlife species. The specific dimensions will be developed during final engineering design for the Project.

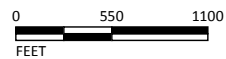




LSA

LEGEND

- |                         |                |  |                                |
|-------------------------|----------------|--|--------------------------------|
| — Alternatives 5 and 12 | Alternative 5  | Alternative 12 (Preferred Alternative) | Western Riverside County MSHCP |
| — Wildlife Crossings    | — Storm Drains | — Storm Drains                         | — Special Linkage Area         |
|                         | — Bridge       | — Bridge                               |                                |



SOURCE: Google Earth (2017); Kimley Horn (10/2018)  
 I:\KHA1101\GIS\WildlifeCrossings.mxd (3/4/2020)

FIGURE 2.15-2



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**Table 2.15.1 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Build Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
Smith Creek	Bridged Roadway	5	35'(10.7m)H x 663'(202.1m)W x 101'(30.8m)L	70.21	High. The tall and wide span of the proposed bridges allows for high-quality connectivity of habitats within Smith Creek. The proposed bridge structures will maintain this connectivity.
	Bridged Roadway	12 (Preferred Alternative)	10'(3.0m)H x 1,072'(326.7m)W x 101'(30.8m)L	31.82	
San Gorgonio River	Bridged Roadway	Alternative 5 and Alternative 12 (Preferred Alternative)	12'(3.7m)H x 893'(272.2m)W x 101'(30.8m)L	32.70	High. The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the San Gorgonio River. The proposed bridge structures will maintain this connectivity.
Unnamed Smith Creek Tributary	Bridged Roadway	12 (Preferred Alternative)	8'(2.4m)H x 133'(40.5m)W x 101'(30.8m)L	3.16	High. The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the Smith Creek Tributary. The proposed bridge structures will maintain this connectivity.
A	RCP	12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 185'(56.4m)L	0.04	The culvert would provide connectivity for small-to-medium-sized animals.
B	RCP	12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 325'(99.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
C	RCP	12 (Preferred Alternative)	42"(1.1m)H x 42"(1.1m)W x 230'(70.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
D	RCP	12 (Preferred Alternative)	30"(0.8m)H x 30"(0.8m)W x 225'(68.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
E	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 260'(79.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
F	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 245'(74.7m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
G	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 204'(62.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
H	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 202'(61.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
I	RCB	12 (Preferred Alternative)	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
J	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 275'(83.8m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.

**Table 2.15.1 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Build Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
K	RCP	5	54"(1.4m)H x 54"(1.4m)W x 265'(30.8m)L	0.06	The culvert would provide connectivity for small-to-medium-sized animals.
L	RCP	5	36"(0.9m)H x 36"(0.9m)W x 215'(80.8m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
M	RCP	5	60"(1.5m)H x 60"(1.5m)W x 205'(65.5m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.
N	RCP	5	36"(0.9m)H x 36"(0.9m)W x 145'(65.5m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
O	RCP	5	54"(1.4m)H x 54"(1.4m)W x 210'(64.0m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.
P	RCB	5	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
Q	RCP	5	36"(0.9m)H x 36"(0.9m)W x 285'(86.9m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.

Source: *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

Note: The proposed dimensions are based on the Build Alternative with the greatest potential effect (e.g., longest culvert extension).

H = height

L = length

W = width

RCB = reinforced concrete box

RCP = reinforced concrete pipe

The Alternative 12 (Preferred Alternative) bridge crossings are all less than one mile from each other, which is the crossing spacing recommended for large wildlife crossings in the U.S. Department of Transportation's (USDOT) *Wildlife Crossing Structure Handbook, Design and Evaluation in North America* (Wildlife Crossing Structure Handbook) (Clevenger and Huijser 2011<sup>1</sup>).

Alternative 5 includes two bridge crossings approximately two miles apart with openness ratios of 70.2 at Smith Creek and 32.7 at San Gorgonio River, respectively, at the two bridge crossings. Alternative 5 also includes six RCP culverts ranging from 36 inches in diameter to 54 inches in diameter and one RCB culvert at 10 ft by 10 ft that could be used by small-to-medium-sized animals, though they are not specifically designed for wildlife movement. The locations and openness ratios of the structures

<sup>1</sup> Clevenger, A.P., and M. Huijser. 2009. *Handbook for Design and Evaluation of Wildlife Crossing Structures in North America*. Western Transportation Institute.



are shown on Figure 2.15-2 and listed in Table 2.15.1. The culverts were designed to convey water and sand flow crucial to downstream species, so they may be flooded or partially filled with sediment at times. The bridges would likely be used by large, medium, and small-sized animals. Although not required by either the WRMSHCP or the CVMSHCP, an additional eight dedicated wildlife crossings (Figure 2.15-1) were added for each alternative to provide connectivity for small- to- medium-sized animals under the road to maintain wildlife connectivity for the WRMSHCP Special Linkage and South Coast Wildlands Linkage Design. The spacing between the dedicated wildlife crossings is less than 0.3 mi, except where prevented by a hillside cut. The dedicated wildlife crossings will be designed in the final design process consistent with the USDOT's Wildlife Crossing Structure Handbook (2011 ), Caltrans' *Wildlife Crossings Guidance Manual* (Meese et al. 2009), and the WRMSHCP. The Project will incorporate a variety of wildlife crossing design dimensions to accommodate a diversity of wildlife species preferences. The wildlife crossings would not be designed to accommodate recreational uses.

Ambient noise can deter wildlife movement. Baseline noise sources consist of distant traffic on I-10, Apache Trail, Bonita Avenue, and Hathaway Street, nearby sand and gravel operations, the UPRR, and nearby aircraft. Traffic noise levels near the proposed two-lane road are predicted to be high as shown in Tables 2.14.4 and 2.14.5 and would likely deter wildlife from entering areas immediately adjacent to the roadway. For example, Table 2.14.4 shows that traffic noise levels would increase by 10 A-weighted decibels (dBA) from a noise level of 48 dBA  $L_{eq}$  (equivalent continuous sound level measured in dBA) at Receptor R6, which is close to the proposed roadway under Alternative 5. In addition, Table 2.14.5 shows that traffic noise levels would increase by 15 dBA from a noise level of 48 dBA  $L_{eq}$  at Receptor R27, which is close to the proposed roadway under Alternative 12 (Preferred Alternative). However, as shown in Tables 2.14.4 and 2.14.5, in Section 2.14, Noise, 2038 traffic noise levels would remain the same as existing traffic noise levels in areas further from the proposed two-lane road because traffic noise on I-10 dominates the noise environment in the Project area. For example, Tables 2.14.4 and 2.14.5 show that traffic noise levels would remain the same without and with the Project under Alternative 5 at Receptor R5 and under Alternative 12 (Preferred Alternative) at Receptor R20, which are located further from the proposed roadway than Receptors R6 and R27 discussed above.

The number and spacing of wildlife crossing opportunities integrated into the Project design would maintain wildlife connectivity across the WRMSHCP Special Linkage,

especially at San Gorgonio River and Smith Creek. The restriction to wildlife movement would be minimal for north/south movement because the nearby I-10 freeway provides a greater barrier to wildlife than would the Project. Noise and traffic is not expected to substantially affect north/south connectivity between the San Bernardino Mountains and San Jacinto Mountains through the WRMSHCP Special Linkage because projected noise and traffic associated with the Project would be substantially less than nearby I-10 to the north, which presents a greater deterrence to wildlife movement. Although the WRMSHCP designates the area as a Special Linkage, it does not provide long-term conservation through the area.

Traffic on the proposed road is expected to increase from 5,200 vehicles per day at project opening to 17,900 vehicles per day by 2038. Impacts to wildlife movement related to traffic growth are expected to be limited because of the implementation of avoidance and minimization Measures WC-3 and WC-4, that provide fencing and guide wildlife towards the crossings, the crossing designs would be consistent with the USDOT's Wildlife Crossing Structure Handbook and Caltrans' *Wildlife Crossings Guidance Manual*. Avoidance and minimization Measures WC-3 and WC-4 are also expected to minimize any increase in vehicle-related wildlife mortality. Therefore, the Project is not expected to result in a substantial effect to wildlife movement. With the implementation of avoidance and minimization Measures WC-3 and WC-4, wildlife movement will be sustained in the BSA for the long term.

The WRMSHCP protects and preserves species of rare, threatened, and endangered plants, birds, and animals. The CVMSHCP aids to minimize and mitigate the impacts of the taking of species covered by the Plan and provides for conservation of the Covered Species. Through participation in both Habitat Conservation Plans and implementation of the avoidance, minimization, and mitigation measures identified below, and through coordination with the Morongo Band of Mission Indians (under Alternative 12 [Preferred Alternative] only), no substantial cumulative effects are anticipated to occur to wildlife movement corridors in the BSA.

### **2.15.3.3 Habitat Conservation Plans**

Portions of the BSA are located in two different Habitat Conservation Plans, the WRMSHCP and the CVMSHCP (Figure 2.15-3). The Morongo Band of Mission Indians Tribal Lands are not subject to the requirements of these Habitat Conservation Plans but are subject to the requirements of FESA.



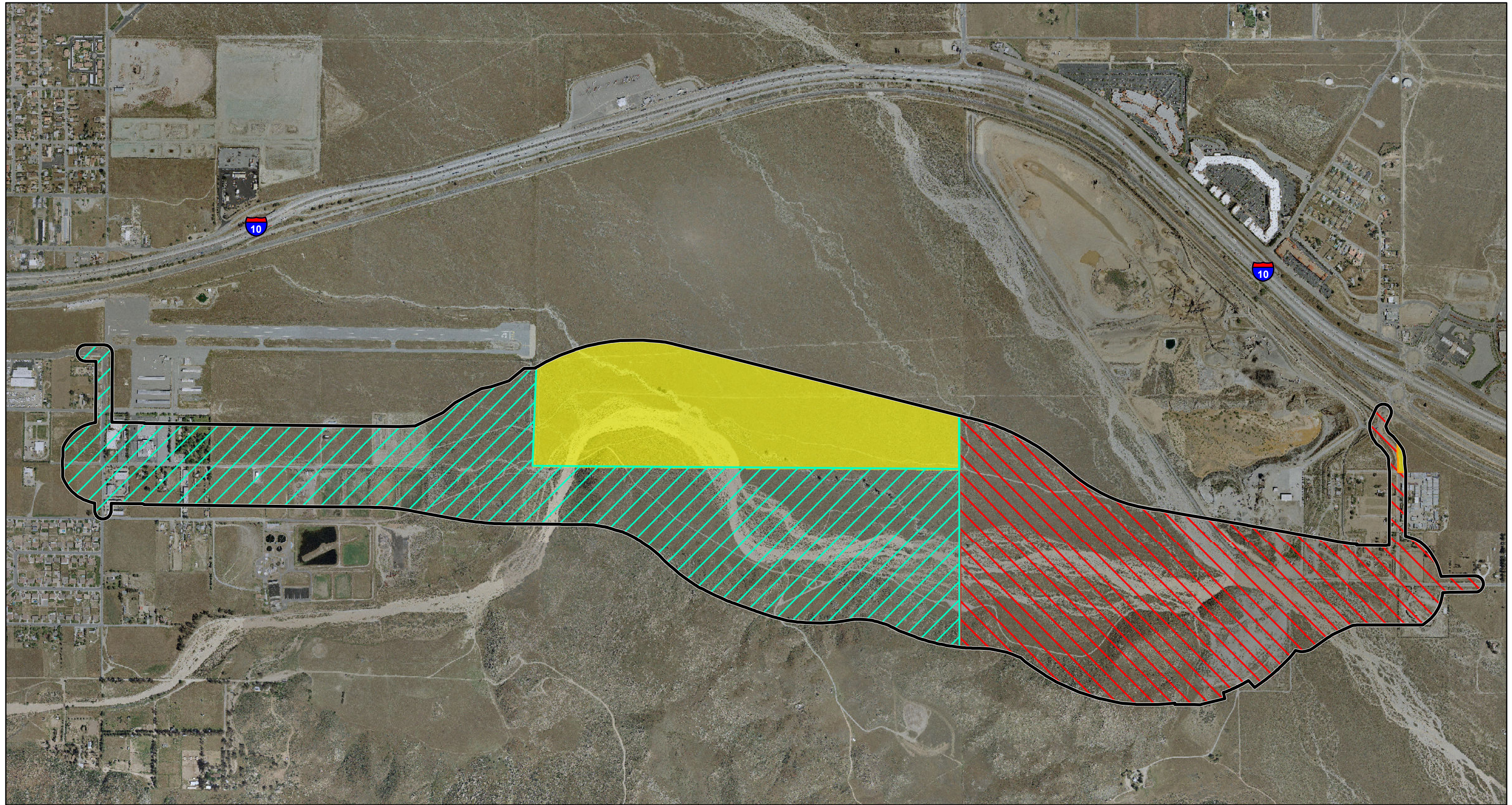
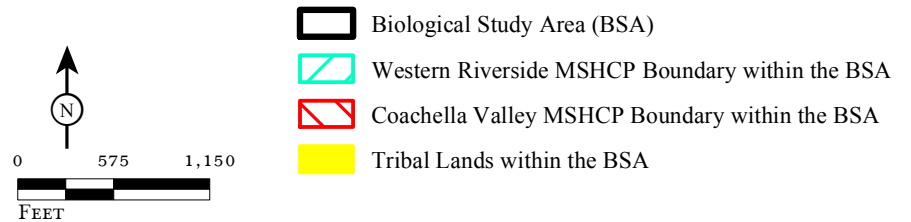


FIGURE 2.15-3



*I-10 Bypass: Banning to Cabazon*  
 Habitat Conservation Plans and Tribal Lands

SOURCE: KHA, 2012; Riverside County, 2013  
 I:\KHA1101\Reports\NES\fig5\_MSHCP\_Tribal.mxd (4/12/2019)



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### **Western Riverside County Multiple Species Habitat Conservation Plan**

The Project site lies within the Pass Area Plan of the WRMSHCP. The WRMSHCP Consistency Assessment Report addresses compliance with riparian/riverine and vernal pool habitat, including riparian/riverine resources, Special Linkage area, and species survey areas (small mammal survey area [Los Angeles pocket mouse] and western burrowing owl survey area) requirements. The Project is also located within an NEPSSA for the Yucaipa onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*). The Project does not lie within any other species-specific survey areas (e.g., for vernal pool species or amphibian species).

Permanent effects to the RAFSS community would be relatively small and would not be considered substantial adverse effects. However, mitigation will be required where adverse effects to this community are associated with jurisdictional waters and Los Angeles pocket mouse habitat.

The RAFSS community is primarily associated with Smith Creek, the San Gorgonio River, and other drainage features within the BSA. Impacts to these drainage features are subject to the regulatory authority of the United States Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB). Mitigation will be required for Project impacts to these drainage features and the associated RAFSS. In addition, habitat for Los Angeles pocket mouse is associated with the RAFSS habitat in the portion of the Project site located within the WRMSHCP Plan Area. Mitigation will be required for impacts to Los Angeles pocket mouse habitat. Mitigation for impacts to jurisdictional waters and mitigation measures for Los Angeles pocket mouse are discussed in Sections 2.16, Wetlands and Other Waters, and 2.18, Animal Species, respectively.

The County, as a local permittee, followed the Criteria Consistency Review Process described in Section 3.0. Implementation and Findings documenting the criteria review consistency process, as described in Section 3.0 of the WRMSHCP, will be made by the Local Permittees for each project for which a Criteria consistency review is conducted and will be included in the appropriate project review and approval documentation. The Information and Findings will include the following:

- a. Brief description of the project and its location focusing on the location of the project with respect to the applicable MSHCP Core or Linkage, Area Plan Subunit, and Cell or Cell Group;

**Response:** The new I-10 Bypass two-lane roadway, extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Morongo Trail (formerly Apache Trail) in the unincorporated community of Cabazon, is located within the WRMSHCP and crosses through the Pass Area Plan and the Special Linkage Area. The above Project Description is included in the Draft and Recirculated Draft EIR/EA. The Project is not located within a WRMSHCP criteria cell or core as stated in Section 2.15, Natural Communities, of the Draft and Recirculated Draft EIR/EA.

- b. Brief description of on-site biological resources focusing on presence or absence of Planning Species (subset of covered species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans) identified for the applicable Core or Linkage and Area Plan Subunit, Biological Issues and Considerations identified for the applicable Area Plan Subunit, and focus Vegetation Communities and connectivity identified for the applicable Cell or Cell Group;

**Response:** The biological resources within the WRMSHCP that would be affected by the Project include disturbed *Acacia greggii* Shrubland Alliance, disturbed *Eriogonum fasciculatum* Shrubland Alliance, and Riversidean Alluvial Fan Sage Scrub (RAFSS) vegetation communities, as described in Section 2.15 of the Draft and Recirculated Draft EIR/EA. The Project also crosses Smith Creek and two unnamed tributaries to Smith Creek that are considered CDFW Streambeds (Section 2.16 of the Draft and Recirculated Draft EIR/EA). Of the 11 planning species described in the WRMSHCP for the Pass Area Plan, loggerhead shrike and Los Angeles pocket mouse were observed on site. Special-status wildlife species potentially affected by the Project include coastal California gnatcatcher, Los Angeles pocket mouse, burrowing owl, Le Conte's thrasher, nesting birds, and desert tortoise (Sections 2.18 and 2.19 of the Draft and Recirculated Draft EIR/EA). The USFWS determined that the Project does not include suitable habitat for desert tortoise and withdrew desert tortoise from consideration in the Section 7 Consultation (USFWS 2021). The habitat conditions on site were not suitable to any special-status plants species (Sections 2.17 and 2.19 of the Draft and Recirculated Draft EIR/EA). The Project crosses a non-criteria cell WRMSHCP Special Linkage that is also known as the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage (Section 2.15 of the Draft and Recirculated Draft EIR/EA).



The Project is within the WRMSHCP Pass Area Plan. The WRMSHCP describes that projects within the Pass Area Plan need to comply with the following three measures, outlined in Section 3.3.10 of the WRMSHCP for the Pass Area Plan, to (1) conduct Tribal coordination regarding Indian Lands, (2) apply the rebuttable presumption of significance in response to question IV(d) of Appendix G of the State CEQA Guidelines regarding migratory wildlife corridors, and (3) forward the Draft and Final CEQA documentation for projects within this Special Linkage Area (including the I-10 Bypass Project) to the Western Riverside County Regional Conservation Authority (RCA) for informational purposes. Consistency with each of the WRMSHCP Pass Area Plan measures is discussed in the response to c. below.

- c. A brief analysis of the relationship of the project as proposed to the biological resources issues noted in (b) and discussion of the proposed project contribution toward achieving the MSHCP Criteria;

**Response:** An analysis of the Project's effects on biological resources is provided in Sections 2.15 through 2.20 of the Draft and Recirculated Draft EIR/EA, the Natural Environmental Study (NES) and Errata (March 2020), the Determination of Biological Equivalent or Superior Preservation (DBESP), and the Biological Opinion (BO), which all demonstrate consistency with the WRMSHCP.

In addition, the County complied with the three measures described in the Pass Area Plan, including the following:

1. The County has coordinated with the Tribe of Morongo Band of Mission Indians (MBMI) throughout the development process for this Project. The MBMI expressed their support for the I-10 Bypass Alternative 12 (Preferred Alternative) in their September 25, 2018, letter to the County (included in Chapter 4, Comments and Coordination, of this Final EIR/EA). The Bureau of Indian Affairs (BIA) is also a cooperating agency under NEPA for the I-10 Bypass Project, and there is ongoing coordination with the BIA. In addition, the USFWS issued a Biological Opinion, dated January 8, 2021, that addresses take authorization for coastal California gnatcatcher and the withdrawal from consultation for desert tortoise consistent with the requirements for the Morongo Band of Mission Indians Tribal Trust Lands (Tribal Lands) and the WRMSHCP and CVMSHCP Plan Areas.

2. The Project would not substantially interfere 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. The size, number, and spacing of wildlife crossings that will be constructed as part of the Project will maintain wildlife connectivity across the Project area through the WRMSHCP Special Linkage. The Project minimizes effects on wildlife movement by maintaining opportunities for wildlife to cross the Project area using three large bridge structures that will facilitate wildlife movement: (1) a 12 ft (H) by 893 ft (W) by 101 ft (L) structure at the San Gorgonio River, (2) a 10 ft (H) by 1,072 ft (W) by 101 ft (L) structure at Smith Creek, and (3) an 8 ft (H) by 133 ft (W) by 101 ft (L) structure at the unnamed Smith Creek Tributary. Eight additional wildlife crossings will provide additional opportunities for small-to-medium-sized wildlife across the length of the Project area at regular intervals (see Figure 11, NES Errata, March 2020). The *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod, K., November 2, 2000) was reviewed for features of the linkage and focal species that would use the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. In addition, the Project was designed to be significantly more porous than the barrier created by the I-10 freeway located to the north with only one crossing in the vicinity.
  3. The RCA was provided copies of the Draft EIR/EA and the Recirculated Draft EIR/EA during circulation, and was involved with multiple discussions regarding the development of the measures stated herein. The Final EIR/EA will be distributed to the RCA according to State CEQA Guidelines.
- d. A brief discussion of any conflicts with the MSHCP Criteria due to project design features, surrounding land use conditions, on-site conditions different from those anticipated in the MSHCP or other appropriate factors and summary of features incorporated in the project to address those conflicts;

**Response:** The Project is a covered activity under the WRMSHCP, per Section 7.0 of the WRMSHCP. The Project does not conflict with the WRMSHCP Criteria. Project design features that avoid and minimize potential impacts to natural communities, wildlife connectivity, wetlands and waters, special-status wildlife species, and the associated avoidance, and minimization measures/commitments are summarized in Table C-1 in Appendix C, Avoidance, Minimization and/or Mitigation Summary.

- e. A Statement of Findings that the proposed project has been determined to be consistent with the MSHCP Criteria and the rationale for this determination. The Findings shall incorporate the information generated as part of (a) through (d) above and shall specifically describe the consistency of the project with Reserve Assembly criteria with emphasis on reserve configuration and connectivity and covered species.

**Response:** As described in the Criteria Consistency Review Process, Section 3.0 of the WRMSHCP, the County as the Local Permittee determined that the Project is a covered activity consistent with the MSHCP Criteria and complied with the Pass Area Plan requirements as supported above.

#### ***No Build Alternative***

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained.

#### ***Build Alternatives***

##### ***Temporary and Permanent Impacts***

The BSA lies within a Special Linkage Area. According to the WRMSHCP, this Special Linkage Area will contribute to assembly of a portion of the San Gorgonio River/San Bernardino San Jacinto Mountains Linkage. Tribal coordination regarding American Indian Lands will be necessary in this area. The San Gorgonio River/San Bernardino San Jacinto Mountains Linkage includes locations within and outside the WRMSHCP Plan Area. The County will remain compliant with the WRMSHCP and will coordinate with the Morongo Band of Mission Indians. Effects to this Special Linkage Area under the Build Alternatives will be minimized, mitigated, or avoided through compliance with the WRMSHCP requirements. Therefore, through compliance with the WRMSHCP, there will be no adverse effects to this Special Linkage Area.

#### ***Coachella Valley Multiple-Species Habitat Conservation Plan***

A portion of the BSA that lies within the CVMSHCP Plan Area is situated within the Cabazon Conservation Area. Within the Cabazon Conservation Area, the BSA lies within “other conserved habitat” for the desert tortoise and Le Conte’s thrasher. In addition, the drainages in the study area are important wildlife corridors and contain habitat for numerous species, including the potential for threatened and endangered species such as the desert tortoise. A pre-construction survey for the desert tortoise may be required by the USFWS. If construction were to commence during the Le

Conte's thrasher nesting season (January 15 through June 15), a pre-construction survey would be conducted by an Acceptable Biologist.<sup>1</sup>

The primary importance of the Cabazon Conservation Area is that the San Gorgonio River and various tributaries function as a fluvial sand transport system for the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area, which lie east of the Project. The portions of the San Bernardino Mountains and the San Jacinto Mountains included in this area are sand sources for this fluvial sand transport system. The CVMSHCP has determined that fluvial sand transport along the San Gorgonio River west of the Cabazon Conservation Area and the functionality of the San Gorgonio River as a Biological Corridor are maintained as a result of public ownership along the river and flood control regulations. The CVMSHCP requires local permittees to protect the fluvial sand transport Essential Ecological Process in the Cabazon Conservation Area to ensure there is no net reduction in fluvial sand transport for downstream sand deposition areas where aeolian sand transport processes are active.

The Coachella Valley Conservation Commission (CVCC) reviewed the I-10 Bypass Project through the Joint Project Review process, and confirmed the Project's consistency with the CVMSHCP on June 11, 2020.

### ***No Build Alternative***

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained.

### ***Build Alternatives***

#### ***Temporary and Permanent Impacts***

Because the Build Alternatives propose to construct a bridge over the San Gorgonio River and Smith Creek, fluvial sand transport and river functionality will not be adversely affected by the Project. The four bridges associated with the two Build Alternatives would span the full width of the 100-year storm flow and, as modeled by the HEC-RAS hydraulic model, have been designed to not restrict flow and, therefore, would ensure a no net reduction in sediment transport from sand source areas to the downstream sand deposition areas where aeolian sand transport processes are active. Two-dimensional hydraulic modeling will occur during final design to confirm that the location of bridge abutments span the 100-

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<sup>1</sup> The requirements for an Acceptable Biologist are outlined in the CVMSHCP.

year storm flow. No structures would be constructed between the sand source and water bodies (i.e., Smith Creek and the San Gorgonio River). In addition, the stormwater conveyance devices such as drainage ditches/swales, cross culverts, and inlets would be designed to avoid impacts to fluvial sand transport, consistent with the CVMSHCP as described below.

1. Drainage ditches/swales for the Project will be approximately 10–20 feet wide running parallel to the roadway with inlets. The graded ditches/swales will be designed shallow to avoid collecting wind-borne sand. Sand that does collect in these systems will naturally flow through the inlets and cross culverts that will be designed with self-cleaning velocities to promote movement of sand through the system. This design will allow sediment to contribute fluvial sand transport Essential Ecological Process or river functionality in the Cabazon Conservation Area that contributes sand to downstream aeolian sand and biological processes at the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area.
2. Cross culverts under the roadway range in size from approximately 36 inches in diameter to a 10x10-foot box culvert. Cross culverts will be designed with self-cleaning velocities to promote movement of sand through the system. This design will maintain sediment transport as noted in item number 1 above.
3. Inlet protection and/or debris settling basins will be constructed at the upstream end of cross culverts ranging in size from approximately 15–100 feet in diameter (or similar length/width combination). Debris basins will be located at the base of steeper canyons and designed to catch larger rock and materials that could block cross culverts. The systems will be designed to let smaller materials including sand to pass through. This design will maintain sediment transport as noted in item number 1 above.

Adverse effects to the CVMSHCP Conservation Areas or fluvial sand transport systems would not occur under the Build Alternatives.

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

### **2.15.4.1 Natural Communities**

The following avoidance and minimization measures will be incorporated to avoid and minimize adverse effects to RAFSS within the BSA.

**NC-1 Protection of Vegetation and Wildlife Within Riversidean Alluvial Fan Sage Scrub.** Prior to clearing or construction, the County of Riverside's (County) Resident Engineer will direct the Project Contractor to ensure that highly visible barriers (e.g., orange construction fencing) will be installed around Riversidean Alluvial Fan Sage Scrub (RAFSS) communities adjacent to the Project's construction footprint to designate Environmentally Sensitive Areas (ESAs) to be preserved. No grading or fill activity of any type will be permitted within these ESAs. RAFSS is habitat for the coastal California gnatcatcher. Therefore prior to construction, vegetation should be removed outside the gnatcatcher breeding season (February 15 through August 31). If vegetation cannot be removed outside the gnatcatcher nesting season (February 15 through August 31), nesting gnatcatcher surveys shall be conducted within 3 days prior to project ground disturbance to ensure the gnatcatcher and other nesting birds protected under the MBTA and California Fish and Game Code are not disturbed by construction-related activities (i.e., brush clearing and noise). Should nesting gnatcatchers be found on or in the immediate vicinity (approximately 300 feet) of the Project site, no construction or clearing will be conducted until the Project biologist determines that the young have fledged or the nest is no longer active. Following construction, temporary impacted areas shall be restored with coastal sage scrub and Riversidean alluvial fan sage scrub. Permanent loss of coastal sage scrub and Riversidean alluvial fan sage scrub will be restored in accordance with the requirements described in the Biological Opinion.

In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment shall be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.

**NC-2 Maintenance Facilities.** During construction, the County's Resident Engineer will ensure that all equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland habitat areas. The



designated upland areas will be located so as to prevent the runoff from any spills from entering waters of the United States.

**NC-3 Biological Monitoring.** Prior to clearing or construction, the County will appoint a biologist that will monitor construction of the Project to ensure that vegetation removal and ESAs are properly constructed and followed.

**NC-4 Revegetation.** Permanent and temporary impacts to native vegetation communities will be restored at a 1:1 ratio. Prior to construction, a restoration plan will be prepared by a Restoration Ecologist that specifies appropriate native seed mixes, site preparation activities including potential invasive species removal, and soil compaction, as well as installation methods and maintenance and monitoring performance standards. All graded slopes will be revegetated with native species, and topsoil will be stockpiled and spread as per Visual Measures V-2 and V-4.

#### **2.15.4.2 Wildlife Corridors**

During construction, the two primary movement corridors, Smith Creek and the San Geronio River, will be avoided as much as possible. Equipment maintenance, lighting, and staging must be in designated areas, away from wildlife corridor entrances. In addition to avoidance and minimization Measures NC-1 through NC-3 identified above, the following avoidance and minimization measures will be incorporated.

**WC-1 Noise and Lighting.** During construction, if work must be conducted at night, the County of Riverside's (County) Resident Engineer will ensure noise and direct lighting will be directed away from the wildlife corridors. Construction will be limited to daylight hours to the extent feasible. If roadway lighting is needed temporarily during construction, the lighting would be restricted and shielded away from adjacent native habitat areas in compliance with Ordinance No. 655 – Regulating Light Pollution within 45 miles of the Palomar Observatory. Permanent lighting will only be provided near the wildlife corridors if absolutely necessary for safety. If permanent lighting is implemented, recessed lighting and/or glare shields would be used to prevent light from shining into the wildlife corridor habitat.

- WC-2 Wildlife Barriers.** During construction, the County’s Resident Engineer will ensure that wildlife corridors will be kept clear of all equipment or structures that could potentially serve as barriers to wildlife passage, except where construction needs to occur in Smith Creek and the San Gorgonio River for pier and abutment installation. Environmentally Sensitive Area (ESA) or exclusion fencing would provide openings for wildlife to move through the corridors during construction.
- WC-3 Wildlife Corridor Fencing.** A fencing plan will be prepared in consultation with the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) during final design and fencing will be installed along the entire length of the Project on both sides of the roadway. The proposed wildlife fence would consist of a 4–5-foot barbwire fence, with small wire mesh on the lower half that would exclude most reptiles and small mammals. The wildlife fence is not intended to exclude all animals, but would exclude most of the species that are known to commonly use the San Gorgonio River Linkage branch and guide animals toward the wildlife crossings and bridges.
- WC-4 Wildlife Crossing Design.** The wildlife crossings will be designed for small-to-medium-size wildlife species consistent with the U.S. Department of Transportation’s (USDOT) *Wildlife Crossing Structure Handbook, Design and Evaluation in North America*, the California Department of Transportation’s (Caltrans) *Wildlife Crossings Guidance Manual*, and the WRMSHCP. The County has agreed to consult with the Wildlife Agencies regarding the design of the wildlife crossings during the final design. Native grasses, forbs, and shrubs that are included in the *Chilopsis linearis* woodland, *Acacia greggii* shrubland, Coastal Sage Scrub, and Riversidean Alluvial Fan Sage Scrub will be planted on slopes at bridges and culverts to provide cover for wildlife and to encourage the use of the wildlife crossings.

With the implementation of the measures described above, and the Project’s construction of bridges that comply with WRMSHCP and CVMSHCP wildlife corridor requirements (e.g., openness ratios), compensatory mitigation is not required for effects to wildlife movement. Further, as stated above, Caltrans has provided funding to the CEHCP to facilitate planning, monitoring, and maintenance of regional

wildlife corridors by avoiding, minimizing, and mitigating impacts to habitat connectivity during the transportation-planning process.

The WRMSHCP protects and preserves species of rare, threatened, and endangered plants, birds, and animals. The CVMSHCP aids to minimize and mitigate the impacts of the taking of species covered by the Plan and provides for conservation of the covered species. Through compliance with both plans and implementation of the avoidance, minimization, and mitigation measures identified above, and through coordination with the Morongo Band of Mission Indians, no substantial cumulative effects are anticipated to occur to wildlife movement corridors in the BSA.

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## 2.16 Wetlands and Other Waters

### 2.16.1 Regulatory Setting

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. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands.

The Navigable Waters Protection Rule (NWPR), effective June 22, 2020, reduces the extent of federal jurisdiction. Among other changes, it removes ephemeral drainages from jurisdiction. The Rule is under legal challenges and faces an uncertain future, which may affect federal jurisdiction of features within the project and subsequently affect permit strategy.

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 will be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional Nationwide. 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 Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual 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 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 will 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 will have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The I-10 Bypass Project qualifies for a Section 404 Nationwide 14 (NWP 14) permit. Pursuant to USACE guidelines, a LEDPA is not required for an NWP 14.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as the Federal Highway Administration (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. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards, and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the 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 Section 2.9, Water Quality, for more details.

### **2.16.2 Affected Environment**

The analysis of the potential adverse effects of the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) on waters of the U.S. is based on the following reports prepared for the Project:

- *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020)
- *Jurisdictional Delineation Report* (January 2015)

The Project's Biological Study Area (BSA) is geographically situated at the base of the San Jacinto Mountains, within the confluence of Smith Creek and the San Gorgonio River. One prominent feature of the BSA is Smith Creek, which conveys flows across the BSA from the west to the east. Another prominent feature is the San Gorgonio River, which conveys flows from the northwest to the southeast through the BSA. The elevations of the existing topography range from approximately 2,080 feet (ft) above mean sea level (amsl) in the western part of the BSA to 1,850 ft amsl in the eastern part of the BSA. Table 2.16.1 shows jurisdictional waters and streambeds within the BSA. Based on the results of the wetlands delineation/jurisdictional assessment, there are a total of 109.40 ac of potential USACE non-wetland waters of the U.S. and 132.57 ac of potential CDFW streambed exist within the BSA. No wetlands exist within the BSA.

There are four major plant communities within the BSA: Disturbed/Ruderal, Disturbed *Acacia greggii* Shrubland Alliance, Riversidean Alluvial Fan Sage Scrub (RAFSS), and Coastal Sage Scrub (CSS). The primary plant community found within Smith Creek and the San Gorgonio River is RAFSS. Other plant communities present

**Table 2.16.1 Waters of the United States/Streambeds within BSA**

Drainage ID	United States Army Corps of Engineers (USACE) Non-Wetland Waters (acres)	California Department of Fish and Wildlife (CDFW) Streambed (acres)
D1	0.44	0.58
D2	0.03	0.03
D3	0.10	0.12
D4 (Smith Creek)	91.95	112.41
D5	0.18	1.51
D6	0.23	0.94
D7	0.14	0.41
D8 (San Gorgonio River)	16.33	16.57
<b>Total</b>	<b>109.40</b>	<b>132.57</b>

Source: *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).  
BSA = Biological Study Area

in the BSA include disturbed *Eriogonum fasciculatum* Shrubland Alliance, *Chilopsis linearis* Woodland Alliance, and developed land that has been affected by grazing animals north and south of Smith Creek. In addition, in August 2013, a fire burned a portion of the BSA from approximately 800 ft southwest of where Smith Creek runs into the San Gorgonio River to approximately 1 mile southeast of Banning Municipal Airport.

Eight hydrologic features were identified within the BSA. These hydrologic features include Smith Creek and the San Gorgonio River as well as their natural major and minor tributaries. Descriptions of the drainages are provided below. Figures 2.16-1 and 2.16-2 show the drainages in the BSA.

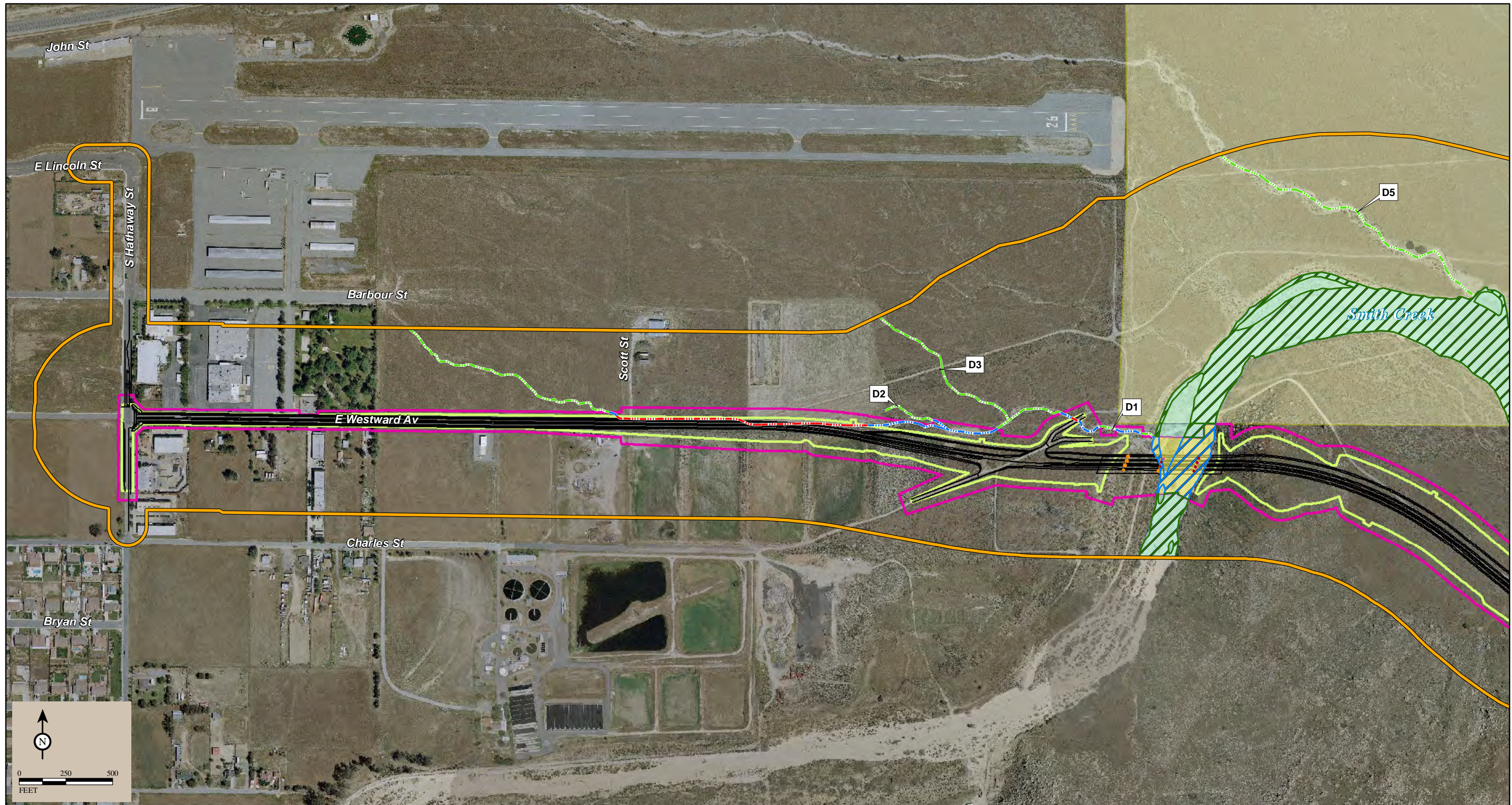
### 2.16.2.1 Drainage D1

This natural earthen-bottom drainage is located in the western portion of the BSA. This drainage conveys flows from the eastern edge of Barbour Street, toward the east through the BSA, and drains into Smith Creek. Dominant vegetation within Drainage D1 is disturbed *Eriogonum fasciculatum* Shrubland Alliance.

### 2.16.2.2 Drainages D2 and D3

Drainages D2 and D3 are erosional features located in the western portion of the BSA just east of Smith Creek. These two drainage features convey flows to Drainage D1, which flows into Smith Creek. Dominant vegetation within Drainages D2 and D3 is disturbed *Eriogonum fasciculatum* Shrubland Alliance.





**LEGEND**

- |                       |                             |  |                                  |  |
|-----------------------|-----------------------------|--|----------------------------------|--|
| Biological Study Area | Alt 5 Columns               | <b>Impacts to ACOE Active Floodplain</b> | <b>Impacts to CDFW Streambed</b> | <b>Impacts to ACOE Non-wetland Waters/CDFW Streambed</b> |
| Tribal Lands          | Alt 5 Alignment             | No Impact                                | No Impact                        | No Impact  |
|                       | Alt 5 Limits of Disturbance | Permanent Impact                         | Permanent                        | Permanent Impact   |
|                       | Alt 5 Grading Limits        | Temporary Impact                         | Temporary                        | Temporary Impact   |
|                       |                             | Permanent Column                         | Permanent Column                 | Drainage ID  |

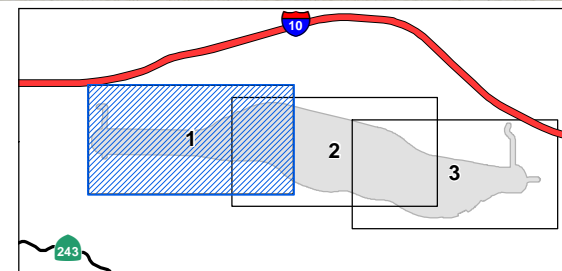


FIGURE 2.16-1  
Sheet 1 of 3

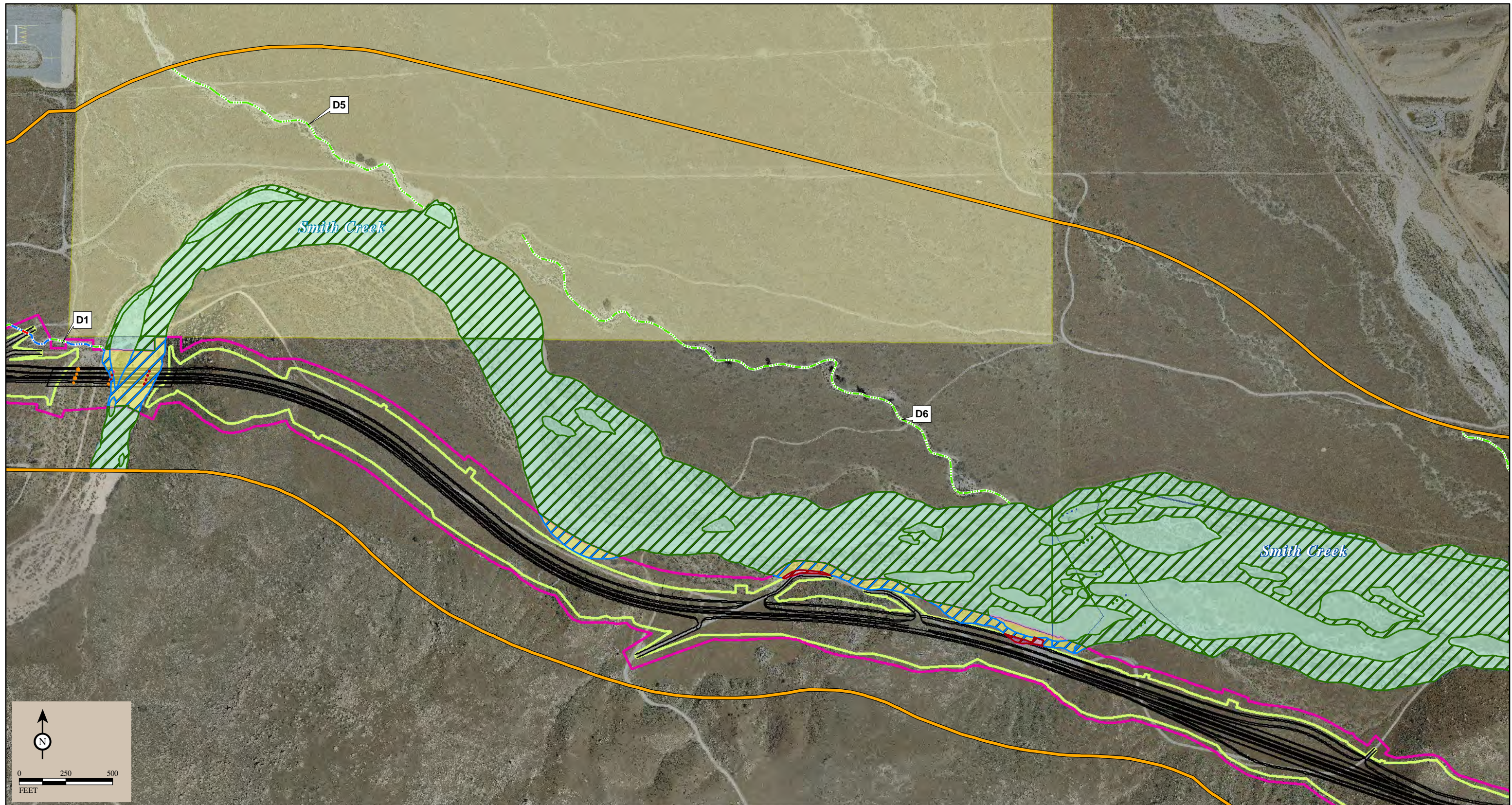
*I-10 Bypass Banning to Cabazon Project  
Environmental Impact Report/  
Environmental Assessment*

Impacts to Potential Jurisdictional  
Waters of the U.S./State Alternative 5  
District 8, RIV031202



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LEGEND		Impacts to ACOE Active Floodplain	Impacts to CDFW Streambed	Impacts to ACOE Non-wetland Waters/CDFW Streambed
Biological Study Area	Alt 5 Columns	No Impact	No Impact	No Impact
Tribal Lands	Alt 5 Alignment	Permanent Impact	Permanent	Permanent Impact
	Alt 5 Limits of Disturbance	Temporary Impact	Temporary	Temporary Impact
	Alt 5 Grading Limits	Permanent Column	Permanent Column	Drainage ID

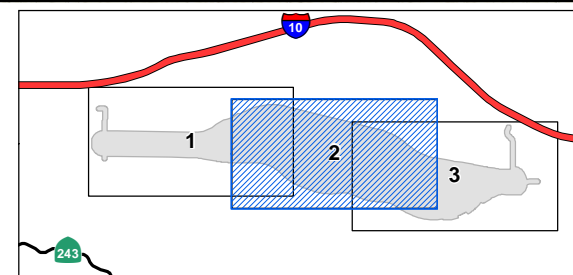


FIGURE 2.16-1  
Sheet 2 of 3

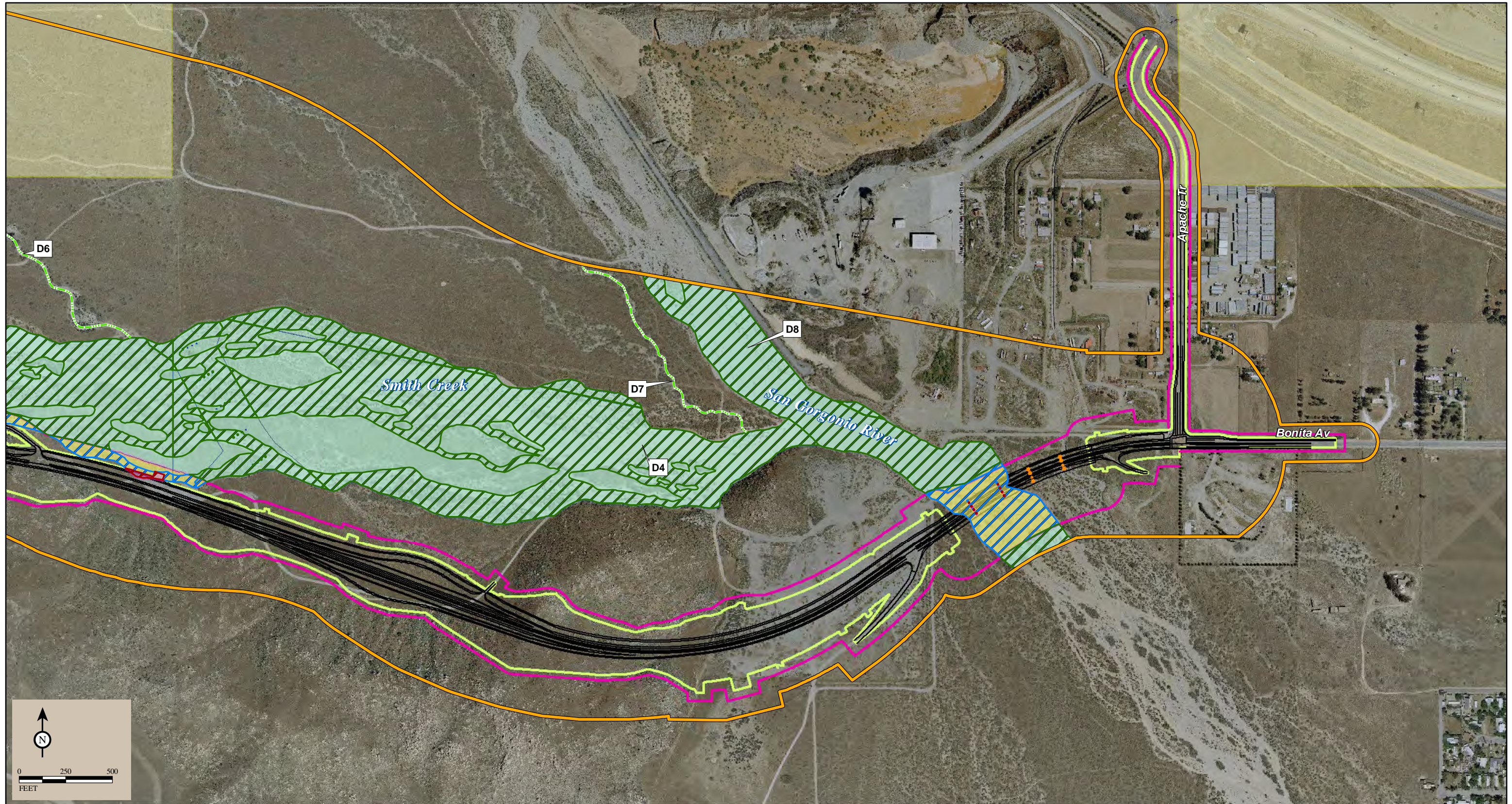
*I-10 Bypass Banning to Cabazon Project  
Environmental Impact Report/  
Environmental Assessment*

Impacts to Potential Jurisdictional  
Waters of the U.S./State Alternative 5  
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LEGEND		Impacts to ACOE Active Floodplain	Impacts to CDFW Streambed	Impacts to ACOE Non-wetland Waters/CDFW Streambed
Biological Study Area	Alt 5 Columns	No Impact	No Impact	No Impact
Tribal Lands	Alt 5 Alignment	Permanent Impact	Permanent	Permanent Impact
	Alt 5 Limits of Disturbance	Temporary Impact	Temporary	Temporary Impact
	Alt 5 Grading Limits	Permanent Column	Permanent Column	Drainage ID

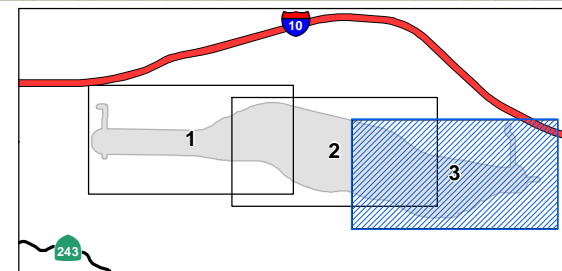


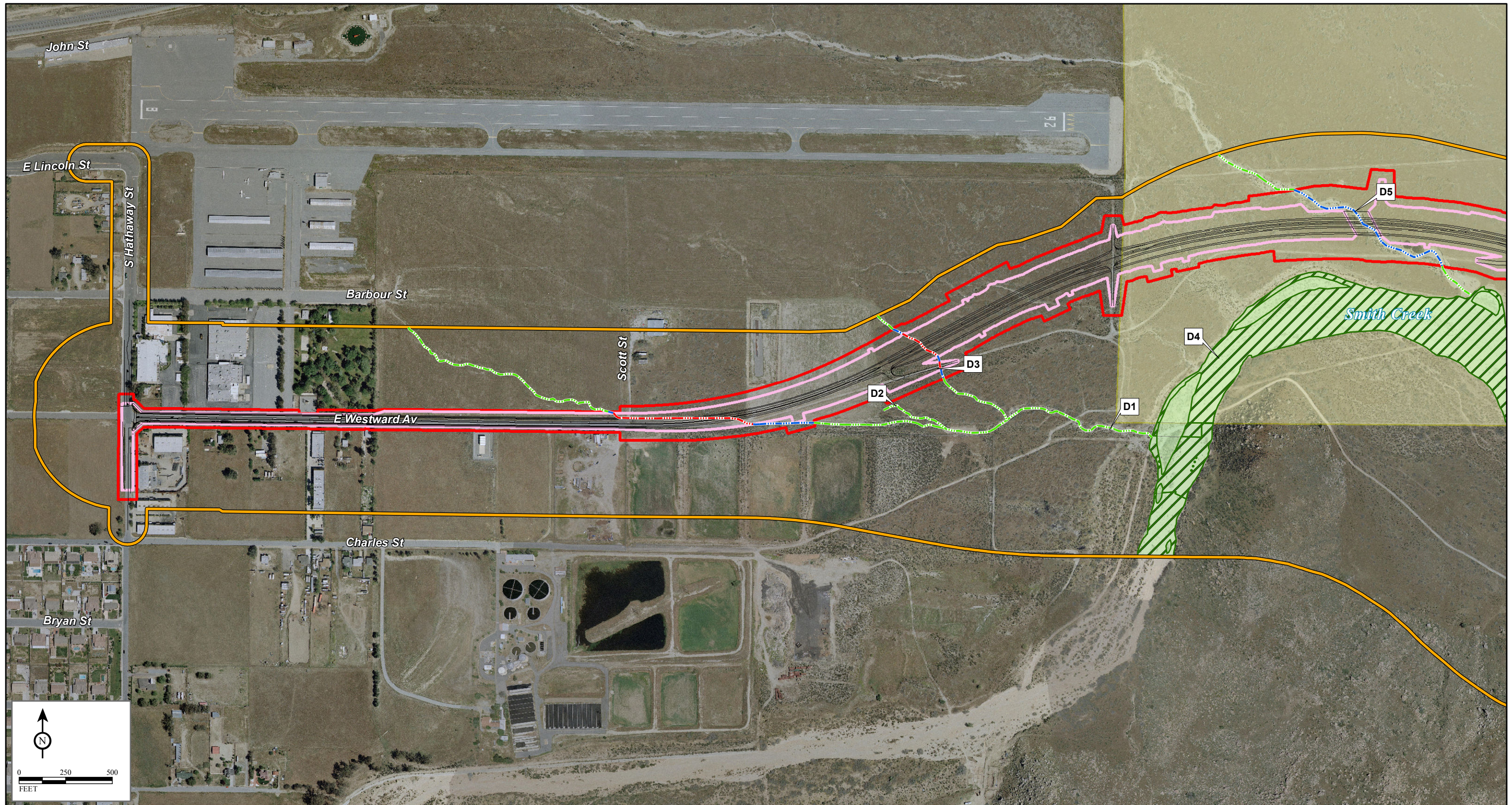
FIGURE 2.16-1  
Sheet 3 of 3

*I-10 Bypass Banning to Cabazon Project  
Environmental Impact Report/  
Environmental Assessment  
Impacts to Potential Jurisdictional  
Waters of the U.S./State Alternative 5  
District 8, RIV031202*



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LEGEND		Impacts to ACOE Active Floodplain	Impacts to CDFW Streambed	Impacts to ACOE Non-wetland Waters/CDFW Streambed
Biological Study Area	Alt 12 Columns	No Impact	No Impact	No Impact
Tribal Lands	Alt 12 Alignment	Permanent	Permanent	Perm
	Alt 12 Limits of Disturbance	Temporary	Temporary	Temp
	Alt 12 Grading Limits	Permanent Column	Permanent Column	Drainage ID

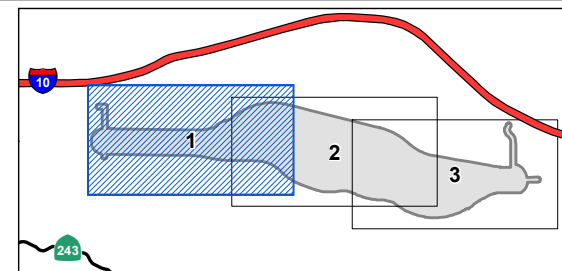


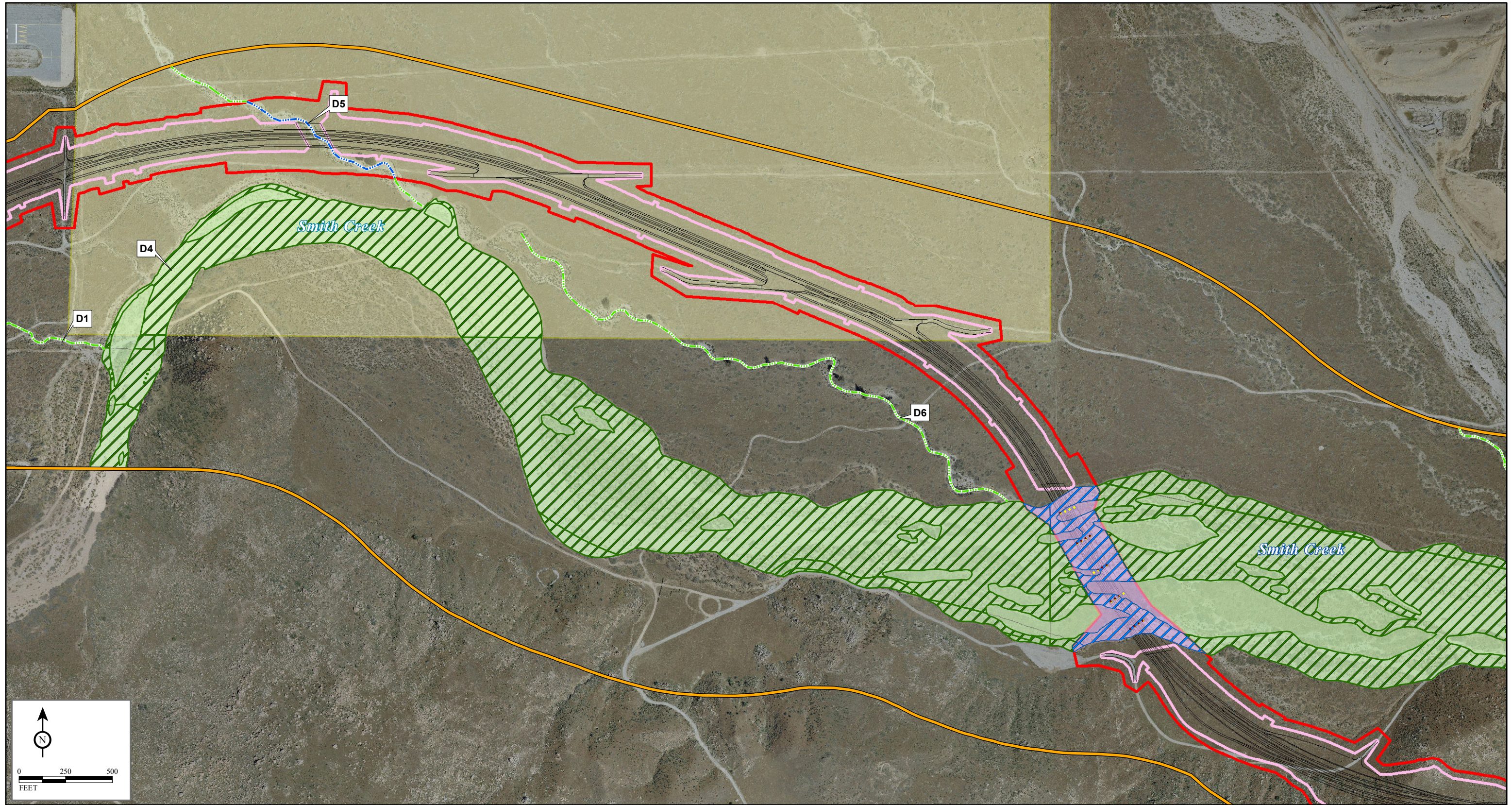
FIGURE 2.16-2  
Sheet 1 of 3

*I-10 Bypass Banning to Cabazon Project  
Environmental Impact Report/  
Environmental Assessment  
Impacts to Potential Jurisdictional  
Waters of the U.S./State  
Alternative 12 (Preferred Alternative)  
District 8, RIV031202*



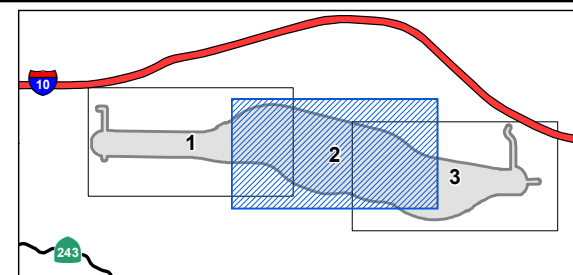
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**LEGEND**

Biological Study Area	Alt 12 Columns	<b>Impacts to ACOE Active Floodplain</b>	<b>Impacts to CDFW Streambed</b>	<b>Impacts to ACOE Non-wetland Waters/CDFW Streambed</b>
Tribal Lands	Alt 12 Alignment	No Impact	No Impact	No Impact
	Alt 12 Limits of Disturbance	Permanent	Permanent	Perm
	Alt 12 Grading Limits	Temporary	Temporary	Temp
		Permanent Column	Permanent Column	Drainage ID

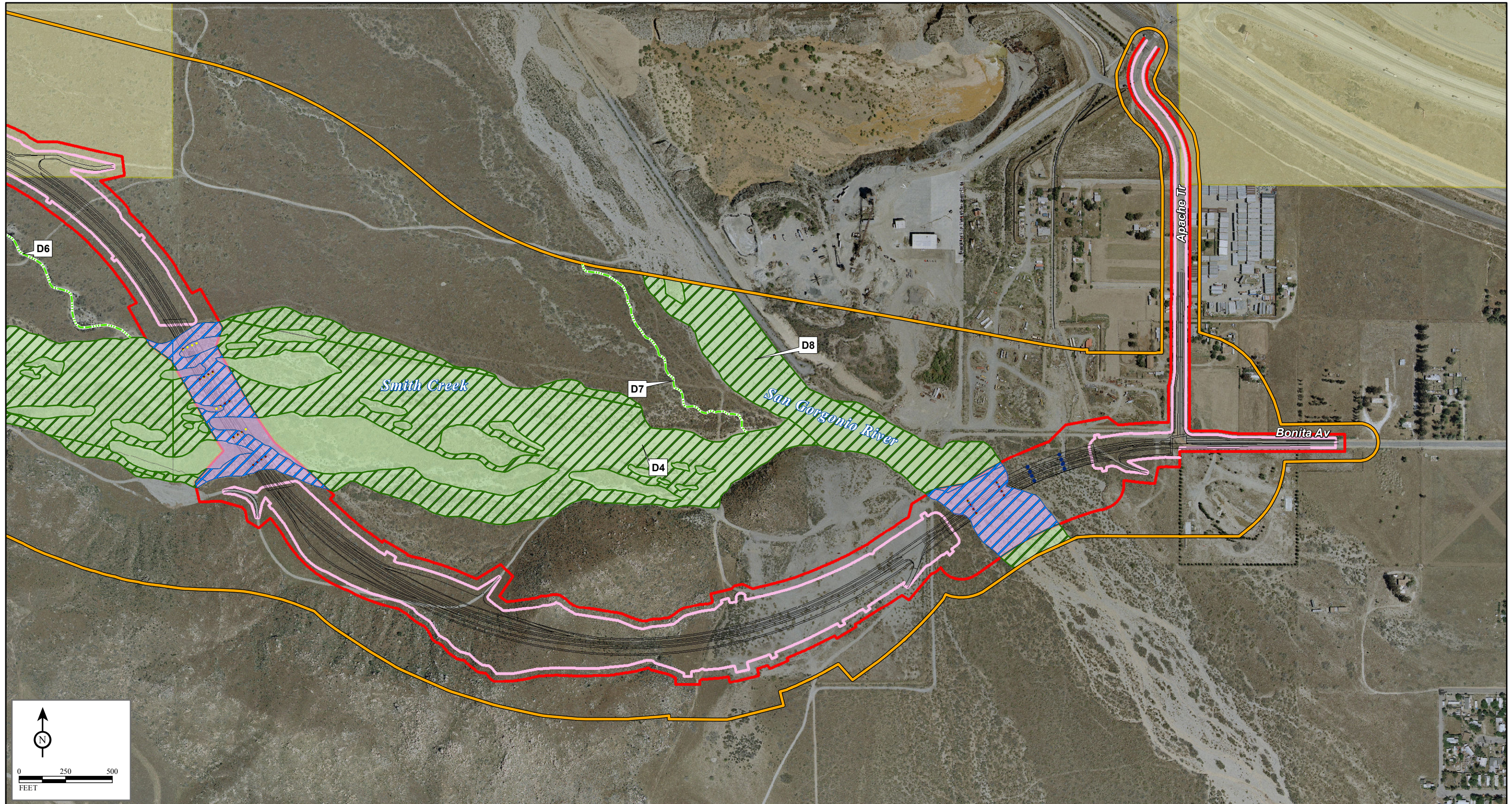


**FIGURE 2.16-2**  
 Sheet 2 of 3  
*I-10 Bypass Banning to Cabazon Project*  
*Environmental Impact Report/*  
*Environmental Assessment*  
 Impacts to Potential Jurisdictional  
 Waters of the U.S./State  
 Alternative 12 (Preferred Alternative)  
 District 8, RIV031202



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LEGEND		Impacts to ACOE Active Floodplain	Impacts to CDFW Streambed	Impacts to ACOE Non-wetland Waters/CDFW Streambed
Biological Study Area	Alt 12 Columns	No Impact	No Impact	No Impact
Tribal Lands	Alt 12 Alignment	Permanent	Permanent	Perm
	Alt 12 Limits of Disturbance	Temporary	Temporary	Temp
	Alt 12 Grading Limits	Permanent Column	Permanent Column	Drainage ID

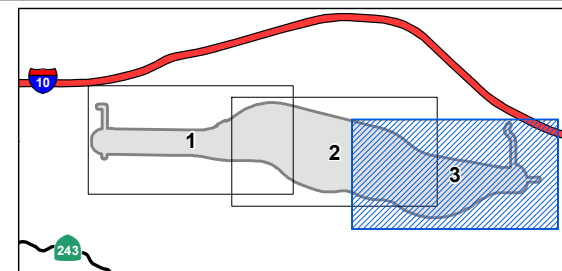


FIGURE 2.16-2  
Sheet 3 of 3

*I-10 Bypass Banning to Cabazon Project  
Environmental Impact Report/  
Environmental Assessment  
Impacts to Potential Jurisdictional  
Waters of the U.S./State  
Alternative 12 (Preferred Alternative)  
District 8, RIV031202*



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### **2.16.2.3 Drainage D4 (Smith Creek)**

Drainage D4 (Smith Creek) is a large, ephemeral, earthen-bottom drainage located south of I-10 and just north of the San Jacinto Mountains. Water is conveyed in a west to east direction through the BSA. This portion of Smith Creek has five earthen-bottom tributaries, Drainages D1, D2, D3, D5, and D6. Dominant vegetation within Smith Creek is RAFSS.

### **2.16.2.4 Drainage D5**

Drainage D5 is a natural earthen-bottom drainage located in the midwestern portion of the BSA. The drainage conveys flows from a north to south direction. This drainage feature conveys water from Ramsey Street in Banning, under I-10, into the BSA, where it is tributary to Smith Creek. Dominant vegetation within this drainage is disturbed *Eriogonum fasciculatum* Shrubland Alliance.

### **2.16.2.5 Drainage D6**

Drainage D6 is a natural earthen-bottom drainage located in the midwestern portion of the BSA. The drainage conveys flows in a north to south direction. The northernmost portion of the drainage appears as though it may have been a part of Drainage D5 and/or Drainage D4 in the past. Flows have been cut off to the northern portion of the drainage. The drainage conveys flows southeast through the BSA and terminates at Smith Creek. Dominant vegetation in this drainage is disturbed *Eriogonum fasciculatum* Shrubland Alliance.

### **2.16.2.6 Drainage D7**

Drainage D7 is an earthen-bottom drainage located in the eastern portion of the BSA. This drainage feature is a braid or relic braid of the mainstem of the San Gorgonio River that originates approximately 3.5 miles upstream near the sand and gravel mine. This braid of the San Gorgonio River conveys water from the San Gorgonio Mountains, under I-10, and terminates at the confluence of Smith Creek and the mainstem of the San Gorgonio River. The dominant vegetation in this drainage is RAFSS.

### **2.16.2.7 Drainage D8 (San Gorgonio River)**

Drainage D8 (San Gorgonio River) conveys flows in a north to south direction through the BSA. The drainage's headwaters are located in the San Bernardino Mountains. The drainage crosses I-10 and continues to the eastern portion of the BSA. Once the San Gorgonio River flows into the BSA, it converges with Smith Creek and travels east. This drainage feature has multiple tributaries; however, none

of these tributaries lie within the BSA. Dominant vegetation within the San Geronio River is best classified as RAFSS.

### **2.16.3 Environmental Consequences**

As described in Section 1.5.1, 14 different alignments were considered for the Project. Seven alternatives were removed from further consideration due to right-of-way, circulation, and design standard issues. Five alternatives were removed from consideration because their impacts to waters of the U.S. were greater than 0.5 ac, which would require an individual Section 404 permit from the USACE. Two other alternatives were withdrawn for reasons of infeasibility due to other factors. Of the remaining alternatives under consideration, Alternatives 5 and 12 (Preferred Alternative) had the smallest potential impacts to waters of the U.S. and CDFW streambeds, both less than the upper threshold for NWP 14 of 0.5 ac. Implementation of this Project will follow best practices as described in the Caltrans *Construction Site Best Management Practices (BMP) Manual* (Caltrans 2017), such as streambank stabilization, temporary stream crossings, clear water diversion, and liquid waste management. In addition to following the Project's Stormwater Pollution Prevention Plan and Water Pollution Control Plan, other construction minimization measure measures would include delineating environmentally sensitive areas in the field and using erosion control measures to prevent unpermitted discharges into waters of the U.S.

The *Jurisdictional Delineation Report* (January 2015) has been submitted to the USACE for verification and a *Preliminary Jurisdictional Determination* (Regulatory Guidance Letter No. 08-02 [USACE 2008]) will be requested as part of the permitting effort.

#### **2.16.3.1 No Build Alternative**

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained.

#### **2.16.3.2 Build Alternatives**

##### ***Temporary Impacts***

Temporary impacts to waters of the U.S. and CDFW streambeds would consist of all activities within the Project footprint that do not result in a permanent fill or structure. This may include construction vehicle traffic, and temporary staging areas, as well as other activities that may result in the movement of soil within waters of the U.S. Areas with temporary impacts to waters of the U.S. and CDFW streambeds would be returned to preconstruction grade following construction. Alternative 5 would result

in 7.62 ac of temporary impacts to potential non-wetland USACE waters of the U.S. and 8.36 ac of temporary impacts to CDFW streambeds. Alternative 12 (Preferred Alternative) would result in 8.24 ac of temporary impacts to potential non-wetland USACE waters of the U.S. and 10.80 ac of temporary impacts to CDFW streambeds. Alternatives 5 and 12 (Preferred Alternative) would not temporarily impact USACE jurisdictional wetland waters or CDFW riparian habitat.

### **Permanent Impacts**

Permanent to waters of the U.S. and CDFW streambeds are those activities that result in a permanent structure or fill, such as the road fill structure, bridge columns, and channel protection. As shown in Table 2.16.2, Alternative 5 would result in 0.31 ac of permanent impacts to potential non-wetland USACE waters of the U.S. and 0.32 ac of permanent impacts to CDFW streambeds. As shown in Table 2.16.2, Alternative 12 (Preferred Alternative) would result in 0.12 ac of permanent impacts to potential non-wetland USACE waters of the U.S. and 0.12 ac of permanent impacts to CDFW streambeds. Alternatives 5 and 12 (Preferred Alternative) will not permanently impact USACE jurisdictional wetlands or other waters or CDFW riparian habitat.

**Table 2.16.2 Impacts to Waters of the United States/Streambeds**

Drainage ID	United States Army Corps of Engineers (USACE) Non-Wetland Waters (acres)				California Department of Fish and Wildlife (CDFW) Streambed (acres)			
	Alternative 5		Alternative 12 (Preferred Alternative)		Alternative 5		Alternative 12 (Preferred Alternative)	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
D1	0.12	0.13	0.08	0.02	0.13	0.22	0.08	0.02
D2	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
D3	0.00	0.00	0.02	0.01	0.00	0.00	0.02	0.01
D4 (Smith Creek)	0.18	3.75	0.01	4.37	0.18	4.40	0.01	6.00
D5	0.00	0.00	0.00	0.12	0.00	0.00	0.00	1.05
D6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D8 (San Gorgonio River)	0.01	3.73	0.01	3.72	0.01	3.73	0.01	3.72
<b>Total</b>	<b>0.31</b>	<b>7.62</b>	<b>0.12</b>	<b>8.24</b>	<b>0.32</b>	<b>8.36</b>	<b>0.12</b>	<b>10.80</b>

Source: *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).



### ***Functions and Values***

All wetlands and other waters have some degree of functionality, and no single wetland can perform all of the functions considered below. The drainages on site were evaluated in terms of low, moderate, or high according to their ability to provide the considered functions (Table 2.16.3). As noted in Section 2.16.3.1, no wetlands exist in the BSA; therefore, Table 2.16.3 relates to the functions and values of non-wetland waters within the BSA.

### ***Wildlife Habitat***

The wildlife habitat function is the ability of the wetland or other water to provide habitat for various types of animals typically associated with wetlands and riparian habitats. Both resident and migrating species are considered in this function.

Smith Creek (Drainage D4), the San Geronio River (Drainage D8), and Drainages D5, D6, and D7 support moderate to high-quality habitat for wildlife because of the presence of RAFSS within these drainages. The Project is not expected to appreciably degrade the moderate to high functions and values of these drainages.

Low-quality habitat for wildlife is present within Drainages D1, D2, and D3. These drainages are considered low-quality habitat for wildlife because they are erosional in nature and are sparsely vegetated.

### ***Endangered Species***

The endangered species habitat function is low along the drainages which would be maintained.

### ***Fish Habitat***

The drainage channels within the study area are ephemeral and do not provide habitat for fish.

### ***Nutrient Production***

The nutrient production function is the effectiveness of a wetland or other water to retain and/or transform inorganic phosphorus and/or nitrogen into their organic forms, or to transform (remove) nitrogen in its gaseous form. Nutrient production for the drainages found within the BSA provides low value to biological resources downstream due to the lack of substantial riparian vegetation. The nutrient production for all drainages found within the BSA is not expected to be substantial.

**Table 2.16.3 Functions and Values of Non-Wetland Waters**

Drainage ID	Wildlife Habitat	Endangered Species	Fish Habitat	Nutrient Production	Nutrient Export	Flood Storage	Water Purification	Sediment Retention	Sediment Detoxification	Ground Discharge/ Recharge
D1	L	L	L	L	L	L	L	L	L	L
D2	L	L	L	L	L	L	L	L	L	L
D3	L	L	L	L	L	L	L	L	L	L
D4 (Smith Creek)	H	L	L	L	H	L	L	L	L	H
D5	H	L	L	L	L	L	L	L	L	L
D6	H	L	L	L	L	L	L	L	L	L
D7	M	L	L	L	L	L	L	L	L	L
D8 (San Geronio River)	H	L	L	L	H	L	L	L	L	H

Source: *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

H = High

L = Low

M = Moderate

### *Nutrient Export*

This function is the capability of a wetland or other water to flush relatively large amounts of organic plant material into downslope waters. There may be instances where export represents a nutrient loss to the system or where exported material causes water quality problems downslope.

This function is considered a high value in Smith Creek and the San Gorgonio River within the BSA. These drainages are capable of carrying large flows, and flows within these drainages may carry nutrients from the decomposition of organic matter in drainages upstream of the BSA to potentially productive areas downstream. The remaining drainages within the BSA are considered to be of low value for nutrient export. The Project would not diminish the flood capacity of Smith Creek and San Gordonio River, and the capacity for these drainages to flush nutrients would continue to have a high function.

### *Flood Storage*

This function refers to the effectiveness of the wetlands or their waters to reduce flood damage and provide attenuation of floodwater for prolonged periods following rain events.

The sparse riparian vegetation and upland vegetation in drainages found within the BSA may slow flows slightly during periods of flooding, minimally absorb wave energy to reduce erosion, and assist in the process of sediment deposition. There are no wetlands and other waters outside the drainage channels that will provide overbank flood storage. Flood storage for all of the drainages within the BSA is considered to be of low value because they are sandy and lack dense riparian vegetation.

### *Water Purification*

This function is the ability of a wetland or other water to filter and absorb soil particles and living organisms in water and soil. Upstream runoff from predominantly urban land uses in the Project area can contain toxins and other contaminants, including residual pesticides, fertilizers, and petroleum products. These toxins and other pollutants may be present during periods of peak runoff.

Due to the lack of wetland and riparian vegetation to uptake toxins and contaminants, water purification functions and values are considered to be of low value within all eight drainages.

### ***Sediment Retention***

This function is the ability of a wetland or other water to bind soil and dissipate erosive forces.

The drainages within the BSA provide low value for sediment retention due to the lack of dense riparian vegetation.

### ***Sediment Detoxification***

This function is the efficiency with which a wetland or other water physically or chemically traps and retains inorganic sediments and/or chemical substances generally toxic to wildlife.

All drainages within the BSA are considered to have a low value for sediment detoxification due to the lack of vegetation to physically trap and retain inorganic sediments.

### ***Groundwater Discharge and Recharge***

This function involves the potential for the wetland or other water to contribute to an aquifer or to serve as an area where groundwater can be discharged to the surface.

Smith Creek (Drainage D4) and the San Geronio River (Drainage D8) are considered to have high value for groundwater discharge and recharge as they are large, ephemeral drainages capable of carrying large flows of water to potential underground aquifers. The Project would not reduce the capacity of Drainages D4 and D8 to contribute to the aquifer recharge or discharge of base flows to the surface. Groundwater discharge and recharge functions for these drainages are expected to continue to be high. Drainages D1–D3 are erosional features, and Drainages D5 and D7 do not carry large volumes of water during a storm event. These factors prevent Drainages D1–D3, D5, and D7 from providing groundwater discharge and recharge. Therefore, these drainages are considered to be of low value.

Alternatives 5 and 12 (Preferred Alternative) will result in the loss of some function and value of the drainages (non-wetland waters). The functions and values will remain intact where required per the permits, and any effects will be offset with appropriate mitigation.

As stated above in Section 2.16.2.7, the Project would permit for impacts to waters of the U.S. The consideration of practicable alternatives in accordance with 40 CFR

230.10(a) does not apply directly to discharges of dredged or fill material into waters of the U.S. authorized by general permits (see 40 CFR 230.7(b)(1)).

Project effects to jurisdictional waters will require a CWA Section 404 Permit from the USACE, a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the CDFW. For a more detailed discussion of the coordination and copies of correspondence with the agencies, please see Chapter 4, Comments and Coordination.

Compensatory mitigation will be required to offset the loss of jurisdictional waters and will be at a minimum 1:1 mitigation ratio. Mitigation for effects to non-wetland waters of the U.S. and State will be consistent with the USACE *Compensatory Mitigation for Losses of Aquatic Resources* (USACE 2008), also known as the USACE Compensatory Mitigation Rule. The I-10 Bypass Project qualifies for a Section 404 Nationwide 14 (NWP 14) permit. Pursuant to USACE guidelines, a LEDPA is not required for an NWP 14. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such impacts is ultimately subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.

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

Conditions pursuant to a Section 401 Certification, Section 404 Permit, and Section 1602 Streambed Alteration Agreement will be discussed and agreed upon with the resource agencies via the permit processes specified in avoidance and minimization Measures WET-2 through WET-4, respectively, below. Appropriate Best Management Practices (BMPs) are identified in avoidance and minimization Measures WQ-1 through WQ-3 in Section 2.9, Water Quality and Storm Water Runoff. Implementation of this Project will follow best practices as described in the Caltrans *Construction Site Best Management Practices (BMP) Manual* (2017), such as streambank stabilization, temporary stream crossings, clear water diversion, and liquid waste management. In addition to following the Project's Stormwater Pollution Prevention Plan and Water Pollution Control Plan, other construction minimization measures would include delineating environmentally sensitive areas in the field and using erosion control measures to prevent unpermitted discharges into waters of the U.S.



Potential temporary and permanent indirect adverse effects to jurisdictional areas would be avoided or minimized through implementation of avoidance and minimization Measures WQ-1 through WQ-3 of Section 2.9, Measure INV-1 found in Section 2.20, and Measures WET-1 through WET-5 below.

**WET-1      Compensatory Mitigation.** Compensatory mitigation is anticipated to be required to offset the loss of non-wetland jurisdictional waters (as described in Section 2.16.3) by the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) at a minimum 1:1 mitigation ratio. Compensatory mitigation may consist of mitigation banking, an in-lieu fee, or habitat restoration. The Coachella Valley Conservation Commission has established the Coachella Valley In-Lieu Fee Program to mitigate for permanent impacts to waters of the US and streambanks. Temporarily affected riparian habitat would be replaced with in-kind habitat restored in place within the Project area. Mitigation for effects to any regulated USACE non-wetland waters or waters of the U.S. and State will be consistent with the USACE *Compensatory Mitigation for Losses of Aquatic Resources* (USACE 2008), also known as the USACE Compensatory Mitigation Rule. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such impacts is ultimately subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.

**WET-2      Section 401 Certification.** The County of Riverside (County) will obtain a Section 401 Certification from the RWQCB for activities that may result in impacts to State Water Quality Standards. If the USACE decides not to take jurisdiction over the ephemeral waters, the RWQCB may require a Waste Discharge Requirements for impacts to state waters under the Porter-Cologne Act.

**WET-3      Section 404 Permit.** The County will obtain a Section 404 permit from the USACE for activities that would discharge materials into a water of the United States. The 2020 NWPR and legal challenges that make implementation of this rule uncertain; however, the USACE will provide guidance at the time of permitting.

**WET-4**      **Section 1602.** The County will submit a complete notification package and associated fees to the CDFW for a Streambed Alteration Agreement.

**WET-5**      **Environmentally Sensitive Area Demarcation for Adjacent Waters of the U.S. and Waters of the State.** Prior to clearing or construction, the County of Riverside's (County) Resident Engineer will direct the Project Contractor to ensure that highly visible barriers (e.g., orange construction fencing) will be installed around waters of the U.S. and waters of the state adjacent to the Project's construction footprint to designate Environmentally Sensitive Areas (ESAs) to be preserved. No grading or fill activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment shall be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.

## 2.17 Plant Species

### 2.17.1 Regulatory Setting

The USFWS and 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). Please see Chapter 2.18, Threatened and Endangered Species, for detailed information about these species.

This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

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

### 2.17.2 Affected Environment

The analysis of the potential impacts of the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) on special-status plant species is based on the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020). Based on the results of the literature search, the following species were identified to have a potential to occur within the BSA: chaparral sand-verbena (*Abronia villosa* var. *aurita*), Yucaipa onion (*Allium marvinii*), Jaeger’s milk-vetch (*Astragalus pachypus* var. *jaegeri*), Plummer’s mariposa lily (*Calochortus plummerae*), Parry’s Spineflower (*Chorizanthe parryi* var. *parryi*), white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), many-stemmed dudleya (*Dudleya multicaulis*), spiny-hair blazing star (*Mentzelia tricuspis*), slender woolly heads (*Nemacaulis denudate* var. *gracilis*), and desert beardtongue (*Penstemon pseudospectabilis* ssp. *pseudospectabilis*).

The BSA is located within the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) Narrow Endemic Plant Species Survey Area (NEPSSA) and requires a habitat suitability assessment for the Yucaipa onion and many-stemmed dudleya. Although the remaining nonlisted plant species require consideration under CEQA, the disturbed nature of the site from heavy grazing makes the site unsuitable for these special-status plant species and its proximity to surrounding development make it unlikely that the Project would adversely affect these species; therefore, these species are not discussed further in this section.

The habitat suitability assessment for the Yucaipa onion and many-stemmed dudleya was conducted on April 24, 2012. Soils on the site were evaluated to determine whether clay soils were present. The Soil Conservation Service has not mapped clay soils in the area, and no clay soils were observed during the field surveys. It was determined that habitat on the Project site was not suitable for Yucaipa onion because the site is outside the elevation range of the species and lacks the necessary clay soils. Habitat was found unlikely to be suitable for many-stemmed dudleya due to the lack of the necessary clay soils; however, the rocky soils (primarily Cieneba rocky sandy loam) in the hilly portion of the site may be marginally suitable for this species. Therefore, focused surveys for the many-stemmed dudleya were conducted in May 2012, and focused surveys for the Yucaipa onion were conducted concurrently. In 2013, the BSA was expanded to accommodate the redesigned Alternative 12 (Preferred Alternative) alignment. A focused survey was conducted in these areas in the expanded BSA. Both the 2012 and 2013 focused surveys found the two species to be absent from the BSA.

### **2.17.3 Environmental Consequences**

#### **2.17.3.1 No Build Alternative**

Under the No Build Alternative, no roadway improvements would be made, and existing conditions would be maintained.

#### **2.17.3.2 Build Alternatives**

##### ***Temporary Impacts***

Due to existing disturbances (heavy grazing) making the habitat unsuitable for these special-status plants species and proximity to surrounding development, the Build Alternatives will not have substantial effects associated with temporary impacts on Yucaipa onion and many-stemmed dudleya and the other special-status plant species.

### **Permanent Impacts**

Due to existing disturbances (heavy grazing) making the habitat unsuitable for these special-status plant species and proximity to surrounding development, the Build Alternatives will not have substantial effects associated with permanent impacts on Yucaipa onion and many-stemmed dudleya and the other special-status plant species.

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

The Yucaipa onion and many-stemmed dudleya were not found to be present within the BSA. The WRMSHCP protects and preserves species of rare, threatened, and endangered plants, but because the Yucaipa onion and many-stemmed dudleya are considered to be absent, no cumulative effects are anticipated. Therefore, no avoidance, minimization efforts, or compensatory mitigation will be required.



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## 2.18 Animal Species

### 2.18.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The USFWS, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the 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 2.19. 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

### 2.18.2 Affected Environment

The analysis of the potential impacts of the Project on special-status animal species is based on the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

Three non-listed special-status animal species were found to be present within the biological study area (BSA): golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). Suitable nesting habitat for the burrowing owl (*Athene cunicularia*) and the prairie falcon (*Falco mexicanus*) was observed within the BSA. Focused surveys for the Los Angeles pocket mouse and burrowing owl were conducted in 2012 and 2013. The burrowing owl was found to be absent during the 2012 and 2013 focused

surveys. The Los Angeles pocket mouse is adequately conserved<sup>1</sup> under the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP), except within Mammal Species Survey Areas where surveys are required. Suitable habitat for this species is present within the BSA. A focused survey for Los Angeles pocket mouse was conducted in July 2012, and the species was found to be present.

There are 25 special-status species that are not federally/State-listed but have the potential to occur within the BSA. These species have limited distribution in Southern California because of ongoing development that is further reducing their range and numbers.

Due to the marginal, disturbed nature of the existing habitat conditions within the BSA, the Project will not have substantial effects on these species. Thus, no further studies are required, with the exception of western burrowing owl and Los Angeles pocket mouse.

In addition, the following 12 of the 25 non-listed special-status species are considered to be adequately conserved under the WRMSHCP:

- Orange-throated whiptail (*Aspidoscelis hyperythra*)
- Western spadefoot (*Spea hammondi*)
- Red diamond rattlesnake (*Crotalus ruber*)
- Coast horned lizard (*Phrynosoma blainvillii* [*coronatum*])
- Golden eagle
- Burrowing owl
- Yellow warbler (*Dendroica petechia*)
- Prairie falcon
- Loggerhead shrike
- Purple martin (*Progne subis*)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)

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<sup>1</sup> Adequately conserved, when certain conservation requirements are met as identified in the species-specific conservation objectives for those species.

The following 5 of the 25 non-listed special-status species are considered to be adequately conserved under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP):

- Coachella Valley giant sand treader cricket (*Macrobaenetes valgum*)
- Coachella Valley Jerusalem cricket (*Stenopelmatus calhouni*)
- Burrowing owl (*Athene cunicularia*)
- Le Conte's thrasher (*Toxostoma lecontei*)
- Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*)

In addition to the special-status species discussed above, the Project has the potential to affect nesting migratory birds.

#### **2.18.2.1 Burrowing Owl**

The western portion of the BSA lies within the WRMSHCP burrowing owl survey area, and suitable habitat was identified throughout. A focused survey was conducted for the burrowing owl in July and August 2012. In 2013, the BSA was expanded to accommodate the redesigned Alternative 12 (Preferred Alternative) alignment. An additional focused survey was conducted in these areas in May and June 2013. All focused surveys were conducted according to the *MSHCP Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan* (Riverside County Environmental Programs Department, March 2006).

The burrowing owl was not detected within the BSA during either the 2012 or 2013 focused surveys. However, the burrowing owl is a highly mobile species with potential to move onto the Project site prior to construction. Therefore, a pre-construction focused survey will be required to verify the species' absence from the Project site prior to grading.

#### **2.18.2.2 Nesting Migratory Birds**

During the 2012 and/or 2013 burrowing owl surveys, prairie falcon, Le Conte's thrasher, golden eagle, and loggerhead shrike were observed within the BSA. Although burrowing owls were not observed during the surveys, the BSA provides suitable nesting habitat for burrowing owls as well as habitat for the four previously mentioned non-listed special-status species. All five species have the potential to occur within the BSA. There is no golden eagle nesting habitat within the BSA; however, a number of golden eagle nests have been documented in the San Jacinto Mountains with flight paths near the BSA (Wildlife Research Institute, Inc. [WRI])

2012<sup>1</sup>) and have been known to forage in the project vicinity. The report shows a flight path within approximately 0.33 mile of the BSA as well as flight paths over the southwest portion of the unincorporated community of Cabazon at Delores Avenue and Magnolia Avenue, as well as at the Banning-Idyllwild Panoramic Highway south of the City of Banning. Although the WRI (2012) study does not document golden eagles flying immediately over the BSA, the report is a small sample size and in close enough proximity that it is likely that golden eagles fly over and forage in or adjacent to the BSA.

### **2.18.2.3 Los Angeles Pocket Mouse**

The BSA lies within a WRMSHCP Mammal Species Survey Area for Los Angeles pocket mouse. Therefore, a Los Angeles pocket mouse focused survey was conducted in 2012 during four one-night trapping sessions: July 15–16, July 16–17, July 29–30, and July 30–31, 2012. The trapping sessions were located in areas consisting of Riversidean Alluvial Fan Sage Scrub (RAFSS), disturbed *Acacia greggii* Shrubland Alliance, *Chilopsis linearis* Woodland Alliance, and disturbed/ruderal vegetation. During the four trapping sessions throughout the BSA in both the Smith Creek and adjacent upland areas, 28 Los Angeles pocket mouse were captured. Therefore, this species is present within the BSA.

### **2.18.2.4 Environmental Consequences**

No adverse effects from the Project are anticipated for the following adequately conserved WRMSHCP species due to the marginal, disturbed nature of the existing habitat conditions within the BSA:

- Orange-throated whiptail
- Western spadefoot
- Red diamond rattlesnake
- Coast horned lizard
- Golden eagle
- Burrowing owl
- Yellow warbler

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<sup>1</sup> Wildlife Research Institute, Inc. 2012. Final Report, Golden Eagle Survey Report for the Painted Hills Project in Riverside County, California, Prepared for HDR Engineering, Inc.



- Prairie falcon
- Loggerhead shrike
- Purple martin
- Northwestern San Diego pocket mouse
- San Diego desert woodrat

No adverse effects from the Project are anticipated for the following adequately conserved CVMSHCP species due to the marginal, disturbed nature of the existing habitat conditions within the BSA:

- Coachella Valley giant sand treader cricket
- Coachella Valley Jerusalem cricket
- Burrowing owl
- Le Conte's thrasher
- Palm Springs round-tailed ground squirrel

#### **2.18.2.5 No Build Alternative**

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained.

#### **2.18.2.6 Build Alternatives**

##### ***Temporary Impacts***

Direct effects are those impacts that are immediate and directly impact the species or its habitat. Indirect effects are those effects caused by or resulting from the proposed action, are later in time, and are reasonably certain to occur. Temporary indirect impacts to LAPM would consist of disturbance created by general human activity, construction traffic, noise, lighting, barrier effects from exclusionary fencing, and introduction and spread of nonnative species, etc. Temporary direct impacts would consist of the temporary removal of LAPM habitat in areas required for access and construction staging or potential entrapment in open trenches or pipes. The specific temporary direct impacts disturbance footprint for each special-status species is described below.

##### ***Los Angeles Pocket Mouse***

Alternative 5 and Alternative 12 (Preferred Alternative) would respectively result in 18.82 acres (ac) and 3.07 ac of temporary impacts to Los Angeles pocket mouse habitat. With implementation of the species-specific avoidance and minimization Measures LAPM-1 through LAPM-6, no temporary impacts are anticipated. The

Build Alternatives will not have substantial effects on Los Angeles pocket mouse. Table 2.18.1 outlines impacts to Los Angeles pocket mouse habitat by alternative (see Figure 10 of the *Natural Environmental Study* in Appendix A).

**Table 2.18.1 Impacts to WRMSHCP Los Angeles Pocket Mouse Habitat**

Alternative	Permanent (acres)	Temporary (acres)
5	30.2	18.82
12 (Preferred Alternative)	4.24	3.07

Source: *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

### ***Burrowing Owl***

With implementation of the species-specific avoidance and minimization Measure BO-1, no impacts are anticipated. The Build Alternatives will not have substantial effects on burrowing owl.

### ***Migratory Birds***

With implementation of species-specific avoidance and minimization Measures MB-1 and MB-2, no temporary impacts are anticipated. The Build Alternatives will not have substantial effects on migratory birds. Although golden eagle is covered by the WRMSHCP, it is not covered by the CVMSHCP. Construction activity may provide temporary disturbance for golden eagle that may fly over or forage in the area. The CVMSHCP covered Le Conte’s thrasher; however, this species is not covered by the WRMSHCP. Implementation of avoidance and minimization Measure MB-2 would avoid temporary impacts to this species during construction.

### ***Permanent Impacts***

Permanent project impacts are all direct impacts consisting of permanent structures including road fill, bridge columns, and channel protection. Specific permanent impact areas for each special-status species are described below.

### ***Los Angeles Pocket Mouse***

Alternative 5 and Alternative 12 (Preferred Alternative) would respectively result in 30.20 ac and 4.24 ac of permanent effects to Los Angeles pocket mouse habitat. With implementation of species-specific avoidance and minimization Measures LAPM-1 through LAPM-6, no permanent impacts are anticipated. As described in LAPM-5 all

lighting adjacent to Los Angeles pocket mouse habitat would be shielded to direct away from habitat. The Build Alternatives will not have substantial effects on Los Angeles pocket mouse.

### ***Burrowing Owl***

With implementation of the species-specific avoidance and minimization Measure BO-1, no permanent impacts are anticipated. The Build Alternatives will not have substantial effects on burrowing owl.

### ***Migratory Birds***

With implementation of species-specific avoidance and minimization Measures MB-1 and MB-2, no permanent impacts are anticipated. The Build Alternatives will not have substantial effects on migratory birds. The Project would permanently reduce the amount of native habitat for Alternative 5 by 50.57 ac and for Alternative 12 (Preferred Alternative) by 47.88 ac, which could be used for foraging by golden eagles. These impacts are a small fraction of golden eagle territory, which averages 12.6 square miles (sq mi, or 3,276 hectares [ha]) ranging from 4.4 sq mi to 18.9 sq mi (1,161 ha to 4,898 ha) (Collopy and Edwards 1989<sup>1</sup>). The WRI 2012 report shows golden eagles flying over habitat near both the City of Banning and the unincorporated community Cabazon including roads. The ongoing disturbance resulting from the proposed two-lane bypass road is not likely to be any greater than the disturbance created by the existing urban development in the areas of Banning and Cabazon, the sand mining operation, and the east-to-west flight path associated with the nearby Banning Municipal Airport.

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

### **2.18.3.1 Los Angeles Pocket Mouse**

The following measures will be implemented within the WRMSHCP boundaries to avoid and minimize impacts to Los Angeles pocket mouse during construction of the Project:

**LAPM-1 Trench Coverings.** Within the construction limits in any potentially suitable habitat for Los Angeles pocket mouse in or adjacent to Smith Creek, the County of Riverside's (County) Resident Engineer shall

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<sup>1</sup> Collopy, M.W., and T.C. Edwards. 1989. Territory size, activity budget, and role of undulating flight in nesting golden eagles (*Aquila chrysaetos*). *J. Field Ornithology*. 43–51.

direct the Construction Contractor to ensure that all excavated, steep-walled holes or trenches more than 2 feet (ft) deep are covered with plywood at the close of each working day or shall provide one or more escape ramps constructed of earthen fill or wooden planks to prevent entrapment of Los Angeles pocket mouse during construction. The ramps shall be located at no greater than 100 ft intervals, with slopes less than 45 percent, and shall be at least 1 ft in width.

**LAPM-2 Pipe Coverings.** All construction pipes, poles, culverts, or similar structures with a diameter of 1.5 inches or greater stored at a construction site for one or more overnight periods shall be thoroughly inspected by a qualified permitted biologist for the presence of Los Angeles pocket mouse before the pipe is subsequently buried, capped, or otherwise used or moved in any way. Unburied pipes laid in trenches overnight shall be capped. If Los Angeles pocket mouse is discovered inside a pipe, the section of pipe containing Los Angeles pocket mouse shall not be moved until a qualified biologist has been consulted. Under the direct supervision of a qualified biologist, if necessary, the pipe may be removed from the path of construction activity.

**LAPM-3 Ground-Disturbing Activity Monitor.** The County shall appoint a qualified biological monitor that shall be present during ground-disturbing activities within suitable habitat for Los Angeles pocket mouse. The monitor shall be responsible for ensuring the project is in compliance with conditions set forth by the United States Fish and Wildlife Service (USFWS) in the incidental take authorization for Los Angeles pocket mouse pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP).

**LAPM-4 Environmentally Sensitive Areas.** Notes will be placed on project construction plans informing contractors that areas designated as having long-term conservation value outside the Project footprint are environmentally sensitive and that construction activity is excluded from those areas.

**LAPM-5 Lighting.** In addition to the lighting restrictions in avoidance and minimization Measure WC-1 included in Section 2.15.3.2, the

proposed roadway will not be lit except for limited lighting at those locations where it is absolutely necessary for safety, such as intersections on each end of the Project and possibly at bridges (if required for safety). Any lighting located near Los Angeles pocket mouse habitat with long-term conservation value will incorporate shielding so that lighting can be directed onto the roads and away from the adjacent habitat. Light will be excluded from wildlife corridors below bridges (possibly by being recessed or closer to the bridge decks). Indirect effects resulting from an increase in light and glare associated with vehicles and daytime and nighttime construction activities will be reduced by incorporating shielded lighting near environmentally sensitive areas adjacent to the project.

**LAPM-6 Roadside Maintenance.** Indirect impacts of exotic plant infestations, litter, and fire will be reduced by regular roadside maintenance to remove litter and weeds from the right-of-way.

The following discussion explains why exclusionary fencing and trapping are not recommended for this Project.

Several well-documented studies have been conducted in recent years showing that, in most cases, relocating small mice such as LAPM has not been successful. These relocation efforts also add considerable cost to a project. The Project team does not favor installing exclusionary fencing and trapping and removing Los Angeles pocket mouse from the Project site as avoidance and minimization measures for the following reasons:

1. **Exclusionary Fencing:** Rarely is the placement of temporary exclusionary fencing successful in keeping small mammals from re-entering a given site. The Los Angeles pocket mouse requires only very small gaps or openings in or under fencing in order to re-enter a site. It should be noted that small mice, such as the Los Angeles pocket mouse, have well-integrated social systems promoted by the establishment of familiarity with close neighbors.
2. **Competition:** Abundances of animals occupying a given site fluctuate greatly over months and years, and rodents can effectively saturate a site at times. All sites have a carrying capacity associated with them at any given time. Rodents living on the receiving site may be expected to exhibit aggressive territorial behavior toward relocated Los Angeles pocket mouse over space and resources.



3. **Predation:** This is one of the main detriments to successful relocation of small mammals. Research shows that death by predation usually occurs within the first 3 days after release. Predators such as snakes, owls, foxes, hawks, and weasels may be attracted to newly constructed burrows. Burrow systems may not yet be intricate enough for the newly released Los Angeles pocket mouse to escape from predators that can enter the burrow. Prior to establishing burrows, the Los Angeles pocket mouse may be exposed to increased levels of predation above ground because they do not know the site well enough to find escape burrows.
4. **Ethical Concerns:** Relocating individuals under less than optimal conditions substantially reduces the probability of success and also raises ethical questions regarding relocation as a means of protecting species. It may be better to donate captured individuals to research museums than to conduct relocations that have a low probability of success.

While it is understandable that it might be desirable to relocate individual LAPM from the area that will be cleared as part of the Project, experience and research of current literature on the subject suggest that mortality is unlikely to be appreciably reduced and the associated cost will be excessive. Appendix L of the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020) includes a memorandum that recommends against exclusionary fencing and trapping for Los Angeles pocket mouse.

Mitigation for impacts to Los Angeles pocket mouse will be achieved through Project consistency with the WRMSHCP. The WRMSHCP was conceived, developed, and is now being implemented specifically to address the direct, indirect, cumulative, and growth-related effects on species and habitats in western Riverside County resulting from build out of the planned land uses and infrastructure. The County of Riverside (County) is a permittee under the WRMSHCP. Compensatory mitigation will be required to offset the loss of LAPM habitat and will be at a minimum 1:1 mitigation ratio. Mitigation opportunities will be evaluated in coordination with Riverside County Regional Conservation Authority.

In order for a project to be consistent with the WRMSHCP, a Determination of Biological Equivalent or Superior Preservation (DBESP) must be made if 90 percent or more of those portions of the site that provide for long-term conservation value of Los Angeles pocket mouse cannot be avoided, and if achievement of overall WRMSHCP conservation goals for the particular species has not yet been demonstrated.

The biologically equivalent or superior alternative (as set forth in Section 6.3.2 of the WRMSHCP) will provide benefits with respect to WRMSHCP Conservation Area design and configuration and will be considered in the context of the following factors:

- Effects on conserved habitats supporting the identified species
- Effects on the populations of the identified species
- Effects on linkages and function of the WRMSHCP Conservation Area
- Effects on WRMSHCP Conservation Area configuration and management

The approved DBESP for the I-10 Bypass Project addresses project impacts to Los Angeles pocket mouse. Applicable mitigation for this purpose under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) was negotiated with federal and State regulatory agencies after the Preferred Alternative was selected, which occurred upon public review of the environmental document.

Project construction will contribute to the incremental loss of potentially suitable Los Angeles pocket mouse habitat in the region for any of the alternatives that may be selected as the preferred alternative. Per the WRMSHCP, proposed inclusion of approximately 32,581 ac (62 percent) of suitable conserved habitat in the WRMSHCP Conservation Area will minimize cumulative impacts to Los Angeles pocket mouse.

The WRMSHCP protects and preserves species of rare, threatened, and endangered plants. Through participation in the WRMSHCP and implementation of the avoidance, minimization, and mitigation measures identified above, no substantial cumulative effects are anticipated to occur to Los Angeles pocket mouse.

### **2.18.3.2 Burrowing Owl**

For the burrowing owl, the WRMSHCP and the CVMSHCP have specific procedures to follow in order to comply with the two plans' conservation objectives, the California Fish and Game Code, and the Migratory Bird Treaty Act (MBTA).

**BO-1 Preconstruction Surveys.** A pre-construction survey within 30 days prior to ground disturbance is mandatory in suitable habitat for the burrowing owl. Additionally, a 30-day pre-construction focused survey on Morongo Band of Mission Indians Tribal Land will be required per the Migratory Bird Treaty Act (MBTA). If burrowing owls are found to be present in the Western Riverside County Multiple

Species Habitat Conservation Plan (WRMSHCP) portion of the biological study area (BSA) during subsequent pre-construction surveys, avoidance or project-specific mitigation will be developed and authorized through consultation with the Western Riverside County Regional Conservation Authority and the California Department of Fish and Wildlife (CDFW), as outlined in Table 9.2, and Appendix E, Summary of MSHCP Species Survey Requirements, in the WRMSHCP. If burrowing owls are found to be present within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) portion of the BSA, coordination with the wildlife agencies is required per Section 4.4 of the CVMSHCP. Additionally, if burrowing owls are found to be present on Morongo Band of Mission Indians Tribal Land, coordination with the United States Fish and Wildlife Service (USFWS) will be required.

The WRMSHCP protects and preserves species of rare, threatened, and endangered plants, birds, and animals. The CVMSHCP aids to minimize and mitigate the impacts of the taking of species covered by the Plan and provides for conservation of the Covered Species. Through participation in both plans, implementation of the avoidance, minimization, and mitigation measures identified above, and through coordination with the United States Fish and Wildlife Service (USFWS) on Morongo Band of Mission Indians Tribal Land, no substantial cumulative effects are anticipated to occur to the burrowing owl.

### **2.18.3.3 Migratory Birds**

All bird species identified above with the potential to occur on site are considered adequately covered by the WRMSHCP, except for Le Conte's thrasher and burrowing owl. No focused surveys for the prairie falcon, golden eagle, or loggerhead shrike are required by the WRMSHCP.

**MB-1 Bird Nesting Season.** To avoid potential effects to fully protected raptors and other nesting birds protected by California Fish and Game Code Sections 3503, 3503.5, and 3513, vegetation clearing and preliminary ground-disturbance activities will be completed outside the bird breeding season (typically set as February 15 through August 31), or a pre-construction nesting bird survey by a qualified biologist will be conducted 72 hours prior to commencement of project activities, including equipment staging, clearing, grubbing,

construction, or ground-disturbing activities. If identified active nests are detected, an appropriate buffer shall be established by the qualified biologist. The buffer area shall be avoided until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist will monitor active nests to ensure established buffers are effective.

**MB-2**      **Le Conte's Thrasher.** Le Conte's thrasher is a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The biological study area (BSA) lies within modeled Le Conte's thrasher habitat. Section 4.4 of the CVMSHCP provides measures that address construction in Conservation Areas within modeled Le Conte's thrasher habitat. These measures include the following:

- During the nesting season (January 15 through June 15), but prior to the start of construction activities, an Acceptable Biologist will conduct an audio playback survey consistent with Le Conte's thrasher protocol developed by the Coachella Valley Conservation Commission's Biological Working Group. The surveys will occur on the construction site and within 500 feet (ft) of the construction site, or to the property boundary if less than 500 ft. The same survey protocol will be used for detection for Le Conte's thrasher regardless of which MSHCP it occurs within (Coachella Valley or Western Riverside County).
- If nesting Le Conte's thrashers are found, a 500 ft buffer, or a buffer to the property boundary if it is less than 500 ft away, will be established around the nest site. The buffer will be staked and flagged.
- No construction will be permitted within the buffer during the breeding season from January 15 through June 15.

For all portions of the BSA (WRMSHCP, CVMSHCP, and Morongo Band of Mission Indians Tribal Land), in the event that initial groundwork cannot be conducted outside the bird nesting season, focused surveys will be conducted prior to ground-disturbing activities. If nesting birds are found, an exclusionary buffer will be established and/or a nesting bird plan will be prepared to avoid and minimize effects to nesting birds. If a buffer is established, the buffer may be up to 500 ft in diameter,

depending on the species of nesting bird found. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist. Construction or clearing will not be conducted within this zone until the biologist determines the young have fledged or the nest is no longer active. If a nesting bird plan is prepared, construction in the vicinity of nesting birds will be subject to the provisions of the nesting bird plan.

No mitigation is required if impacts are avoided as stated above. Through participation in both plans, implementation of the avoidance, minimization, and mitigation measures identified, and through coordination with the USFWS on Morongo Band of Mission Indians Tribal Land, no substantial cumulative effects are anticipated to occur to the nesting birds.



## 2.19 Threatened and Endangered Species

### 2.19.1 Regulatory Setting

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) (and the California Department of Transportation [Caltrans], as assigned), 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) 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 or a Letter of Concurrence. 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 2080 of the California 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 California 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 CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of 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.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the

coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

### **2.19.2 Affected Environment**

The analysis of the potential impacts of the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) on federally/State-listed threatened or endangered animal species is based on the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

A focused survey for the desert tortoise (*Gopherus agassizii*) was conducted in April and May 2013 (*Natural Environment Study*). This survey was conducted within suitable habitat areas along the Project alignment within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) “other conserved habitat” for the desert tortoise, the Morongo Band of Mission Indians Tribal Lands, and adjacent additional protocol survey areas. Portions of the Project within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) were not surveyed based on the plan’s requirements. No desert tortoise or desert tortoise sign was observed within the survey area; therefore, the desert tortoise is considered to be absent from the biological study area (BSA).

The California Natural Diversity Database (CNDDDB) has a 2016 record of a coastal California gnatcatcher recorded within the BSA (*Natural Environment Study*). The BSA was previously outside of the known range of coastal California gnatcatcher. No focused surveys have been conducted for this species. The disturbed *Eriogonum fasciculatum* Shrubland Alliance is a subset of the CSS plant community. The coastal sage scrub, Riversidean alluvial fan sage scrub, and disturbed *Eriogonum fasciculatum* Shrubland Alliance within the BSA is considered suitable coastal California gnatcatcher habitat. The coastal California gnatcatcher is a covered species by the WRMSHCP. Coastal California gnatcatcher is neither a covered species under the CVMSHCP nor a covered species on Tribal Land.

The United States Fish and Wildlife Service (USFWS) authorizes take of listed species and destruction of critical habitat through Section 7(a)(2) of the Federal

Endangered Species Act (FESA) (United States Code [USC] Title 16, Sections 1531–1544). A Section 7 Consultation is required for take allocation where there is a federal nexus (i.e., Federal Highway Administration [FHWA]). While the focused surveys for the desert tortoise determined that the species is absent from the BSA at this time, the species is mobile and may move into the BSA prior to construction. Therefore, the Project may affect the desert tortoise, which is a federally and State-listed threatened species. The Project would affect coastal California gnatcatcher due to the loss of habitat, which required a Section 7 Consultation with the USFWS.

Twelve species that are federally/State listed as threatened or endangered were found to have the potential to occur within the BSA. The USFWS species list included four of these species:

- Triple-ribbed milkvetch (*Astragalus tricarinatus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Least Bell’s vireo (*Vireo bellii pusillus*)
- Peninsular bighorn sheep (*Ovis canadensis nelsoni*) (peninsular Distinct Population Segment)

Of the 12 species with potential to occur, including the 4 species listed above, only 1 species (i.e., the desert tortoise) was found to have potentially suitable habitat within the BSA. Therefore, these four species are not discussed further.

Because the Project lies outside of the National Marine Fisheries Service (NMFS) jurisdictional boundary/quadrangle, and none of the species under NMFS jurisdiction were listed on the IPAC species list from the USFWS letter dated April 19, 2019, a species list was not requested from NMFS as NMFS species will not be impacted by the Project.

The Project will not affect any State-listed species, and there are no federal fisheries issues associated with the Project.

### **2.19.3 Environmental Consequences**

A focused survey (*Natural Environment Study*) determined that the desert tortoise is absent from the BSA at this time. However, the desert tortoise is a mobile species and may move into the BSA prior to construction. To ensure the species will not be impacted, avoidance and minimization measures will be incorporated. As described in the Biological Opinion issued by the USFWS on January 8, 2021, Caltrans and the Bureau of Indian Affairs (BIA) initiated consultation in accordance with Section 7 of

the FESA on April 15, 2020, and July 20, 2020, respectively. The Biological Opinion is included as an attachment to Chapter 4. Due to the absence of desert tortoise diagnostic indicators during protocol surveys, the degraded status of habitat, and the lack of historical records within the project area, both agencies withdrew their requests for consultation on desert tortoise. Regardless, where habitat occurs in the CVMSHCP Plan Area, pre-construction surveys will be conducted and, if desert tortoises are found, relocation efforts will be coordinated with the USFWS.

The desert tortoise is a covered species by the CVMSHCP. To ensure the species will not be impacted within the CVMSHCP, avoidance and minimization measures will be incorporated. If desert tortoises are discovered during pre-construction surveys in the portion of the alignment that lies within the boundaries of the CVMSHCP Cabazon Conservation Area, they will be moved from the Project alignment to a specified location. Prior to issuance of any Project permits, the Coachella Valley Conservation Commission (CVCC) will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises and Guidelines for Handling Desert Tortoises During Construction Projects* (Desert Tortoise Council, revised July 1999) or develop a similar protocol for relocation and monitoring of desert tortoise for review and approval by the wildlife agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that may become available.

The CDFW authorizes take of endangered, threatened, or candidate species through the provisions of Sections 2081 and 2080.1 of the California Fish and Game Code. Take of the desert tortoise is covered under the Section 2081 permit through the CVMSHCP.

Based on the negative desert tortoise surveys and the lack of suitable habitat, it was determined that there is no desert tortoise habitat within the BSA in the WRMSHCP that would require take authorization.

The BSA was previously outside of the known range of the coastal California gnatcatcher. No focused surveys have been conducted for this species. However, based on a 2016 CNDDDB record, coastal California gnatcatchers are assumed to be present within the BSA. Based on the most recent CNDDDB search, the Project assumes coastal California gnatcatchers are present on site and any “take” of CSS and RSS will be mitigated accordingly. The coastal sage scrub, Riversidean alluvial sage scrub, and disturbed *Eriogonum fasciculatum* Shrubland Alliance presumably

provides habitat for coastal California gnatcatcher as documented by the CNDDDB. The Project would impact up to 29.39 ac of gnatcatcher habitat with 11.93 ac of permanent impacts and 17.46 ac of temporary impacts. In order to minimize impacts to coastal California gnatcatcher, vegetation would be cleared outside of the nesting season (February 15 to August 30).

The BIA initiated a Section 7 consultation with the USFWS with a “may affect/likely to adversely affect” determination for the project impact to coastal California gnatcatcher (Table 2.19.1) habitat located on Morongo Band of Mission Indians Tribal Land. The USFWS issued a Biological Opinion concurring with the no jeopardy determination and authorizing incidental take of coastal California gnatcatcher on Tribal Land on January 8, 2021.

**Table 2.19.1 Federal Endangered Species Act Effect Findings**

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (if applicable)
<b>Reptile</b>				
Desert Tortoise	<i>Gopherus agassizii</i>	FT	No Effect	No Effect
Coastal California Gnatcatcher	<i>Polioptila californica californica</i>	FT	No adverse effect on CVMSHCP and WRMSHCP; No jeopardy on WRMSHCP land and Tribal Lands	No Effect

FT = Federally Threatened

Caltrans initiated a standard Section 7 consultation in the CVMSHCP and a streamlined Section 7 consultation in the WRMSHCP both with a “may affect/likely to adversely affect” determination for coastal California gnatcatcher (Table 2.19.1). USFWS issued a Biological Opinion with a no jeopardy determination and no adverse effect that were not previously evaluated in the WRMSHCP BO and no adverse effect determination within the CVMSHCP and authorizing take of coastal California gnatcatcher habitat within the CVMSHCP and the WRMSHCP on January 8, 2021.

### 2.19.3.1 No Build Alternative

Under the No Build Alternative, no roadway improvements would be made, and existing conditions would be maintained.



### **2.19.3.2 Build Alternatives**

#### ***Temporary Impacts***

The Build Alternatives may permanently and temporarily affect the desert tortoise and coastal California gnatcatcher, which are federally listed as a threatened species. Direct effects are those impacts that are immediate and directly impact the species or its habitat. Indirect effects are those effects caused by or resulting from the proposed action, are later in time, and are reasonably certain to occur. Temporary indirect impacts to tortoise would consist of disturbance created by general human activity, construction traffic, noise, lighting, barrier effects from exclusionary fencing, the introduction and spread of nonnative species, increased predation, and the spread of upper respiratory tract disease, etc. Temporary direct impacts to coastal California gnatcatcher would consist of temporary removal of habitat and indirect impacts associated with human disturbance and construction noise. Temporary direct impacts would consist of the temporary removal of LAPM habitat in areas required for access and construction staging or potential entrapment in open trenches or pipes.

A Section 7 consultation with the USFWS was required for take authorization of desert tortoise on Tribal Lands. The Section 7 Consultation was initiated by the BIA with the USFWS for potential project-related effects to the desert tortoise on Morongo Band of Mission Indians Tribal Lands.

A streamlined Section 7 consultation in accordance with the CVMSHCP was conducted for potential project-related effects to the desert tortoise. A relocation plan coordinated with the USFWS is required for potential project-related effects to the desert tortoise for areas within the Project footprint outside of Morongo Band of Mission Indians Tribal Lands.

A Section 7 Consultation was initiated by Caltrans for take of coastal California gnatcatcher within the WRMSHCP and CVMSHCP and by the BIA on Tribal Lands. A streamlined Section 7 consultation in accordance with the WRMSHCP was conducted for potential project-related effects on coastal California gnatcatcher.

The CDFW authorizes take of endangered, threatened, or candidate species through the provisions of Sections 2081 and 2080.1 of the California Fish and Game Code. The Project may have adverse effects to the State-listed as threatened desert tortoise. Take of the desert tortoise is covered under the 2081 permit through the CVMSHCP.

The Project will not adversely affect any State-listed species.

## **Permanent Impacts**

Permanent direct effects are those impacts that result in the direct mortality to the species or habitat. Permanent impacts consist of the loss of habitat from the construction of permanent structures including road fill, bridge columns, and channel protection. Specific permanent impact areas for desert tortoise and coastal California gnatcatcher consist of those areas where structures would be constructed resulting in the permanent loss of habitat as described above.

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

#### **2.19.4.1 Desert Tortoise**

A pre-construction survey for the desert tortoise is required within the Cabazon Conservation Area in modeled desert tortoise habitat in accordance with CVMSHCP protocols for consistency. Additionally, pre-construction clearance surveys would be conducted on Morongo Band of Mission Indians Tribal Lands per the Incidental Take Authorization issued by the USFWS after a Section 7 Consultation, under Alternative 12 (Preferred Alternative) only. Per the CVMSHCP, prior to construction, a qualified biologist will conduct a presence/absence survey of the Project alignment and adjacent areas within 200 feet of the project alignment for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted between February 15 and June 15 or September 1 and October 31. If the desert tortoise is found to be present on site during the pre-construction surveys, efforts to avoid and minimize adverse effects will be made. These avoidance and minimization measures are described below and are intended to comply with the 2009 Desert Tortoise Field Manual.<sup>1</sup>

**DT-1 Designation of Field Contact Representative.** The County of Riverside (County) will designate a Field Contact Representative (FCR) to be responsible for overseeing compliance with the protective stipulations and coordination with other involved regulatory agencies. The FCR will be on the project site during ground-disturbing activities and Environmentally Sensitive Area (ESA) fence installation as needed and will have the authority to halt activities that violate

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<sup>1</sup> United States Fish and Wildlife Service. December 2009. Desert Tortoise (Mojave Population) Field Manual (*Gopherus agassizii*). Website: [https://www.fws.gov/nevada/desert\\_tortoise/documents/field\\_manual/Desert-Tortoise-Field-Manual.pdf](https://www.fws.gov/nevada/desert_tortoise/documents/field_manual/Desert-Tortoise-Field-Manual.pdf), accessed November 2016.

measures applicable to the project. The FCR may be a crew chief or field supervisor, a project manager, any other employee of the project proponent, or a contracted biologist.

**DT-2 Tortoise Education for Contractor Employees.** The County's designated FCR shall prepare a desert tortoise education program prior to project construction. All personnel will be required to participate in the program to receive environmental awareness training. The program will cover the following topics regarding the desert tortoise (Mojave population):

- Distribution
- General behavior and ecology
- Sensitivity to human activity
- State and federal legal protections
- Penalties for violations of state and federal laws
- Reporting requirements and project protective conservation measures

**DT-3 Temporary Tortoise-Proof Fence.** Prior to construction, the County's designated FCR shall ensure that temporary tortoise-exclusionary fencing will be installed on all portions of the project site that are accessible to desert tortoise during construction. The fence will be installed per Chapter 8 of the 2009 Desert Tortoise Field Manual or the most currently accepted United States Fish and Wildlife Service (USFWS) desert tortoise fence design criteria. The authorized biologist will approve and inspect the location and construction of the fence. Workers will be informed that their activities will be restricted to the construction area within the desert tortoise barriers.

**DT-4 Clearance Surveys within Temporary Tortoise-Proof Fence.** The County's designated FCR shall ensure that focused clearance surveys for desert tortoises and their burrows will be conducted within the fenced area after fence installation and prior to ground-disturbing activities. Surveys will be conducted by an authorized biologist according to Chapter 6 of the 2009 Desert Tortoise Field Manual or the most current USFWS protocol to verify the presence/absence of

desert tortoise within the fenced area. The following will be required according to the Manual:

- A clearance survey with 100 percent coverage of the fenced project. Clearance surveys consist of at least two consecutive surveys of the site. Each survey will involve walking transects less than or equal to 15 feet wide under typical conditions and less in areas vegetated by dense vegetation or when conditions limit the ability of the surveyor to locate desert tortoises. Clearance surveys should be conducted when desert tortoises are most active (April through May or September and October) and timed to follow the pre-construction survey.

**DT-5 Translocation Plan.** The County's designated FCR shall prepare a translocation plan in accordance with the 2009 Desert Tortoise Field Manual and approved by the USFWS. The translocation plan will address any desert tortoises that may be found within the fenced area during the focused surveys or construction activities. Desert tortoise translocation and clearance methods may include temporarily penning desert tortoises within the area surrounding their burrows, relocating desert tortoises from the area of direct effect to an area in the immediate vicinity of the project, or translocating desert tortoises to a designated area outside their home range.

**DT-6 Tortoises Encountered During Construction.** During construction, the County shall contract an authorized biologist that will be on call. If a desert tortoise is discovered on the project site during construction, all work that will adversely affect the tortoise will stop and the on-call biologist will immediately assess the situation to determine the appropriate action. If it is determined that the desert tortoise needs to be relocated, it will be relocated in accordance with the translocation plan.

**DT-7 Tortoises and Construction Equipment.** For the duration of the project, the County shall ensure that under no circumstances will equipment be moved if a tortoise is present next to or under equipment. If this occurs, the authorized biologist will be notified and

will determine the appropriate action to take in accordance with the translocation plan.

No firearms, dogs, or pets will be allowed at the project site. Firearms carried by authorized security and law enforcement personnel are exempt.

Trash and discarded food items will be promptly contained within closed, raven-proof containers. Container contents will be regularly removed from the construction site to reduce the attraction to ravens and other predators of the desert tortoise.

**DT-8 Personnel and Construction Vehicles.** During construction, the County's Resident Engineer shall ensure that vehicular traffic and parking at work sites and along existing roads will be conducted to minimize the potential for running over desert tortoises and to prevent damage to tortoise habitat.

Vehicles will be parked in designated parking/staging areas that have been fenced and cleared of desert tortoises.

Vehicles required for construction activities will not be driven or parked outside of existing road or work site rights-of-way or otherwise designated parking/staging areas. If vehicles must be left at the work sites overnight, they will not be parked outside existing rights-of-way or otherwise designated parking/staging areas.

To ensure that construction personnel will see and be able to avoid desert tortoises on roadways, drivers will travel no more than 20 miles per hour on all dirt roads.

**DT-9 Disposition of Dead or Injured Tortoises.** Upon locating desert tortoises killed or injured by construction activities, the County shall give initial notification within 24 hours of their finding that must be made in writing to the USFWS Division of Law Enforcement (370 Amapola Avenue, Suite 114, Torrance, CA 90501). The report shall include the date, time, and location of the carcass, a photograph (if possible), the cause of death (if known), and any other pertinent information.



Injured animals shall be transported to a qualified veterinarian or rehabilitator licensed by the State of California. If any treated desert tortoises survive, the USFWS shall be contacted regarding the final disposition of the animals.

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) shall endeavor to place the remains of intact desert tortoises with educational or research institutions holding the appropriate State and federal permits per their instructions. Arrangements regarding the proper disposition of potential museum specimens shall be made with the institution by Caltrans as a representative of the FHWA before implementation of the project.

#### **2.19.4.2 Coastal California Gnatcatcher**

Mitigation and minimization measures for the loss of coastal California gnatcatcher habitat are described in the vegetation removal procedures in avoidance and minimization Measure NC-1, as outlined in Section 2.15, Natural Communities. In addition, the following conditions from the Biological Opinion approved by the USFWS on January 8, 2021 will be implemented:

##### **Conservation Measures:**

1. To minimize effects to gnatcatcher, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as February 15 through August 31) or a pre-construction nesting bird survey would be conducted within 3 days prior to project activities including equipment staging, clearing, grubbing, construction, and/or ground disturbance, to ensure the gnatcatcher are not disturbed by construction-related activities.
  - a. Should nesting gnatcatcher be found on or within 300 feet of the Project site during the pre-construction survey, an appropriate buffer shall be established by a qualified biologist. No construction or clearing would be conducted within the buffer area until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist would monitor active nests to ensure established buffers are effective.

2. Prior to ground-disturbing activities, highly visible barriers (such as orange construction fencing) would be installed around plant communities adjacent to the Project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type would be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, would not be allowed to operate within the ESAs. All construction equipment would be operated in a manner to prevent accidental damage to habitat adjacent to the Project footprint. No structure of any kind, or incidental storage of equipment or supplies, would be allowed within these protected zones. Silt fence barriers would be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.
3. A designated biologist, familiar with gnatcatcher life history and habitat requirements, would be retained and will be responsible for overseeing compliance with conservation measures and coordination with other involved regulatory agencies. The designated biologist would be on the Project site during all Project activities and would have the authority to halt activities that violate measures applicable to the proposed Project. The names and qualifications of individuals to serve as designated biologists would be submitted to the USFWS for review and approval.
4. Lighting would be limited to installations at intersections for safety and incorporate wildlife-friendly designs.
5. To offset permanent and temporary impacts to native vegetation communities, a Habitat Mitigation and Monitoring Plan (HMMP) would be developed in coordination with the USFWS to restore Riversidean alluvial sage scrub (RAFSS) and *Acacia greggii* shrubland (shrubland) within the Project area at a 1:1 ratio. Only native plant species, preferably from seed or stock sourced in or near the Project area, would be used in restoration. The HMMP would include items such as appropriate native seed mixes and identify site activities, maintenance and monitoring performance standards, and responsible parties. To ensure success of the restoration area, a draft HMMP would be submitted to the USFWS for review and approval no later than 30 days prior to initial ground-disturbing activities.

6. To provide for the safety of the motoring public, and conservation of local fauna, permanent wildlife fencing would be installed along the length of the new roadway following completion of the Project. Per the Project's Determination of Biological Equivalent or Superior Preservation (DBESP), the Riverside County Transportation Department (RCTD) would develop the fencing plan in coordination with the Wildlife Agencies.

**Reasonable and Prudent Measures:**

1. Prior to the onset of ground-disturbing activities, Caltrans and RCTD will identify whether the final engineering plans and the Project footprint deviate from information presented to the USFWS in the biological assessment and ensure that they include design features to secure wildlife connectivity as presented in the WRMSHCP DBESP and the Environmental Impact Report/ Environmental Assessment (EIR/EA).
2. Caltrans and RCTD will monitor Project-related actions and inform the USFWS of non-compliance and any gnatcatcher observations for the duration of Project-related activities.

**Terms and Conditions:**

1. Prior to initiating any portion of construction activities that will directly impact gnatcatcher habitat, RCTD will submit to the Palm Springs USFWS Office Geographic Information System (GIS) data and figure(s) showing the impact area based on final project designs relative to the impact area depicted in the documents provided to support this consultation. The figure(s) will include vegetation mapping, all federally listed species observations from project-specific surveys (identified to the year and source of the survey), and a table showing the final impacts by habitat type.
2. RCTD will commit to implement all conservation measures listed in the BIA's biological assessment, the WRMSHCP DBESP, the Caltrans Natural Environmental Study, and measures in the EIR/EA related to wildlife connectivity.
3. The Project's designated biologist will report non-compliance to the USFWS within 48-hours via phone or electronic mail.

4. Ensure that USFWS personnel have the right to access and inspect the Project site during project implementation (with prior notification from USFWS) for compliance with the Project Description, conservation measures, and terms and conditions of the Biological Opinion.

**Reporting Requirements:**

1. Caltrans and the BIA will provide annual reporting of the activities conducted under the Biological Opinion. Any such reports shall be filed not later than March 31st for the preceding calendar year. Reporting requirements for restoration activities will be laid out within the HMMP.

## 2.20 Invasive Species

### 2.20.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act analysis for a project.

### 2.20.2 Affected Environment

The analysis of the potential impacts of the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) due to invasive species is based on the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020).

Fourteen exotic plants on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory were identified as occurring in the biological study area (BSA). Each plant in the inventory is given an overall rating of high, moderate, or limited. Plants with a high rating have severe ecological impacts. Plants with a moderate rating have substantial and apparent, but not severe, ecological impacts. Invasive plant species with a limited/low rating are invasive but their ecological impacts are minor on a statewide level. Therefore, invasive plant species with a limited/low rating are not discussed. Only invasive plant species with high and moderate ratings, which are identified in the BSA, are discussed here. Those invasive species are: Sahara mustard (*Brassica tournefortii*), red brome (*Bromus madritensis ssp. rubens*), and cheatgrass (*Bromus tectorum*). Invasive species identified within the BSA with a moderate rating are: slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), rat-tail fescue (*Vulpia myuros*), shortpod mustard (*Hirschfeldia incana*), London rocket (*Sisymbrium irio*), and tree tobacco (*Nicotiana glauca*).



## **2.20.3 Environmental Consequences**

### **2.20.3.1 No Build Alternative**

Under the No Build Alternative, no roadway improvements would be made and existing conditions would be maintained.

### **2.20.3.2 Build Alternatives**

#### ***Temporary and Permanent Impacts***

The Build Alternatives have the potential to spread invasive species to adjacent native habitats in the BSA via the ingress and egress of construction equipment that are contaminated with invasive species, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that seed is spread along the highway. None of the species on the Cal-IPC Invasive Plant Inventory are used by the California Department of Transportation (Caltrans) for erosion control or landscaping. All equipment and materials will be inspected for the presence of invasive species. Through implementation of the avoidance, minimization, and mitigation measures listed below, no permanent or temporary project-related effects are anticipated.

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

**INV-1 Invasive Species Control.** In compliance with the Executive Order on Invasive Species (EO 13112) and guidance from the Federal Highway Administration (FHWA), any landscaping and erosion control for the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. Precautions would include inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. At a minimum, this program will include the following measures incorporated for compliance with EO 13112 as well as the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) and the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP):

- During construction, the County of Riverside's (County) Project Contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one project location to another.

- During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.
- During construction, the County's Project Contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed to prevent excessive amounts of dust due to dry or windy conditions.
- During construction, the County's Project Contractor shall ensure that all stockpiled material is sufficiently watered or covered to prevent excessive amounts of dust.
- During construction, soil, gravel, and rock will be obtained from weed-free sources.
- Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.
- After construction, affected areas adjacent to native vegetation will be revegetated with plant species that are native to the area and approved by a County-appointed biologist.
- After construction, all revegetated areas will avoid the use of species listed on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory that have a high or moderate rating.
- Erosion control and revegetation sites will be monitored after construction to detect and control the introduction/invasion of nonnative species.
- Eradication procedures (e.g., spraying and/or hand weeding) will be outlined if an infestation occurs. The use of herbicides will be prohibited within and adjacent to native vegetation except as specifically authorized and monitored by the Biologist.
- All woody invasive species (e.g., tamarisk, tree tobacco) will be removed from the project limits.

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## 2.21 Energy

The information in this section is based on the following document:

- Interstate 10 (I-10) Bypass Project Energy Analysis Memorandum (December 2017)

### 2.21.1 Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b), Appendix F, Energy Conservation, requires an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

### 2.21.2 Affected Environment

Energy is currently consumed within the Project area for the construction of public and private projects; operation of automobiles, trucks, and marine vessels; and operation of existing land uses. Automobile and truck fueling stations are located throughout the Transportation Study Area (Figure 2.5-1).

California is rich in conventional and renewable energy resources. It has large crude oil and substantial natural gas deposits in six geological basins, located in the Central Valley and along the Pacific Coast. Most of those reserves are concentrated in the southern San Joaquin Basin. More than a dozen of the nation's 100 largest oil fields are located in California, including the Belridge South oil field, the second-largest oil field in the contiguous United States. In addition, federal assessments indicate that large undiscovered deposits of recoverable oil and gas lie offshore in the federally administered Outer Continental Shelf.

Excluding federal offshore areas, California's total energy consumption ranks among the highest in the nation, but in 2015, the State's per capita energy consumption ranked 49th, due in part to its mild climate and its energy efficiency programs. In 2016, California ranked third in the nation in conventional hydroelectric generation, second in net electricity generation from all other renewable energy resources combined, and first as a producer of electricity from solar, geothermal, and biomass

resources. California leads the nation in solar thermal electricity capacity and generation.

### **2.21.2.1 Petroleum**

California was the third-largest producer of petroleum among the 50 states in 2016, after Texas and North Dakota, and, as of January 2017, third in oil refining capacity, with a combined capacity of almost 2 million barrels per calendar day at the State's 18 operable refineries.

A network of crude oil pipelines connects production areas to refining centers in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California refiners also process large volumes of Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and the Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports. Led by Saudi Arabia and Ecuador, foreign suppliers now provide more than two-fifths of the crude oil refined in California; however, California's dependence on foreign oil remains less than the national average.

California ranks third in the United States in petroleum refining capacity and accounts for more than one-tenth of total U.S. capacity. California's largest refineries are highly sophisticated; they are capable of processing a wide variety of crude oil types and are designed to yield a high percentage of light products like motor gasoline. To meet strict federal and State environmental regulations, California refineries are configured to produce cleaner fuels, including reformulated motor gasoline and low-sulfur diesel.

Most California motorists are required to use a special motor gasoline blend called California Clean Burning Gasoline (CA CBG). In the ozone non-attainment areas of Imperial County and the Los Angeles metropolitan area, motorists are required to use California Oxygenated Clean Burning Gasoline, and the Los Angeles area is also required to use oxygenated motor gasoline during the winter months. By 2004, California completed a transition from methyl tertiary-butyl ether (MTBE) to ethanol as a gasoline oxygenate additive, making California the largest ethanol fuel market in the United States. Four ethanol production plants are located in central and southern California, but most of California's ethanol supply is transported by rail from corn-based producers in the Midwest. Some supply is also imported from abroad.



### **2.21.2.2 Natural Gas**

California natural gas production typically accounts for less than 2 percent of total annual U.S. production and satisfies less than one-fifth of State demand. Production takes place in basins located in northern and southern California, as well as offshore in the Pacific Ocean. California receives most of its natural gas by pipeline from production regions in the Rocky Mountains, the Southwest, and western Canada. As with crude oil production, California natural gas production is in decline. However, State supply has remained relatively stable due to increasing amounts of natural gas shipped from the Rocky Mountains. California markets are served by two key natural gas trading centers—the Golden Gate Center in northern California and the California Energy Hub in southern California—and the State has nearly a dozen natural gas storage facilities that help stabilize supply. In part to help meet California’s demand for natural gas, several companies have proposed building liquefied natural gas (LNG) import terminals in southern California.

### **2.21.2.3 Coal, Electricity, and Renewables**

Natural gas-fired power plants provide the largest portion of the in-state electricity generation, although it has declined in recent years while solar and wind have increased. California is one of the largest hydroelectric power producers in the United States, and with adequate rainfall, hydroelectric power typically accounts for close to one-fifth of State electricity generation. Due to strict emission laws, only a few small coal-fired power plants operate in California, producing less than 1 percent of the total electricity generation in California.

California leads the nation in electricity generation from non-hydroelectric renewable energy sources. In 2016, California had 73 percent of the nation’s capacity and produced 71 percent of the nation’s utility-scale electricity generation from solar thermal resources. While most of the fuel-type categories had little change over the past year, utility-scale solar photovoltaic (PV) capacity increased by 2,538 megawatts (MW) to 8,618 MW in 2016. This increase included capacity expansions of approximately 268 MW to existing solar PV plants, as well as 2,270 MW of new solar PV facilities that went online in 2016. Capacity expansions included McCoy Solar (104 MW added) in Riverside County and Desert Stateline Solar (113 MW added) in San Bernardino County. New solar PV installations for 2016 were most prevalent in Kern County with 855 MW of new capacity from 16 projects. Following Kern County, Los Angeles County added 337 MW from 19 projects while Fresno County followed up in third with 265 MW from two projects. Riverside, Kings, Imperial, and Tulare Counties rounded out the listings of counties with 100 MW or

more of new installations with 240 MW, 224 MW, 189 MW, and 109 MW, respectively. Total in-state wind generation increased by 11 percent to 13,500 gigawatt hours (GWh) in 2016, up 1,324 GWh from 2015. Overall, renewables in California accounted for 27.9 percent of the total in-state electric generation in 2016, an increase of 3.3 percent from 2015.

Due to high electricity demand, California imports more electricity than any other State in the country. States in the Pacific Northwest deliver power to California markets primarily from hydroelectric sources, while states in the Desert Southwest deliver power primarily from coal- and natural gas-fired sources. Hydroelectric power comes to California primarily through the Western USA interconnection, which runs from northern Oregon to southern California. The system, also known as the Pacific Intertie, is the largest single electricity transmission program in the United States. Although the Pacific Intertie was originally designed to transmit electricity south during California's peak summer demand season, flow is sometimes reversed overnight and has occasionally been reversed during periods of reduced hydroelectric generation in the Northwest. California restricts the use of coal-fired generation within its boundaries; however, the Los Angeles Department of Water and Power (LADWP) operates the coal-fired Intermountain power plant in Utah, which delivers three-fourths of its output to LADWP and other California municipal utilities. A recent California law forbids utilities from entering into long-term contracts with conventional coal-fired power producers. Intermountain's existing contracts with southern California cities are set to expire in 2027.

#### **2.21.2.4 Energy Consumption in California/Riverside County**

The following statistics have been provided by the California Energy Commission (CEC) and are current through 2017.

##### ***Electricity***

Fueled by population growth, the demand for electricity in California is increasing. At the same time, the mandate to decrease greenhouse gas (GHG) emissions will only increase in the future. California's electricity mix is generated by natural gas (33.7 percent); coal (4.13 percent); large hydroelectric (14.7 percent); nuclear (9.08 percent); and renewable (29.0 percent) sources in 2017.

In 2017, California produced 71 percent of the electricity it used; the rest was imported from the Pacific Northwest (14 percent) and the United States Desert Southwest (16 percent). Natural gas is the main source for electricity, contributing

34 percent of the total system power. According to the United States Department of Energy (DOE), Energy Information Administration (EIA) *Annual Electric Power Industry Report*, Californians spent almost \$41 billion for their electricity in 2017. Table 2.21-1 shows the total electricity consumed in Riverside County for 2017.

**Table 2.21-1 Annual Electricity Consumption in Riverside County (2017)**

Type of Consumer	Millions of Kilowatt-Hours <sup>1</sup>
Residential	7,560
Non-Residential	8,346
<b>Total</b>	<b>15,906</b>

Source: California Energy Commission. Energy Consumption Data Management System (2019).

<sup>1</sup> A kilowatt-hour is a unit of power equal to 1,000 watts of electricity consumed in 1 hour.

### **Natural Gas**

Electricity generation is the largest user of natural gas, using approximately half of all natural gas in the State. The residential sector uses 38 percent of the available natural gas. Of that amount, 88 percent is used for space and water heating. Table 2.21-2 shows the total natural gas consumption in Riverside County for 2017.

**Table 2.21-2 Annual Natural Gas Consumption in Riverside County (2017)**

Land Use	Millions of Therms <sup>1</sup>
Residential	254
Non-Residential	139
<b>Total</b>	<b>393</b>

Source: California Energy Commission. Energy Consumption Data Management System (2019).

<sup>1</sup> A therm is a unit of heat containing 100,000 British thermal units (Btu).

### **Liquid Petroleum Gas (Propane)**

Liquefied petroleum gas (LPG) is a mixture of gaseous hydrocarbons, mainly propane and butane that change into liquid form under moderate pressure. LPG (usually called propane) is commonly used as a fuel for rural homes for space and water heating, as a fuel for barbecues and recreational vehicles, and as a transportation fuel. It is normally created as a by-product of petroleum refining and from natural gas production.

LPG is generally an unregulated fuel in California (except for storage and safety issues, which are regulated). Because it is an unregulated commodity, the State does

not collect data on LPG sales or usage. The statistics for LPG in the Alternatives to Traditional Transportation Fuels section below were provided by the DOE, EIA, Office of Coal, Nuclear, Electric, and Alternate Fuels. As such, statistics are unavailable for LPG as a fuel for rural homes, for space and water heating, or for barbecues, and none are contained in the body of this section.

### ***Traditional Transportation Fuels (Fossil Fuels)***

Fossil fuels are energy resources that come from the remains of plants and animals that are millions of years old. The three fossil fuels—petroleum oil, natural gas, and coal—are overwhelmingly responsible for providing the energy that powers our lifestyles and economy, and fuels our transportation systems. They are the bedrock we base our energy mix on, but they are a limited resource. Once they are consumed, they will no longer be part of our energy mix.

A public concern with fossil fuels is that, in addition to their unsustainability as a non-renewable source of energy, there is a negative environmental impact in the use of fossil fuels. The burning of fossil fuels is responsible for emissions that contribute to global climate change, acid rain, ozone problems, and unhealthy air. As such, the development of alternatives to traditional transportation fuels is desirable to improve sustainability and reduce impacts of fossil fuel consumption.

### ***Alternatives to Traditional Transportation Fuels***

Alternatives to traditional transportation fuels are being developed and introduced into the consumer marketplace. Alternative fuels currently in use in the United States include:

- Compressed natural gas
- Electric (EVC)
- Ethanol, 85 percent (E85)
- Hydrogen (HYD)
- LNG
- LPG

The following information was prepared by the EIA, the independent statistical and analytical agency within the DOE. Each year, the EIA collects data on the number of alternative fuel vehicles (AFVs) supplied, and for a limited set of fleet user groups, the number of AFVs in use and the amount of alternative transportation fuel

consumed. The user groups surveyed are federal and State governments, alternative fuel providers, and transit companies.

### **Alternative Fuel Vehicles in Use**

An estimated 431,545 AFVs were in use in the United States in 2016, with 45,208 in use in California (see Table 2.21-3).

**Table 2.21-3 Alternative Fuel Vehicles In Use by Fuel Type (2016)**

Fuel Type	United States	California
Compressed Natural Gas (CNG)	25,539	8,164
Electric	10,180	3,761
Ethanol, 85% (E85)	388,432	31,862
Hydrogen	49	46
Liquefied Natural Gas (LNG)	379	324
Liquefied Petroleum Gas (LPG)	6,966	1,051
<b>Total</b>	<b>431,545</b>	<b>45,208</b>

Source: Energy Information Administration. Alternative Fuels Data Center. Website: <http://www.eia.gov/renewable/afv/users.cfm?fs=a> (accessed April 2019).

### **Alternative Fuel Consumption**

The estimated consumption of alternative fuels (in thousand gasoline-equivalent gallons) in California during 2016 is shown in Table 2.21-4.

**Table 2.21-4 Estimated Consumption of Alternative Fuels in California by Fuel Type (2016) (thousand gasoline-equivalent gallons)**

CNG	Electric	E85	Hydrogen	LNG	LPG	Total
71,990	231	1,528	121	3,422	1,341	78,633

Source: Energy Information Administration. Alternative Fuels Data Center. Website: <http://www.eia.gov/renewable/afv/users.cfm?fs=a> (accessed April 2019).

CNG = compressed natural gas

LNG = liquefied natural gas

E85 = Ethanol, 85%

LPG = liquefied petroleum gas

## **2.21.3 Environmental Consequences**

The following discussion of environmental consequences describes both the direct and indirect energy impacts of the Project, which includes construction.

### **2.21.3.1 Direct Impacts**

#### ***Build Alternatives (Alternative 5 and Alternative 12 [Preferred Alternative])***

Local energy demand for transportation projects typically is dominated by vehicle fuel usage. Energy consumption is mainly based on the annual vehicle miles traveled (VMT). The primary purpose of the Project is to provide an alternative to Interstate



10 (I-10) for local traffic in the Project area in addition to providing an alternate route between the City of Banning and the unincorporated community of Cabazon in the event of a closure on I-10. Currently, local traffic has no alternative to using I-10 between Banning and Cabazon, but I-10 provides an indirect route between the two communities. The construction of the proposed bypass roadway would provide for a more direct path between the two communities, allowing much of the local traffic currently using I-10 for these short trips to use the shorter bypass roadway instead. This additional route is anticipated to reduce overall VMT in this area by reducing out-of-direction travel for local vehicle trips. Moreover, the Project would provide a safe route for bicyclists and pedestrians, which encourages the use of these modes of transportation, and thus reduces VMT. Reduction of VMT would decrease vehicle fuel usage and local energy demand.

In addition to VMT, traffic operating conditions in the Project area also influence fuel consumption rates. Without the route improvements resulting from the Project, congested traffic conditions would be more prevalent throughout the Project area. Those conditions would contribute to a higher energy consumption rate because vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on congested roads. In addition, in the event of a closure along I-10 or major delays affecting the freeway, the Project would reduce the need for circuitous detours through Idyllwild or Victorville when I-10 is closed, as well as reducing the amount of idling and slow speed travel behind any closure, which in turn would improve traffic operating conditions.

Therefore, by reducing VMT and improving traffic operating conditions in the Project area, the Project would decrease local and regional energy consumption; therefore, no significant impact would occur.

Construction of the Project would require the use of off-road construction equipment, as well as water trucks, and on-road vehicles for soil hauling and worker commuting.

As discussed in Section 2.13, Air Quality, the Project construction would last approximately 24 months and would include four phases. Each piece of construction equipment would operate 8 hours per working day. The equipment list for each phase, number of equipment, horsepower, and load factor assumptions are shown in Table 2.21-5.

**Table 2.21-5 Construction Equipment Assumptions**

Construction Phase	Construction Equipment	No. of Equipment	Horsepower	Load Factor
Grubbing/Land Clearing	Crawler Tractors	1	208	0.43
	Excavators	1	163	0.38
	Signal Boards	7	6	0.82
Grading/Excavation	Crawler Tractors	1	208	0.43
	Excavators	3	163	0.38
	Graders	1	175	0.41
	Rollers	2	81	0.38
	Rubber Tired Loaders	1	200	0.36
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	78	0.48
	Generator Sets	1	84	0.74
	Graders	1	175	0.41
	Plate Compactors	1	8	0.43
	Pumps	1	84	0.74
	Rough Terrain Forklifts	1	100	0.4
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37
Paving	Pavers	1	126	0.42
	Paving Equipment	1	131	0.36
	Rollers	3	81	0.38
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37

Source: Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0.

All construction equipment was assumed to be powered by diesel, and the fuel consumption was calculated based on the equation:

$$\text{Fuel Consumption} = \text{Horsepower} * \text{Load Factor} * \text{Specific Fuel Consumption}$$

where the specific fuel consumption was assumed as 0.22 kilogram per kilowatt-hour (kWh) for diesel engine (February 2016).<sup>1</sup> Table 2.21-6 shows the daily fuel and energy consumption of each construction phase.

The on-road vehicle trips, including soil hauling, worker commuting, and water trucks, would also consume fuel. It was assumed that light-duty trucks would be used for worker commuting, while soil hauling and water trucks would be heavy-heavy duty diesel trucks. Table 2.21-7 shows the daily VMT, fuel consumption, and energy consumption for each phase.

<sup>1</sup> Mario Klanfar, Tomislav Korman, and Trpimir Kujundžić. 2016. *Fuel Consumption and Engine Load Factors of Equipment in Quarrying of Crushed Stone*. February.

**Table 2.21-6 Construction Off-Road Fuel and Energy Consumption**

Construction Phase	Fuel Consumption (gal/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	74.24	10.20
Grading/Excavation	373.58	51.35
Drainage/Utilities/Subgrade	292.23	40.17
Paving	119.61	16.44

Source: Compiled by LSA Associates, Inc. (April 2019).  
gal/day = gallons per day  
MMBtu/day = 1 million British thermal units per day

**Table 2.21-7 Construction On-Road VMT, Fuel, and Energy Consumption**

Construction Phase	Soil Hauling VMT (mi/day)	Worker Commute VMT (mi/day)	Water Truck VMT (mi/day)	Diesel Consumption (gal/day)	Gasoline Consumption (gal/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	0	480	40	6.29	22.38	3.56
Grading/Excavation	4,020	960	40	638.57	44.75	93.16
Drainage/Utilities/Sub-Grade	0	880	40	6.29	41.02	5.81
Paving	0	720	40	6.29	33.56	4.91

Source: Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0.  
gal/day = gallons per day  
mi/day = miles per day  
MMBtu/day = 1 million British thermal units per day  
VMT = vehicle miles traveled

As shown in Tables 2.21-6 and 2.21-7, the total construction-related off-road and on-road peak daily energy consumption would be approximately 145 million British thermal units (MMBtu) (i.e., 51.35 MMBtu + 93.16 MMBtu = 144.51 MMBtu) per day and would occur during the grading/excavation phase. Compared to energy consumption without the Project construction, the Project would result in a substantial increase in temporary indirect energy consumption in the Project area. As a comparison, as discussed in Section 2.21.2.1 above, non-residential consumers in Riverside County consumed 8,346 million kWh (or 28,455,776 MMBtu) of electricity and 139 million therms (or 13,900,000 MMBtu) of natural gas in 2017. Therefore, energy consumption from construction activities would be negligible at the Riverside County regional level, and would only last for a short period of time during project construction.

**No Build Alternative**

Under the No Build Alternative, the effects on energy consumption discussed above for the Build Alternatives would not occur.

### **2.21.3.2 Indirect Impacts**

#### ***Build Alternatives (Alternative 5 and Alternative 12 [Preferred Alternative])***

Indirect energy impacts consist principally of the ongoing, non-recoverable energy costs associated with the manufacture and maintenance of vehicles, the one-time, non-recoverable energy costs associated with construction of roads and structures, and the ongoing, non-recoverable energy costs associated with maintaining the roads and structures.

The purpose of the Project is to provide a local roadway connecting Banning and the Cabazon and to provide a bypass for I-10 in the event of freeway closures. The proposed I-10 bypass does not generate new regional vehicular trips; therefore, the Project would cause no additional energy costs associated with the manufacture and maintenance of vehicles.

Based on the annual urban roadway maintenance energy data in the California Department of Transportation (Caltrans) *Energy and Transportation Systems* handbook, Table C:14 of  $1.634 \times 10^8$  BTU per lane-mile for Portland cement concrete pavement and  $1.776 \times 10^8$  BTU per lane-mile for asphalt concrete pavement, and assuming that the Build Alternatives would have approximately equal amounts of each over the two-lane 3.3 miles of the Project, the roadway maintenance energy would be 1,125 MMBtu per year. Compared to Riverside County, this level of energy consumption would be negligible at the regional level, thus no significant impact would occur.

#### ***No Build Alternative***

Under the No Build Alternative, the indirect effects on energy consumption discussed above for the Build Alternatives would not occur.

### **2.21.3.3 Total Energy Impacts**

An important criterion in any energy impact analysis is if or when the energy savings a project would achieve would offset the energy cost to construct the Project. If the energy savings would offset the energy costs, the Project would have a payback period defined as the period of time taken to do so.

As discussed in Section 2.21.3.1, the direct energy costs would be negative because the Project would decrease VMT and improve traffic operating conditions. Compared to Riverside County, the indirect energy costs from construction and maintenance of

the proposed I-10 bypass would be negligible at the regional level, and would be compensated by the energy savings from the operation of the Project.

Thus, for the region, the energy consumption would not be substantially impacted by the Build Alternatives. Therefore, no avoidance, minimization, or mitigation measures would be required.

#### **2.21.4 Consistency with Energy Conservation Plans**

The CEC, the California Public Utilities Commission (CPUC), and the Consumer Power and Conservation Financing Authority (previously called the CPA but which is now defunct) approved the final State of California Energy Action Plan in 2003. The Plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, an updated Energy Action Plan was adopted by the CEC and the CPUC to reflect policy changes and actions after 2003.

The State's energy policies have been substantially influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. The CEC's Integrated Energy Policy Report (IEPR) advances policies that would enable the State to meet its energy needs in a carbon-constrained world. That report also provides a comprehensive set of recommended actions to achieve these policies.

Rather than produce a new Energy Action Plan, the CEC and the CPUC have prepared instead the Energy Action Plan – 2008 Update, which examines the State's ongoing actions in the context of global climate change. The update was prepared using the information and analysis prepared for the 2007 IEPR as well as recent CPUC decisions.

As discussed above, while the direct energy impacts of constructing and maintaining the Project are substantial at a local level, the total energy impacts would be negligible at the Riverside County regional and statewide level. The Project would not conflict with these California energy conservation plans because the California energy conservation planning actions are conducted at a regional level and the total project impact to regional energy supplies would be minor.



Thus, as shown, the Project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy.

## **2.21.5 Avoidance, Minimization, and Mitigation Measures**

### **2.21.5.1 Construction Minimization Measures**

Construction of the Build Alternatives (Alternative 5 and Alternative 12 [Preferred Alternative]) would not result in adverse impacts related to energy consumption in the Project area or in the region compared to the No Build Alternative. No measures to address impacts are required. However, in the interest of promoting energy efficiency, the following avoidance and minimization Measure E-1 will be implemented as part of the construction of Build Alternatives.

**E-1** The County's Engineer shall incorporate a construction efficiency plan, into the Project Plans, Specifications, and Estimates package where applicable. This construction efficiency plan will include the following:

- Select disposal sites as close as practicable to the Interstate 10 (I-10) construction area to minimize haul distances and excavation-related fuel consumption.
- Reuse existing rail, steel, and lumber wherever possible, such as for falsework, shoring, and other applications during the construction process.
- Recycle asphalt taken up from roadways, if practicable and cost-effective.
- Use newer, more energy-efficient equipment and maintain older construction equipment in good working order.
- Schedule construction operations to result in the most efficient use of construction equipment possible.
- Promote employee carpooling.

### **2.21.5.2 Maintenance Minimization Measures**

Maintenance of any of the Build Alternatives would not result in adverse impacts related to energy consumption in the Area of Interest or in the region compared to the No Build Alternative. No measures are required. However, in the interest of promoting energy efficiency, the following avoidance and minimization Measure E-2 will be implemented as part of the Build Alternatives.

**E-2** The County's Engineer shall incorporate a maintenance efficiency plan into the Project Plans, Specifications, and Estimates package where applicable. This maintenance efficiency plan will include the following:

- Maintain maintenance equipment in good working order.
- Schedule maintenance operations to result in the most efficient use of maintenance equipment possible.

### **2.21.5.3 Operational Minimization Measures**

Operation of the Build Alternatives (Alternative 5 and Alternative 12 [Preferred Alternative]) would not result in adverse impacts related to energy consumption in the Project area or in the region compared to the No Build Alternative. No measures are required. However, in the interest of promoting energy efficiency, the following avoidance and minimization Measure E-3 will be implemented as part of the Build Alternatives.

**E-3** The County's Engineer shall incorporate a lighting plan into the Project Plans, Specifications, and Estimates package where applicable. This area lighting plan will identify lighting fixtures that are energy efficient and identify placement of individual lighting fixtures used for roadway lighting that will provide safety lights for pedestrians and motorists. Also see measures V-3, WC-1 and LAPM-5 for additional information regarding other measures to minimize lighting impacts.

## **2.22 Cumulative Impacts**

### **2.22.1 Regulatory Setting**

Cumulative impacts are those impacts that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the 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 including 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. These activities can also contribute to potential community impacts identified for the Project, such as changes in community character, traffic patterns, housing availability, and employment.

The 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 can be found in 40 Code of Federal Regulations Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

### **2.22.2 Methodology**

The potential for the Interstate 10 (I-10) Bypass Project: Banning to Cabazon (Project) to contribute to cumulative impacts was evaluated based on the following methodology provided in the California Department of Transportation (Caltrans) Standard Environmental Reference Environmental Impact Report (EIR)/ Environmental Assessment (EA) Annotated Outline (August 2013):

- Identification/definition of the resources to be considered in the cumulative effect analysis, based on whether the Project would result in direct or indirect impacts to the resources. Resources for which the Project would or could contribute to

cumulative impacts (based on the analyses provided in Chapter 2 of this Final EIR/EA) are listed in Table 2.22.1. Resources for which the Project is not expected to contribute to cumulative impacts, based on the analyses in Chapter 2, are listed in Table 2.22.3 at the end of this section.

- Definition of the geographic boundary or resource study area (RSA) for each resource evaluated in the cumulative impact analysis, based on an area appropriate to assess the overall health and status of that resource, as well as the potential for the Build Alternatives to contribute to cumulative impacts related to that resource. The RSAs for each resource are described by resource in Section 2.22.4. As described later in this section, the RSAs for cumulative impacts for the individual resources cover parts of the City of Banning (Banning), the community of Cabazon (Cabazon), unincorporated Riverside County, and the Tribal Lands both north and south of I-10 to ensure that the potential for cumulative effects of other projects and the I-10 Bypass Project on resources of concern consider the potential for those effects on a larger scale than the project-specific impact analyses.
- Description of the current health and historical context of each resource, as well as its status within the resource-specific RSA, based on effects on the resource from past, present, and reasonably foreseeable future actions. This information is provided in the relevant sections in Chapter 2.
- Identification of current and reasonably foreseeable future actions or projects and their associated environmental impacts that have contributed, or could contribute, to cumulative impacts to each resource. Projects considered in this analysis, in addition to Alternative 5 and Alternative 12 (Preferred Alternative), are described in Section 2.22.3. It is important to note that the potential environmental effects of many of the proposed projects were not available for incorporation in this analysis. As a result, the potential for effects on the cited resources for the various projects were generally estimated based on the likelihood of those projects to impact resources documented in the RSAs.
- Assessment of potential cumulative impacts. Determine for each resource whether there is currently a cumulative impact on the resource and whether the impacts from the Project would contribute to that impact, and if so, at what level. That evaluation is provided by resource in Section 2.22.4.
- Assessment of the need for the Build Alternatives to provide mitigation or other recommended actions to address their potential contributions to cumulative impacts. That assessment is provided by resource in Section 2.22.4.

**Table 2.22.1 Resources for Which the Build Alternatives Would or Could Potentially Contribute to Cumulative Impacts**

Resource Category	Reason Why Alternative 5 and Alternative 12 (Preferred Alternative) Would Potentially Contribute to a Cumulative Impact for the Resource	Section Where Cumulative Analysis Is Provided
Traffic and Transportation (also, Land Use) – Long-Term	The Build Alternatives would result in less than LOS D at three intersections.	2.22.4.2 (Land Use – 2.22.4.1)
Visual and Aesthetics – Long-Term	The Build Alternatives would contribute to changes in the visual environment.	2.22.4.3
Noise – Long-Term	The Build Alternatives would contribute to increases in ambient noise levels at some residences adjacent to the new roadway and local streets improved at both the east and west ends of the Project.	2.22.4.4
Natural Communities	The Build Alternatives would contribute to cumulative impacts related to natural communities and wildlife corridors.	2.22.4.5
Wetlands and Other Waters of the United States	The Build Alternatives would contribute incrementally to cumulative impacts on non-wetland waters.	2.22.4.6
Threatened and Endangered Species	The Build Alternatives would contribute incrementally to cumulative impacts on threatened and endangered species.	2.22.4.7

Source: Analyses provided in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures (June 2016).  
LOS = level of service

### 2.22.3 Reasonably Foreseeable Future Projects

The eastern and western ends of the Project area are in developed areas of Banning and Cabazon and the Build Alternatives cross undeveloped land that has been grazed by cattle since the late 1700s. The area encompasses part of the lower slope of the San Jacinto Mountains, which supports chaparral and some desert transitional species. Two major drainages flow through the region: Smith Creek and the San Gorgonio River. The eastern and western termini of the Build Alternatives are the same, but the alignment of Alternative 12 (Preferred Alternative) is located to the north of Smith Creek, through the Morongo Band of Mission Indians Tribal Land, whereas Alternative 5 is located to the south of Smith Creek, toward the foothills of the San Jacinto Mountains.

This section identifies and describes the adopted, proposed, and potential plans and related projects that may, in concert with the Build Alternatives, contribute to cumulative effects in the project area. These plans and Project represent past, current, and reasonably foreseeable future actions or projects that might have occurred or



might occur in the project area, as well as the potential environmental impacts of those actions and projects, where that information is available.

Adopted plans that will direct future growth, development, and open space preservation in the project area include the Riverside County General Plan (2015), the Banning General Plan (2006), the Pass Area Plan (2015), the Riverside County Congestion Management Plan (2011), the Draft Morongo Band of Mission Indians General Plan (2008), the Western Riverside County Multiple-Species Habitat Conservation Plan (WRMSHCP), the Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP), and the Southern California Association of Governments Regional Transportation Plan (2016).

### **2.22.3.1 Transportation Projects**

Planned transportation infrastructure projects in the project area include construction of and improvements to local roads, rail grade separation projects, and passenger rail service and facility improvements, as described in the following sections.

#### ***City of Banning Planned Transportation Improvements***

The Banning General Plan Circulation Element Amendment (2013) shows Lincoln Street as a four-lane major highway and Westward Avenue as a two-lane collector, extending from Sunset Avenue to Cottonwood Road at the eastern city limits. The plan also shows Barbour Street extending eastward from 8th Street to Hathaway Street as a two-lane collector. North-south streets consist of San Gorgonio Avenue, a four-lane major highway south of Lincoln Street; Hargrave Street, a four-lane secondary highway south of Lincoln Street; and Hathaway Street, four-lane secondary highway south of Lincoln Street. There is no current schedule for the construction of the unbuilt collective improvements shown in the General Plan.

There is also no current schedule for constructing the unbuilt sections of Westward Avenue between Hathaway Street and San Gorgonio Avenue, and that project is not currently included in the Regional Transportation Plan/Sustainable Communities Strategy. Banning has paved an approximately 600-foot half-section of Westward Avenue immediately west of Hathaway Street; however, this segment is blocked from public use because it does not serve any currently developed parcels.

#### ***Riverside County Planned Transportation Improvements***

Planned circulation improvements in unincorporated Riverside County are documented in the Riverside County General Plan (2015) and the Pass Area Plan (2015) contained in that General Plan. The 2015 Pass Area Plan Circulation Plan

designates a proposed road in Riverside County jurisdiction that connects Banning to Cabazon in the generalized location of the Build Alternatives (unbuilt roads shown in the General Plan are considered conceptual). Refer to Figure 2.22-1 for the 2015 Pass Area Plan Circulation Plan.

### ***Union Pacific Railroad Planned Transportation Improvements***

#### ***Freight Service***

The Union Pacific Railroad (UPRR) is a major transcontinental freight-hauling facility that serves traffic to and from the Ports of Los Angeles and Long Beach and terminals in Southern California, with freight destinations across the country. Trains in excess of 100 cars are common. The facility currently provides two tracks in the project area, with long-range plans to expand to three or four tracks within the existing UPRR right-of-way in the project area.

#### ***At-Grade Crossings***

Most of the railroad crossings in the project area are at grade, including those at the following locations:

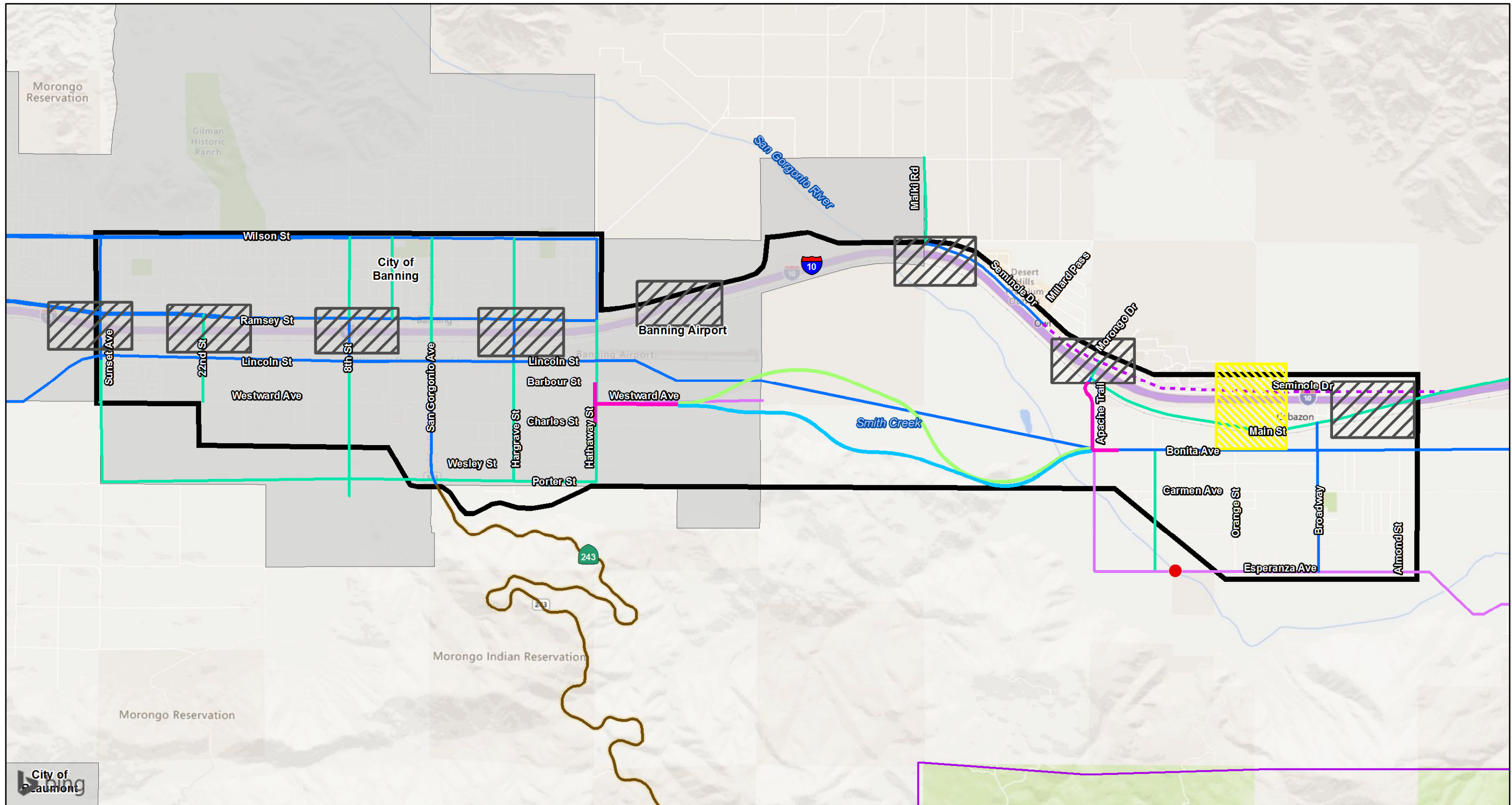
- 22<sup>nd</sup> Street
- San Geronio Avenue
- Hargrave Street
- Apache Trail
- Broadway Street

Grade separations between the railroad tracks and local roads have been constructed at the following locations:

- 8<sup>th</sup> Street
- Sunset Avenue

The existing at-grade railroad crossings have been identified as needing to be grade separated. The tight proximity of the railroad tracks and I-10 coupled with the proximity of local road intersections makes such grade separations complex and expensive. Given the costs, limitations on funding, and competition from other grade separation projects, these separations are unlikely to be constructed for several decades.

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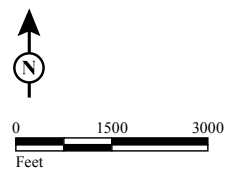


LEGEND

- Traffic Study Area
- The Pass Area Plan Boundary
- City Boundary
- Alternatives 5 and 12
- Alternative 5
- Alternative 12 (Preferred Alternative)
- Major (118' ROW)
- Secondary (100' ROW)
- Mountain Arterial 2 Ln (110' ROW)
- Collector (74' ROW)
- Seminole Drive (Downgraded to secondary highway in 2015 from a major highway in the 2003 Pass Area Plan)
- Existing Interchange
- Proposed Interchange
- Existing Bridge

Note: The Proposed Project is shown in the 2015 Pass Area Plan only. The roadway designations in the Traffic Study Area are the same in the 2015 and 2003 Pass Area Plans, except for the segment of Seminole Drive indicated.

FIGURE 2.22-1



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### **Passenger Service**

UPRR currently accommodates six Amtrak Sunset Limited trains per week (three eastbound and three westbound). The Riverside County Transportation Commission (RCTC), in coordination with the Coachella Valley Association of Governments, Caltrans, and the Federal Railroad Administration, is studying the expansion of passenger rail service to the Coachella Valley and the San Geronio Pass. In 2010, the RCTC reaffirmed its formal support for implementation and expansion of intercity Amtrak rail service to the Coachella Valley and the San Geronio Pass. As of October 2016, RCTC had completed an Alternatives Analysis and initiated the development of a Program Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Although stops and station locations have yet to be determined, the initial service plan would be for two daily round trips along the corridor through the project area. The RCTC anticipates that implementation of any passenger rail service in the corridor is at least 10 years away.

#### **2.22.3.2 Land Use Projects**

Adopted plans that include local and regional land use projects were reviewed in the project area. These plans include the Pass Area Plan (2015), the Riverside County General Plan (2015), the Banning General Plan (2006), and the Morongo Band of Mission Indians Draft General Plan (2008). Planned and approved land use projects in the vicinity of the Project are described in Table 2.22.2, and the locations of those projects are shown on Figure 2.22-2.

#### **2.22.4 Resources for Which the Build Alternatives May Contribute to Cumulative Impacts**

This analysis focuses on the potential for the Build Alternatives to contribute to cumulative impacts to the environmental resources listed in Table 2.22.1 when considered in conjunction with the effects of the other past, present, and future transportation and land use projects described earlier.

The Build Alternatives include avoidance, minimization, mitigation, and compensation measures as described in detail in Sections 2.1 through 2.20 in Chapter 2 of this Final EIR/EA. This section describes those measures and considers whether additional measures should be added to assist in reducing or avoiding identified cumulative impacts. In addition, the planned and reasonably foreseeable projects generally include, or are anticipated to include, project design features and/or measures to address the impacts of those projects.

**Table 2.22.2 Summary of Land Development Projects in the  
Interstate 10 Bypass Project: Banning to Cabazon Project Area<sup>1</sup>**

Number <sup>2</sup>	Project Name and Location	Jurisdiction	Status	Project Build Out
1	Diversified Pacific Residential Development - Wilson Street east of Sunset Avenue (north side of Sunset Ave)	City of Banning	Approved, City anticipates Construction will begin in 2017	34.6 ac development, including 98 low-density residential units.
2	St. Boniface Residential Development - West of 8th Street and north of Gilman Street	City of Banning	Approved, City anticipates Construction will begin in 2017	171 single family homes, up to 5 du/ac.
3	Rancho San Gorgonio Specific Plan	City of Banning	Approved, Construction anticipated to begin mid-2018	A master-planned community organized into 44 planning areas and that includes a mixture of residential, commercial, open space, and recreational uses. In total, 3,133 du would be allowed in the Specific Plan area, with an average density of 4.1 du/ac.
4	Butterfield-Pardee Specific Plan	City of Banning	Approved	The project proposes a maximum of 5,387 du (936.4 ac of residential), a golf course and open space (253.9 ac), parks (66.5 ac) and other open space (108.4 ac), two school sites (23.0 ac), an existing utility substation facility (4.2 ac), a potential fire station site (1.6 ac), a potential 1.5-2.0 mgd satellite treatment plant (3 ac), commercial/office sites (36.0 ac), and backbone roadways (113.6 ac).
5	Loma Linda (Banning Bench) Specific Plan - East of Sunset, North of Wilson	City of Banning	Approved with Development agreement 1995, construction not yet commenced	600 ac development, including 186 ac single-family residential, 15 ac public use, and 10 ac commercial development
6	Little Europe Specific Plan	City of Banning	Approved 1991. Development agreement not yet obtained	9.4 ac residential, 5.2 ac commercial
7	Sun Lakes North Specific Plan – East of Highland Springs and North of Sun Lake Boulevard	City of Banning	Original plan approved 1983	47.1 ac commercial
8	Community of Cabazon Land Use Plan <sup>3</sup>	Riverside County	Planning stages	The Community of Cabazon began preliminary research stage in April 2017 for the development of a Land Use Plan. Would include a Community Core Area for potential development and other uses. A “Possible Bypass Alignment Overlay” would depict the Project connecting Banning to the community of Cabazon via Bonita Avenue.

**Table 2.22.2 Summary of Land Development Projects in the  
Interstate 10 Bypass Project: Banning to Cabazon Project Area<sup>1</sup>**

Number <sup>2</sup>	Project Name and Location	Jurisdiction	Status	Project Build Out
9	La Quinta Inn – West of Hargrave Street and North of Ramsey Street	City of Banning	Approved 2014. Development agreement not yet obtained	1.28 ac with commercial (hotel and restaurant) uses.
10	Village at Paseo San Gorgonio – Across from City Hall along Ramsey Street	City of Banning	Planning Stages	5.5 ac of mixed use development that includes approximately 65,000 sf of office, retail, and restaurant space
11	Cabazon Outlet Mall Expansion on Seminole Drive between Morongo Trail and Millard Pass	Riverside County	Planning stages	79,150 sf retail building
12	Plot plan for a 65,000 sf retail sales center on Seminole Drive between Morongo Trail and Millard Pass	Riverside County	Approved	65,000 sf retail building
13	O'Donnell Business Park at – Northeast corner of Hathaway Street at / Nicolet Street	City of Banning	Approved, Construction plans under review, mass grading commenced	64 ac with 1.2 million sf of light industrial and warehousing commercial space. Includes 12 Buildings, ranging from 11,311-786,984 sf
14	Banning Industrial Park Gordon-Messenger - North of Banning Airport, South of Railroad	City of Banning	Approved 2007. Development agreement not yet obtained	64 ac development, including 1 million sf Industrial Development.
15	Configure 21 parcels into 3 commercial parcels on Seminole Drive between Morongo Trail and Millard Pass	Riverside County	Planning stages	Three commercial parcels
16	Potential expansion of the Banning Airport	City of Banning	Planning stages	Construction of a second taxiway

Sources: City of Banning (2017) and County of Riverside (2017).

<sup>1</sup> This list includes all reasonably foreseeable projects in the project area both north and south of I-10 that could potentially contribute to cumulative impacts on resources in the City of Banning, the community of Cabazon, this part of unincorporated Riverside County, and the Tribal Lands. Projects with expired approvals in the County of Riverside are not included in this list.

<sup>2</sup> Refer to Figure 2.22-2 for the locations of these projects.

<sup>3</sup> Exact location of project has not been identified as of June 2017. Therefore, this plan is not mapped on Figure 2.22-2.

ac = acre(s)

du = dwelling unit(s)

I-10 = Interstate 10

sf = square foot/feet

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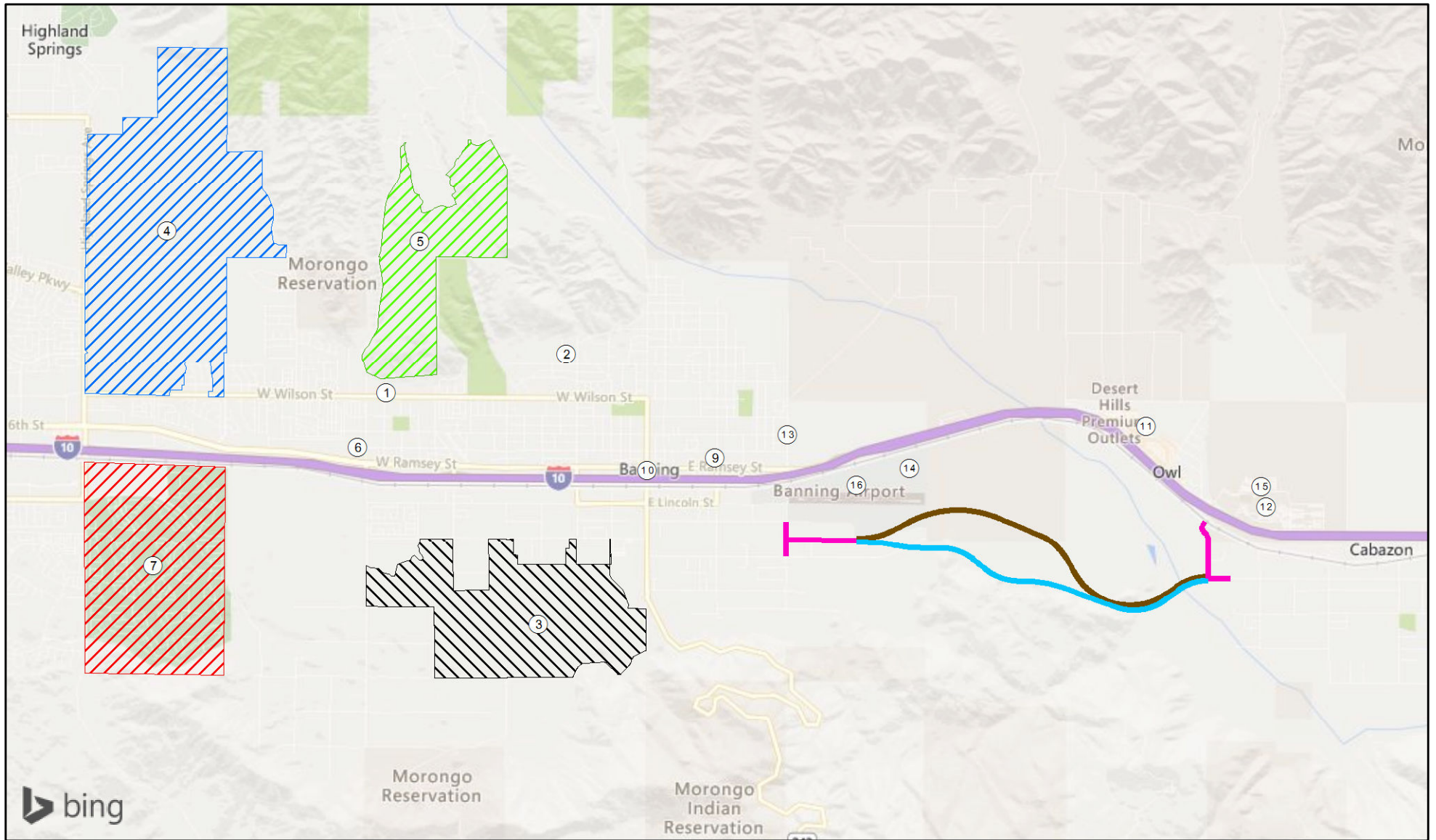


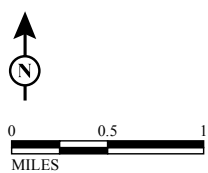
FIGURE 2.22-2

LEGEND

Planned, Approved, and Potential Projects

- |   |                                     |  |
|---|-------------------------------------|--|
| ① Diversified Pacific Residential Development | ⑦ Sun Lakes North Specific Plan     | ⑫ 65,000 sqft retail sales center                |
| ② St. Boniface Residential Development        | ⑧ Rancho San Gorgonio Specific Plan | ⑬ O'Donnell Business Park                        |
| ③ Rancho San Gorgonio Specific Plan           | ⑨ Village at Paseo San Gorgonio     | ⑭ Banning Industrial Park Gordon - Messenger     |
| ④ Butterfield Specific Plan                   | ⑩ Cabazon Outlet Mall Expansion     | ⑮ Configure 21 parcels into 3 commercial parcels |
| ⑤ Loma Linda Specific Plan                    | ⑪ Little Europe Specific Plan       | ⑯ Potential Banning Municipal Airport Expansion  |

- █ Alternatives 5 and 12
- █ Alternative 5
- █ Alternative 12 (Preferred Alternative)



SOURCE: Bing Maps (2018); City of Banning (2016); County of Riverside (2016)

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*I-10 Bypass: Banning to Cabazon*  
Planned Projects



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As discussed earlier, the potential transportation projects that could be implemented by build out of the I-10 Bypass Project include local and regional road improvements shown in the local area general plans, and UPRR and Amtrak facility and service improvements. No information on the potential environmental effects of those projects was available for consideration in this analysis.

#### **2.22.4.1 Land Use Resources (Permanent)**

The Build Alternatives are inconsistent with Policy 6 of the City of Banning's General Plan Circulation Element, thereby resulting in a direct impact. Policy 6 establishes a minimum level of service (LOS) D for roadways in the City of Banning that three intersections within the City of Banning are expected to exceed in 2038. Although this is a permanent impact under land use, the Build Alternatives are inconsistent with a circulation element policy. Therefore, this direct permanent impact will be discussed below, in Section 2.22.4.2, *Traffic and Transportation Resources*.

#### **2.22.4.2 Traffic and Transportation Resources (Permanent) Resource Study Area for Traffic and Transportation Resources**

Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, describes the existing and future traffic conditions in the transportation study area. The RSA for traffic and transportation is defined as roadway links and intersections included in the study area for the *Traffic Operational Analysis Report* (April 2015) because the traffic modeling analysis showed that traffic volumes with and without the Build Alternatives changed by less than 1 percent on freeway segments outside the study area. The RSA for traffic and transportation includes roadway segments, intersections, segments of the I-10 freeway and SR-243 in the City of Banning and Unincorporated Riverside County. In the City of Banning, the RSA extends as far north as Wilson Street, Sunset Avenue to the east, and Porter Street to the south. In Unincorporated Riverside County, the RSA extends as far north as I-10 and Seminole Drive, Esperanza Avenue to the south and until Almond Street to the east.

Both the County and the City consider LOS D as an acceptable level of service for intersections and roadway segments. The Opening Year (2022) and Future Year (2038) traffic conditions are based on an analysis of the LOS and delay for roadways in the RSA, assuming completion of the Project and the projects listed in Table 2.22.2.

### **Impacts of the Build Alternatives to Traffic and Transportation Resources**

The Project would signalize the intersections of Westward Avenue/Hathaway Street in Banning and Bonita Avenue/Apache Trail in Cabazon. The existing western and eastern roadways that serve as the termini for the new I-10 Bypass roadway would also be improved by the Project. The Project would also provide a new Bypass roadway between the City of Banning and the Community of Cabazon, which will reduce congestion from local trips on I-10 and provide local residents with improved circulation when I-10 is congested or closed during an emergency.

As discussed in Section 2.5, the Project would reroute traffic rather than generating new traffic. The Opening Year (2022) condition resulting in LOS deficiencies at the intersection of the I-10 eastbound ramps/South 8<sup>th</sup> Street is due to traffic redistribution that would occur when the Project is completed. An operational improvement to address this deficiency would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project.

In the Future Year (2038) condition, it is anticipated that traffic signals will be warranted at the intersections of Charles Street and South Hargrave Street and North Hathaway Street and East Barbour Street. These signals are not warranted in the Opening Year (2022), and future improvements, including traffic signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element. Therefore, it is not reasonable or feasible to include these traffic signals in the project scope.

### **Impacts of Other Projects on Traffic and Transportation Resources**

The projects listed in Table 2.22.2 could contribute to impacts to LOS on roadways within the RSA and in the surrounding area. Other projects, once complete, could degrade LOS and worsen delays due to vehicle trips generated to and from completed projects. However, it is assumed that other projects would be required to mitigate their respective impacts by improving roadways, signalizing intersections, or paying into local transportation mitigation fee programs to offset impacts, as appropriate.

### **Potential for Cumulative Impacts on Traffic and Transportation Resources**

As discussed above, the Build Alternatives, in addition to nearby projects listed in Table 2.22.2, could result in impacts to traffic and transportation in the RSA and the surrounding area. Impacts to traffic and transportation could result from an increase in use of local roadways and highways resulting from other nearby projects, redistributed traffic as a result of the Build Alternatives, and the overall increase in urbanization in the area over time. However, the Build Alternatives would also improve existing roadways and circulation in the area and it is assumed that other projects would be required to mitigate their respective traffic impacts, as appropriate. As a result, the Build Alternatives, in addition to other projects, would have a minimal potential for cumulative impacts to traffic and transportation in the RSA.

### **Mitigation for Cumulative Impacts on Traffic and Transportation Resources**

The Project would provide an alternative route when I-10 is congested or closed by improving existing streets and intersections in the City of Banning and Community of Cabazon. However, the Project would not address the impacts to the intersection of I-10 eastbound ramps/South 8th Street in the Opening Year (2022) or the intersections of Charles Street/South Hargrave Street and North Hathaway Street/East Barbour Street in the Future Year (2038). Operational improvements to address the deficiency at I-10 eastbound ramps and South 8th Street would require a review of the full interchange, ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. Signals are not warranted in the Opening Year (2022) for Charles Street/South Hargrave Street and North Hathaway Street/East Barbour Street; therefore, future improvements, including installing signals at these intersections, would only occur if warranted by growth and build-out of the City's General Plan Circulation Element.

To avoid adverse traffic impacts, the other projects would need to be consistent with the policies and programs included in the County of Riverside and the City of Banning General Plans, or a general plan amendment would be required to address inconsistencies. The Project and other projects are required to reduce impacts and include Project Design Features (PDFs) and/or mitigation to address project impacts to traffic and transportation, such as deficient LOS or increases in traffic delays. In general, the Build Alternatives, in addition to the other projects listed in Table 2.22.2 are anticipated to improve circulation and mitigate impacts to traffic and transportation in the RSA.

### **2.22.4.3 Visual and Aesthetic Resources**

#### ***Resource Study Area for Visual and Aesthetic Resources***

Section 2.6, Visual/Aesthetics, describes the visual environment in the general project area, which include views of predominantly open space and vacant land. Additional land uses include residential, industrial, and commercial uses. The area includes the north and south sides of the I-10 corridor and the UPRR tracks.

The RSA for visual/aesthetics is defined as the footprint of the Project and areas that can be seen from the Build Alternatives, and areas from which the Build Alternatives can be seen. The RSA primarily consists of the southerly San Jacinto Mountains foothills frontage between the western Banning city limits and the eastern edge of Cabazon.

#### ***Impacts of the Build Alternatives to Visual and Aesthetic Resources***

As discussed in Section 2.6 of this Final EIR/EA, the Build Alternatives would result in expanded right-of-way and additional hardscape, graded slopes, and bridges within the RSA. Both Build Alternatives would require cuts in the foothills. These cuts would modify the visual quality of the RSA by introducing more urbanized and hardscape elements and, as a result, could affect the existing community character.

Alternative 5 includes one bridge at the west end of the RSA over Smith Creek and another bridge over the San Gorgonio River. Alternative 5 would have the greatest visual impact on views of the foothills. Alternative 5 would require cuts into the foothills at five different locations. Some of these cuts avoid having to construct Alternative 5 over Smith Creek. Elevated segments of Alternative 5 would have fill sections and side slopes that would be visible as the elevation of the road rises and falls through the foothills.

Under Alternative 12 (Preferred Alternative), the Smith Creek Bridge would be located more centrally in the RSA and would be longer than the Alternative 5 bridge over Smith Creek. The primary difference between the two alternatives is that Alternative 12 (Preferred Alternative) remains close to the ground and within flat areas for approximately two-thirds of the alignment, and breaches the foothills at only one location, resulting in a reduction of visual impacts compared to Alternative 5.

Both Alternative 5 and Alternative 12 (Preferred Alternative) would alter the landscape within the foothills when compared to existing conditions. The viewer group is small in this location; however, the viewer response to the change would be high. From this viewpoint, the fill slope and culvert crossing is visible along with the



foothill breach that would occur to the west. The resulting adverse change to visual quality and character at this viewpoint under Alternative 5 and Alternative 12 (Preferred Alternative) would be high; therefore, resulting in an adverse impact under NEPA.

With consideration of aesthetic features for pavement, bridge structures, and slopes during final design, some visual impacts would be minimized. Slope revegetation would minimize the visual impacts in Banning and Cabazon. Although avoidance and minimization Measures V-1 through V-3 (Structure Elements, Landscaping/Plantings, and Light and Glare), provided in Section 2.6.6, would minimize some of the visual impacts, the new road would contribute to continued views of urbanized land uses in the RSA. Not all of the visual effects of Alternative 5 and Alternative 12 (Preferred Alternative) can be fully mitigated.

### ***Impacts of Other Projects on Visual and Aesthetic Resources***

The cumulative transportation and development projects described in Section 2.22.3 could also contribute to changes in the visual environment in the RSA as a result of property acquisition, development of new land uses and transportation infrastructure, and overall increasing urbanization in the area. The other projects would be expected to include PDFs and/or mitigation to address the visual impacts of new/expanded hardscape, new development, and other changes to the visual environment similar to the measures for the Build Alternatives.

### ***Potential for Cumulative Impacts on Visual and Aesthetic Resources***

As discussed above, the Build Alternatives would result in changes in the visual character of the RSA. The other cumulative transportation and land use projects could also result in changes in the visual environment in the RSA as a result of property acquisition, development of new land uses and transportation infrastructure, and the overall increase in urbanization in the area. As a result, Alternative 5 and Alternative 12 (Preferred Alternative) could contribute incrementally to continuing changes in the visual environment in the RSA.

### ***Mitigation for Cumulative Impacts on Visual and Aesthetic Resources***

Avoidance and minimization Measures V-1 through V-3 (Structure Elements, Landscaping/Plantings, and Light and Glare) (Section 2.6.6) would substantially reduce the short- and long-term adverse visual impacts under Alternatives 5 or 12 (Preferred Alternative). The other cumulative projects would be expected to include PDFs and/or mitigation to address the visual impacts of new/expanded hardscape,

new development, and other changes to the visual environment similar to the measures included in Alternative 5 and Alternative 12 (Preferred Alternative). However, even with mitigation, Alternative 5 and Alternative 12 (Preferred Alternative) and the other cumulative projects could result in continuing changes in the visual environment and community character as a result of increased urbanization in the RSA.

#### **2.22.4.4 Noise**

##### ***Resource Study Area for Noise***

The RSA for noise is defined as the footprint of the Project and the vicinity of the Project, including parts of Banning, unincorporated Riverside County, and Cabazon north and south of I-10.

##### ***Noise Impacts of the Build Alternatives***

The long-term noise impacts identified and described in Section 2.14 of this Final EIR/EA include the effects of the cumulative projects discussed earlier in Section 2.22.3 and listed in Table 2.22-2. Therefore, that analysis was a cumulative analysis for noise impacts. In summary, the Build Alternatives would expose 7 receptors to noise levels that approach or exceed the Noise Abatement Criteria (NAC). In addition, of the seven receptors, four would also experience a substantial noise increase of 12 A-weighted decibels (dBA) or more over their corresponding modeled existing noise level.

##### ***Noise Impacts of Other Projects***

Transportation and land use projects discussed in Section 2.22.3 may result in some or all of the same kinds of long-term noise impacts as would occur under the Build Alternatives. These projects would be expected to conduct a noise analysis, as necessary, specific to each project and the local conditions of each project area. The noise analysis would be expected to include noise abatement to address the noise impacts generated by each project.

##### ***Potential for Cumulative Noise Impacts***

As discussed above, other cumulative transportation and land use projects may result in some or all of the same kinds of long-term noise impacts as would occur under the Build Alternatives. Therefore, cumulative noise impacts would not occur under the Build Alternatives.

### **Mitigation for Cumulative Noise Impacts**

Although SW-9 at a height of 6 ft and 8 ft was determined to be feasible and reasonable, the County determined that SW-9 would not be constructed because it would impact the adjacent property by encroaching on the front yard minimum setback requirement and would remove an existing pedestrian access point. Therefore, no abatement measures are recommended to provide lower noise levels as a result of the Build Alternatives.

#### **2.22.4.5 Natural Communities**

##### **Resource Study Area for Natural Communities**

As discussed earlier in Section 2.15, Natural Communities, the Biological Study Area (BSA) is within the boundaries of the WRMSHCP, the CVMSHCP, and Morongo Band of Mission Indians Tribal Lands. The RSA for biological resources, which includes lands that are protected from development to preserve biological resources and natural habitat, was defined as:

- Areas between I-10 on the north and 1 mile south of Smith Creek on the south, and between the western Banning city limits and the eastern edge of the WRMSHCP on the east;
- The CVMSHCP Cabazon Conservation Area between the WRMSHCP boundary on the east and the eastern edge of Cabazon; and
- Morongo Band of Mission Indians Tribal Lands in the area bounded by I-10, the eastern Banning city limits, Smith Creek, and the Robertson's Ready Mix property.

Vegetation in the BSA has been affected by I-10, the adjacent concrete plant and associated infrastructure, livestock grazing, and residential and commercial development. Aside from the developed and disturbed/ruderal areas, the BSA contains six plant communities: disturbed *Acacia greggii* shrubland alliance, disturbed *Eriogonum fasciculatum* shrubland alliance, *Chilopsis linearis* woodland alliance, coastal sage scrub, and Riversidean alluvial fan sage scrub (RAFSS). The predominant plant community in the BSA is RAFSS.

##### **Impacts of the Build Alternatives on Natural Communities**

Construction of the Build Alternatives would result in approximately 12.51 acres (ac) and 12.43 ac of temporary effects to RAFSS under Alternative 5 and Alternative 12 (Preferred Alternative), respectively. Temporary impacts include incidental disturbances within construction areas and equipment staging areas. The Build

Alternatives would also result in approximately 0.55 ac and 0.04 ac of permanent effects to RAFSS under Alternative 5 and Alternative 12 (Preferred Alternative), respectively. The permanent effects would be relatively minor and may result from the complete removal of existing vegetation, encroachment into existing vegetation, shading effects, and fill material (e.g., dirt for grading activities and concrete and steel for bridge columns).

Section 2.15.2.2 of this Final EIR/EA includes analysis of the potential for impacts related to wildlife corridors under the Build Alternatives. The project area is within the WRMSHCP Special Linkage Area, and the CVMSHCP states that the San Gorgonio River and associated tributaries provide value as a Biological Corridor between the San Bernardino Mountains and the San Jacinto Mountains. Wildlife movement and habitat fragmentation in the RSA have been affected by transportation facilities, including I-10, Johnson Road, and the UPRR bridge over the San Gorgonio River approximately 1.5 miles north of the proposed river crossing. Avoidance and minimization Measures NC-1 through NC-3 were identified to avoid and minimize impacts to RAFSS communities adjacent to the footprints of the Build Alternatives. Avoidance and minimization Measures NC-1 through NC-3 include Environmentally Sensitive Area fence installation, designation of maintenance facilities, biological monitoring, and a weed abatement program.

The potential for Alternative 5 and Alternative 12 (Preferred Alternative) to result in impacts related to wildlife corridors would be minimized based on the openness ratios of the proposed wildlife crossings at Smith Creek and the San Gorgonio River, which would be sized to support large wildlife species. Additionally, avoidance and minimization Measures WC-1 and WC-2 assist in supporting and sustaining wildlife movement in the RSA in the long term.

### ***Impacts of Other Projects on Natural Communities***

Because some of the other projects identified in Section 2.22.3 may be in or near vegetation communities and areas with wildlife corridors, as described by the CVMSHCP and WRMSHCP, those projects could potentially result in impacts related to those natural communities and wildlife corridors. The potential impacts to these natural communities as a result of these projects are not anticipated to be substantial compared to the potential impacts of Alternative 5 and Alternative 12 (Preferred Alternative) because most of these projects would be constructed in existing, predominantly built-up areas, and would not involve construction of a new roadway.

### **Potential for Cumulative Impacts on Natural Communities**

As discussed above, Alternative 5 and Alternative 12 (Preferred Alternative) would potentially result in impacts related to natural communities and wildlife corridors. Some of the other cumulative land use and transportation projects may also result in impacts related to these types of resources. As a result, Alternative 5 and Alternative 12 (Preferred Alternative) would contribute incrementally to cumulative impacts related to natural communities and wildlife corridors in the RSA.

### **Mitigation for Cumulative Impacts on Natural Communities**

The potential for the Build Alternatives to result in impacts related to natural communities and wildlife corridors will be largely mitigated by implementing Avoidance and minimization Measures NC-1 through NC-3 and avoidance and minimization Measures WC-1 through WC-2. Similarly, it is expected that other projects in the RSA that may result in impacts related to natural communities and wildlife corridors would also include appropriate measures to address the potential impacts from those individual projects.

Additional measures for Alternative 5 and Alternative 12 (Preferred Alternative), beyond those described for the Project, are not warranted because those measures already substantively reduce or mitigate the effects of the Build Alternatives related to wildlife corridors.

#### **2.22.4.6 Wetlands and Other Waters**

##### ***Impacts of the Build Alternatives on Wetlands and Other Waters***

The analysis of the potential for Alternative 5 and Alternative 12 (Preferred Alternative) to impact wetlands and other waters of the United States is provided in the *Natural Environment Study* (April 2015) and Section 2.16, Wetlands and Other Waters. Because no wetlands are located in the BSA, the Build Alternatives would not contribute to cumulative impacts on wetlands.

As shown in Table 2.16-1 in Section 2.16 of this Final EIR/EA, Alternative 5 and Alternative 12 (Preferred Alternative) would result in permanent and temporary impacts to non-wetland waters under the jurisdiction of United States Army Corps of Engineers (USACE) and streambeds under the jurisdiction of the California Department of Fish and Wildlife (CDFW). As a result, the Build Alternatives would require permits from the following agencies:

- USACE (pursuant to Section 404 of the federal Clean Water Act [CWA])
- CDFW (pursuant to Section 1602 of the California Fish and Game Code)



- Regional Water Quality Control Board (RWQCB) (pursuant to Section 401 of the federal CWA)

In addition, compensatory mitigation for Alternative 5 and Alternative 12 (Preferred Alternative) would result in a minimum 1:1 mitigation ratio for impacts to non-wetland waters in the area.

### ***Impacts of Other Projects on Wetlands and Other Waters***

Detailed environmental analyses were not available for the other projects described in Section 2.22.3.

### ***Potential for Cumulative Impacts on Wetlands and Other Waters***

As shown in Table 2.16-1 in Section 2.16, Alternative 5 and Alternative 12 (Preferred Alternative) would result in permanent and/or temporary impacts to non-wetland waters. As noted earlier, quantified information on the potential impacts of other projects identified in Section 2.22.3 on non-wetlands waters is not available. Past transportation and land use projects in the RSA, including historical agricultural and grazing activities, have resulted in a substantial reduction in the total amount of wetlands and other waters in eastern Riverside County. However, based on the types and locations of the projects identified in Section 2.22.3, it is reasonable to conclude that they would result in incremental impacts to non-wetland waters in the RSA.

As noted in Section 2.16, compensatory mitigation for Alternative 5 and Alternative 12 (Preferred Alternative) would result in no net loss of non-wetland waters in the RSA due to a minimum 1:1 compensatory mitigation ratio for the Project impacts on those resources. It is the County's intent to mitigate for impacts to non-wetland waters within the RSA. As a result, Alternative 5 and Alternative 12 (Preferred Alternative) would not contribute to cumulative impacts on non-wetlands and jurisdictional waters in the RSA.

### ***Mitigation for Cumulative Impacts on Wetlands and Other Waters***

Alternative 5 and Alternative 12 (Preferred Alternative) include compensatory measures to address the permanent and temporary Project effects on non-wetland jurisdictional waters, as discussed in Section 2.16.4 of this Final EIR. In addition, the Build Alternatives would require permits from the USACE, the CDFW, and the RWQCB, and the conditions from those permits will be included in the final design, construction, and operation of Alternative 5 and Alternative 12 (Preferred Alternative). Compensatory mitigation would need to occur within the RSA to avoid incremental cumulative impacts to jurisdictional non-wetland waters and streambed.

Similarly, it is expected that other projects in the RSA that impact jurisdictional waters would also include appropriate avoidance, minimization, mitigation, and compensation measures as part of those individual projects to address the permanent and temporary impacts on those projects. It is the County's intent to provide compensatory mitigation within the RSA; the Coachella Valley Conservation Commission has established the Coachella Valley In-Lieu Fee Program which is within the RSA to mitigate for permanent impacts to waters of the US and streambanks. Temporarily affected riparian habitat would be replaced with in-kind habitat restored in place within the project area.

Additional measures for Alternative 5 and Alternative 12 (Preferred Alternative), beyond the measures/permits described previously, are not warranted because those measures already substantively reduce or mitigate the effects of the Build Alternatives on non-wetland waters.

#### **2.22.4.7 Threatened and Endangered Species** ***Impacts of the Build Alternatives on Threatened and Endangered Species***

The analysis of the potential for the Build Alternatives to impact threatened and endangered species is provided in the *Natural Environment Study* and Section 2.19, Threatened and Endangered Species. Threatened and endangered species observed or potentially occurring in the BSA for Alternative 5 and Alternative 12 (Preferred Alternative) that are protected under the Federal Endangered Species Act and/or the California Endangered Species Act are listed as follows:

- **Least Bell's Vireo:** Federal and State endangered; absent from the BSA.
- **Peninsular Bighorn Sheep:** Federal endangered; absent from the BSA.
- **Southwestern Willow Flycatcher:** Federal and State endangered; absent from the BSA.
- **Triple-Ribbed Milk-Vetch:** Federal endangered; absent from the BSA.
- **Desert Tortoise:** Federal and State threatened; low probability of occurrence in the BSA.
- **Coastal California Gnatcatcher:** Federal threatened; assumed to be present within the BSA.

Sections 2.15, Natural Communities; 2.17, Plant Species; and 2.18, Animal Species, describe other special-interest plant and animal species potentially occurring in the BSA and within the natural communities in the BSA.

As discussed in Section 2.19, no impacts to least Bell's vireo, peninsular bighorn sheep, southwestern willow flycatcher, or triple-ribbed milk-vetch would occur due to these species' absence from the BSA. The Build Alternatives could result in impacts to desert tortoise. Although no desert tortoises were observed in the BSA during the 2013 focused survey, desert tortoise is a mobile species that could move into the BSA, thereby resulting in potential impacts to this species as a result of construction and operation of the Build Alternatives.

As discussed in Section 2.19, the BSA was previously outside of the known range of the coastal California gnatcatcher. No focused surveys have been conducted for this species. However, based on CNDDDB records, coastal California gnatcatchers are assumed to be present. Based on the most recent CNDDDB search, the Project assumes CAGN is present on site and any "take" of CSS and RSS will be mitigated accordingly.

### ***Impacts of Other Projects on Threatened and Endangered Species***

Information about impacts of other projects described in Section 2.22.3 on threatened and endangered species is not available. However, based on the types and locations of these other projects in the RSA, it is reasonable to assume they would result in the loss of limited amounts of threatened and endangered species because those species are themselves limited in this area. Past transportation and land use projects in the RSA, including historical agricultural and grazing activities, have resulted in a substantial reduction in the total amounts of habitat available for threatened and endangered species in eastern Riverside County, including in the RSA.

### ***Potential for Cumulative Impacts on Threatened and Endangered Species***

As summarized in Section 2.19, the Build Alternatives would potentially result in permanent and/or temporary impacts on two threatened species, the desert tortoise and the coastal California gnatcatcher. The other cumulative projects, because they are in the RSA, may also result in permanent and/or temporary impacts to threatened and endangered species, including desert tortoise and coastal California gnatcatcher. As a result, the Build Alternatives are anticipated to contribute incrementally to cumulative impacts on threatened and endangered species in the RSA.

### **Mitigation for Cumulative Impacts on Threatened and Endangered Species**

Alternative 5 and Alternative 12 (Preferred Alternative) are covered projects in the WRMSHCP and the CVMSHCP. These plans provide a comprehensive, habitat-based approach to the protection of covered species by focusing on conservation and management of lands essential for their long-term conservation. The WRMSHCP and the CVMSHCP provide mitigation for cumulative impacts to covered species and their habitats. The Project's consistency with these plans ensures that cumulative and indirect impacts to those species are effectively mitigated. Therefore, avoidance and minimization Measures DT-1 through DT-9 and avoidance and minimization Measure NC-1 (education for contractor employees, tortoise-proof fence installation, and guidelines for potential tortoise interaction during construction and vegetation removal), in conjunction with protection provided under the WRMSHCP and the CVMSHCP, address the Project's permanent and temporary impacts on threatened and endangered species and other special-interest species. In addition, the following conditions from the Biological Opinion approved by the USFWS on January 8, 2021 will be implemented:

#### **Conservation Measures:**

1. To minimize effects to gnatcatcher, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as February 15 through August 31) or a pre-construction nesting bird survey would be conducted within 3 days prior to project activities including equipment staging, clearing, grubbing, construction, and/or ground disturbance, to ensure the gnatcatcher are not disturbed by construction-related activities.
  - a. Should nesting gnatcatcher be found on or within 300 feet of the Project site during the pre-construction survey, an appropriate buffer shall be established by a qualified biologist. No construction or clearing would be conducted within the buffer area until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist would monitor active nests to ensure established buffers are effective.
2. Prior to ground-disturbing activities, highly visible barriers (such as orange construction fencing) would be installed around plant communities adjacent to

the Project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type would be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, would not be allowed to operate within the ESAs. All construction equipment would be operated in a manner to prevent accidental damage to habitat adjacent to the Project footprint. No structure of any kind, or incidental storage of equipment or supplies, would be allowed within these protected zones. Silt fence barriers would be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.

3. A designated biologist, familiar with gnatcatcher life history and habitat requirements, would be retained and will be responsible for overseeing compliance with conservation measures and coordination with other involved regulatory agencies. The designated biologist would be on the Project site during all Project activities and would have the authority to halt activities that violate measures applicable to the proposed Project. The names and qualifications of individuals to serve as designated biologists would be submitted to the USFWS for review and approval.
4. Lighting would be limited to installations at intersections for safety and incorporate wildlife-friendly designs.
5. To offset permanent and temporary impacts to native vegetation communities, a Habitat Mitigation and Monitoring Plan (HMMP) would be developed in coordination with the USFWS to restore Riversidean alluvial sage scrub (RAFSS) and *Acacia greggii* shrubland (shrubland) within the Project area at a 1:1 ratio. Only native plant species, preferably from seed or stock sourced in or near the Project area, would be used in restoration. The HMMP would include items such as appropriate native seed mixes and identify site activities, maintenance and monitoring performance standards, and responsible parties. To ensure success of the restoration area, a draft HMMP would be submitted to the USFWS for review and approval no later than 30 days prior to initial ground-disturbing activities.
6. To provide for the safety of the motoring public, and conservation of local fauna, permanent wildlife fencing would be installed along the length of the new roadway following completion of the Project. Per the Project's



Determination of Biological Equivalent or Superior Preservation (DBESP), the Riverside County Transportation Department (RCTD) would develop the fencing plan in coordination with the Wildlife Agencies.

**Reasonable and Prudent Measures:**

1. Prior to the onset of ground-disturbing activities, Caltrans and RCTD will identify whether the final engineering plans and the Project footprint deviate from information presented to the USFWS in the biological assessment and ensure that they include design features to secure wildlife connectivity as presented in the WRMSHCP DBESP and the Environmental Impact Report/ Environmental Assessment (EIR/EA).
2. Caltrans and RCTD will monitor Project-related actions and inform the USFWS of non-compliance and any gnatcatcher observations for the duration of Project-related activities.

**Terms and Conditions:**

1. Prior to initiating any portion of construction activities that will directly impact gnatcatcher habitat, RCTD will submit to the Palm Springs USFWS Office Geographic Information System (GIS) data and figure(s) showing the impact area based on final project designs relative to the impact area depicted in the documents provided to support this consultation. The figure(s) will include vegetation mapping, all federally listed species observations from project-specific surveys (identified to the year and source of the survey), and a table showing the final impacts by habitat type.
2. RCTD will commit to implement all conservation measures listed in the BIA's biological assessment, the WRMSHCP DBESP, the Caltrans Natural Environmental Study, and measures in the EIR/EA related to wildlife connectivity.
3. The Project's designated biologist will report non-compliance to the USFWS within 48-hours via phone or electronic mail.
4. Ensure that USFWS personnel have the right to access and inspect the Project site during project implementation (with prior notification from USFWS) for compliance with the Project Description, conservation measures, and terms and conditions of the Biological Opinion.

### **Reporting Requirements:**

1. Caltrans and the BIA will provide annual reporting of the activities conducted under the Biological Opinion. Any such reports shall be filed not later than March 31st for the preceding calendar year. Reporting requirements for restoration activities will be laid out within the HMMP.

Similarly, it is expected that other projects in the area that impact threatened and endangered species would also include appropriate avoidance, minimization, and mitigation measures to address the permanent and temporary impacts to those species.

Additional measures for the Build Alternatives, beyond those described above for the Project, are not warranted because those measures already substantively reduce or mitigate the effects of the Build Alternatives on threatened and endangered species.

#### **2.22.5 Resources for Which the Build Alternatives Would Not Contribute to Cumulative Impacts**

The detailed impact analyses in Chapter 2 describe potential impacts to environmental resources and, in some cases, avoidance, minimization, and mitigation measures were proposed to reduce or eliminate the specific impact. These impacts were reviewed to assess whether they, in combination with impacts from past, present, and reasonably foreseeable future actions, would contribute to cumulative adverse impacts to the environmental resource. Table 2.22.3 lists the environmental resources and includes a brief discussion of why the Build Alternatives would not contribute to cumulative impacts.

**Table 2.22.3 Resources for Which the Build Alternatives Would Not Contribute to Cumulative Impacts**

Resource/Impact Category	Reason Why Alternative 5 and Alternative 12 (Preferred Alternative) Would Not Contribute to a Cumulative Impact for the Resource
Land Use – Temporary Impacts	<p><b>Existing and Future Land Uses.</b> As discussed in Section 2.1, the Build Alternatives would not result in adverse effects to existing or future land uses, including park and recreational facilities; and would be consistent with Riverside County and Morongo Band of Mission Indians local plans, as well as State and regional plans. Because the Build Alternatives would not result in direct or indirect land use impacts, there is no potential for the Build Alternatives to contribute to cumulative land use impacts. However, the Build Alternatives would be inconsistent with Policy 6 (sets a minimum LOS D standard for roadways within Banning’s jurisdiction) of the City of Banning’s General Plan Circulation Element, resulting in a permanent impact that is discussed in Sections 2.1 and 2.5 (Traffic and Transportation/Pedestrian and Bicycle Facilities). The Build Alternatives would not result in temporary impacts to existing or future land uses because the Build Alternatives would not be in violation with LOS standards until the new roadway is complete and in operation.</p>
Community Impacts	<p><b>Community Character and Cohesion.</b> As discussed in Section 2.3.1, compliance with Caltrans standards for noise, air emissions, temporary construction easements, and implementation of a comprehensive public outreach program would ensure that no substantial impacts to community character and cohesion would result. There is no potential for the Build Alternatives to contribute to cumulative impacts.</p> <p><b>Relocations and Real Property Acquisition.</b> As discussed in Section 2.3.2, the Build Alternatives would not require full acquisitions of property. Alternative 12 (Preferred Alternative) would require acquisition of an easement for public road purposes of approximately 14 acres of undeveloped Morongo Band of Mission Indians Tribal Lands but would not result in the displacement of any businesses or residences because the property is vacant. The Build Alternatives would not result in direct or indirect impacts related to relocations and real property acquisition, and no potential contribution to cumulative impacts from relocation and real property acquisition would result.</p> <p><b>Environmental Justice.</b> As discussed in Section 2.3.3, no minority or low-income populations were identified that could be adversely affected by the Build Alternatives. Therefore, the Build Alternatives would not result in direct or indirect environmental justice impacts, and would not contribute to cumulative impacts.</p>
Utilities/Emergency Services	<p>As discussed in Section 2.4, the Build Alternatives include relocation or protection-in-place of some existing utility lines to accommodate construction and operation, but this would not constitute a substantial impact to utility services. Construction of the Build Alternatives could result in temporary indirect effects on some emergency service providers and transit and school bus services, including road and/or lane closures, or detours where improvements to existing streets are proposed (i.e., Westward Avenue, Hathaway Street, Apache Trail, and Bonita Avenue). Preparation and implementation of a TMP as described in avoidance and minimization Measure TR-1 would mitigate these short-term impacts. The Build Alternatives would not create permanent adverse impacts to utilities and emergency service providers. Operation of the Build Alternatives would likely result in a beneficial impact to emergency services providers as a result of improved response times between Banning and Cabazon. Therefore, there is no potential for the Build Alternatives to contribute to cumulative impacts.</p>

**Table 2.22.3 Resources for Which the Build Alternatives Would Not Contribute to Cumulative Impacts**

Resource/Impact Category	Reason Why Alternative 5 and Alternative 12 (Preferred Alternative) Would Not Contribute to a Cumulative Impact for the Resource
<p>Traffic – Short-Term</p> <p>Pedestrian and Bicycle Facilities</p>	<p><b>Construction Impacts.</b> As discussed in Section 2.5, construction of the Build Alternatives could result in potential short-term effects on traffic circulation, including temporary delays, temporary detours, and/or partial lane closures on local streets. These impacts would be mitigated with implementation of the TMP described in MM TR-1 prior to and during construction activities; therefore, no contribution to cumulative impacts would result.</p> <p><b>Bicycle and Pedestrian Impacts.</b> During construction, some sidewalks and on-street bicycle facilities may be temporarily closed. These closures are anticipated to be of very limited duration (e.g., hours and days), and alternate access would be provided. The short-term impacts to pedestrian and bicycle facilities during construction of the Build Alternatives would be mitigated with implementation of the TMP required in MM TR-1. Therefore, the Build Alternatives would not contribute to cumulative impacts.</p>
<p>Visual and Aesthetic Resources –</p> <p>Temporary Impacts</p>	<p>As discussed in Section 2.6, during construction of the Build Alternatives, equipment, large vehicles, and staging areas would be visible. Construction lighting at night may also be visible but implementation of MM V-3 would ensure lights with non-glare hoods are used to illuminate only the right-of-way. Because visual impacts would be short term and would occur only in areas where construction is occurring, there would be no contribution to cumulative impacts.</p>
<p>Cultural Resources</p>	<p>As discussed in Section 2.7, a finding of “No Historic Resources” was made regarding the potential for cultural resources impacts in the APE for the Build Alternatives. Therefore, no impacts to historic resources would occur and the Project would not contribute to cumulative impacts.</p> <p>Archaeological surveys resulted in the identification of eight bedrock milling sites in the APE, but no artifacts, features, or indicators of other use were observed at any of the sites. As such, the eight prehistoric sites were found not eligible for listing on the National Register of Historic Places or the California Register of Historical Resources. Representatives of the Morongo Band of Mission Indians requested that each site be further mitigated if it would be affected by construction. MM CR-3 requires specific mitigation actions for the bedrock milling features, which includes avoiding, burying, relocating, or excising the milling features. With implementation of MM CR-3, no direct or indirect impacts to archaeological resources would occur and no contribution to cumulative impacts would result.</p>
<p>Hydrology and Floodplains</p>	<p>As discussed in Section 2.8, the Build Alternatives would require construction of rock slope protection and new cross culverts within the 100-year floodplain. Alternative 5 would result in a longitudinal encroachment at one location; however, this encroachment was determined not to be “significant” as defined by Code of Federal Regulations Title 23, Part 650.105, and would not have an adverse effect on base flood elevation. Alternative 12 (Preferred Alternative) would not include a longitudinal encroachment. With implementation of MM HYD-1 and HYD-2, and Best Management Practices (BMPs) for water quality and storm water runoff, Alternative 5 and Alternative 12 (Preferred Alternative) would not result in incompatible floodplain development or significant effects on natural and beneficial floodplain values and would not contribute to cumulative impacts.</p>

**Table 2.22.3 Resources for Which the Build Alternatives Would Not Contribute to Cumulative Impacts**

<b>Resource/Impact Category</b>	<b>Reason Why Alternative 5 and Alternative 12 (Preferred Alternative) Would Not Contribute to a Cumulative Impact for the Resource</b>
Water Quality	As discussed in Section 2.9, the Build Alternatives would not result in impacts to water quality with implementation of MMs WQ-1 (construction BMPs), WQ-2 (treatment control BMPs), and WQ-3 (debris and sediment control). Therefore, the Project would not contribute to cumulative water quality impacts.
Geology, Soils, Seismicity, and Topography	As discussed in Section 2.10, the Project is in a seismically active area potentially subject to seismic shaking associated with earthquakes; however, with implementation of MMs GEO-1 through GEO-5, no adverse effects to geology, soils, seismicity, and topography would result. Therefore, the Build Alternatives would not contribute to cumulative geologic impacts.
Paleontology	As discussed in Section 2.11, development of either Alternative 5 or Alternative 12 (Preferred Alternative) has the potential to adversely affect paleontological resources; however, with the implementation of MM PAL-1, adverse effects on paleontological resources would be mitigated. Therefore, the Build Alternatives would not contribute to cumulative impacts.
Hazardous Waste and Hazardous Materials	As discussed in Section 2.12, four areas of potential concern were identified where historic practices could have resulted in soil contamination. These areas are adjacent to Alternative 5 but are outside the footprint of Alternative 12 (Preferred Alternative). Soil contamination could include pesticides from historical use at orchards and sheep dip sites; metals could be found in soil at a former rifle range; and unknown materials could be found at an informal dumping site. Typical hazardous materials (e.g., solvents, paints, and fuels) would be used during construction of both Build Alternatives and would be handled in accordance with required federal, State, and local procedures. Measures to avoid impacts include conducting Site Investigations (Phase II Environmental Site Assessments) of the four areas of potential concern, plus, if the Site Investigation data warrant, further soil sampling and remediation. The measures apply to Alternative 5 specifically and would apply to Alternative 12 (Preferred Alternative) if hazardous waste or materials are discovered during construction. No impacts would result and the Build Alternatives would not contribute to cumulative impacts.
Air Quality	As discussed in Section 2.13, operation of the Build Alternatives would not result in exceedances of the 1-hour and 8-hour carbon monoxide ambient air quality standards or contribute to a PM <sub>2.5</sub> or PM <sub>10</sub> hot spot. Because no impacts would result, the Build Alternatives would not contribute to cumulative air quality impacts.
Noise – Construction	As discussed in Section 2.14, noise during construction of the Build Alternatives would be intermittent, short term, and overshadowed by existing noise sources in the area and would not be adverse impacts with compliance with Caltrans Standard Specifications Section 14-8.01 and the applicable local jurisdictions' noise standards (MM N-1). Additionally, all internal combustion engines on construction equipment will be equipped with the manufacturer-recommended mufflers during construction (MM N-1). Because construction of the Build Alternatives would not cause adverse noise impacts, no contribution to cumulative noise impacts would occur.
Plant Species	As discussed in Section 2.17, the Build Alternatives are not anticipated to result in temporary or permanent effects to the Yucaipa onion and many-stemmed dudleya. Due to existing disturbances (heavy grazing) and proximity to surrounding development, the Build Alternatives will not have substantial effects on the other special-status plant species described in Section 2.16. Because no impacts to plant species would occur, there is no potential for the Build Alternatives to contribute to cumulative impacts.



**Table 2.22.3 Resources for Which the Build Alternatives Would Not Contribute to Cumulative Impacts**

Resource/Impact Category	Reason Why Alternative 5 and Alternative 12 (Preferred Alternative) Would Not Contribute to a Cumulative Impact for the Resource
Animal Species	As discussed in Section 2.18, the Build Alternatives have the potential to result in temporary and permanent effects to Los Angeles pocket mouse, burrowing owl, and migratory birds. Because the Western Riverside County Multiple-Species Habitat Conservation Plan and the Coachella Valley Multiple-Species Habitat Conservation Plan are designed to mitigate for impacts to covered species and habitats on a regional scale, no mitigation is required if impacts are avoided as described in Section 2.18. With implementation of MMs LAPM-1 through LAPM-6, BO-1, MB-1 through MB-2, and coordination with the United States Fish and Wildlife Service regarding the Morongo Band of Mission Indians Tribal Lands, no substantial effects are anticipated to nesting birds. Therefore, the Build Alternatives would not contribute to cumulative impacts to animal species.
Invasive Species	As discussed in Section 2.20, the Build Alternatives have the potential to spread invasive species to adjacent native habitats in the Biological RSA. All equipment and materials will be inspected for the presence of invasive species seeds. Based on implementation of MM INV-1, no permanent or temporary effects from invasive species are anticipated and the Build Alternatives would not contribute to cumulative impacts.
Global Climate Change	As discussed in Chapter 3, the Build Alternatives would not result in a substantial increase in CO <sub>2</sub> emissions and would reduce the average greenhouse gas emissions generated per vehicle trip. Therefore, the Build Alternatives would not contribute to cumulative global climate change impacts.

Sources: Analyses provided in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures (April 2017).

APE = Area of Potential Effects

Banning = City of Banning

BMP = Best Management Practices

Cabazon = community of Cabazon

Caltrans = California Department of Transportation

CO<sub>2</sub> = carbon dioxide

I-10 = Interstate 10

MM = Mitigation Measure

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

Project = I-10 Bypass Project: Banning to Cabazon

RSA = Resource Study Area

TCE = temporary construction easement

TMP = Traffic Management Plan

# **Chapter 3** California Environmental Quality Act Evaluation

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## **3.1 Determining Significance under the California Environmental Quality Act**

The Project is subject to federal, as well as Riverside County (County) and State environmental review requirements because the County proposes the use of federal funds from the Federal Highway Administration (FHWA) and/or the Project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The County is the Project proponent and Lead Agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this Project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (Project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the identification of each "significant effect on the environment" resulting from the Project and ways to mitigate each significant effect. If the Project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the

findings of mandatory significance of CEQA. This chapter discusses the effects of this Project and CEQA significance.

### **3.2 Impacts of the Project**

As CEQA Lead Agency, the County has assessed the significance of potential impacts of implementing either of the Build Alternatives (Alternative 5 or Alternative 12 [Preferred Alternative]) using the Environmental Checklist, provided in Appendix A, and the County's analyses of project impacts discussed in detail in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures. Potential impacts of the Build Alternatives are analyzed according to each CEQA resource category (air quality, biological resources, etc.), including identification of the level of significance of the impact with and without mitigation. Where the impacts are the same for both Alternative 5 and Alternative 12 (Preferred Alternative), the discussion refers to the Build Alternatives. Where the impacts are different by alternative, the discussions refer to Alternative 5 or Alternative 12 (Preferred Alternative), as appropriate. As described in Chapter 1, Alternative 12 (Preferred Alternative) was identified as the Locally Preferred Alternative in the Recirculated Draft Environmental Impact Report/Environmental Assessment (EIR/EA). The designation of a Locally Preferred Alternative in the Recirculated Final EIR/EA was intended to convey the County's preference for Alternative 12 (Preferred Alternative) based on the information available prior to public review of the Recirculated Draft EIR/EA, including potential impacts and reasonable mitigation measures. As described in Chapter 1, after comparing and weighing the benefits of the Build Alternatives and considering comments received during the public review period of the Recirculated Draft EIR/EA, on December 17, 2019, the Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative.

The individual questions from the CEQA Environmental Checklist in Appendix A addressed in these analyses are provided for each resource category heading in this chapter.

**I. AESTHETICS**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS -- Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

The potential for the Build Alternatives to result in impacts related to aesthetics was assessed in the *Visual Impact Assessment* (March 2015), the results of which are summarized in Section 2.6, Visual/Aesthetics, in this Draft Environmental Impact Report/Environmental Assessment (EIR/EA). The following analyses are based on information in that technical study.

**Would the Project:**

**I.a. Have a substantial adverse effect on a scenic vista?**

**Significance Determination:** *Less Than Significant Impact*

State Route 243 (SR-243), a State Scenic Route,<sup>1</sup> begins at the southern Banning city limit west and south of the Project area. As part of the Palms to Pines Scenic Byway (Scenic Byway), this route traverses forested mountain scenery along a ridge of the San Jacinto Mountains. It rises in a series of switchbacks offering views of the San Bernardino Valley and the desert scenery.

The northern approximately 1 mile of this Scenic Byway would have limited views of Alternative 5 and Alternative 12 (Preferred Alternative). The view from SR-243 would only include the western part of the Build Alternatives, approximately 0.5 mile of the 2.6-mile total proposed road length for either Build Alternative, and the effect on a scenic vista would be less than significant.

Based on the distance of this Scenic Byway from the Project area and the limited views of Alternative 5 and Alternative 12 (Preferred Alternative) from this location,

<sup>1</sup> State Scenic Highway Program. Website: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/scenic\\_hwy.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm) (accessed September 29, 2016).

the potential impacts associated with views of the Build Alternatives from SR-243 would be less than significant. No mitigation is required.

**I.b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**Significance Determination:** *Less Than Significant Impact with Mitigation*

As discussed above, 0.5 mile of the total 2.6-mile length of either of the Build Alternatives would be visible from a portion of SR-243, a State scenic route. No part of either of the Build Alternatives is within or adjacent to a State scenic highway. Both Build Alternatives would introduce a new road cutting into the outcroppings and foothills of the San Jacinto Mountains, which would be visible from SR-243.

Alternative 5 would have the greatest impact to the foothills, cutting into the slopes in five different locations. Alternative 12 (Preferred Alternative) would be closer to the existing level of ground surface, and would traverse flat areas for approximately two-thirds of the alignment, impacting the foothills at only one location. With implementation of avoidance and minimization Measures V-1 and V-2, provided in Section 2.6, impacts from either of the Build Alternatives associated with damage to scenic resources would be reduced to less than significant levels.

**I.c. Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Significance Determination:** *Potentially Significant Impact*

As discussed in Section 2.6 of this Final EIR/EA, the expanded right-of-way, bridges, graded slopes, and the new roadway itself would modify the existing visual quality of the Project area because the majority of the Project area is currently undeveloped land. Alternative 5 would cross Smith Creek on a new bridge in unincorporated Riverside County just east of the eastern City of Banning (City) city limits and then extend parallel to the south side of Smith Creek, traversing three different foothill knolls, which would require breaching existing ridgelines. A moderate amount of fill for elevation change will also be required on the road approaches to the foothills.

Alternative 12 (Preferred Alternative) would remain north of Smith Creek in eastern Banning, and then travel east across the Morongo Band of Mission Indians Tribal Lands. Alternative 12 (Preferred Alternative) would cross Smith Creek on a new bridge that would be more centrally located and longer than the bridge in



Alternative 5. Alternative 12 (Preferred Alternative) primarily crosses desert lowlands and some foothills.

Alternative 5 and Alternative 12 (Preferred Alternative) would have a significant impact on views from one single-family home of the desert flatland and foothills because the viewer would see the long stretch of roadway with visibility of the new side slopes resulting from the breaching of the foothills (Key View 6; refer to Section 2.4, Visual/Aesthetics). Proposed culverts and the unpaved service access road would also be visible from this view.

Various aesthetic features would be considered during final design of either Build Alternative to reduce potential aesthetic impacts. These include minimization of roadway sections and bridge height/profile, maintenance of the existing natural grade wherever possible, vegetation of newly filled slopes, terraced retaining walls, and selective rock placement. However, design constraints did not allow for adjustments of road placement to avoid impacts to Key View 6. With implementation of avoidance and minimization Measures V-1 through V-3, provided in Section 2.6, impacts from Alternative 5 and Alternative 12 (Preferred Alternative) that are associated with changes in visual character would be mitigated for Key Views 1 through 5, and Key View 7. However, changes in visual character would be significant and unavoidable under Key View 6 for both Build Alternatives.

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

**Significance Determination:** *Less Than Significant Impact*

The Build Alternatives would each include street lighting to illuminate the new road in compliance with current street lighting standards. The County of Riverside's Mt. Palomar lighting restriction area requires the Project limit light leakage and spillage that may interfere with the operations at the Palomar Observatory. The minimal amount of additional lighting associated with either Build Alternative would not create glare because there are virtually no adjacent surfaces to reflect light. Lighting will be concentrated at intersections and bridge crossings. To minimize light spill into adjoining areas, the light fixtures will be designed to direct light downward to only those areas requiring illumination for safety purposes. The impact of these light sources will be low because very few residences are sited such that the signalized intersections or moving vehicles would be visible. The new sources of light would not adversely affect day or night views. In summary, the potential impacts of lighting associated with either of the Build Alternatives would be less than significant.

## II. AGRICULTURE AND FOREST RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FOREST RESOURCES -- Would the project:</b>				
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 type="checkbox"/>	<input checked="" 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"/>

### Would the Project:

- II.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?**
- II.b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?**
- II.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))?**
- II.d. Result in the loss of forest land or conversion of forest land to non-forest use?**
- II.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?**

**Significance Determination:** *No Impact*

There is no Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest land, Williamson Act Contract parcels, or parcels zoned for agricultural or forest use in the Project area; therefore, no farmlands or forest lands would be converted with implementation of either Build Alternative. The majority of the alignment of Alternative 5 would pass through undeveloped land, and the acquisition of property to construct the new roadway in this area would not conflict with land use and zoning designations. Much of the alignment of Alternative 12 (Preferred Alternative) would pass through undeveloped Morongo Band of Mission Indians Tribal lands (i.e., Section 12), and acquisition of property in this area for the new roadway would not conflict with existing industrial designations as designated by the Morongo Band of Mission Indians Draft General Plan Land Use Element map (December 2011). In summary, neither of the Build Alternatives would impact agricultural and forest resources, and no mitigation is required.

### III. AIR QUALITY

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The potential for the Build Alternatives to result in impacts related to air quality was assessed in the *Air Quality Analysis* (September 2014; Errata, December 2017; May 2019; May 2021), the results of which are summarized in Section 2.13, Air Quality, in this Final EIR/EA. The following analyses are based on information in that technical study.

#### Would the Project:

#### III.a. Conflict with or obstruct implementation of the applicable air quality plan?

**Significance Determination:** *No Impact*

The Project is located in the South Coast Air Basin (Basin). Air quality within the Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) adopted the *2016 Air Quality Management Plan (2016 AQMP)* in March 2017.

The main purpose of an Air Quality Management Plan (AQMP) is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. The Basin is in nonattainment for the federal and State standards for ozone (O<sub>3</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). In addition, the Basin is in nonattainment for the State particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standard, and in attainment/maintenance for the federal PM<sub>10</sub>, carbon monoxide (CO), and nitrogen dioxide (NO<sub>2</sub>) standards.

Consistency with the 2016 AQMP for the Basin would be achieved if a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. The current AQMP was based on assumptions provided by the California Air Resources Board (ARB) and SCAG to model for the most recent motor vehicle and demographic data, respectively. The air quality levels projected in the 2016 AQMP assume that development associated with general plans will be constructed in accordance with population growth projections identified by SCAG in its 2016 Regional Transportation Plan (RTP). The 2016 AQMP has also assumed that these development projects will implement strategies to reduce construction and operational emissions. As described in Section 2.13, the Build Alternatives are consistent with the scope of design concept of the Federal Transportation Improvement Program (FTIP) and is consistent with the current RTP; therefore, the Build Alternatives are in conformance with the State Implementation Plan (SIP). No impacts would result and no mitigation is required.

**III.b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Significance Determination:** *Less Than Significant with Mitigation*

Historical air quality data show that existing CO levels for the Project area and general vicinity do not exceed either the State or federal ambient air quality standards (AAQS) for CO. Using the Caltrans Transportation Project-Level Carbon Monoxide Protocol, a screening and a CO hot-spot analysis were conducted to determine whether the Build Alternatives would result in any CO hot spots. It was determined that no exceedances of the federal 1-hour or 8-hour CO AAQS would occur.

The Build Alternatives would be in a nonattainment area for federal AAQS for PM<sub>2.5</sub> and in an attainment/maintenance area for the federal AAQS for PM<sub>10</sub>. A PM<sub>2.5</sub>/PM<sub>10</sub> hot-spot analysis was submitted to the Transportation Conformity Working Group (TCWG) for its review. In May 2014, the TCWG determined that the Project is not a project of air quality concern. The operation of either Build Alternative would neither delay attainment of the PM<sub>2.5</sub> standard nor contribute to a PM<sub>10</sub> hot spot that will cause or contribute to a violation of the federal PM<sub>10</sub> air quality standard in the Basin.

Construction activities would generate combustion emissions from on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions during construction activities would vary daily as construction activity levels change. The type and



number of equipment used during construction have been specified based upon typical construction methods for the Project.

The maximum amount of construction-related emissions during a peak construction day is presented in Table 3.1. Table 3.1 presents construction-related emissions as calculated in the *Air Quality Analysis* (September 2014; Errata, December 2017; May 2019; May 2021), which uses the SMAQMD Road Construction Model (version 8.1.0). The emissions presented below in Table 3.1 are based on the best information available at the time of calculations and specify that the schedule for all improvements is anticipated to take approximately 24 months, beginning in 2018 and ending in 2020. Construction is now expected to start in 2022 with the same 24-month duration. Due to ongoing emission reductions resulting from tightening regulations,<sup>1</sup> a later construction period would result in emissions that are the same or lower than those shown in Table 3.1.

**Table 3.1 Maximum Project Construction Emissions <sup>1</sup>**

Project Phases	ROG	CO	NO <sub>x</sub>	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
Grubbing/Land Clearing (lbs/day)	1.4	9.7	14.4	50.6	11.0
Grading/Excavation (lbs/day)	7.2	53.3	85.4	54.3	13.9
Drainage/Utilities/Sub-Grade (lbs/day)	5.4	42.4	52.9	52.7	12.9
Paving (lbs/day)	2.2	20.0	19.6	2.2	1.1
<b>Maximum (lbs/day)</b>	<b>7.2</b>	<b>53.3</b>	<b>85.4</b>	<b>54.3</b>	<b>13.9</b>
<b>Total (tons/construction project)</b>	<b>1.41</b>	<b>10.7</b>	<b>15.5</b>	<b>12.0</b>	<b>3.0</b>

Source: LSA Associates, Inc. (2017) and SMAQMD Road Construction Emissions Model, version 8.1.0.

<sup>1</sup> This table demonstrates construction equipment emissions that would occur as a result of the Project.

Construction emissions projected in this table have been calculated using the current SMAQMD Construction Emissions model 8.1.0.

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = oxides of nitrogen

ROG = reactive organic gases

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

SMAQMD = Sacramento Metropolitan Air Quality Management District

Caltrans Standard Specifications for construction (Section 14-9 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plant Emissions]) will be adhered to in order to reduce emissions generated by construction equipment. Additionally, the SCAQMD has established Rule 403 for reducing fugitive dust emissions. The best available control measures (BACM), as specified in SCAQMD Rule 403, shall be incorporated into the Project commitments. With the implementation of standard construction measures (providing 50 percent effectiveness), such as frequent watering (e.g.,

<sup>1</sup> California Air Resources Board (CARB) Mobile Sources Program Portal, website: <https://www.arb.ca.gov/msprog/msprog.htm>, accessed February 2019.

minimum twice per day), and avoidance and minimization Measures AQ-1 through AQ-5, fugitive dust and exhaust emissions from construction activities would not result in any significant air quality impacts.

The Project is not a traffic-generating project; the Project would result in the redistribution of existing trips. The majority of the intersections would not result in a change in levels of service (LOS) and the Project would improve LOS at three intersections. Therefore, there would be no project-related increase in operational emissions that would exceed SCAQMD thresholds. No mitigation is required.

**III.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)?**

**Significance Determination:** *Less Than Significant with Mitigation*

The Build Alternatives may result in temporary, short-term, construction-related increases in pollutant concentrations associated with construction equipment emissions and fugitive dust. Implementation of SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, provided in avoidance and minimization Measures AQ-1 through AQ-5 in Section 2.13 would minimize potential short-term air quality impacts to residences located along the west and east ends of the Project area to a less than significant level.

The Build Alternatives would not generate new regional vehicular trips and no new regional vehicular emissions would occur. The Build Alternatives may have a beneficial effect in helping to reduce congestion on I-10, which may contribute to reduced vehicle emissions in the area. Through incorporation of avoidance and minimization Measures AQ-1 through AQ-5, impacts would be less than significant after mitigation.

**III.d. Expose sensitive receptors to substantial pollutant concentrations?**

**Significance Determination:** *Less Than Significant with Mitigation*

The sensitive receptors within or adjacent to the Project area are primarily residential uses on the west and east end of the Project. Most of the Project area is undeveloped land and, with the exception of residential uses, there are no parks, schools, or other sensitive receptors in the area. As discussed above, the Project may result in temporary, short-term, construction-related increases in pollutant concentrations

specifically associated with construction equipment emissions and fugitive dust. Implementation of the SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, provided in avoidance and minimization Measures AQ-1 through AQ-5 in Section 2.13, would reduce potential short-term air quality impacts to a less than significant level after mitigation.

Section 15126.2(a) of the CEQA Guidelines require that an EIR identify direct and indirect significant effects of the Project on the environment, giving due consideration to short-term and long-term effects. As identified in the California Air Pollution Control Officers Association's (CAPCOA) *Health Risk Assessments for Proposed Land Use Projects* (CAPCOA Planning Managers, July 2009), air pollution studies have shown an association of health risk effects (e.g., respiratory and other non-cancer effects) and proximity to high-traffic roadways, and that diesel exhaust and other cancer-causing chemicals emitted from cars and truck are responsible for much of the overall cancer risk from airborne toxics in the State. The CAPCOA guidance states that there are two types of land use projects that have the potential to cause long-term public health risk impacts:

- **Type A** – Land use project with toxic emissions that impact receptors (e.g., combustion-related power plants, gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, quarry operations, and other stationary sources that emit toxic substances)
- **Type B** – Land use projects that will place receptors in the vicinity of toxics sources (e.g., stationary sources, high-traffic roads, freeways, rail yards, and ports)

The majority of the Project's alignment is not proximate to existing sensitive receptors. Sensitive receptors in the Project vicinity are primarily located along Hathaway Street and Westward Avenue within the western project limits in Banning and along Morongo Apache Trail and Bonita Avenue within the eastern project limits in Cabazon. These areas where existing sensitive receptors are located are the same for both of the Build Alternatives. No new developments that would introduce sensitive receptors to the Project area are located proximate to the Project. Trucks traveling along I-10 are required to stop at the truck scales when open. Monitoring and enforcement of truck traffic by the California Highway Patrol (CHP) would also occur, preventing the use of the Project by truck trips. The Project includes parallel turn-outs on both sides of the new roadway (located approximately 4,000 feet (ft) west of the San Gorgonio River Bridge) for CHP monitoring and enforcement of

truck traffic to preclude truck drivers from using the new roadway to bypass the CHP vehicle inspection station on parallel segments of I-10. This strategy was discussed during several stakeholder meetings with the CHP in attendance and one focus meeting with the CHP. In addition to the proposed parallel turn-outs on both sides of the new roadway, additional features (e.g., cameras) may be considered during future design phases.

As described above, short-term construction emissions would not be significant with mitigation. The Project would result in a redistribution of traffic in the Project area rather than generate new traffic. The Project is anticipated to reduce overall vehicle miles traveled (VMT) in this area by reducing out-of-direction travel for local vehicle trips. The project-level conformity analysis for CO in Section 2.13, Air Quality, demonstrated that the Project is not expected to result in concentrations (i.e., hot spots) exceeding the CO standards. The Project would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation. The Project would reduce the traffic volumes along I-10. As shown on Figure 2.13-3, based on an FHWA analysis using the United States Environmental Protection Agency (EPA) Motor Vehicle Emission Simulator, Version 2014a (MOVES2014a), even if VMT increases by 45 percent as forecast, a combined reduction of 91 percent in the total annual emissions for the priority Mobile Source Air Toxics (MSAT) is projected for the same time period with EPA emission control rules. This dramatic reduction occurs for all of the priority MSAT pollutants. Although the Project would result in the redistribution of traffic volumes to area roadways, it would have no meaningful potential MSAT effects.

Based on the reasons stated above, the Project would not result in long-term operational impacts resulting in significant health risks due to sensitive receptors being exposed to substantial pollutant concentrations.

### **III.e. Create objectionable odors affecting a substantial number of people?**

#### **Significance Determination:** *Less Than Significant with Mitigation*

The Project may result in temporary, short-term, construction-related increases in objectionable odors, particularly during paving activities. These odors would be short term and could affect nearby residents at both the eastern and western ends of the Project area. Implementation of the SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, as described in Section 2.13, would reduce this potential short-term impact to a less than significant level. Because the odor impacts would be temporary and would end when construction is complete, they are considered to be less than significant with mitigation.

### IV. BIOLOGICAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES -- Would the project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

The potential for the Build Alternatives to result in impacts to biological resources was assessed in the *Natural Environment Study* (April 2015; Errata, December 2017; April 2019; March 2020; October 2020). The results of those technical studies are summarized in Sections 2.15 through 2.20 in this Final EIR/EA. The following analyses are based on the information in those technical studies.

The biological study area (BSA) is within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP), the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and the Morongo Band of Mission Indians Tribal Lands. The BSA was evaluated for suitability of habitat for the presence of sensitive or special-status species, wetlands, wildlife migration, and compatibility with regional habitat conservation plans.

**Would the Project:**

**IV.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?**

**Significance Determination:** *Less Than Significant with Mitigation*

**Desert Tortoise.** Suitable habitat is present in the BSA for the federal and State-listed threatened desert tortoise (*Gopherus agassizii*). No desert tortoise or desert tortoise sign were observed in the BSA. Although the focused survey found the species to be absent from the BSA, the desert tortoise is a mobile species and may move into the BSA prior to construction. To ensure the species will not be impacted, avoidance and minimization Measures DT-1 through DT-9 provided in Section 2.19, Threatened and Endangered Species, will be implemented during construction.

With implementation of avoidance and minimization Measures DT-1 through DT-9, any impacts from Alternative 5 and Alternative 12 (Preferred Alternative) to the desert tortoise would be less than significant.

**Coastal California Gnatcatcher.** Suitable habitat is present in the BSA for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*). The Project was previously outside of the known range of the coastal California gnatcatcher; however, the CNDDDB has a 2016 record of a coastal California gnatcatcher within the BSA. Although focused surveys have not been completed for this project, the CNDDDB record would indicate the coastal sage scrub, Riversidean alluvial fan sage scrub, and disturbed *Eriogonum fasciculatum* Shrubland Alliance provide potential habitat for coastal California gnatcatcher. To ensure this species will not be impacted, avoidance and minimization Measure NC-1 in Section 2.15, Natural Communities, will be implemented during construction.

With implementation of avoidance and minimization Measure NC-1, impacts from Alternative 5 and Alternative 12 (Preferred Alternative) to the coastal California gnatcatcher would be less than significant.

**Burrowing Owl.** The BSA was found to contain potentially suitable habitat for the burrowing owl. The western part of the BSA is within the WRMSHCP burrowing owl survey area.



Although focused owl surveys determined that burrowing owl is absent from the BSA, per the WRMSHCP, CVMSHCP, and the Migratory Bird Treaty Act (MBTA), a preconstruction survey for this species will be required prior to construction of the Project.

With implementation of avoidance and minimization Measure BO-1 in Section 2.18, Animal Species, in this Final EIR/EA, any impacts from Alternative 5 and Alternative 12 (Preferred Alternative) to the burrowing owl would be less than significant.

**Migratory Birds.** Five non-listed special-status species with suitable nesting habitat within the BSA have the potential to be present in the BSA: burrowing owl, prairie falcon, Le Conte’s thrasher, golden eagle, and loggerhead shrike. Potential effects to nesting raptors and other migratory bird species may occur during the bird-breeding season. The typical breeding season within the WRMSHCP part of the BSA is from February 15 through August 31. Within the CVMSHCP part of the BSA, the breeding season is from February 1 through July 31.

With implementation of avoidance and minimization Measures MB-1 and MB-2 in Section 2.18 in this Final EIR/EA, any impacts from Alternative 5 and Alternative 12 (Preferred Alternative) to migratory birds would be less than significant.

**Los Angeles Pocket Mouse.** The BSA is within a WRMSHCP Mammal Species Survey Area for the Los Angeles pocket mouse. A focused survey for the Los Angeles pocket mouse was conducted in 2012 during four one-night trapping sessions in areas consisting of Riversidean alluvial fan sage scrub, disturbed *Acacia greggii* Shrubland Alliance, *Chilopsis linearis* Woodland Alliance, and disturbed/ruderal vegetation. A total of 28 Los Angeles pocket mouse individuals were captured in the BSA during those surveys.

The Project will permanently and temporarily impact WRMSHCP Los Angeles pocket mouse Mammal Species Survey Area habitat, as shown in Table 3.2.

**Table 3.2 Impacts to WRMSHCP Los Angeles Pocket Mouse Mammal Species Survey Areas**

Alternative	Permanent (acres)	Temporary (acres)
5	30.2	18.82
12 (Preferred Alternative)	4.24	3.07

WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

With implementation of avoidance and minimization Measures LAPM-1 through LAPM-6 in Section 2.18 in this Final EIR/EA, any impacts from Alternative 5 and Alternative 12 (Preferred Alternative) to the Los Angeles pocket mouse would be less than significant.

**IV.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 Game or US Fish and Wildlife Service?**

**Significance Determination:** *Less Than Significant with Mitigation*

The Riversidean alluvial fan sage scrub is a California Natural Diversity Database (CNDDDB) designated special-status plant community. The coastal California gnatcatcher, Los Angeles pocket mouse, and other special-status species are known to be associated with this plant community.

Alternative 5 will result in 0.55 acre of permanent impact and 12.51 acres of temporary impact to Riversidean alluvial fan sage scrub of the 147.39 acres of Riversidean alluvial fan sage scrub within the BSA. Alternative 12 (Preferred Alternative) will result in 0.04 acre of permanent impact and 12.43 acres of temporary impact to the Riversidean alluvial fan sage scrub habitat of the 147.39 acres of Riversidean alluvial fan sage scrub within the BSA. Those impacts would result from the disturbance and/or removal of existing vegetation. Permanent impacts are relatively minor and may result from the complete removal of existing vegetation, encroachment into existing vegetation, shading effects, and fill material (e.g., dirt for grading activities, and concrete and steel for bridge columns). Temporary impacts will include incidental disturbances within construction areas and equipment staging areas.

With implementation of avoidance and minimization Measures NC-1 through NC-3 in Section 2.15, Natural Communities, in this Final EIR/EA, impacts from Alternative 5 and Alternative 12 (Preferred Alternative) would be less than significant under CEQA.

**IV.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?**

**Significance Determination:** *No Impact*

The *Jurisdictional Delineation Report* (January 2015) concluded that a total of 109.39 acres of potential jurisdictional non-wetland waters of the United States were found to be present in the BSA. No potential wetland waters of the United States were found. A total of 132.57 acres of California Department of Fish and Wildlife (CDFW) potential streambed were found to be present in the BSA. No CDFW potential riparian habitat is present in the BSA. Section 2.8, Hydrology and Floodplains, in this Final EIR/EA provides additional information about non-wetland waters. Because wetland waters were found to be absent from the BSA, there will be no impact to such resources under Alternative 5 and Alternative 12 (Preferred Alternative); therefore, no mitigation is required.

**IV.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?**

**Significance Determination:** *Less Than Significant with Mitigation*

Wildlife movement and habitat fragmentation have been affected by roads and other transportation facilities in the BSA. These facilities include I-10, Johnson Lane, other local roads, and the Union Pacific Railroad (UPRR) bridge over the San Geronio River, located approximately 1.5 mi north of the proposed location of the new bridge crossing.

Part of the BSA is in what is identified as an “Essential Connectivity Area” that is intended to connect the most ecologically intact and well conserved lands generally across less intact and protected lands. A more detailed regional analysis that is consistent with the goals of the California Essential Habitat Connectivity Project (CEHCP) is the South Coast Wildlands (SCW), *South Coast Missing Linkages Project (A Linkage Design for the San Bernardino-San Jacinto Connection)* (2005). That report evaluated wildlife habitat linkages, or corridors, between the San Bernardino Mountains and the San Jacinto Mountains, which link the Transverse and Peninsular Mountain Ranges. The SCW linkage design through the San Geronio/San Jacinto Pass area includes three elevation grades: (1) lower elevation coastal foothills, which represent a mosaic of grassland, coastal sage, chaparral, oak savannas and woodlands, and riparian forest; (2) mid-elevation shifts to montane chaparral interspersed with conifer hardwood forests dominated by Jeffrey pine, ponderosa pine, and sugar pine, mixed with patches of canyon live oak or black oak; and

(3) high-elevation transitions to subalpine habitats, with white fir, lodgepole pine, and limber pine being the most prominent species.

The San Bernardino-San Jacinto Mountains Linkage Design has five routes to accommodate various species and ecosystems functions. The branch of the Linkage Design in the BSA encompasses the San Gorgonio River. South Coast Wildlands (2005) reported that the southern portion of the branch, which lies south of I-10 and in the BSA, serves to provide a linkage for badger, Pacific kangaroo rat, large-eared woodrat, Merriam's kangaroo rat, and coast horned lizard. It is presumed that these small-to-medium-sized species are the primary users of the San Gorgonio River branch of the South Coast Wildlands Linkage Design; however, it is acknowledged that larger species may on occasion use this linkage. Black bears observed in the San Jacinto Mountains presumably traveled from the San Bernardino Mountains along the San Gorgonio River and/or Whitewater River. Additionally, mountain lions are presumed to use the San Gorgonio River as a corridor because there have been sightings of mountain lions in the City.

Included in this branch of the Linkage Design is the confluence of Smith Creek and the San Gorgonio River. Smith Creek serves as an east/west wildlife corridor for various species that use habitats associated with Smith Creek. Those species include mountain lion, mule deer, rock wren, tarantula hawk, and green hairstreak butterfly. Even though only part of Smith Creek was in the San Bernardino-San Jacinto Mountains Linkage Design, the SCW *South Coast Missing Linkages Project* states that this branch should be conserved through restrictions on floodplain development.

To assist in assessing the probability of wildlife use of proposed crossings in the BSA, the openness ratio (as required by the WRMSHCP) was considered. An openness ratio is commonly used to quantify the feeling of openness as an animal approaches the undercrossing's opening. The openness ratio, which calculated in meters, is the undercrossing height multiplied by the undercrossing span, then divided by the road width. For large mammals, such as mule deer, the WRMSHCP requires an openness ratio, as calculated in meters, of 0.6, with a minimum crossing height of 10-13 ft. The WRMSHCP describes the dimensions of these facilities do not need to be as robust for the smaller species, however the length of the facilities (particularly culverts) may need to be reduced to accommodate them. The WRMSHCP does not provide a minimum openness ratio for medium-sized mammals (coyote, raccoon) or smaller wildlife species, but recommends 3–5 ft culverts for medium-sized mammals and 2–3 ft culverts for small mammals, reptiles, and amphibians. The WRMSHCP

further describes these smaller structures are preferred by mice, weasels, and other small wildlife and that the dimensions of these facilities do not need to be as robust for the smaller species, however the length of the facilities (particularly culverts) may need to be reduced to accommodate them. For example, small mammals (vole sized) have been shown to use culverts as long as 64 meters. Smaller wildlife structures, including 36-inch corrugated steel pipe and reinforced concrete box culverts generally suffice for a variety of small to medium-sized species that dig holes, use burrows, or live or hunt in hollow logs or confined spaces. These include American badger, raccoon, skunks, weasels (*Mustella* sp.), gray fox, bobcat, and coyote. A number of smaller mammals, reptiles, and amphibians also have been documented using culverts this size or smaller.

Neither Build Alternative would block the east/west wildlife movement within the linkage that runs along the northern San Jacinto foothills and San Gorgonio River. Both alternatives have been designed with large bridge structures that would maintain north/south connectivity along the San Gorgonio River and east/west connectivity along Smith Creek thereby minimizing fragmentation across the MSHCP's San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage.

Alternative 12 (Preferred Alternative) has three bridge crossings each spanning the extent of the 100-year Hydrologic Engineering Center's River Analysis System (HEC-RAS) hydraulic model width and is designed to accommodate both large and small wildlife species with openness ratios of 3.15 at the unnamed tributary to Smith Creek, an openness ratio of 31.8 for Smith Creek, and an openness ratio of 32.7 for the San Gorgonio River (Table 3.3). The Alternative 12 (Preferred Alternative) bridge crossings are all less than 1 mile from each other, consistent with the wildlife crossing interval spacing recommendation in the U.S. Department of Transportation's (USDOT) *Wildlife Crossing Structure Handbook, Design and Evaluation in North America* (Clevenger and Huijser 2011).

Alternative 12 (Preferred Alternative) also includes nine reinforced concrete pipe (RCP) culverts ranging from 30 inches in diameter to 60 inches in diameter and one reinforced concrete box (RCB) culvert at 10 feet (ft) by 10 ft that could be potentially used by small to medium sized animals. Bridges and culvert locations and their respective openness ratios are provided on in Table 3.3. The culverts are primarily designed to convey stormwater, but could be used by wildlife to cross under the roadway.

**Table 3.3 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
Smith Creek	Bridged Roadway	Alternative 5	35'(10.7m)H x - 663'(202.1m)W x 101'(30.8)L	70.21	<b>High:</b> The tall and wide span of the proposed bridges allow for high-quality connectivity of habitats within Smith Creek. The proposed bridge structures will maintain this connectivity.
		Alternative 12 (Preferred Alternative)	10'(3.0m)H x 1,072'(326.7m)W x 101'(30.8m)L	31.82	
San Gorgonio River	Bridged Roadway	Alternative 5 and Alternative 12 (Preferred Alternative)	12'(3.7m)H x 893'(272.2m)W x 101'(30.8m)L	32.70	<b>High:</b> The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the San Gorgonio River. The proposed bridge structures will maintain this connectivity.
Unnamed Smith Creek Tributary	Bridged Roadway	Alternative 12 (Preferred Alternative)	8'(2.4m)H x 133'(40.5m)W x 101'(30.8m)L	3.16	<b>High:</b> The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the unnamed Smith Creek Tributary. The proposed bridge structures will maintain this connectivity.
A	RCP	Alternative 12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 185'(56.4m)L	0.04	The culvert would provide connectivity for small-to-medium-sized animals.
B	RCP	Alternative 12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 325'(99.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
C	RCP	Alternative 12 (Preferred Alternative)	42"(1.1m)H x 42"(1.1m)W x 230'(70.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
D	RCP	Alternative 12 (Preferred Alternative)	30"(0.8m)H x 30"(0.8m)W x 225'(68.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
E	RCP	Alternative 12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 260'(79.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
F	RCP	Alternative 12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 245'(74.7m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
G	RCP	Alternative 12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 204'(62.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.



**Table 3.3 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
H	RCP	Alternative 12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 202'(61.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
I	RCB	Alternative 12 (Preferred Alternative)	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
J	RCP	Alternative 12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 275'(83.8m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
K	RCP	Alternative 5	54"(1.4m)H x 54"(1.4m)W x 265'(80.8m)L	0.06	The culvert would provide connectivity for small-to-medium-sized animals.
L	RCP	Alternative 5	36"(0.9m)H x 36"(0.9m)W x 215'(65.5m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
M	RCP	Alternative 5	60"(1.5m)H x 60"(1.5m)W x 205'(62.5m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.
N	RCP	Alternative 5	36"(0.9m)H x 36"(0.9m)W x 145'(44.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
O	RCP	Alternative 5	54"(1.4m)H x 54"(1.4m)W x 210'(64.0m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.
P	RCB	Alternative 5	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
Q	RCP	Alternative 5	36"(0.9m)H x 36"(0.9m)W x 285'(86.9m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.

Source: Table G, *Natural Environment Study* (April 2015).

Note: The proposed dimensions are based on the Build Alternative with the greatest potential effect (e.g., longest culvert extension).

H = height

RCB= reinforced concrete box

L = length

RCP = reinforced concrete pipe

W = width

Alternative 5 has two bridge crossings approximately 2 miles apart with openness ratios of 70.2 at Smith Creek and 32.7 at San Geronio River respectively, with the two bridge crossings. Alternative 5 also includes six RCP culverts ranging from 36 inches in diameter to 54 inches in diameter and one RCB culvert at 10 ft by 10 ft that could be used by small-to-medium-sized animals, though they are not specifically designed for wildlife movement. The locations and openness ratios of the structures are listed in Table 3.3. The culverts were designed to convey water and sand flow crucial to downstream species, so they may be flooded or partially filled with

sediment at times. The bridges would likely be used by large, medium and-small-sized animals. An additional eight dedicated wildlife crossings were added for each alternative to provide connectivity for small to medium sized animals under the road to maintain wildlife connectivity for the WRMSHCP Special Linkage and SCW Linkage Design. The spacing between the dedicated wildlife crossings is less than 0.3 mile, except where prevented by a hillside cut. The dedicated wildlife crossings will be designed during final design in consultation with the wildlife agencies and consistent with the USDOT's *Wildlife Crossing Structure Handbook, Design and Evaluation in North America* (Clevenger and Huijser 2011<sup>1</sup>) and Caltrans' *Wildlife Crossings Guidance Manual* (Meese et al. 2009). The wildlife crossings were not designed to accommodate recreational uses.

Ambient noise can deter wildlife movement. Baseline noise sources consist of distant traffic on I-10, Apache Trail, Bonita Avenue, and Hathaway Street, nearby sand and gravel operations, the UPRR, and aircraft. Noise from a two-lane road can deter wildlife; however, it is presumed that baseline noise associated with the eight lanes of traffic associated with I-10 would likely be greater than the noise generated from the proposed two-lane road.

The Project would restrict wildlife movement; however, the number of bridges with large spans and culvert crossings spaced throughout the Project provides wildlife with opportunities to cross the fenced road, especially at San Gorgonio River and Smith Creek. The restriction to wildlife movement would be minimal for north/south movement because the nearby I-10 freeway provides a greater barrier to wildlife than the Project would. Noise and traffic are not expected to substantially affect north/south connectivity between the San Bernardino Mountains and San Jacinto Mountains through the WRMSHCP because noise and traffic associated with I-10 to the north would be a greater deterrence to movement.

For both alternatives, the culverts were not designed to convey wildlife, so they may be flooded or partially filled with sediment at times. The bridges will be able to be used by large, medium, and small-sized animals. An additional eight dedicated wildlife crossings were added for each alternative designed to provide connectivity for small-to-medium-sized animals across the road to improve wildlife connectivity at this WRMSHCP Special Linkage and SCW Linkage Design.

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<sup>1</sup> Clevenger, A.P., and M. Huijser. 2009. *Handbook for Design and Evaluation of Wildlife Crossing Structures in North America*. Western Transportation Institute.

The dedicated wildlife crossings will be designed during final design in consultation with the wildlife agencies and will be consistent with the USDOT *Wildlife Crossing Handbook* and Caltrans *Wildlife Crossing Guidance Manual*. The longest extent between culverts between crossing opportunities (bridges and culverts) for both Alternative 5 and Alternative 12 (Preferred Alternative) is approximately 0.4 miles. The wildlife crossings were not designed to accommodate recreational uses.

The Project is also in a WRMSHCP Special Linkage Area. According to the WRMSHCP, this Special Linkage Area contributes to assembly of part of the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. Coordination with the Morongo Band of Mission Indians regarding Tribal Lands would be necessary for development of Alternative 12 (Preferred Alternative). The San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage includes locations within and outside the WRMSHCP Plan Area. The CVMSHCP states that the San Gorgonio River and associated tributaries provide value as a Biological Corridor between the San Bernardino Mountains and the San Jacinto Mountains.

The WRMSHCP San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage and the South Coast Wildlands San Bernardino-San Jacinto Mountains Linkage Design both cross I-10 to the north as well as the UPRR, the frontage road, and Johnson Lane. I-10 consists of four lanes of traffic in each direction separated by a concrete barrier, effectively creating a barrier for most wildlife movement across this transportation corridor. However, there are several drainage crossings underneath these three linear features, with San Gorgonio River being the largest. The I-10 crossing at the San Gorgonio River has a 250 ft bridge span length and immediately downstream, the UPRR bridge has a 200 ft bridge span length under which wildlife can cross. There is a 4–5 ft barbwire fence, with large welded wire mesh on the lower half, which runs along the I-10 right-of-way. The fence appears to primarily serve as a barrier for cattle and larger tortoise; however, it may guide some species toward the bridges where they can cross under the freeway. Most of the small-to-medium-sized wildlife species known to use the San Gorgonio River Linkage would likely be able to traverse over or through this fence. If mountain lion or black bear use this branch of the linkage, they would be able to jump or climb over the I-10 fence.

Traffic on the proposed road is expected to increase from 5,200 vehicles per day at project opening to 17,900 vehicles per day by 2038. Impacts to wildlife movement related to traffic growth are expected to be limited because of (1) the implementation of avoidance and minimization Measures WC-3 and WC-4, that provide fencing and

guide wildlife towards the crossings. The wildlife crossings will be designed during final design in consultation with the wildlife agencies and will be consistent with the USDOT's *Wildlife Crossing Structure Handbook* and Caltrans' *Wildlife Crossing Guidance Manual*.

Because wildlife movement along the San Geronio River and Smith Creek will not be affected due to the high openness ratios associated with the proposed crossings provided in Alternative 5 and Alternative 12 (Preferred Alternative), the Project is not expected to have a significant impact on native resident wildlife species, native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. With implementation of avoidance and minimization Measures WC-1 through WC-4, provided in Section 2.15, Natural Communities, in this Final EIR/EA, these impacts would be less than significant.

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

**Significance Determination:** *No Impact*

There are no known local policies or ordinances (e.g., tree protection regulations) applicable to the Project. Therefore, Alternative 5 and Alternative 12 (Preferred Alternative) would not conflict with such policies, and no impacts would result.

**IV.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?**

**Significance Determination:** *No Impact*

The BSA is in both the WRMSHCP and CVMSHCP Plan Areas. The Build Alternatives will comply with the project-specific requirements in these two MSHCPs. As discussed in Sections 2.1 and 2.15 of this Final EIR/EA, the Project is consistent with the policies and requirements of the CVMSHCP and WRMSHCP; specifically wildlife movement, fluvial sand transport, protection of covered species and associated habitat. Therefore, Alternative 5 and Alternative 12 (Preferred Alternative) would not conflict with the WRMSHCP or CVMSHCP, and no impacts would result.

**V. CULTURAL RESOURCES**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES -- Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The potential for the Build Alternatives to result in impacts to cultural and paleontological resources was assessed in the *Historic Property Survey Report* (April 2016), the *Archaeological Survey Report* (February 2016), the *Historical Resources Evaluation Report* (June 2016), the *Extended Phase I Report* (February 2016, Errata December 2017) and the *Paleontological Resources Technical Memorandum* (December 2017). The results of those technical studies are summarized in Section 2.7, Cultural Resources, and Section 2.11, Paleontology, in this Final EIR/EA. The following analyses are based on information in those technical studies.

**Would the Project:**

**V.a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

**Significance Determination:** *Less Than Significant Impact*

One resource within the Area of Potential Effects (APE), the Deutsch Company Complex, has been found potentially eligible for listing on the California Register of Historical Resources (California Register) and is considered a historical resource under CEQA. Although the Deutsch Company Complex would not be physically modified as a result of construction of the Project, a temporary construction easement along Westward Avenue would be established in order to reconstruct existing improvements within existing street right-of-way to match the new roadway (i.e., match the new curb, gutter, sidewalk, or reconstruction of driveways and minor grading). Indirect visual impacts would also occur as a result of adding a turn lane and signalization of the South Hathaway Street/East Westward Avenue intersection. Because the area surrounding the Deutsch Company Complex is already developed with a wide modern road and modern buildings within sight of the Deutsch Company

Complex, the Project would not result in a significant change to the viewshed of this historic property. No mitigation is required.

**V.b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Significance Determination:** *Less Than Significant with Mitigation*

Archaeological surveys resulted in the identification of eight bedrock milling sites in the APE. No artifacts, features, or indicators of other use were observed at any of the bedrock milling sites during archaeological testing. As such, these eight prehistoric sites in the APE were found not to be eligible for listing on the National Register of Historic Places (National Register) or the California Register.

Representatives of the Morongo Band of Mission Indians requested that bedrock milling features affected by the construction of the Build Alternatives be mitigated. Specific mitigation measures for each of the eight milling sites are identified in avoidance and minimization Measure CR-3 in Section 2.7 in this Final EIR/EA. Measure CR-3 was developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians. The impacts of the Build Alternatives on the milling sites would be less than significant with incorporation of avoidance and minimization Measure CR-3.

Field surveys identified eight archaeological resources, but as previously noted these were found ineligible for listing on the National and California Registers. No additional archaeological resources requiring evaluation were identified through archival research or consultation. Furthermore, the APE does not appear to be sensitive in terms of archaeological resources. However, there is always a potential to encounter unknown buried cultural materials during excavation. In the event that buried cultural materials are encountered during construction, compliance with avoidance and minimization Measures CR-2 and CR-4, provided in Section 2.7, would avoid and/or minimize potential impacts of the Build Alternatives on buried cultural materials.

**V.c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Significance Determination:** *Less Than Significant with Mitigation*

The alignments of Alternative 5 and Alternative 12 (Preferred Alternative) are in areas mapped as low sensitivity for paleontological resources based on the 2015



County General Plan Multipurpose Open Space Element (refer to the Paleontological Sensitivity Map). That map identifies the sensitivity of lands in the County in relation to the potential for finding paleontological resources.

However, the *Paleontological Resources Technical Memorandum* (December 2017) has determined Pleistocene Older Surficial Sediments underlay the study area. Pleistocene deposits, similar to the Older Surficial Sediments, have produced a variety of scientifically important fossils elsewhere in the County and the region. These fossils include large and small mammals, reptiles, fish, invertebrates, and plants. Due to the potential that these types of fossils could be found in Older Surficial Sediments, these sediments are considered to have high paleontological sensitivity.

It should be noted that excavation techniques such as the use of drill rigs for dewatering wells, geotechnical investigations, or drilling for installation of piles will not require any monitoring, even at depths below 15 ft as the drilling is destructive to any fossils that may be present and, as such, they are not considered scientifically important. Drilling for cast-in-drilled hole (CIDH) piles prevents access to the rock face, which limits the amount of contextual information that may be collected. This excavation method also produces fine-grained material and limits the recovery of larger and more complete fossils. Moreover, depending on the size and type of drill rig employed, the depth of drilling, and the site conditions, this method may pose safety issues that limit or even prevent access to the spoils piles.

Collectively, the site is underlain by geologic units that have no, low, and high paleontological sensitivity. Therefore, the Project has the potential to impact scientifically important paleontological resources. In accordance with all applicable State, County, and City regulations and requirements for paleontological resources, avoidance and minimization Measure PAL-1 shall be implemented to reduce potential impacts to paleontological resources.

### **Avoidance and Minimization Measure**

**PAL-1** The County of Riverside (County) shall appoint a qualified paleontologist that shall implement a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP should be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) and include, but not be limited to, the following:

1. The paleontologist, or his/her representative, shall attend a preconstruction meeting.
2. Excavation and grading activities in geologic units with high paleontological sensitivity (Older Surficial Sediments) shall be identified and monitored by a qualified paleontological monitor. Deposits with low paleontological sensitivity (Surficial Sediments) shall be monitored on a spot-check basis. No paleontological monitoring is required in geologic units with no paleontological sensitivity (plutonic rocks, metasedimentary rocks).
3. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and the paleontologist contacted to assess the find for scientific significance. If any fossil remains are discovered in sediments with a low paleontological sensitivity rating (Surficial Sediments), the paleontologist shall make recommendations as to whether monitoring shall be required in these sediments as well.
4. Collected resources that are scientifically significant shall be prepared to the point of identification and permanent preservation. This includes washing and picking of mass samples to recover small vertebrate and invertebrate fossils and removal of surplus sediment around larger specimens to reduce the storage volume for the repository and the storage cost for the Project.
5. Scientifically significant resources shall be identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of an appropriate facility that will make them available for study by qualified individuals.
6. At the conclusion of the monitoring program, a report of findings with an appended inventory of specimens shall be prepared. When submitted to the County, the report and inventory will signify completion of the program to mitigate impacts to paleontological resources.

**V.d. Disturb any human remains, including those interred outside of dedicated cemeteries?**

**Significance Determination:** *Less Than Significant Impact*

There is always a potential to encounter unknown buried human remains during excavation. In the event that buried cultural materials or human remains are encountered during construction, compliance with avoidance and minimization Measure CR-1, provided in Section 2.7, would avoid and/or minimize potential impacts of the Build Alternatives on buried human remains.

Tribal consultation under Section 106 is documented in Section 2.7, Cultural Resources. Because the Notice of Preparation (NOP) for the Project was issued in November 2013, more than a year prior to the effective July 1, 2015 date specified in the law, the procedural requirements of Assembly Bill (AB) 52 do not apply to the Project. However, Riverside County complied with the spirit and intent of the law through consultation with Native American tribes conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA). Chapter 4, Comments and Coordination, identifies the consultation efforts conducted with interested tribes:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe

**Significance Determination:** *Less Than Significant with Mitigation*

As documented in the *Historic Property Survey Report* (August 2016, Errata December 2017), one resource within the APE, the Deutsch Company Complex, has been found potentially eligible for listing on the California Register and is considered a historical resource under CEQA.

Good faith government-to-government consultation took place before AB 52 took effect and is documented in Chapter 4. A meeting was held with the Cultural Heritage Program Director of the Morongo Band of Mission Indians (Morongo) on January 13, 2016. A Sacred Lands File search and a list of Native American contacts were requested from the California Native American Heritage Commission (NAHC) on July 26, 2012. On July 30, 2012, the NAHC responded that no Native American

sacred sites were identified within a 0.5-mile radius of the Project, but that Native American sacred sites exist in proximity to this area. The Morongo Band of Mission Indians requested the presence of Tribal Monitors and the preservation of bedrock milling sites. Avoidance and minimization measures to address cultural resources have been identified and included in Section 2.7.4, Avoidance, Minimization, and/or Mitigation Measures. Specific measures to address potential impacts to tribal cultural resources (TCRs) include avoidance and minimization Measures CR-1 through CR-4. Measures CR-3 and CR-4 were developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians.

Consultation will continue during the design and construction phase of the Project. With implementation of these measures, impacts would remain less than significant.

**VI. ENERGY**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VI. Energy -- Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The potential for the Build Alternative 5 and Alternative 12 (Preferred Alternative) to adversely increase energy demand was assessed in the I-10 Bypass Project Energy Analysis memorandum (2017). The following discussion is based on that analysis.

**VI.a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Significance Determination:** *Less Than Significant Impact*

Construction energy use would result from material processing, on-site construction equipment, and traffic delays due to construction. These energy use levels will vary throughout the construction phase; the frequency and magnitude would be reduced by implementing traffic management during construction phases of Build Alternative 5 and Alternative 12 (Preferred Alternative). The majority of the construction will be taking place away from existing roads and therefore the traffic management during construction would be focused on the portions of the Project for Alternative 5 and Alternative 12 (Preferred Alternative) between Westward Avenue on the west and Apache Trail on the east.

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

The following measures will also be incorporated as project features and will be implemented as part of the Project to reduce energy use impacts from the Project.

## Avoidance and Minimization Measure

**AQ-2** Project specifications will include the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

Based on the traffic analysis (Kimley-Horn 2013), the Project would slightly reduce total vehicle miles traveled (VMT) within the Project area. In addition, by 2038, the construction of the I-10 Bypass would decrease the number of vehicles crossing the at-grade railroad crossings within the Project area by almost 2,400 trips per day (*Traffic Operational Analysis Revised Final Report (April 2015)*) as a result of trips being diverted to the I-10 Bypass and avoiding the railroad crossing. As vehicle fuel efficiency improves with better traffic flow, the Project would reduce fuel usage. The projectThe Project may also have a beneficial effect in helping to reduce congestion on roadway links in the Project vicinity and thereby reduce vehicle fuel usage.

In addition, all electrical support devices (e.g., street lighting, ramp meters) would use current low-energy demand LED technology, replacing existing incandescent lighting, resulting in reduced energy use. Construction energy impacts will be unavoidable but even though the Project would not increase the VMT, there will likely be long-term energy benefits by improved operation and smoother pavement surfaces. Therefore, the Project would have no long-term energy demand impacts.

### **VI.b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**Significance Determination:** *Less Than Significant Impact*

### **Temporary Energy Impacts**

Temporary indirect energy impacts would result from the construction of the Project. Construction energy impacts involve the one-time, non-recoverable energy costs associated with construction of roads and structures. Construction of the Project would require the use of off-road construction equipment, as well as water trucks, and on-road vehicles for soil hauling and worker commuting.



As discussed in the *Air Quality Analysis* (September 2014)<sup>1</sup>, the Project construction would last approximately 24 months and would include four phases. Each piece of construction equipment would operate 8 hours per working day. The equipment list for each phase, numbers of equipment, horsepower, and load factor assumptions are shown in Table 3.4.

**Table 3.4 Construction Equipment Assumptions**

Construction Phase	Construction Equipment	Number of Equipment	Horsepower	Load Factor
Grubbing/Land Clearing	Crawler Tractors	1	208	0.43
	Excavators	1	163	0.38
	Signal Boards	7	6	0.82
Grading/Excavation	Crawler Tractors	1	208	0.43
	Excavators	3	163	0.38
	Graders	1	175	0.41
	Rollers	2	81	0.38
	Rubber Tired Loaders	1	200	0.36
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	78	0.48
	Generator Sets	1	84	0.74
	Graders	1	175	0.41
	Plate Compactors	1	8	0.43
	Pumps	1	84	0.74
	Rough Terrain Forklifts	1	100	0.4
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
Paving	Tractors/Loaders/Backhoes	2	98	0.37
	Pavers	1	126	0.42
	Paving Equipment	1	131	0.36
	Rollers	3	81	0.38
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37

Source: Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0.

All construction equipment was assumed to be powered by diesel, and the fuel consumption was calculated based on the equation:

$$\text{Fuel Consumption} = \text{Horsepower} * \text{Load Factor} * \text{Specific Fuel Consumption}$$

<sup>1</sup> LSA Associates, Inc. 2014. *I-10 Bypass Project: Banning to Cabazon Air Quality Analysis*, September.

where the specific fuel consumption was assumed as 0.22 kilogram per kilowatt hour for diesel engines (February 2016).<sup>1</sup> Table 3.5 shows the daily fuel and energy consumption of each construction phase.

**Table 3.5 Construction Off-Road Fuel and Energy Consumption**

Construction Phase	Fuel Consumption (gal/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	74.24	10.20
Grading/Excavation	373.58	51.35
Drainage/Utilities/Subgrade	292.23	40.17
Paving	119.61	16.44

Source: Compiled by LSA Associates, Inc. (December 2017)  
 gal/day = gallons per day  
 MMBtu/day = 1 million British thermal units per day

The on-road vehicle trips, including soil hauling, worker commuting, and water trucks would also consume fuel. It was assumed that light duty trucks would be used for worker commuting, while soil hauling and water trucks would be heavy-heavy duty diesel trucks. Table 3.6 shows the daily vehicle miles traveled (VMT), fuel consumption, and energy consumption for each phase.

**Table 3.6 Construction On-Road VMT, Fuel, and Energy Consumption**

Construction Phase	Soil Hauling VMT (miles/day)	Worker Commute VMT (miles/day)	Water Truck VMT (miles/day)	Diesel Consumption (gallon/day)	Gasoline Consumption (gallon/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	0	480	40	6.29	22.38	3.56
Grading/Excavation	4,020	960	40	638.57	44.75	93.16
Drainage/Utilities/Sub-Grade	0	880	40	6.29	41.02	5.81
Paving	0	720	40	6.29	33.56	4.91

Source: Compiled by LSA Associates, Inc. (December 2017) and using Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0.  
 MMBtu/day = 1 million British thermal units per day  
 VMT = vehicle miles traveled

As shown in Tables 3.5 and 3.6, the total of construction related off-road and on-road peak daily energy consumption would be approximately 145 MMBtu (51.35 MMBtu + 93.16 MMBtu = 144.51 MMBtu) per day and would occur during the grading/excavation phase. Compared to energy consumption without the Project construction, the Project would have a substantial increase in temporary indirect energy

<sup>1</sup> Mario Klanfar, Tomislav Korman, Trpimir Kujundžić, 2016. Fuel Consumption and Engine Load Factors of Equipment in Quarrying of Crushed Stone. February.

consumption in the study area. However, this level of energy consumption would be negligible at the regional level, and would only last for a short period of time during project construction. Therefore, the impact would be less than significant.

### **Permanent Energy Impacts**

Local energy demand for transportation projects typically is dominated by vehicle fuel usage. Energy consumption is mainly based on the annual VMT. As stated in the Project Description, a primary purpose of the Project is to provide an alternative to I-10 for local traffic in the study area in addition to providing an alternate route between Banning and Cabazon in the event of a closure on I-10. Currently, local traffic has no alternative to using I-10 between Banning and Cabazon, but I-10 provides an indirect route between the two communities. The construction of the proposed bypass roadway would provide for a more direct path between the two communities, allowing much of the local traffic currently using I-10 for these short trips to use the shorter bypass roadway instead. This additional route is anticipated to reduce overall VMT in this area by reducing out of direction travel for local vehicle trips. Moreover, the Project would provide a safe route for bicyclists and pedestrians, which encourages the use of these modes of transportation, and thus reduces VMT.

In addition to VMT, traffic-operating conditions in the study area also influence fuel consumption rates. Without the capacity improvements resulting from the Project, congested traffic conditions would be more prevalent throughout the study area. Those conditions would contribute to a higher energy consumption rate because vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on congested roads. In addition, in the event of a closure along I-10 or major delays affecting the freeway, the Project would reduce the need for circuitous detours through Idyllwild or the City of Victorville when I-10 is closed, as well as reducing the amount of idling and slow speed travel behind any closure, which would improve traffic operating conditions.

Therefore, by reducing VMT and improving traffic operating conditions in the study area, the Project would decrease local and regional energy consumption and would thus compensate for energy consumption associated with construction of the Project. No significant impact would occur.

### **Consistency with Energy Conservation Plans**

The California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the Consumer Power and Conservation Financing

Authority (CPA) approved the final State of California Energy Action Plan in 2003<sup>1</sup>. The Plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, an updated Energy Action Plan was adopted by the CEC and the CPUC to reflect policy changes and actions after 2003.

The State's energy policies have been substantially influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. The CEC's Integrated Energy Policy Report (IEPR) advances policies that would enable the State to meet its energy needs in a carbon-constrained world. That report also provides a comprehensive set of recommended actions to achieve these policies.

Rather than produce a new Energy Action Plan, the CEC and the CPUC have prepared instead the Energy Action Plan – 2008 Update<sup>2</sup>, which examines the State's ongoing actions in the context of global climate change. The update was prepared using the information and analysis prepared for the 2007 IEPR as well as recent CPUC decisions.

As discussed above, while the temporary indirect energy impacts of constructing the Project are substantial at a local level, the total indirect energy impacts would be negligible at the regional and statewide level. The Project would not conflict with these California energy conservation plans because the California energy conservation planning actions are conducted at a regional level and the Project would decrease local and regional energy consumption.

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<sup>1</sup> State of California. 2003. *State of California Energy Action Plan*, May. [http://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Public\\_Website/Content/Utilities\\_and\\_Industries/Energy\\_-\\_Electricity\\_and\\_Natural\\_Gas/2003%20Energy%20Action%20Plan.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2003%20Energy%20Action%20Plan.pdf), accessed February 2019.

<sup>2</sup> State of California. 2008. *Energy Action Plan – 2008 Update*, February. [http://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Public\\_Website/Content/Utilities\\_and\\_Industries/Energy\\_-\\_Electricity\\_and\\_Natural\\_Gas/2008%20Energy%20Action%20Plan%20Update.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2008%20Energy%20Action%20Plan%20Update.pdf) (accessed February 2019).

**VII. GEOLOGY AND SOILS**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

The potential for construction and operation of the Build Alternatives to result in geology- and soils-related impacts was assessed in the *Preliminary Geotechnical Design Report* (August 2014); *Preliminary Foundation Report, I-10 Bypass Project, Smith Creek Bridge, Banning, California* (August 2014); and *Preliminary Foundation Report, I-10 Bypass Project, San Gorgonio River Bridge, Banning, California* (August 2014). The results of these studies are summarized in Section 2.10, Geology/ Soils/Seismic/Topography, in this Final EIR/EA. The following analyses are based on information in that section of the Final EIR/EA.

**Would the Project:**

- VII.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?**

**ii.) Strong seismic ground shaking?**

**Significance Determination:** *Less Than Significant with Mitigation*

The active and potentially active faults in the San Geronio Pass area are capable of producing seismic shaking that could be damaging to bridges and roadways. The study area is not within an Alquist-Priolo Earthquake Study Zone, as established by the State Geologist, and there are no active fault traces within the Project limits and the immediately surrounding areas. Therefore, the risk for ground surface rupture is low. The potential for structural damage can be substantially reduced or avoided through seismic engineering design. The design and construction of the Build Alternatives to current highway and structure design standards, including applicable seismic standards, would minimize the potential impacts of seismic events on the Project facilities and to people using or in the vicinity of the Project facilities. Implementation of avoidance and minimization Measures GEO-1 through GEO-5, provided in Section 2.10 in this Final EIR/EA, would ensure that the Build Alternatives are designed to accommodate the expected ground accelerations through compliance with applicable geotechnical design standards of the State of California, Caltrans, and seismic codes. Seismic shaking impacts would be reduced to a less than significant level with implementation of these measures.

Construction activities associated with the Build Alternatives could be impacted by ground motion from seismic activities if an earthquake were to occur during construction. Implementation of safe construction practices and compliance with Caltrans and California Occupational Safety and Health Administration (Cal/OSHA) requirements would minimize the potential impacts of these conditions. Impacts would be less than significant.

**VII.a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**iii.) Seismic-related ground failure, including liquefaction?**

**iv.) Landslides?**

**VII.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?**

**Significance Determination:** *Less Than Significant with Mitigation*



The natural slopes in granitic bedrock in the Project area appear to be in stable condition. As discussed in Section 2.10, impacts resulting from liquefaction, landslides, soil instability, subsidence, lateral spreading, or expansive soils are not expected to occur during construction and operation of the Build Alternatives. However, potential impacts related to these types of conditions would be less than significant based on implementation of avoidance and minimization Measures GEO-1 through GEO-5 in Section 2.10.

**VII.b. Result in substantial soil erosion or the loss of topsoil?**

**Significance Determination:** *Less Than Significant with Mitigation*

Construction of the Build Alternatives would temporarily disturb soil within the Project footprint. Temporary impacts would include soil compaction and increased potential for soil erosion compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. The construction of the Build Alternatives would be required to adhere to the requirements of the General Construction Permit and to implement erosion and sediment control Best Management Practices (BMPs) specifically identified in a project Storm Water Pollution Prevention Plan (SWPPP) to keep sediment from moving off site into receiving waters. Section 2.9, Water Quality and Storm Water Runoff, in this Final EIR/EA provides additional information regarding construction-related water quality issues and mitigation. With implementation of the BMPs in the SWPPP, impacts of the Build Alternatives related to soil erosion would be less than significant.

**VII.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?**

**Significance Determination:** *Less Than Significant with Mitigation*

As discussed in Section 2.10, Alternative 5 and Alternative 12 (Preferred Alternative) would alter existing landforms as a result of grading and cut-and-fill. Alternative 5 would cross Smith Creek approximately 1 mi east of Hathaway Street and would require extensive grading, with several cuts of up to 130 ft into the hillsides. Additional hillside grading would be required along the east segment where the two Build Alternatives share the same alignment. Alternative 12 (Preferred Alternative) would require substantially less overall hillside grading than Alternative 5, but some cuts would still occur under Alternative 12 (Preferred Alternative). The design and construction of the Build Alternatives to current highway and structure design

standards, including applicable seismic standards, required in avoidance and minimization Measures GEO-1 through GEO-5 would minimize the potential impacts during construction of the Build Alternatives related to slope stability.

**VII.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?**

**Significance Determination:** *No Impact*

The Build Alternatives would not include any septic tanks or alternative wastewater disposal systems and, therefore, would not result in any impacts related to soils incapable of supporting the use of those types of disposal systems. No mitigation is needed.

**VIII. GREENHOUSE GAS EMISSIONS**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VIII. GREENHOUSE GAS EMISSIONS -- Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Would the Project:**

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

**Significance Determination:** *Less Than Significant with Mitigation*

GHG 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. As discussed in Section III, Air Quality, construction of the Project would be in compliance with applicable air quality rules.

**Construction Emissions**

The on-site construction equipment for the Project is anticipated to emit 3,570 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) during the 24 months of construction (Table 3.7). When amortized over the life of the Project (i.e., 30 years), the annual emissions of CO<sub>2</sub>e are anticipated to be 119 metric tons of CO<sub>2</sub>e. While these emissions are for a construction schedule that would start in 2018 and complete in 2020, due to the planned improvements to construction equipment emissions controls over time, the actual emissions that would occur with the expected schedule would be less than or equal to these. The energy usage associated with construction of the

**Table 3.7 Construction CO<sub>2</sub> Emissions**

Greenhouse Gas	Road Construction Emissions Model Estimates (metric tons of CO <sub>2</sub> equivalent)
CO <sub>2</sub>	3,570 total for the project

Source: Modeling using the *Roadway Construction Emissions Model 8.1.0* (Sacramento Metropolitan Air Quality Management District 2017).  
CO<sub>2</sub> = carbon dioxide

Project has been considered in the Energy Analysis Memorandum, which is included as Appendix K of this Final EIR/EA. Construction activities will be in compliance with the South Coast Air Quality Management District (SCAQMD) CEQA guidelines for construction.

**Operational Emissions**

GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds or in vehicle miles traveled. As previously noted in the traffic study, the Project would not generate any new vehicle trips. Table 3.8 shows the 2038 GHG emissions for the Build condition compared to the No Build condition. Table 3.9 describes each of the elements of the Project purpose and its resulting impact on GHG emissions and climate change. The energy usage associated with operation of the Project has been considered in the *Energy Analysis Memorandum*, which is included as Appendix K of this Final EIR/EA.

**Table 3.8 2038 GHG Emissions (metric tons/year)**

Roadway	No Build		Build		Project Increase	
	Total Vehicles	Trucks	Total Vehicles	Trucks	Total Vehicles	Trucks
I-10	230	37	215	34	-15	-2
I-10 Bypass	0	0	15	2	15	2

Source: Compiled by LSA Associates, Inc. based on ADT from Kimley-Horn and Associates, Inc. (October 2013) and CT-EMFAC2014.  
I-10 = Interstate 10

**Table 3.9 Project Impacts to Climate Change from Greenhouse Gas Emissions**

Project Purpose Element	Impacts to GHG Emissions
Accommodate local trips on a local roadway vs. local trips using I-10.	<p>The Project will provide a more direct, shorter path for:</p> <ul style="list-style-type: none"> <li>• Banning to Cabazon Trips</li> <li>• Cabazon to WB I-10 Trips (no track crossing)</li> <li>• South Banning to EB I-10 Trips</li> </ul> <p>These shorter trips will reduce GHG emissions.</p>
Provide an alternate route between Banning and Cabazon in the event of a closure along I-10 or major delays affecting the freeway.	<p>The Project will reduce the need for circuitous detours through Idyllwild or Victorville when the I-10 is closed, as well as reducing the amount of idling and slow speed travel behind any I-10 closure. Albeit these circumstances are a rare occurrence, these factors will reduce GHG emissions.</p>
Provide a safe route via local roadways for bicyclists and pedestrians.	<p>Bicyclists must currently use I-10 between Banning and Cabazon and there is no route for pedestrians. Providing safe routes for bicyclists and pedestrians will encourage the use of these modes of transportation, thus reducing GHG emissions.</p>
Provide a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks.	<p>The Project should reduce idling times behind the railroad gates, thus reducing GHG emissions.</p>
Improve the transportation facilities connecting Banning and Cabazon to address growth and mobility needs as identified in the County General Plan policy cited in Section 1.3.2.4, as well as similar policies in the Banning General Plan Circulation Element.	<p>The Project is part of a planned, integrated, and multimodal transportation system that is in balance with proposed long-range land uses.</p>
Improve the transportation facilities connecting Banning and Cabazon consistent with the SCAG RTP/SCS and the FTIP.	<p>The Project is part of a conforming FTIP designed to bring the region into conformity with the emission of criteria air pollutants. By conforming, the measures that reduce vehicle emissions of criteria pollutants would also co-benefit GHG reduction.</p>

Source: Compiled by LSA Associates, Inc. (2017).  
 EB = eastbound  
 FTIP = Federal Transportation Improvement Program  
 GHG = greenhouse gas  
 I-10 = Interstate 10  
 RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy  
 SCAG = Southern California Association of Governments  
 WB = westbound

The Project will address growth and mobility needs as identified in the Riverside County General Plan Circulation Element, Policy C 1.5. The Project will not generate new vehicular traffic trips because new homes or businesses will not be constructed as part of the Project and the Project is not considered a traffic generator.

As stated in Table 3.9, above, the Project will reduce traffic volumes along I-10 due to the rerouting of local trips between Cabazon and Banning that will no longer need to use the freeway with the Project as compared to the No Build Alternative. Additionally, the Project will reduce VMT because it is more direct for local trips than I-10, as noted in the Traffic section. The Project would also provide an alternate route between Banning and Cabazon in the event of a closure along I-10 or major delays affecting the freeway. This would allow motorists along I-10 to avoid emissions associated with idling and lower vehicle speeds. The Project would also enhance the use of alternative modes of transportation by providing bicycle lanes and pedestrian walkways. Because the Project provides a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks, there would be a reduction in vehicle idle times at railroad gates that would reduce GHG emissions from idling vehicles. While several area intersections could be negatively affected by this project, improvements to these intersections would subsequently be made so that the intersection performance would be restored. Therefore, the Build Alternatives would not substantially contribute to an increase in long-term GHG emissions. Thus, the amortized construction GHG emissions of 119 metric tons of CO<sub>2</sub>e per year would be the total project annual GHG emissions. This level of emissions would be negligible compared to the County's 2008 community-wide GHG emissions of over 7 million metric tons of CO<sub>2</sub>e per year (County of Riverside Climate Action Plan, December 2015) and would not have a significant impact.

Moreover, the County is firmly committed to implementing measures to help reduce GHG emissions impacts in the region, as described in its Climate Action Plan (CAP; December 2015), including potential GHG emissions associated with the Project. Implementation of the following measures as part of the Build Alternatives will further reduce potential GHG emission impacts associated with the Build Alternatives:

### **Avoidance and Minimization Measures**

**GHG-1** During construction, the County of Riverside's (County) Resident Engineer shall direct the Project Contractor to ensure that the Build Alternatives will incorporate the use of energy-efficient lighting such as light-emitting diode (LED) traffic signals, as described in the County CAP Transportation Measure R2-T5.



**GHG-2** During construction, the County’s Resident Engineer shall direct the construction contractor to comply with California Code of Regulations (CCR) Title 13, Section 2449(d)(3), which was adopted by the California Air Resources Board (ARB) on June 15, 2008. This regulation restricts idling of construction vehicles to no longer than 5 consecutive minutes. Compliance with this regulation will reduce harmful emissions from diesel-powered construction vehicles during construction of the Build Alternatives, as described in County CAP Transportation Measure R2-T8.

Riverside County has conducted a qualitative analysis, as discussed above, and determined that, the Project would improve traffic flow without increasing the traffic volumes along I-10 between Banning and Cabazon. While the Project would result in a slight increase in GHG emissions during construction, because the Project would not generate new traffic, it is anticipated that the Project will not result in any increase in operational GHG emissions. Thus, operation of the completed Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.

**VIII.b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Significance Determination:** *No Impact*

**Regulatory Setting**

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

**Federal**

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the Project level. The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and

incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.<sup>1</sup> This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability.”<sup>2</sup> Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

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

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

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<sup>1</sup> Federal Highway Administration (FHWA). Sustainable Highways Initiative. Website: <https://www.fhwa.dot.gov/environment/sustainability/resilience/>, accessed April 2019.

<sup>2</sup> FHWA. Sustainable Highways Initiative. Website: <https://www.sustainablehighways.dot.gov/overview.aspx>, accessed April 2019.

## State

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

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

Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that CARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

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

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

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

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

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

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

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

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

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to

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

alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

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

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

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

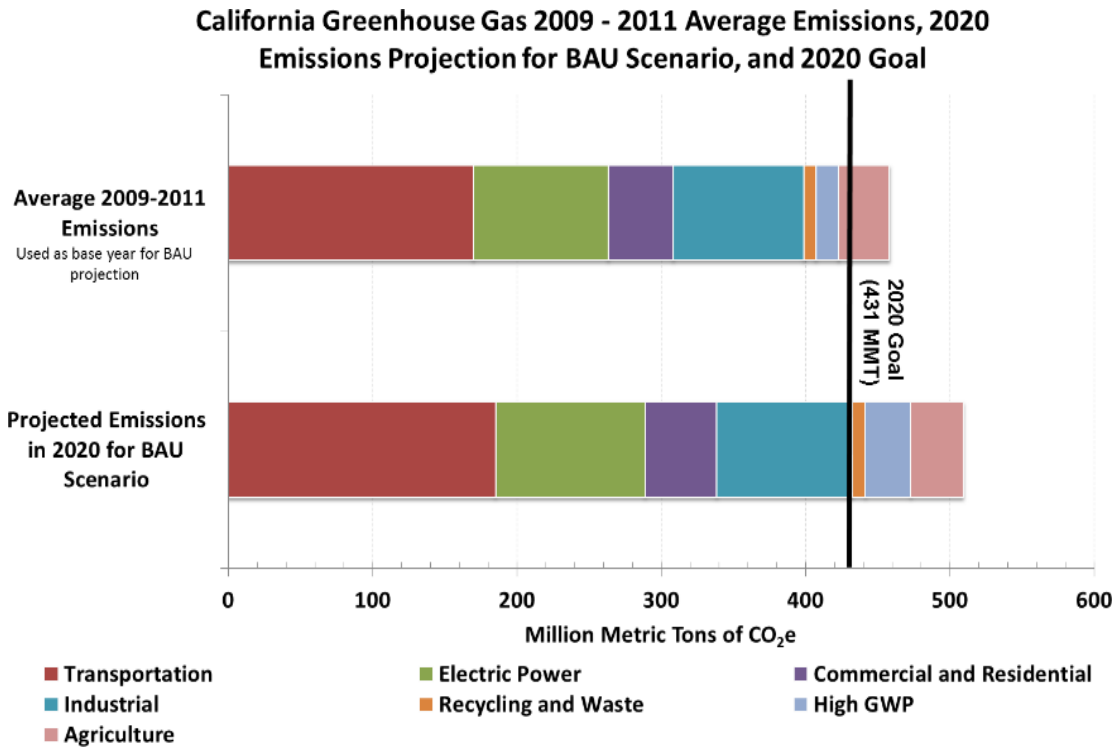
### **Environmental Setting**

AB 32 requires CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008, updated on May 22, 2014 and again on December 14, 2017. In 2016, the State Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the State Legislature passed companion legislation AB 197, which provides additional direction for developing the Scoping Plan. The 2017 Scoping Plan update incorporates the 2030 target set by EO B-30-15 and codified by SB 32.

The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. As part of its supporting documentation

for the Draft Scoping Plan, CARB released the GHG inventory for California.<sup>1</sup> CARB is responsible for maintaining and updating California's GHG Inventory per Health and Safety Code Section 39607.4. The associated forecast/projection is an estimate of the emissions anticipated to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented.

An emissions projection estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. The projected 2020 emissions provided in Figure 3-1 represent a business-as-usual (BAU) scenario assuming none of the Scoping Plan measures are implemented. The 2020 BAU emissions estimate assists ARB in demonstrating progress toward meeting the 2020 goal of 431 MMTCO<sub>2</sub>e.<sup>2</sup> The 2017 edition of the GHG emissions inventory (released June 2017) found total California emissions of 440.4 MMTCO<sub>2</sub>e, showing progress towards meeting the AB 32 goals.



**Figure 3-1 Projected 2020 Emissions**

<sup>1</sup> CARB. 2016 Edition of the GHG Emission Inventory Released (June 2016): <https://www.arb.ca.gov/cc/inventory/data/data.htm> (accessed April 2019).

<sup>2</sup> The revised target using Global Warming Potentials (GWP) from the IPCC Forth Assessment Report (AR4).



The 2020 BAU emissions projection was revisited in support of the Update to the Scoping Plan (2017). This projection accounts for updates to the economic forecasts of fuel and energy demand as well as other factors. It also accounts for the effects of the 2008 economic recession and the projected recovery. The total emissions expected in the 2020 BAU scenario include reductions anticipated from Pavley I and the Renewable Electricity Standard (30 MMTCO<sub>2e</sub> total). With these reductions in the Baseline, estimated 2020 statewide BAU emissions are 509 MMTCO<sub>2e</sub>.

### **Project Analysis**

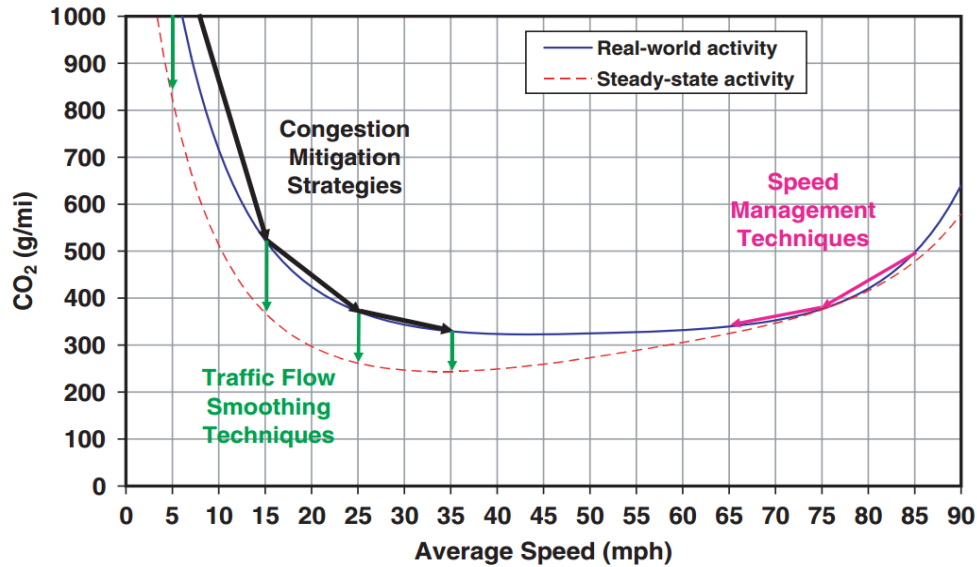
GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations.

### **Long-Term Operational Emissions**

Four primary strategies can reduce 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 concurrently.

FHWA supports these strategies to lessen climate change impacts and correlate with efforts that the state of California is undertaking to reduce GHG emissions from the transportation sector.

The highest levels of CO<sub>2</sub> 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 3-2, below). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO<sub>2</sub>, may be reduced.



**Figure 3-2 Possible Use of Traffic Operation Strategies in Reducing On-Road CO<sub>2</sub> Emission<sup>1</sup>**

The purpose of the Project is to:

- Accommodate local trips on a local roadway;
- Provide an alternate route between Banning and Cabazon in the event of a closure on I-10;
- Provide a safe route for bicyclists;
- Provide a safe route for pedestrians;
- Provide a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks;
- Improve the transportation facilities connecting Banning and Cabazon to address growth and mobility needs as identified in the 2015 County General Plan policy cited in Section 1.3.2.4, as well as in the Banning General Plan Circulation Element, and;
- Improve the transportation facilities connecting Banning and Cabazon consistent with the 2016–2040 SCAG RTP/SCS and the 2019 FTIP.

<sup>1</sup> Transportation Research Board Publications. 2010. *Traffic Congestion and Greenhouse Gases*. Website: <http://onlinepubs.trb.org/onlinepubs/trnews/trnews268.pdf> (accessed April 2019).

Southern California Association of Governments (SCAG) included an SCS as part of both its 2012 and 2016 RTP/SCS. Under SB 375, the primary goal of the SCS is to provide a vision for future growth that will decrease per capita GHG emissions from automobiles and light trucks. By providing an alternate route between Banning and Cabazon, the proposed build alternatives would help achieve the improved access and mobility goals of SCAG's 2016 RTP/SCS.

The on-site construction equipment for the Project is anticipated to emit a total of 3,570 metric tons of GHGs during the 24 months of construction. 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.

Compliance with the 2015 Caltrans Standard Specifications, the South Coast Air Quality Management District (SCAQMD) Rules and Regulations, and avoidance and minimization Measure GHG-2 during construction will minimize construction-related GHG impacts.

The Project will address growth and mobility needs as identified in the Riverside County General Plan Circulation Element, Policy C 1.5. The Project will not generate new vehicular traffic trips because new homes or businesses will not be constructed as part of the Project, and the Project is not considered a traffic generator.

The Project would result in a slight increase in GHG emissions during construction; however, these emissions are at levels not considered significant for an individual project. In addition, because the Project would not generate new traffic, it is anticipated that the Project will not result in any increase in operational GHG emissions that would have a significant impact on the environment. The Project is consistent with, and does not conflict with, any applicable plans, policies, or regulations adopted for the purposes of reducing the emissions of GHGs. No impacts would result.

### **Project-Level Greenhouse Gas Emissions Reduction Strategies**

The following measures will also be included in the Project to reduce its GHG emissions and potential climate change impacts:

1. The Project would incorporate the use of energy-efficient lighting, such as light-emitting diode (LED) traffic signals. LED bulbs—or indications, in the traffic signal vernacular—cost \$60 to \$70 apiece but last 5 to 6 years, compared to the 1-year average lifespan of the incandescent bulbs previously used. The LED

- indications themselves consume 10 percent of the electricity of traditional lights, which will also help reduce the Project's GHG emissions.
2. The Project construction contractor must comply with California Code of Regulations (CCR) Title 13, Section 2449(d)(3), which was adopted by the ARB on June 15, 2008. This regulation restricts idling of construction vehicles to no longer than 5 consecutive minutes. Compliance with this regulation would reduce GHG emissions from diesel-powered construction vehicles.
  3. Avoidance and minimization Measure AQ-4: The County's Resident Engineer will direct the Project Contractor to adhere to California Department of Transportation (Caltrans) Standard Specifications for Construction (Sections 14.9-02 and 14-9.03).
  4. The Project would provide paved roadway shoulders that would be used by bicyclists and a shared-use path that is also usable by pedestrians. Thus, the Project encourages the use of pedestrian and bicycle modes instead of GHG-producing vehicles.

With implementation of these strategies, the Project would minimize GHG emissions and thus, be consistent with the Riverside County 2015 Climate Action Plan. As described in the Air Quality Section, the Project is also consistent with the SCAG RTP/SCS. Thus, the Project would not conflict with the applicable plan adopted for the purpose of reducing GHG emissions, and there would be no impact.

**IX. HAZARDS AND HAZARDOUS MATERIALS**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>IX. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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 result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

The potential for the Build Alternatives to result in impacts related to hazards and hazardous materials was assessed in the *Initial Site Assessment* (February 2016, updated September 2020), the results of which are summarized in Section 2.12, Hazardous Waste, in this Final EIR/EA. The following analyses are based on information in Section 2.12.

**Would the Project:**

**IX.a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Significance Determination:** *Less Than Significant Impact*

Construction of the Project would require transporting some hazardous materials. Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with relevant State, federal, and local

regulations regarding the use, storage, handling, disposal, and transport of potentially hazardous materials to protect human health and the environment. Vehicles using the proposed new roadway could transport hazardous materials; however, the transport of hazardous waste and/or materials is heavily regulated, and such transport would need to comply with federal and State regulations. Hazardous waste transport on a regional scale is anticipated to continue to occur on I-10 rather than on either of the Build Alternative roadways. Therefore, impacts related to hazardous wastes/materials (direct or indirect) would be less than significant.

**IX.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?**

**Significance Determination:** *Less Than Significant Impact*

Upset and accident conditions involving the release of hazardous materials into the environment are not reasonably foreseeable, and these conditions would not be facilitated by the Project. There would not be an increase in vehicles carrying hazardous materials on the new roadway because those vehicles would likely stay on I-10. Most vehicles traveling between the City and Cabazon on the new roadway would be local residents. If such a condition were to occur, the appropriate emergency and hazardous materials response teams would be called to ensure that hazards to the public and the environment would be as minimal as possible. Impacts would be less than significant.

**IX.c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Significance Determination:** *No Impact*

There are no existing schools within 0.25 mi of either of the Build Alternatives that could be affected by hazardous waste or substances as a result of the Project. No impacts would occur.

**IX.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?**

**Significance Determination:** *Less Than Significant Impact With Mitigation*



As discussed in Section 2.11, Hazardous Waste, based on the *Initial Site Assessment* (February 2016, updated September 2020), no recognized environmental conditions were encountered within the permanent right-of-way limits for Alternative 5 and Alternative 12 (Preferred Alternative). However, historical use of some properties within or adjacent to the alignment of Alternative 5 may have impacted the soil, and hazardous material could be encountered during construction activities. There is a former site that was used as a rifle range during World War II that could contain soil contaminated with explosives, lead, perchlorate, and ammunition debris. Based on historical agricultural use, some areas may contain residual pesticides, herbicides, and/or heavy metals. There are also areas of debris scatter consisting of tires and household refuse (a former public dump site) that could potentially contain hazardous materials that have impacted soils. No sites or materials of concern were observed within the footprint of Alternative 12 (Preferred Alternative). For Alternative 5, incorporation of avoidance and minimization Measures HAZ-1 in Section 2.12 of this Final EIR/EA regarding conducting a Limited Phase 2 environmental study and additional soil sampling, following the selection of the preferred alternative, would reduce impacts from encountering hazardous materials to a less than significant level.

**IX.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?**

**Significance Determination:** *Less Than Significant Impact*

As described in Section 2.12, Hazardous Waste, in this Final EIR/EA, Banning Municipal Airport is approximately 1,100 ft to 1,300 ft north of the alignments of the Build Alternatives. Therefore, Federal Aviation Administration (FAA) design standards will control the height of the roadbed and any structures associated with the Build Alternatives. The preliminary project design meets the applicable FAA criteria. Those design criteria will be incorporated into the final design plans. As a result, the Build Alternatives would not result in a significant safety hazard for people working, residing, or traveling in the Project area as a result of their proximity to Banning Municipal Airport. A less than significant impact would occur.

**IX.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?**

**Significance Determination:** *No Impact*

There are no private airstrips in the vicinity of the alignments of the Build Alternatives. As a result, the Build Alternatives would not result in a safety hazard for people working, residing, or traveling in the Project area as a result of proximity to private airfields. No impact would occur.

**IX.g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Significance Determination:** *Less Than Significant Impact*

During construction of both Build Alternatives, access to local businesses and residents using Westward Avenue may be temporarily impacted. Accordingly, the construction contractor will coordinate with local fire, police, and hospitals to ensure that access to emergency routes during construction is adequately maintained and that construction activities do not physically interfere with an adopted emergency response or evacuation plan. The impact will be less than significant.

When completed, both Alternative 5 and Alternative 12 (Preferred Alternative) would have a beneficial impact regarding adopted emergency response plans and emergency evacuation plans. The Project will provide an emergency relief route for traffic on I-10 and an alternate route for emergency service vehicles from Cabazon to the City.

**IX.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?**

**Significance Determination:** *No Impact*

Both Build Alternatives would cross foothill areas considered high wildfire susceptibility zones. However, neither of the Build Alternatives would expose people or structures to a significant risk of loss, injury, or death involving wildfires because no new urbanized land uses are proposed. Depending on the location of a future fire, the Project could aid in evacuation of the area and facilitate access for emergency vehicles. Future projects in the Project area would be required to be developed in accordance with the Fire Hazards section of the County General Plan Safety Element. The Build Alternatives would provide improved emergency access in the Project area, thereby resulting in a beneficial impact.

**X. HYDROLOGY AND WATER QUALITY**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>X. HYDROLOGY AND WATER QUALITY -- Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 storm water 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The potential for the Build Alternatives to result in impacts related to hydrology and water quality was assessed in the *Water Quality Assessment Report* (April 2015), the *Location Hydraulic Study* (May 2015), and the *Drainage Report* (January 2020). The results of that technical study are summarized in Section 2.8, Hydrology and Floodplains, and Section 2.9, Water Quality and Storm Water Runoff, in this Final EIR/EA. The following analyses are based on information in the *Water Quality Assessment Report* (April 2015).

**Would the Project:**

**X.a. Violate any water quality standards or waste discharge requirements?**

**X.f. Otherwise substantially degrade water quality?**

**Construction-Related Short-Term Significance Determination: *Less Than Significant with Mitigation***

Potential pollutant sources during construction include soil disturbance caused by construction equipment and construction materials (spills, leaks, concrete, asphalt, excavated soil, etc.). If not controlled, the use of these materials could increase the potential for discharges to Smith Creek and/or the San Geronio River during construction activities. The largest water quality pollutant risk is sediment runoff caused by grading activities and hauling. Construction activities will cover approximately 82 acres for Alternative 5 and 80 acres for Alternative 12 (Preferred Alternative).

The Project would require construction activities within the San Geronio River and Smith Creek, which are mapped as waters of the United States. Any activity that may result in impacts to State water quality standards triggers Section 401 of the Clean Water Act (CWA). Therefore, a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) will be required for the Project. The Section 401 permit is triggered in tandem with the Section 404 permit required from the United States Army Corps of Engineers (USACE). A Section 404 permit is required for projects that involve the discharge of dredged or fill material into waters of the United States. Because fill impacts associated with the Build Alternatives would be under 0.5 acre, the Project falls within the guidelines of a Nationwide Permit issued by the USACE. The construction of bridge abutments in the San Geronio River and Smith Creek will require a Section 1602 Streambed Alteration Agreement from the CDFW.

As specified in avoidance and minimization Measure WQ-1, Alternative 5 and Alternative 12 (Preferred Alternative) would be required to obtain coverage under the Construction General Permit from the State Water Resources Control Board (SWRCB) for the duration of construction activities. Alternative 12 (Preferred Alternative) traverses the Morongo Band of Mission Indians Tribal Lands so Federal Construction General Permit No. CAR12000I would apply. In compliance with the Construction General Permit, a SWPPP would be prepared which would specify the Erosion Control, Sediment Control, and Good Housekeeping BMPs to be implemented during construction of the Project to reduce the risk of erosion and sedimentation and prevent spills. Construction-related impacts to water quality will be minimized by the installation of BMPs (e.g., hydroseeding with a native seed mix, fiber rolls, silt fencing, storm drain inlet protection, a stabilized construction entrance/exit, sediment basins, and concrete washouts) combined with Good Housekeeping

Practices (e.g., proper handling and management of construction materials and waste). With compliance with the requirements of the Construction General Permit and implementation of BMPs, as specified in avoidance and minimization Measure WQ-1, construction-related impacts to water quality would be less than significant.

**Long-Term Impacts Significance Determination:** *Less Than Significant with Mitigation*

Typical pollutants from highways and roadways include heavy metals, sediment, litter, and oil and grease. As traffic increases, the amount of a pollutant originating from cars and trucks (i.e., tire and brake lining wear, litter, and spills during vehicle accidents) is also expected to increase. Impacts to water quality could occur over months or years during operation of the Project. The primary causes of these impacts would be from increased impervious area which can increase storm water runoff rates and volumes and increase storm water pollutant loads. Because the roadway does not currently exist, both Build Alternatives would increase the impervious surface area.

As specified in avoidance and minimization Measure WQ-2, BMPs will be implemented in accordance with Whitewater River Watershed MS4 NPDES Permit requirements to target constituents of concern in runoff from road and bridge facilities during project operation. Some of the drainage from the facilities would be treated by permanent storm water treatment BMPs (e.g., infiltration swales/strips, basins) to minimize the discharge of highway pollutants to Smith Creek and the San Geronio River. In addition to treatment through infiltration, these BMPs would also serve to reduce increased flows from added impervious areas through longer travel paths and storage.

The potential long-term impacts to water quality vary between Alternative 5 and Alternative 12 (Preferred Alternative). The main difference in water quality impacts between the two Build Alternatives is related to the cut slopes. Alternative 5 includes more cut-slope surface area, and some slopes are up to 130 ft in height. Alternative 12 (Preferred Alternative) has less cut-slope surface area, with some slopes up to 90 ft in height. Increasing the cut-slope area can result in erosion, and sediment and debris runoff, which may create impacts to the surrounding environment and water quality. Alternative 5 and Alternative 12 (Preferred Alternative) will be designed to permanently stabilize the cut slopes with hydroseed or other means, minimize concentrated storm water runoff, and minimize changes to runoff volume. Sediment controls, such as swales/strips combined with desilting, will be incorporated into the design of the Project. The slopes will be graded to minimize concentrated flows and

promote sheet-flow, and frequent outlets to the adjacent drainages will be provided. Changes in runoff will be reduced by minimizing the addition of impervious areas and incorporating detention basins as necessary. The WQAR evaluated the design of the Project to be the minimum width of road needed to provide improvements consistent with the circulation elements of the City and the County. In addition, avoidance and minimization Measure WQ-3 requires use of debris fences for hillsides where required by the Geotechnical Engineer, drainage ditches at the top of slopes, and desilting basins for sediment-prone areas to control debris and sediment from entering storm water run-off. Maintenance of these BMPs after major storm events will include debris removal/cleaning and monitoring of the rock slope protection along the roadway embankments and bridges due to potential for scour from the adjacent watercourses.

The Project includes culverts and bridges. Culverts can exacerbate scouring of drainage courses which can degrade downstream water quality. Localized scouring of the waterways may also be worsened by localized increases in impervious surfaces that result in greater water volume and flow rates. Rock slope protection will be placed at the culvert inlets and outlets and bridge abutments and columns to minimize scour.

In summary, the Project will be designed and constructed to avoid and minimize the potential for long-term water quality impacts. With implementation of avoidance and minimization Measures WQ-2 and WQ-3 provided in Section 2.9 in this Final EIR/EA, water quality and waste discharge standards would be met and impacts would be less than significant.

**X.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)?**

**Significance Determination:** *No Impact*

Construction and operation of Alternative 5 and Alternative 12 (Preferred Alternative) would not use groundwater, and dewatering activities are not anticipated. No impacts to groundwater supply or recharge would occur.



**X.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?**

**X.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?**

**Significance Determination:** *Less than Significant Impact*

The Project includes culverts and bridges. Culverts can exacerbate scouring of drainage courses. Localized scouring of the waterways may also be worsened by localized increases in impervious surfaces that result in greater water volume and flow rates. Changes to a drainage course geomorphology (i.e., hydromodification) can be caused by erosion and sedimentation downstream. Rock slope protection will be placed at the culvert inlets and outlets to minimize scour. Changes to channel geomorphology will be minimized by designing bridges to pass flood waters and allow unimpeded flow of the drainage course. Bridges will also be designed to match upstream and downstream channel conditions. Rock slope protection will be placed at bridges to minimize the potential for scour at the abutments and bridge columns. These design measures will ensure that the Project would not alter the existing drainage pattern through alteration of the course of a stream or river such that it would result in erosion or siltation on site or off site, or an increase in the rate or amount of surface runoff in a manner that would result in flooding.

The alignment for Alternative 5 would be along the south side of Smith Creek, and the Alternative 12 (Preferred Alternative) alignment would be along the north side of Smith Creek. The roadway embankment for Alternative 5 would be within the base floodplain of Smith Creek and would result in one longitudinal encroachment approximately at the mid-point of the proposed roadway at the south end of the prominent bend in the creek adjacent to the foothills. This encroachment would result in an increase in the 100-year water surface elevation of less than 0.5 ft. Due to this minimal rise in water surface elevation and the surrounding undeveloped land, this impact would be less than significant. Alternative 12 (Preferred Alternative) would be far enough north of Smith Creek and high enough in elevation to avoid longitudinal encroachment at Smith Creek.

**X.e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**

**Significance Determination:** *Less Than Significant Impact*

Storm water drainage systems would be installed during construction of the new roadway under Alternative 5 and Alternative 12 (Preferred Alternative). They would be designed to ensure sufficient capacity for the volume of expected storm water to ensure that polluted runoff from the new roadway does not impact the environment. Impacts would be less than significant.

**X.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?**

**Significance Determination:** *No Impact*

The Build Alternatives do not include the construction of any housing and, as a result, would not place housing in any designated flood hazard area. No mitigation is required.

**X.h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

**Significance Determination:** *Less Than Significant with Mitigation*

Both Alternatives would be located in a 100-year flood hazard area. When significant storm events occur, the San Gorgonio River and Smith Creek drainages are known to receive very large flows in a short period of time (i.e., flash flooding), which presents risks to life and property for anyone in the floodplain under unprotected conditions. These watercourses meander through the Project area and change courses based on flows and erosion.

The hydraulic modeling was conducted as part of the *Location Hydraulic Study I-10 Bypass – Banning to Cabazon* (May 2015) using USACE Hydrologic Engineering Center River Analysis System (HEC-RAS) software with published flow rates from the Federal Emergency Management Agency (FEMA) for Smith Creek and the San Gorgonio River. This modeling considers ground elevations and terrain to estimate flooding depths and horizontal limits (spread) due to the 100-year design storm event, which is especially beneficial in areas such as FEMA Zone A (no base flood elevation determined) found along the San Gorgonio River within the Project limits. This evaluation determined that the Project bridges on Smith Creek and the San Gorgonio

River would not affect the water surface elevation of those water courses during a 100-year storm event. While the 100-year storm event is required for design of the bridges and the roadway, larger flood frequencies will be considered as required or allowed by funding parameters during final design for elements such as scour at bridge foundation, which typically considers the 200-year check flood event.

The proposed bridges for Alternative 5 and Alternative 12 (Preferred Alternative) would clear the 100-year water surface elevation with greater than the minimum freeboard of 4 ft under the bridge under the 100-year storm condition as recommended by Caltrans, FEMA, and the County Flood Control District and Water Conservation District. “Freeboard” is defined as the amount of clearance between the estimated flood elevation and the feature(s) being referenced (in this case, the bridges).

Alternative 5 would result in one longitudinal encroachment approximately at the midpoint of the proposed roadway at the south end of the prominent bend in Smith Creek adjacent to the foothills. This encroachment would not impede or redirect flow within but would result an increase in the 100-year water surface elevation approximately 0.38 ft, which would not exceed the 1 foot cumulative increase allowable by FEMA per 44 CFR 60.3(c)(10). In addition, the land surrounding the longitudinal encroachment and water surface elevation increase is currently undeveloped and is unlikely to be developed due to the presence of Smith Creek and the adjacent hillsides. Due to this minimal rise in water surface elevation and the surrounding undeveloped land, this impact would not be adverse. Avoidance alternatives were evaluated. To avoid this encroachment at Smith Creek, the road alignment would need to be shifted approximately 200 ft to the south. This change would require tighter, nonstandard, horizontal curve radii and would place the alignment significantly farther into the hillside, thereby resulting in additional cut-slope heights. In addition, the increased water surface elevation of less than 0.5 ft at a localized area along Smith Creek would not result in a noticeable change when considering the magnitude of flow being several feet deep and over 500 ft wide. For these reasons, variations of Alternative 5 to avoid the longitudinal encroachment at Smith Creek are not considered feasible or appropriate.

Alternative 5 and Alternative 12 (Preferred Alternative) would comply with applicable agency requirements for bridges, cross culverts, drainage inlets, and rock slope protection, to prevent damage to project features and/or users during estimated storm events.

Maintenance and monitoring after storm events would be necessary to minimize risks to life and property. These activities would involve removal of silt and debris at cross culverts and inlets, maintaining graded ditches and swales, and monitoring scour at bridge foundations and along slope protection areas.

The Project would require construction of retaining walls and extension of existing culverts within the 100-year floodplain and would result in a minimal increase in flood heights and flood limits. This minimal increase would not result in a significant change in flood risks or damage. The proposed encroachments would not result in an adverse change in flood risks or damage.

Culverts and bridges can exacerbate scouring of drainage courses and cause localized scouring. To minimize these impacts, the low chords of bridges will be designed to be above the 100-year water surface elevation, and the number, size, and shape of piers will be designed to minimize obstructions to potential floodplain flows. Rock slope protection to establish stable banks where the roadway is immediately adjacent to and/or crosses Smith Creek and the San Geronio River will be placed at culvert inlets and outlets and bridges to minimize scour.

Impacts would be less than significant based on implementation of the measures in Section 2.8 and the design features cited above.

**X.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?**

**Significance Determination:** *Less Than Significant Impact*

With the exception of the existing levee along the Robertson's Ready Mix (RRM) active sand and gravel mining operation, which is not a FEMA-approved levee, there are no levees or dams in the Project vicinity. The purpose of the levee at the RRM facility is to protect the sand and gravel operation in the event of a major storm event. Therefore, the Project would not expose people or structures to a significant risk of flooding, and any impact would be less than significant.

**X.j. Inundation by seiche, tsunami, or mudflow?**

**Significance Determination:** *No Impact*

Due to the distance of the Project area from the Pacific Ocean (approximately 55 mi), there is no foreseeable risk of tsunami inundation. There is also low risk from seiches (i.e., oscillations in enclosed bodies of water caused by seismic waves) or mudflows

due to the lack of bodies of water, dams, or landslide-prone hillsides in the area. The Build Alternatives are not within a dam inundation area; therefore, a seiche as a result of dam failure would not occur, and no impacts would result.

**XI. LAND USE AND PLANNING**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XI. LAND USE AND PLANNING -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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"/>

The potential for the Build Alternatives to result in impacts specific to land use and planning is discussed in Sections 2.1, Land Use, and 2.2, Growth, in this Final EIR/EA. The following analyses are based on information in Sections 2.1 and 2.2.

**Would the Project:**

**XI.a. Physically divide an established community?**

**Significance Determination:** *No Impact*

Community cohesion is the degree to which residents feel attachments to their neighborhood, a level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. The presence of significant populations with shared culture indicates that the study area demonstrates community cohesion that indicates an established community.

The Build Alternatives would provide a non-freeway connection between the City of Banning and the community of Cabazon. By creating an alternate route for vehicles and a new pedestrian and bicycle route, the Project would improve access, circulation, and emergency response times in Cabazon, all of which are considered to be enhancements to the neighborhood. As a result, Build Alternatives would benefit those areas and would not physically divide an established community. There would be no impact, and no mitigation is needed.

**XI.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?**

**Significance Determination:** *Less Than Significant Impact*

The Project is consistent with applicable land use plans, policies, and regulations for the following reasons:

- By providing access to the parcels adjacent to the roadway, the Project would be consistent with and facilitate the development of the 2015 Riverside County General Plan.
- Both of the Build Alternatives are consistent with the Circulation Element of the Banning General Plan, which shows Westward Avenue extending easterly to the city limits at the boundary of the County jurisdiction and the Morongo Band of Mission Indians Tribal Land.
- Both proposed Build Alternatives are consistent with the Morongo Band of Mission Indians' consistent support for an alignment south of I-10.

As discussed in Section 2.1, Land Use, Alternative 5 and Alternative 12 (Preferred Alternative) are consistent with the regional mobility goals of the City, the community of Cabazon, the County (including the 2015 General Plan), and SCAG. As shown in Tables 2.1.4 and 2.1.5 in Section 2.1, both Build Alternatives are consistent with City and County plans and policies, including the 2015 County General Plan. Therefore, the Build Alternatives are consistent with those local jurisdictions' approved land use and relevant transportation plans and would not conflict with those plans. No mitigation is needed.

Alternative 5 primarily crosses cattle grazing area, which is generally located south of Smith Creek and south into the hills. Acquisition of land for Alternative 5 would remove some of the grazing area, and the new road would make it more difficult for cattle to access the approximately 15 acres of grazing land between Smith Creek and the new roadway. Given the overall extent of the cattle-grazing operation (approximately 500 acres), the loss of 15 acres (or 3 percent) is not considered a significant impact. In addition, according to the owner of the cattle-grazing operation, this loss would not impact those cattle-grazing operations. According to the 2015 County General Plan land use map, cattle grazing may be phased out in this area before 2035 because that area is designated in the General Plan as very low-density residential uses. As a result, land use impacts related to cattle-grazing operations under Alternative 5 would be less than significant. No mitigation is required.

**XI.c. Conflict with any applicable habitat conservation plan or natural community conservation plan?**

**Significance Determination:** *No Impact*

As described earlier in response to the biological resources checklist questions (Section IV, Biological Resources), the Build Alternatives will comply with the applicable requirements and measures set forth in the relevant habitat conservation plans for the Project area (i.e., WRMSHCP and CVMSHCP) and would not conflict with these plans. As a result, the Build Alternatives would not result in impacts related to conflicts with applicable habitat conservation plans, and no mitigation is required.

**XII. MINERAL RESOURCES**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XII. MINERAL RESOURCES -- Would the project:</b>				
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"/>

**Would the :**

**XII.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?**

**XII.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?**

**Significance Determination:** *No Impact*

According to the County General Plan Multipurpose Open Space Element (2015), the study area is in Mineral Resources Zone 2 and 3 (MRZ-2 and MRZ-3). MRZ-2 designates land where there is likelihood of significant mineral resource deposits, or where significant mineral deposits exist. MRZ-3 designates land where regionally important mineral deposits are likely to exist, but the significance of the deposit is undetermined. The State Geologist has designated a sand and gravel mine in the eastern end of the Project area (currently being mined by Robertson’s Ready Mix) as a Significant Mineral Resource Zone 2 (MRZ-2), which indicates that the site contains mineral deposits of regional or statewide significance (this is reflected in the 2015 County General Plan). The MRZ-2 designation discourages the use of such lands for purposes other than mining operations and mineral extraction until such time as the minerals can be extracted.

Alternative 5 and Alternative 12 (Preferred Alternative) are outside of and would avoid the Robertson’s Ready Mix site, including the approved expansion of the mining operation to the west of the existing facility.

Both Build Alternatives would construct an approximately 900 ft long bridge over the San Gorgonio River south of the RRM plant that would span the entire floodplain. As a result, the bridge would preserve the existing flows of both water and sand at this

location. The Project includes improvements to Apache Trail south of the RRM plant. Therefore, the Project does not improve access to the RRM plant.

There are no productive oil or gas wells in the study area and, as a result, the Build Alternatives would not impact any productive oil or gas wells.

The Build Alternatives are located in areas with known mineral deposits of regional and statewide significance; however, these deposits would not be affected by implementation of the Project. Therefore, there would be no impact, and no mitigation is required.

**XIII. NOISE**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIII. NOISE -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

The potential for the Build Alternatives to result in impacts specific to noise is discussed in Section 2.14, Noise, in this Final EIR/EA. Additional noise analysis was conducted and is presented below in accordance with the CEQA Guidelines.

**Existing Conditions at the Project Site**

Land Uses in the Project area include single-family residential, industrial/manufacturing, mining, and undeveloped/vacant land. In addition, a future planned expansion of the Robertson’s Ready Mix operation in the Project area has been permitted/approved. The primary source of noise in the Project area is distant traffic on I-10, Apache Trail, Bonita Avenue, and Hathaway Street. Other sources of noise within the Project area include noise generated from the nearby sand and gravel operation, noise generated from the UPRR (including train horn noise), and distant aircraft noise.

**Regulatory Background: *Applicable Noise and Vibration Standards***

The applicable noise and vibration standards for the Project are described below.

***United States Bureau of Mines***

In 1974, the United States Bureau of Mines (USBM) began a study to gather and update available blast vibration data. Work was included in the area of structural and

human response to vibration. This resulted in the publishing of USBM Report of Investigations 8507, “Structure Response and Damage Produced by Ground Vibration From Surface Mine Blasting” in 1980. The USBM recommends a maximum safe overpressure of 0.014 pounds per square inch (134 decibels [dB] linear, unweighted) for residential structures. The first occurrence of airblast damage is usually the breakage of poorly mounted windows.

#### ***Office of Surface Mining Reclamation and Enforcement***

The Office of Surface Mining Reclamation and Enforcement (OSMRE) published a document titled *Blasting Guidance Manual* that addresses the negative effects of blasting. The OSMRE *Blasting Guidance Manual* includes noise and vibration limits with respect to building damage and human perception. The OSMRE airblast noise limits with respect to building damage are similar to those of the USBM, as described above. The OSMRE airblast limits for building damage may apply to the location of any dwelling, public building, school, church, community, or institutional building in connection with blasting under the jurisdiction of the OSMRE. Based on OSMRE data, a 129 dB peak noise level is used for evaluating building damage impacts associated with the Project’s blasting-related activities. This airblast limit set by the OSMRE is based on the minimal probability of superficial damage to residential-type structures, and takes into consideration subjective human response. Per the OSMRE, if an airblast can be kept at or below 120 dB, then annoyance would be minimal. Thus, for the purpose of this analysis, 120 dB is used in connection with the analytical evaluation of the potential human annoyance from the Project’s blasting-generated noise level.

#### ***State of California Building Code***

The State’s noise insulation standards are codified in CCR, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in the State for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures (e.g., residential buildings, schools, or hospitals) are located near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA (A-weighted decibels) Community Noise Equivalent Level (CNEL) or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.



**Caltrans Transportation and Construction Vibration Guidance Manual**

Vibration levels generated from construction activity are evaluated against the vibration damage potential threshold criteria contained in the Caltrans *Transportation and Construction Vibration Guidance Manual* (2013) because the City of Banning’s Municipal Code and the Riverside County Code do not have vibration level standards. Table 3.10 provides the vibration levels for various types of structures that would potentially result in structural damage.

**Table 3.10 Vibration Damage Potential Threshold Criteria**

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Source: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013).  
 Note: Transient sources create a single isolated vibration event (e.g., blasting or drop balls). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.  
 Caltrans = California Department of Transportation  
 in/sec = inches per second  
 PPV = peak particle velocity

**County of Riverside**

**General Plan Noise Element**

The noise element of the County’s 2015 General Plan sets forth policies to assess and control environmental noise. Applicable policies are shown in Table 3.11. Based on Policy N 1.3, the County’s exterior noise standard is 65 dBA CNEL for schools, hospitals, rest homes, long-term care facilities, mental care facilities, residential uses, libraries, passive recreation uses, and places of worship. In addition, based on Policy N 13.1, the County’s interior noise standard for sensitive uses is 45 dBA CNEL, which is consistent with the State’s interior noise standard. Figure 3-3 shows the County’s Land Use Compatibility for Community Noise Environments.

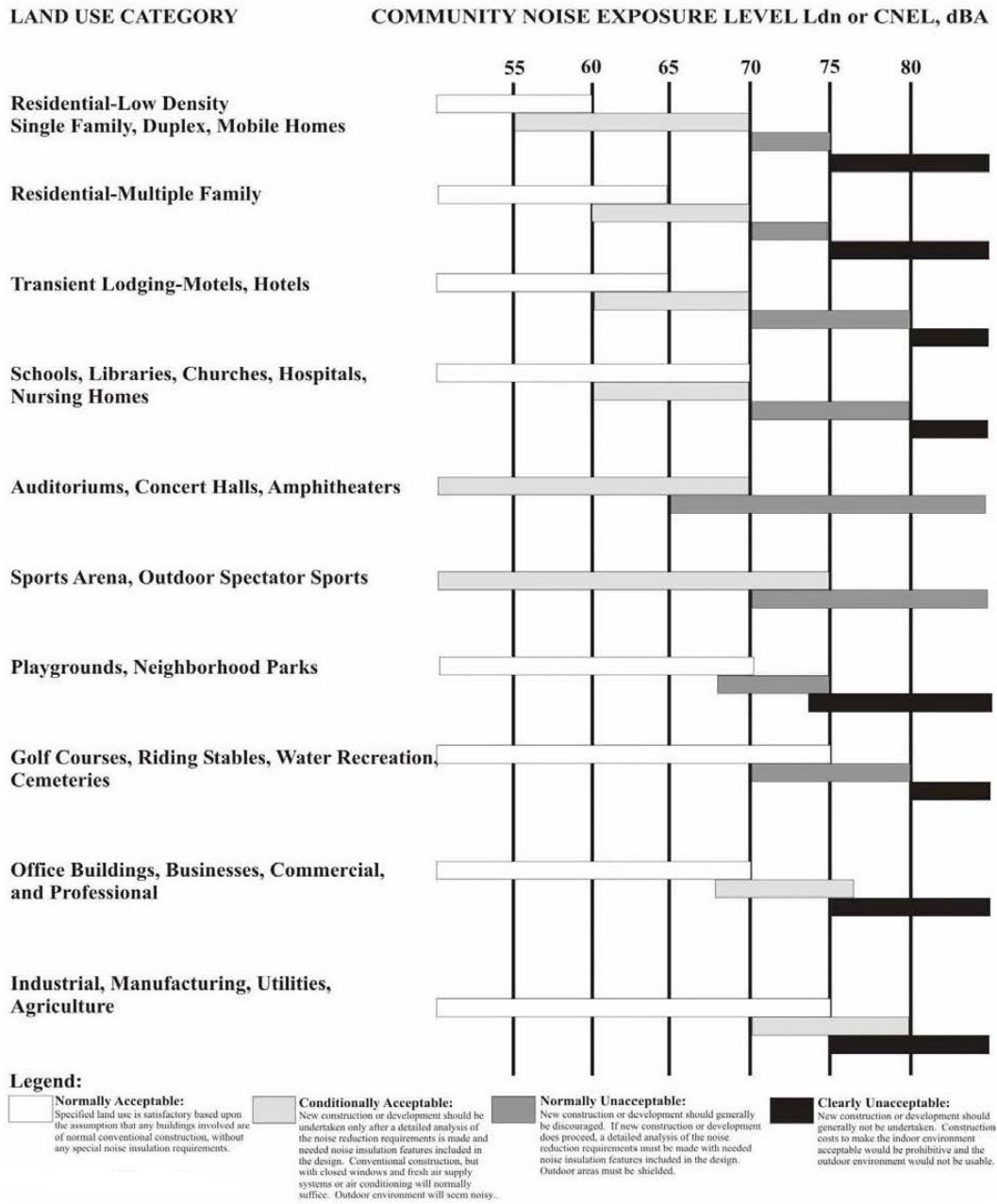
**Table 3.11 County of Riverside’s 2015 General Plan Noise Element Policies**

Policy No.	Policies
N 1.1	Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.
N 1.2	Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.
N 1.3	Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 dBA CNEL: schools, hospitals, rest homes, long-term care facilities, mental care facilities, residential uses, libraries, passive recreation uses, and places of worship.  According to the State of California Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures.  Areas around airports may have different noise standards than those cited above. Each Area Plan affected by a public-use airport includes one or more Airport Influence Areas, one for each airport. The applicable noise compatibility criteria are fully set forth in Appendix G and summarized in the Policy Area section of the affected Area Plan.
N 1.4	Determine if existing land uses will present noise compatibility issues with Projects by undertaking site surveys.
N 1.5	Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.
N 1.6	Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.
N 1.7	Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.
N 1.8	Limit the maximum permitted noise levels that cross property lines and impact adjacent land uses, except when dealing with noise emissions from wind turbines.
N 2.3	Mitigate exterior and interior noises occurring at residential land uses during the hours of 7:00 a.m. to 10:00 p.m. to the exterior and interior noise standards of 65 and 55 dBA L <sub>eq</sub> , respectively, and during the hours of 10:00 p.m. to 7:00 a.m. to the noise standards of 45 and 40 dBA L <sub>eq</sub> , respectively, to the extent feasible, for stationary sources.
N 8.3	Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.
N 8.4	Require that the loading and shipping facilities of commercial and industrial land uses which abut residential parcels be located and designed to minimize the potential noise impacts upon residential parcels.
N 11.1	Utilize natural barriers such as hills, berms, boulders, and dense vegetation to assist in noise reduction.
N 11.2	Utilize dense landscaping to effectively reduce noise. However, when there is a long initial period where the immaturity of new landscaping makes this approach only marginally effective, utilize a large number of highly dense species planted in a fairly mature state, at close intervals, in conjunction with earthen berms, setbacks, or block walls.
N 12.1	Minimize the impacts of construction noise on adjacent uses within acceptable practices.
N 12.2	Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.
N 12.3	Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the County for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as: (a) Temporary noise attenuation fences; (b) Preferential location of equipment; and (c) Use of current noise suppression technology and equipment.
N 12.4	Require that all construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
N 13.1	Enforce the California Building Standards that sets standards for building construction to mitigate interior noise levels to the tolerable 45 CNEL limit. These standards are utilized in conjunction with the Uniform Building Code by the County’s Building Department to ensure that noise protection is provided to the public. Some design features may include extra-dense insulation, double-paned windows, and dense construction materials.

Source: County of Riverside General Plan Noise Element (2015).

CNEL = Community Noise Equivalent Level      L<sub>eq</sub> = equivalent continuous noise level

dBA = A-weighted decibels



Source: County of Riverside General Plan Noise Element (2015).

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

L<sub>dn</sub> = day-night average noise level

**Figure 3-3 County of Riverside Land Use Compatibility for Community Noise Environments**

### ***County Code***

Section 9.52.020 of the County Code exempts noise generated from capital improvement project of a governmental agency. However, the County can require the compliance of Section 9.52.020(I) of the County Code, which limits construction hours within 0.25 mi of an occupied residence to between the hours of 6:00 a.m. and 6:00 p.m. from June to September and between the hours of 7:00 a.m. and 6:00 p.m. from October to May. Although the County Code does not specify the day of the week for the hours mentioned above, it is assumed these hours apply to weekdays and Saturdays. Construction on Sundays and holidays would be prohibited. Construction activities that occur outside of the hours above are subject to the noise standards in Section 9.52.040 of the County Code and shown in Table 3.12.

### ***City of Banning***

The Project is subject to the requirements of the City General Plan Noise Element and the City Municipal Code.

#### ***General Plan Noise Element***

The noise element of the City's General Plan sets forth goals, policies, and programs. Applicable goals, policies, and programs to assess and control environmental noise are shown in Table 3.13. In addition, the City sets forth land use compatibility guidelines for noise-sensitive land uses and outdoor activity areas.

Figure 3-4 shows the City Land Use Compatibility for Community Noise Environments. The City's exterior noise standard for residential land uses is 65 dBA CNEL. Although interior noise standards for residential land uses were not specified in the City's General Plan Noise Element, the State's interior noise standard of 45 dBA CNEL was assumed.

### **Municipal Code Noise Ordinance**

Section 8.44.085(A) of the City's Municipal Code exempts noise generated from capital improvement projects of a governmental agency. However, the City can require the compliance of Section 8.44.090(E) of the City's Municipal Code, which limits noise levels related to landscape maintenance and construction, including erection, excavation, demolition, alteration, or repair of any structure or improvement, to the hours between 7:00 a.m. to 6:00 p.m. provided that noise

**Table 3.12 Sound Level Standards (dBA L<sub>max</sub>)**

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density (acres)	Maximum Decibel Level	
				7:00 am to 10:00 pm	10:00 pm to 7:00 am
Community Development	EDR	Estate Density Residential	2	55	45
	VLDR	Very Low Density Residential	1	55	45
	LDR	Low Density Residential	0.5	55	45
	MDR	Medium Density Residential	2-5	55	45
	MHDR	Medium High Density Residential	5-8	55	45
	HDR	High Density Residential	8-14	55	45
	VHDR	Very High Density Residential	14-20	55	45
	HTDR	Highest Density Residential	20+	55	45
	CR	Retail Commercial		65	55
	CO	Office Commercial		65	55
	CT	Tourist Commercial		65	55
	CC	Community Center		65	55
	LI	Light Industrial		75	55
	HI	Heavy Industrial		75	75
	BP	Business Park		65	45
PF	Public Facility		65	45	
SP		Specific Plan-Residential		55	45
		Specific Plan-Commercial		65	55
		Specific Plan-Light Industrial		75	55
		Specific Plan-Heavy Industrial		75	75
Rural Community	EDR	Estate Density Residential	2	55	45
	VLDR	Very Low Density Residential	1	55	45
	LDR	Low Density Residential	0.5	55	45
Rural	RR	Rural Residential	5	45	45
	RM	Rural Mountainous	10	45	45
	RD	Rural Desert	10	45	45
Agriculture	AG	Agriculture	10	45	45
Open Space	C	Conservation		45	45
	CH	Conservation Habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20	45	45
	W	Watershed		45	45
	MR	Mineral Resources		75	45

Source: County of Riverside, County Code.

dBA = A-weighted decibels

L<sub>max</sub> = maximum instantaneous noise level

**Table 3.13 City of Banning’s General Plan Noise Element Goals, Policies, and Programs**





Goal/Policy Number	Goal/Policy/Program
<b>Goal</b>	<b>A noise environment that complements the community’s residential character and its land uses.</b>
Policy 1	The City shall protect noise sensitive land uses, including residential neighborhoods, schools, hospitals, libraries, churches, resorts and community open space, from potentially significant sources of community noise.
Program 1.A	The City shall require building setbacks, the installation of wall and window insulation, sound walls, earthen berms, and/or other mitigation measures in areas exceeding the City’s noise limit standards for private development projects as they occur.
Program 1.C	The City shall use the development review process to assure the use of buffers between sensitive receptors and incompatible land uses.
Program 1.D	The City shall require that commercial compactors, loading zones, and large trash bins be located at a sufficient distance from residential properties to reduce noise impacts to its acceptable standard.
Policy 2	The relationship between land use designations in the Land Use Element and changes in the circulation pattern of the City, as well as individual developments, shall be monitored and mitigated.
Program 2.A	The City shall develop guidelines and minimal criteria requirements for noise analyses for proposed development projects. Studies shall evaluate project impacts and the effectiveness of proposed mitigation measures.
Policy 3	Private sector project proposals shall include measures that assure that noise exposures levels comply with State of California noise insulation standards as defined in Title 25 (California Noise Insulation Standards) and/or Banning Ordinances 1138 and 1234, whichever is more restrictive.
Policy 4	The City shall maintain a General Plan Circulation Map and assure low levels of traffic within neighborhoods by assigning truck routes to major roadways only.
Program 4.A	The City shall review designated primary truck routes and ensure they are clearly marked throughout the community. Except for traffic providing location-specific services and deliveries, construction trucks and delivery trucks shall be limited to designated truck routes, including Ramsey Street, and those portions of Lincoln Street, Highland Springs Avenue, Hathaway Street, Sunset Avenue, Eighth Street, San Geronio Avenue and Hargrave Street so designated.
Program 4.B	The City shall discourage development projects that result in through-traffic in residential neighborhoods.
Policy 6	All development proposals within the noise impact area of the Interstate and the railroad shall mitigate both noise levels and vibration to acceptable levels through the preparation of focused studies and analysis in the development review and environmental review process.
Policy 7	The City shall coordinate with adjoining jurisdictions to assure noise-compatible land uses across jurisdictional boundaries.
Policy 8	The City shall impose and integrate special design features into proposed development that minimize impacts associated with the operation of air conditioning and heating equipment, on-site traffic, and use of parking, loading and trash storage facilities.

Source: City of Banning General Plan Noise Element (2006).



Land Uses	CNEL (dBA)						
	50	55	60	65	70	75	80
Residential - Single Family Dwellings, Duplex, Mobile Homes	A		B			D	
	A		B			D	
Residential – Multiple Family	A		B			D	
	A		B			D	
Transient Lodging: Hotels and Motels	A		B			D	
	A		B			D	
School Classrooms, Libraries, Churches, Hospitals, Nursing Homes and Convalescent Hospitals	A		B			D	
	A		B			D	
Auditoriums, Concert Halls, Amphitheaters	B		C			D	
	B		C			D	
Sports Arenas, Outdoor Spectator Sports	B		C			D	
	B		C			D	
Playgrounds, Neighborhood Parks	A		C			D	
	A		C			D	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	A		C			D	
	A		C			D	
Office Buildings, Business, Commercial and Professional	A		B			D	
	A		B			D	
Industrial, Manufacturing, Utilities, Agriculture	A		B			D	
	A		B			D	

Source: California Department of Health Services, "Guidelines for the Preparation and Content of the Noise Element of the General Plan," 1990

-  **Normally Acceptable:** With no special noise reduction requirements assuming standard construction.
-  **Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design
-  **Normally Unacceptable:** New construction is discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
-  **Clearly Unacceptable:** New construction or development should generally not be undertaken.

CNEL = Community Noise Equivalent Level  
 dBA = A-weighted decibels

**Figure 3-4 City of Banning’s Land Use Compatibility for Community Noise Environments**

levels do not exceed 55 dBA for intervals of more than 15 minutes per hour at any time as measured in the interior of the nearest occupied residence or school.

Although the City’s Municipal Code does not specify the day of the week for these hours, it is assumed they apply to weekdays and Saturdays. Construction on Sundays and holidays would be prohibited. Construction activities that occur outside of the hours of 7:00 a.m. to 6:00 p.m. are subject to the noise standards in Section 8.44.070 of the City Municipal Code and shown in Table 3.14.

**Table 3.14 Maximum Noise Level Standards (dBA L<sub>max</sub>)**

Zone Use	Time	Base Noise Level (dBA)	L <sub>25</sub>	L <sub>8</sub>	L <sub>2</sub>	L <sub>max</sub>
Residential	10:00 PM to 7:00 AM	45	50	55	60	65
Residential	7:00 AM to 10:00 PM	55	60	65	70	75
Industrial & Commercial	Anytime	75				

Source: City of Banning, Municipal Code.  
 dBA = A-weighted decibels  
 L<sub>max</sub> = maximum instantaneous noise level

The following impact analysis is based on the noise standards and criteria described above.

**Would the Project:**

**XIII.a. Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Construction-Related Short-Term Noise Impacts Significance Determination:**  
*Less Than Significant with Mitigation*

**Long-Term Off-Site Traffic Noise Impacts Significance Determination:**  
*Potentially Significant Impact*

**Discussion: Construction Noise Impacts**

The Project is generally located south of I-10 between Hathaway Street and Apache Trail in the City and the County.

Construction-related short-term noise levels would be higher than existing ambient noise levels in the Project area today, but would no longer occur after construction of the Project is completed.

Under Alternative 5 and Alternative 12 (Preferred Alternative), two types of short-term noise impacts could occur during construction of the Project. First, construction crew commutes and the transport of construction equipment and materials to the site for the Project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 ft would generate up to 75 dBA  $L_{max}$  [maximum instantaneous noise level]), the effect on longer-term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commutes and equipment transport to the Project site would be less than significant.

The second type of short-term noise impact is related to noise generated during grading and roadway construction activities on the Project site. Construction is completed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site, and therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.15 lists typical construction equipment noise levels recommended for noise impact assessments based on a distance of 50 ft between the equipment and a noise receptor.

As shown, construction equipment generates high levels of noise, with maximums ranging from 74 dBA to 101 dBA. Typical noise levels range up to 87 dBA  $L_{max}$  at 50 ft during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery (e.g., back-fillers, bulldozers, draglines, and front loaders). Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the bypass would temporarily increase the ambient noise environment and would have the potential to affect noise-sensitive land uses in the vicinity of an individual project. Construction of the Project is expected to require the use of scrapers, bulldozers, and water trucks/pickup trucks. Noise associated with the use of

**Table 3.15 Construction Equipment Noise Emission Levels**

<b>Equipment Description</b>	<b>Spec 721.560<sup>1</sup> L<sub>max</sub> at 50 ft</b>	<b>Actual Measured<sup>2</sup> L<sub>max</sub> at 50 ft</b>
Backhoe	80	78
Blasting	N/A	94
Compactor (ground)	80	83
Cranes	85	81
Dozers	85	82
Dump Truck	84	76
Excavators	85	81
Flat Bed Trucks	84	74
Front-End Loaders	80	79
Graders	85	N/A <sup>3</sup>
Impact Pile Driver	95	101
Jackhammer	85	89
Pickup Truck	55	75
Pneumatic Tools	85	85
Pumps	77	81
Rock Drill	85	81
Roller	85	80
Scrapers	85	84
Tractors	84	N/A
Vibratory Pile Driver	95	101

Source: Federal Highway Administration Roadway Construction Noise Model (January 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

<sup>1</sup> Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.

<sup>2</sup> The maximum noise level was developed based on the average noise level measured for each piece of equipment during the CA/T program in Boston, Massachusetts.

<sup>3</sup> Since the maximum noise level based on the average noise level measured for this piece of equipment was not available, the maximum noise level developed based on Spec 721.560 was used.

ft = foot/feet

L<sub>max</sub> = maximum instantaneous sound level

N/A = not applicable

construction equipment is estimated to be between 75 and 84 dBA L<sub>max</sub> at a distance of 50 ft from the active construction area for the grading phase.

As seen in Table 3.15, the maximum noise level generated by each scraper is assumed to be approximately 84 dBA L<sub>max</sub> at 50 ft from the scraper in operation. Each bulldozer would generate approximately 82 dBA L<sub>max</sub> at 50 ft. The maximum noise level generated by water trucks and pickup trucks is approximately 75 dBA L<sub>max</sub> at 50 ft from these vehicles. Two pieces of equipment with equal sound levels increase the noise level by 3 dBA. Assuming that each piece of construction equipment operates with a usage factor of 40 percent at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 86 dBA L<sub>max</sub> and 84 dBA L<sub>eq</sub> (equivalent continuous noise level) at a distance of 50 ft

and 82 dBA  $L_{eq}$  (equivalent continuous noise level) at a distance of 50 ft from the active construction area.

In addition to typical roadway construction activities, pile driving and blasting is expected as part of the Project during construction. The worst-case noise level generated from pile driving would be 101 dBA  $L_{max}$  and 94 dBA  $L_{eq}$  at a distance of 50 ft when pile driving activities are assumed to operate with a usage factor of 20 percent. Blasting is expected to occur just east of Smith Creek as well as toward the east where the alignment crosses to the south of the hillside before crossing the San Gorgonio River.

Air overpressure (blast noise) dB levels for confined blast charges depend on many factors (e.g., the charge weight used for the blast, the depth of burial of the charge, the terrain features and other natural screening, the orientation of the blast, the velocity of the blast progression, atmospheric conditions, and temperature gradients). Due to the varying factors of noise levels associated with blasting which are not available at this time, once final construction plans are available, an assessment of the potential noise impacts associated with blasting should be completed in order to show compliance with USBM and OSMRE standards. For the purpose of evaluating potential noise impacts from blasting, the worst-case noise level generated from blasting would be 94 dBA  $L_{max}$  and 84 dBA  $L_{eq}$  at a distance of 50 ft when blasting are assumed to operate with a usage factor of 10 percent.

The following discusses potential construction noise impacts in the County of Riverside and in the City of Banning for both Alternative 5 and Alternative 12 (Preferred Alternative).

### *County of Riverside*

The closest residences in the County portion of the Project area are located approximately 50 ft from the Project construction area and may be subject to short-term noise of 86 dBA  $L_{max}$  generated by construction activities. The closest residences in the County portion of the Project area are located approximately 620 ft from proposed pile driving and may be subject to short-term noise of 90 dBA  $L_{max}$ . The closest residences in the County portion of the Project area are located approximately 2,700 ft from proposed blasting location and may be subject to short-term noise of 78 dBA  $L_{max}$ . Noise levels generated from short-term construction activities would increase existing ambient noise levels in the Project area, but the increase in ambient noise level would no longer exist after construction of the Project

is completed. In addition, the County would require the compliance of Section 9.52.020 of the County Code, which limits construction hours to between the hours of 6:00 a.m. and 6:00 p.m. from June to September and between the hours of 7:00 a.m. and 6:00 p.m. from October to May even though the County Code exempts noise levels generated from capital improvement projects. For construction activities occurring outside of the construction hour limits mentioned above, compliance with the maximum exterior daytime and nighttime noise standards specified in Section 9.52.040 of the County Code would be required. The implementation of avoidance and minimization Measure NOI-1 would further minimize construction noise impacts. Therefore, potential construction noise impacts would be less than significant.

### *City of Banning*

The closest residences in the City portion of the Project area are located approximately 40 ft from the Project construction area and may be subject to short-term noise of 86 dBA  $L_{eq}$ . The closest residences in the City portion of the Project area are located approximately 4,200 ft from proposed pile driving and may be subject to short-term noise of 56 dBA  $L_{eq}$ . The closest residences in the City are located approximately 4,500 ft from proposed blasting location and may be subject to short-term noise of 45 dBA  $L_{eq}$ . Standard building construction in Southern California would provide 24 dBA (EPA 1978) or more in noise reduction from exterior to interior with windows and doors closed. With the exterior-to-interior noise attenuation of 24 dBA, the interior noise levels of the closest residences would be exposed to noise levels of 60 dBA  $L_{eq}$  from construction. Interior noise levels of the closest residences would be exposed to noise levels of 32 dBA  $L_{eq}$  from proposed pile driving. Interior noise levels of the closest residences would be exposed to noise levels of 21 dBA  $L_{eq}$  from proposed blasting. Noise levels associated with Project construction activities at the closest residences would exceed the City's interior noise standard of 55 dBA for intervals of more than 15 minutes per hour to between the hours of 7:00 a.m. and 6:00 p.m. even though the City Municipal Code exempts noise levels generated from capital improvement projects. If construction activities occur outside of the construction hours mentioned above, compliance with the maximum exterior noise standards specified in Section 8.44.070 of the City's Municipal Code would be required. Implementation of avoidance and minimization Measure NOI-1 would be required to reduce potential construction noise impacts. Even though the increase in ambient noise level would no longer exist after construction of the Project is completed, short-term construction would generate noise levels higher than existing ambient noise levels in the Project area. In addition, with the implementation of



avoidance and minimization Measure NOI-1, noise levels generated by construction activities would remain a potentially significant impact.

### **Avoidance and Minimization Measure**

**NOI-1 Construction Noise.** The County of Riverside's (County) Resident Engineer shall verify that all construction plans include notes stipulating the following:

- Grading and construction contractors shall use equipment that generates lower vibration levels such as rubber-tired equipment rather than metal-tracked equipment.
- To the extent feasible, sound control blankets shall be placed such that the line of sight from ground-level construction equipment and sensitive receptors would be blocked. For example, an 8-foot (ft) high sound control blanket that has a minimum Sound Transmission Class (STC) rating of 28 would provide a noise level reduction of 11 A-weighted decibels (dBA) when the construction equipment is located approximately 50 ft from the sound control blanket while the receptor is located approximately 10 ft on the other side.
- Construction haul truck and materials delivery traffic shall avoid residential areas whenever feasible.
- The construction contractor shall place noise-generating construction equipment and locate construction staging areas away from sensitive uses, whenever feasible.
- The construction contractor shall schedule high-noise producing activities between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption to sensitive uses.
- All residential units located within 500 ft of the construction site shall be sent a notice regarding the construction schedule. A sign, legible at a distance of 50 ft shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities.

**Discussion:** *Long-Term Off-Site Traffic Noise Impacts*

Potential long-term noise impacts associated with project operations are solely from traffic noise. Long-term noise impacts were evaluated based on the noise standards in the Noise Element of the County of Riverside and City of Banning General Plan. According to the County and City's Noise Elements, the long-term operational exterior noise standard for residential uses is 65 dBA CNEL.

Potential traffic noise impacts within the Project area under both Alternative 5 and Alternative 12 (Preferred Alternative) were evaluated based on the studied roadways and Future Year (2038) without and with project volumes were obtained from Table 5-2 of the *Traffic Operational Analysis Revised Final Report* (April 2015). Traffic noise impacts within the Project area were identified when traffic noise would increase by 3 dBA or more and when the future with project noise levels at 50 ft from the roadway centerline of the outermost lane would exceed 65 dBA CNEL. A noise level difference of 3 dBA is generally the point at which the human ear will perceive a difference in noise level (Caltrans, May 2011). Roadways within the Project area for which traffic volumes would increase by two times or more were identified because these roadways would increase traffic noise level, by 3 dBA or more. The list of roadways and the traffic volume comparison to determine the increase in traffic volumes are provided in Appendix G of this Final EIR/EA. A list of roadways that would experience an increase in traffic volumes by two times or more is provided below.

- Bypass Road between Hathaway Street and Bonita Avenue
- Bonita Avenue between Morongo Trail and Magnolia Street
- Bonita Avenue between Morongo Trail and Orange Street
- Charles Street between Hargrave Street and Hathaway Street
- Wesley Street between San Gorgonio Avenue and Hargrave Street
- Wesley Street between Hargrave Street and Hathaway Street
- Barbour Street between Hargrave Street and Hathaway Street
- Lincoln Street between Hargrave Street and Hathaway Street
- Hathaway Street between Lincoln Street and Barbour Street
- Hathaway Street between Barbour Street and Bypass Road
- Hathaway Street between Bypass Road and Charles Street
- Hargrave Street between Charles Street and Wesley Street

Three roadway segments listed below were removed from the list above due to low traffic volumes as an average daily traffic of 3,000 or lower would confine the 65 dBA CNEL impact zone within the roadway right-of-way.

- Wesley Street between San Geronio Avenue and Hargrave Street
- Wesley Street between Hargrave Street and Hathaway Street
- Hargrave Street between Charles Street and Wesley Street

The FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions for a total of nine roadway segments identified above and to determine the noise level at 50 ft from the roadway centerline of the outermost lane under both Alternative 5 and Alternative 12 (Preferred Alternative). This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. These noise levels represent worst-case scenarios, which assume no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and the model printouts are provided in Appendix G of this EIR.

Table 3.16 shows the roadway segments that would increase traffic noise levels by 3 dBA or more (doubling of traffic volume or more) and traffic noise levels at 50 ft from the roadway centerline of the outermost lane under both Alternative 5 and Alternative 12 (Preferred Alternative). As shown in Table 3.15, noise levels at 50 ft from the roadway centerline of the outermost lane that exceed 65 dBA CNEL are shown in bold and traffic noise impacts along these roadway segments would be significant. Mitigation measures in the form of sound walls were not considered for front-facing residences because areas in front yards and driveways are not considered noise-sensitive.<sup>1</sup> However, mitigation measures in the form of sound walls were considered for residences with side and rear yards.

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<sup>1</sup> Residential front yards are not considered noise-sensitive because there are no active uses. Active uses are areas where people are exposed to traffic noise for an extended period of time on a regular basis (for example, backyard of a single-family residence).

Table 3.16 Year 2038 Traffic Noise Levels Without and With Project

Roadway Segment	Year 2038 Without Project (Baseline)					Year 2038 With Project						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Lincoln Street between Hargrave Street and Hathaway Street	2,900	59	118	250	68.3	12,100	9,200	141	301	647	<b>74.5</b>	<b>6.2</b>
Barbour Street between Hargrave Street and Hathaway Street	310	< 50	< 50	< 50	52.6	3,900	3,590	< 50	< 50	97	63.6	11.0
Charles Street between Hargrave Street and Hathaway Street	4,000	< 50	< 50	99	63.2	8,200	4,200	< 50	75	160	<b>66.3</b>	<b>3.1</b>
Hathaway Street between Lincoln Street and Barbour Street	2,900	< 50	57	114	63.1	12,100	9,200	67	137	291	<b>69.3</b>	<b>6.2</b>
Hathaway Street between Barbour Street and Bypass Road	1,900	< 50	< 50	88	61.2	15,300	13,400	77	159	339	<b>70.3</b>	<b>9.1</b>
Hathaway Street between Bypass Road and Charles Street	400	< 50	< 50	< 50	54.4	5,200	4,800	< 50	80	167	<b>65.6</b>	<b>11.2</b>
Bypass Road between Hathaway Street and Bonita Avenue	-	-	-	-	-	17,900	17,900	203	434	935	76.9	-
Bonita Avenue between Morongo Trail and Magnolia Street	3,400	64	131	278	69.0	19,200	15,800	191	409	879	<b>76.5</b>	<b>7.5</b>
Bonita Avenue – Magnolia Street and Orange Street	2,700	57	113	239	68.0	17,300	14,600	178	381	820	<b>76.0</b>	<b>8.0</b>

Source: Compiled by LSA Associates, Inc. (January 2017).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

**Bold** indicates areas adjacent to the roadway would be potentially significant before mitigation because noise levels exceed the 65 dBA CNEL noise standard at 50 ft from the centerline of the outermost lane and have a project-related traffic noise of 3 dBA or more.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet

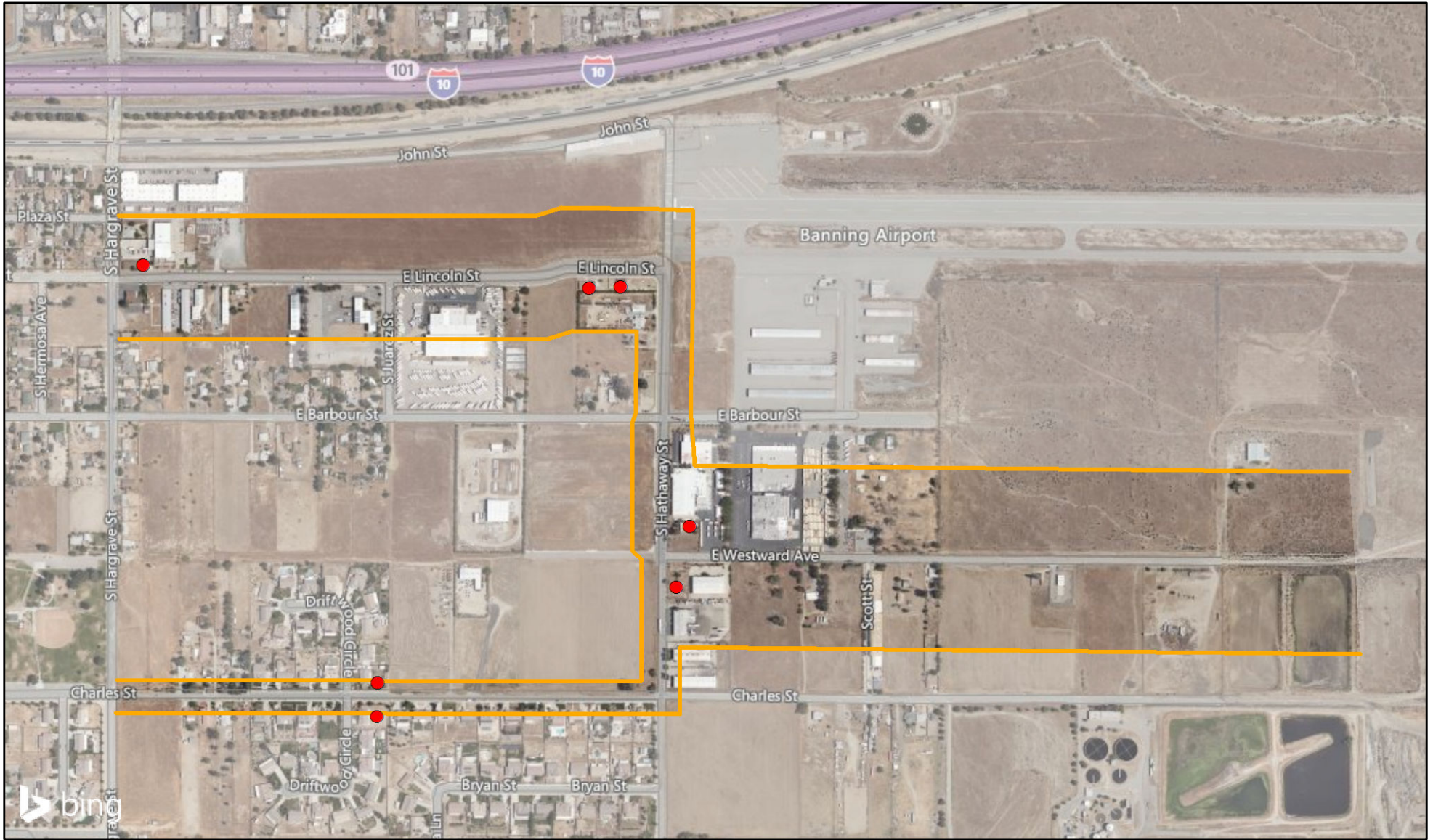
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The following is a discussion of (1) each location in which the side or rear yard has a direct line of sight to a roadway segment as shown in Figure 3-5; (2) the existing noise abatement present at each location; (3) a determination of potential significance; and (4) where necessary, recommended mitigation measures under both Alternative 5 and Alternative 12 (Preferred Alternative).

- **825 East Lincoln Street.** The side yard of this residence currently abuts Lincoln Street and is enclosed by a 6 ft high block wall. Given the increased noise level and taking into consideration the existing wall, noise level from traffic on Lincoln Street would likely exceed 65 dBA CNEL. Though noise level impacts from Lincoln Street would exceed 65 dBA CNEL, it is expected that, due to the proximity to the I-10 Freeway, the existing freight rail line, and the existing industrial uses, noise from those sources would dominate the noise environment in this area. Therefore, providing further mitigation along Lincoln Street would be ineffective in reducing the overall noise level at the noise-sensitive residential use and noise levels at this location would exceed 65 dBA CNEL, resulting in a potentially significant impact.
- **1527 and 1554 East Lincoln Street.** The side yards of these residences currently abut Lincoln Street. Due to the residences being front-facing as well as having direct access to Lincoln Street, the maximum wall height per the City of Banning Code would be 48 inches or 4 ft, which would not break the line of sight between the source and receptor and would not provide the necessary noise reduction to reduce levels to below the 65 dBA CNEL noise standard. Additionally, these residences are in proximity to the I-10 Freeway and the existing freight rail line that produces noise that would dominate the noise environment in this area. Therefore, providing further mitigation along Lincoln Street would be ineffective in reducing the overall noise level at the noise-sensitive residential use and noise levels at these locations would exceed 65 dBA CNEL, resulting in a potentially significant impact.
- **770 and 820 South Hathaway Street.** The structures at these locations, which are zoned industrial, are currently vacant. From a noise perspective, since these homes are impacted by Hathaway Street and Westward Avenue, a wall shielding only one of the roads would not be an effective method to reduce potential noise impacts; therefore, mitigation is not recommended at this time and noise levels at these locations would exceed 65 dBA CNEL, resulting in a potentially significant impact. Additionally, these residences are exposed to noise generated by operations of the adjacent industrial uses.

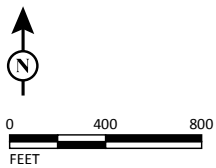


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**LEGEND**

- Noise Impact Locations
- 65 dBA CNEL Contour (Without Shielding)



SOURCE: Bing Maps (2014)

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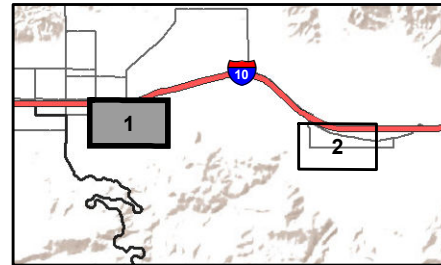
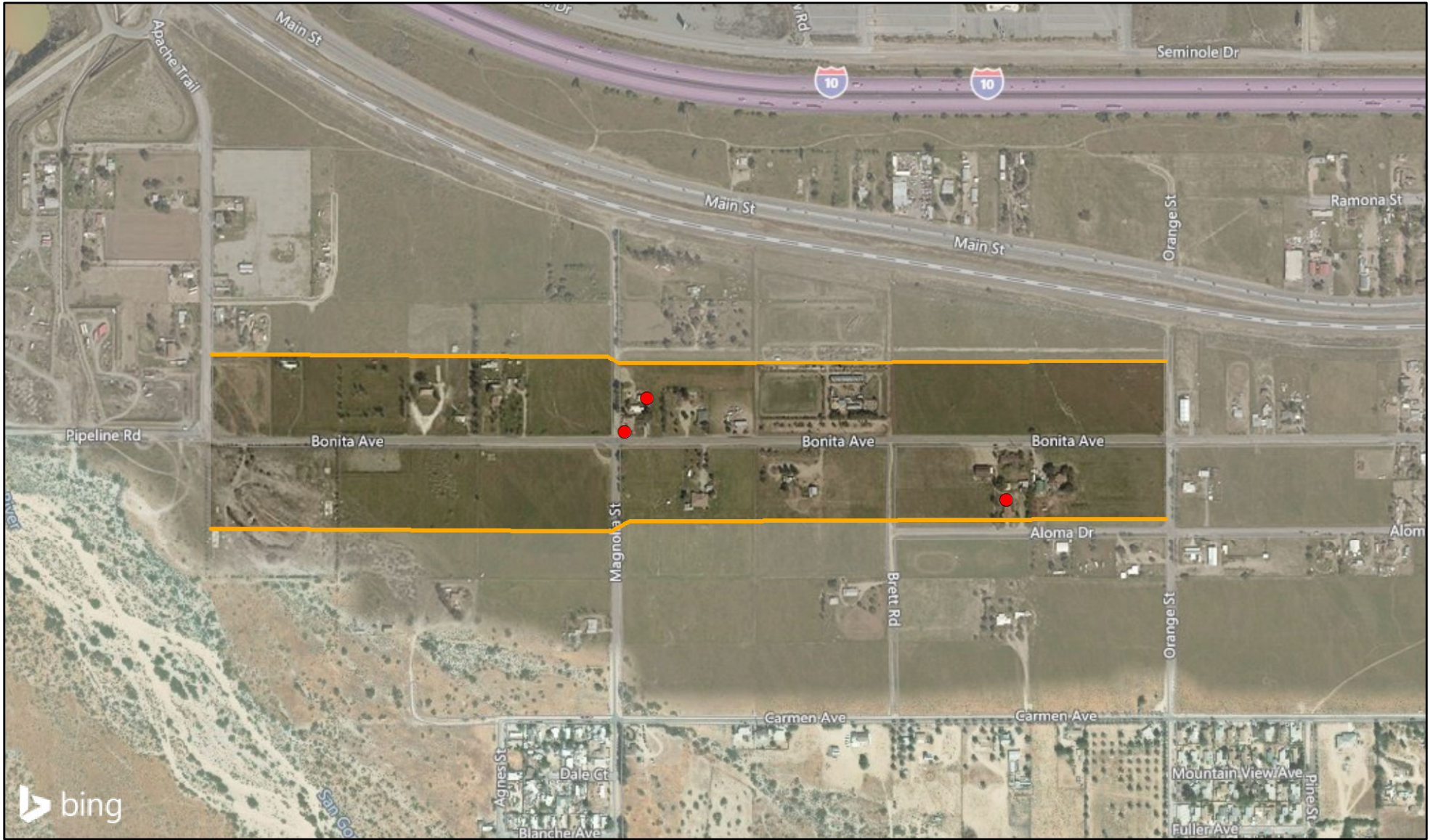


FIGURE 3-5  
Sheet 1 of 2

*I-10 Bypass: Banning to Cabazon*  
 Alternatives 5 and 12 (Preferred Alternative)  
 Potential Noise Impacts

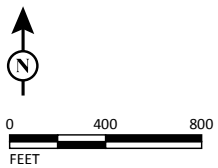
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**LEGEND**

- Noise Impact Locations
- 65 dBA CNEL Contour (Without Shielding)



SOURCE: Bing Maps (2014)

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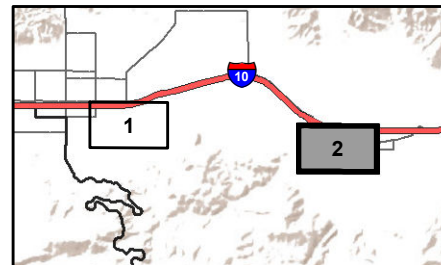


FIGURE 3-5  
Sheet 2 of 2

*I-10 Bypass: Banning to Cabazon*  
 Alternatives 5 and 12 (Preferred Alternative)  
 Potential Noise Impacts

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- **956 and 1004 Driftwood Circle.** These single-family homes have rear yards adjacent to Charles Street, which are surrounded by existing 6 ft high block walls. Factoring in the noise reduction provided by the existing block walls, noise levels would remain below 65 dBA CNEL, and traffic noise would be less than significant.
- **49734 Aloma Drive.** This single-family home has a rear yard that would fall within the 65 dBA CNEL contour. Factoring in shielding provided by the other single-family homes located to the north, would reduce traffic noise levels below 65 dBA CNEL, and traffic noise impact would be less than significant.
- **49340 Bonita Avenue.** The front and side yards of this residence currently abuts Bonita Avenue. Given that the western portion of this residence is considered the property's front yard, the County or Riverside's maximum wall height of 48 inches or 4 ft, would not break the line-of-sight between the source and receptor and would not reduce traffic noise levels below 65 dBA CNEL. Therefore, traffic noise impacts would be a potentially significant impact.
- **49220 and 49270 Bonita Avenue.** Two single-family residences are located on the northeast corner of the Bonita Avenue and Magnolia Street intersection. Both residences have rear yards that are located within the 65 dBA CNEL impact zone from traffic noise impacts on Bonita Avenue. Due to secondary issues including the blocking of views, graffiti nuisance potential, and the existing rural setting where a wall would not be common, the construction of property line sound walls was not considered, thus resulting in a potentially significant impact.

**XIII.b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?**

**Construction-Related Short-Term Vibration Impacts Significance**

**Determination:** *Less Than Significant with Mitigation*

**Long-Term Traffic Vibration Impacts Significance Determination:** *Less than Significant*

**Discussion:** *Construction Vibration Impacts*

Vibration generated by construction equipment can result in varying degrees of ground vibration, depending on the equipment. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings on soil near an active construction area respond to these vibrations, which range from imperceptible to low rumbling sounds with



perceptible vibrations and slight damage at the highest vibration levels. Typically, construction-related vibration does not reach vibration levels that would result in damage to nearby structures.

Table 3.6 shows that the vibration damage threshold for continuous/frequent intermittent sources is 0.10 peak-particle velocity (PPV) (inches per second [in/sec]) for structures that are fragile to vibration damage, 0.25 PPV (in/sec) for historic and some old buildings, 0.30 PPV (in/sec) for older residential buildings, and 0.5 PPV (in/sec) for new residential structures. These thresholds were used to evaluate the potential for short-term, construction-related, ground-borne vibration during construction of the Project.

Construction of the Project under both Alternative 5 and Alternative 12 (Preferred Alternative) would generate vibration levels from trucks, bulldozers, pile driving, and blasting. The use of trucks and bulldozers would be utilized throughout the entire project area while pile driving would only occur at the location of the proposed bridges and blasting would only occur at the Smith Creek area. Based on the Caltrans' Transportation and Construction Vibration Guidance Manual, a loaded truck, large bulldozer, and pile driving would generate vibration levels of 0.076 PPV (in/sec), 0.089 PPV (in/sec), and 0.644 PPV (in/sec), respectively, when measured at 25 ft. Vibration levels generated from blasting depend on the size of the charge.

Based on the worst-case condition under both Alternative 5 and 12 (Preferred Alternative), the closest residential structure from the Project boundary is approximately 40 ft. At this distance, the closest residential structure would experience vibration levels of up to 0.045 PPV (in/sec) from bulldozing activities. This vibration level would be below the damage threshold of 0.10 PPV (in/sec) for fragile buildings. The closest residential structure from pile driving is approximately 620 ft. At this distance and would experience vibration levels of up to 0.019 PPV (in/sec). This vibration level would be below the damage threshold of 0.10 PPV (in/sec) for fragile buildings. Since, vibration levels generated from blasting is dependent on the size of the charge and distance, blasting would be required to be designed to be lower than the vibration damage potential threshold criteria for structures located within the Project area.

Potential blasting would be located in the Smith Creek area in the County, which will require a detail evaluation of potential noise and vibration impacts and County approval. The nearest residence is a ranch house located approximately 1,320 ft from

the proposed blasting activities and coordination with residences when detailed blasting information is available would not be required. However, since major power transmission utility lines (Southern California Edison) and major transmission gas lines (Southern California Gas Company) are located within approximately 300 ft and 1,000 ft, respectively, from proposed blasting activities, coordination would be required when detailed blasting information becomes available.

The implementation of avoidance and minimization Measure NOI-2, would reduce potential vibration impacts from blasting during construction to less than significant.

**Discussion:** *Traffic Vibration Impacts*

The Project under both Alternative 5 and Alternative 12 (Preferred Alternative) would include new asphalt pavement with proper maintenance. As a result, there would be no potholes, bumps, or other discontinuities in the road surface that would generate ground-borne vibration or noise impacts from vehicular traffic traveling on the I-10 Bypass in the Project area. Therefore, ground-borne vibration and ground-borne noise impacts generated from operation of the Project would be less than significant.

**Avoidance and Minimization Measure**

**NOI-2**      **Blasting.** The County’s Project Engineer shall verify that all construction plans include notes stipulating that all blasting activities be designed such that blasting vibration levels are lower than the vibration damage potential threshold criteria for structures located within the Project area.

To avoid potential impact to power transmission lines and gas lines located near planned blasting activities during construction, the County’s Resident Engineer shall coordinate with Southern California Edison and Southern California Gas Company. This coordination will occur once more detailed information (e.g., the size of the proposed blasting charge and its distance to nearest electric and gas utility lines) becomes available regarding planned blasting activities during construction.

**XIII.c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Significance Determination:** *Potentially Significant Impact*

A substantial permanent increase associated with the Project under both Alternative 5 and Alternative 12 (Preferred Alternative) would occur if the Project would cause noise levels to increase by 3 dBA CNEL or more. A noise level difference of 3 dBA is generally the point at which the human ear will perceive a difference in noise level (Caltrans, May 2011). As discussed in the long-term off-site traffic noise impacts discussion, the long-term traffic noise sources would cause an increase in ambient noise levels of more than 3 dBA at sensitive receptors in the vicinity of the Project site; thus, the impact would be potentially significant without mitigation. Due to secondary issues including the blocking of views, graffiti nuisance potential and the existing rural setting, in addition to City and County Code restrictions on front yard wall heights (discussed in long-term off-site traffic noise impacts section), the construction of property line sound walls was not considered, thus resulting in a potentially significant impact.

**XIII.d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Significance Determination:** *Less Than Significant with Mitigation*

As discussed in Response XII.a. above, implementation of the Project under both Alternative 5 and Alternative 12 (Preferred Alternative) would include construction activities that would result in a substantial temporary increase in ambient noise levels in the Project site vicinity above levels existing without the Project, but these increased noise levels would no longer occur once construction is completed. Sensitive receptors in the Project vicinity are as close as 40 ft from proposed construction areas. Compliance with the hours specified in the County Code and the City's Municipal Code regarding construction activities, as well as the implementation of mitigation NOI-1 would minimize construction noise impacts on adjacent noise-sensitive land uses when construction occurs near the Project boundary. Therefore, substantial temporary or periodic increase in ambient noise levels from construction activities for the Project would be less than significant.

**XIII.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?**

**Significance Determination:** *No Impact*

The existing Banning Municipal Airport is approximately 0.2 mile (1,100 ft) north of Alternative 5 and Alternative 12 (Preferred Alternative). The Build Alternatives are located outside of the 60 dBA CNEL noise contour. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels generated by the operation of the Banning Municipal Airport.

**XIII.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?**

**Significance Determination:** *No Impact*

No private airstrips are located in the vicinity of Alternative 5 and Alternative 12 (Preferred Alternative). As a result, the Build Alternatives would not expose people to excessive noise levels generated by the operations at private airstrips.

**XIV. POPULATION AND HOUSING**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIV. POPULATION AND HOUSING -- Would the project:</b>				
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"/>

The potential for the Build Alternatives to result in impacts related to population and housing growth is discussed in Section 2.2, Growth, of this Final EIR/EA. The following analysis is based on the information in Section 2.2, Growth, and the Land Use Elements of the City General Plan and the County General Plan.

**Would the Project:**

**XIV.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)?**

**Significance Determination:** *Less Than Significant Impact*

As discussed in Section 2.2, Alternative 5 could potentially result in minor shifts in the locations of growth and could potentially result in shifts in the timing of growth in the study area. Specifically, Alternative 5 could affect the timing and location of development. As soon as the Project is built, immediate access would be provided to large areas of flat developable land, which are currently inaccessible/blocked off by sand mining or floodplains/creeks. There is currently high pressure for development in the area, as is seen especially north of I-10, where access was provided for several outlet shopping centers. However, Alternative 5 would not result in significant changes in the growth forecast for the study area based on adopted General Plans and other land use plans.

The Morongo Band of Mission Indians supports the new bypass road under Alternative 12 (Preferred Alternative) to facilitate development of land uses in their General Plan. Alternative 12 (Preferred Alternative) would facilitate and speed the conversion of open space land to developed uses by providing access. The impact is dependent upon economic forces and is not expected to be substantial. The new

bypass road would be a through road and would not provide driveways or frontage roads to facilitate new access. The Build Alternatives would not affect the density or type of development on these parcels because future growth is expected to be consistent with currently applicable General Plans and other governing land use plans; growth would be largely in response to market pressure and other factors, not only the presence of the new road.

Alternative 12 (Preferred Alternative) could result in greater shifts in the locations of growth than Alternative 5 because there is more land available for development north of Smith Creek, but would potentially result in shifts in the timing of growth in the study area the same as Alternative 5. However, Alternative 12 (Preferred Alternative) would not result in significant changes in the growth forecast in the study area based on adopted General Plans and other land use plans. Impacts would be less than significant.

**XIV.b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**Significance Determination:** *No Impact*

Neither Build Alternative would displace any housing and would not necessitate construction of replacement housing elsewhere. No impact would occur.

**XIV.c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**Significance Determination:** *No Impact*

Neither Build Alternative would displace people and would not necessitate construction of replacement housing elsewhere. No impact would occur.



**XV. PUBLIC SERVICES**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XV. PUBLIC SERVICES -- Would the project:</b>				
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 public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The potential for Alternative 5 and Alternative 12 (Preferred Alternative) to result in impacts related to public services are discussed in Sections 2.3, Community Impacts, and 2.4, Utilities/Emergency Services, in this Final EIR/EA. The following analyses are based on that information.

**Would the Project:**

**XV.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 public services:**

- i. Fire protection?**
- ii. Police protection?**

**Significance Determination:** *No Impact*

As discussed in Section 2.3, Community Impacts, the Project would provide a road connection between the City and Cabazon other than I-10, which will improve response times during emergencies for areas along this section of I-10 when it is backed up or closed. Alternative 5 and Alternative 12 (Preferred Alternative) would not require construction of new fire protection or law enforcement facilities and no impacts would result.

The Desert Hills (Banning) weigh station operated by the California Highway Patrol (CHP) is on the segment of I-10 parallel to the proposed bypass facility. To preclude trucks from using the bypass to avoid the weigh station, truck enforcement turnouts will be provided in both directions to allow the CHP to enforce the weigh station restrictions. Truck enforcement turnouts are a project feature requested as a result of stakeholder coordination by the CHP. Therefore, neither Build Alternative would result in impacts related to operation of this weigh station.

**XV.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 public services:**

**iii. Schools?**

**iv. Parks?**

**Significance Determination:** *No Impact*

The Build Alternatives would not temporarily or permanently affect schools, parks, or other public facilities because, with implementation of the Project, access to these facilities would be improved. Students would no longer need to use I-10 to access their high school and, therefore, access to Banning High School from Cabazon would be improved.

The Project does not include construction of housing or other uses that would necessitate construction of additional public facilities, nor would it cause physical impacts to government facilities in the study area. Additionally, the Project would not result in physical impacts to schools or parks/ recreational facilities stemming from the need to alter these public facilities or increase public services. Rather, improving access to these facilities would be a benefit, and would allow the public to utilize the facilities more efficiently. No impacts would result.

**XVI. RECREATION**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XVI. RECREATION -- Would the project:</b>				
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"/>

The potential for the Build Alternatives to impact recreational resources is discussed in Section 2.1, Land Use, in this Final EIR/EA. The following analyses are based on information in that section.

**Would the Project:**

**XVI.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?**

**Significance Determination:** *No Impact*

The Build Alternatives do not include the construction of any new residential or commercial uses and would not result in growth in the study area that is not currently identified in the applicable adopted General Plans. Although the Build Alternatives would provide a new road in the study area, there are no parks or other recreation resources along the alignments of the Build Alternatives and, as a result, Alternative 5 and Alternative 12 (Preferred Alternative) would not result in increased demand for parks in the area. No mitigation is needed.

**XVI.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?**

**Significance Determination:** *No Impact*

The Build Alternatives will include paved shoulders that could be used by bicyclists and a multi-use path that will provide bicyclists and pedestrians with alternatives to using I-10 when traveling between the City and Cabazon. Those facilities would be part of the improvements in the Build Alternatives and would not require the construction or expansion of other recreation resources in other areas that might have physical impacts on the environment. No mitigation is required.

**XVII. TRANSPORTATION/TRAFFIC**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION/TRAFFIC -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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"/>

The potential for Alternative 5 and Alternative 12 (Preferred Alternative) to result in impacts related to traffic is assessed in the *Traffic Operational Analysis Revised Final Report* (April 2015). The results of that technical study are summarized in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, in this Final EIR/EA. The following analyses are based on information in that technical study.

**Would the Project:**

**XVII.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?**

**Significance Determination:** *Potentially Significant Impact*

## Compatibility with City and County General Plan Policies

As shown in Table 2.1.4 in Section 2.1 in this Final EIR/EA, and as listed below, the Project would be inconsistent with Policy 6 of the City of Banning's General Plan Circulation Element. Policy 6 sets a minimum standard of LOS D for all roadways within the City of Banning to which the intersections listed below fail to meet. The Project will have a potentially significant, unmitigated impact at the following intersections:

### *Opening Year 2022*

- Intersection No. 3 (I-10 Eastbound ramps/South 8<sup>th</sup> Street)

Intersection No. 3 results in LOS E in the AM peak hour in the Opening Year (2022). An operational improvement to address this deficiency would require a review of the full interchange including all ramps, mainline, and merge/diverge operations for near-term and long-term conditions in accordance with Caltrans requirements. This process is outside the scope and feasibility of the I-10 Bypass project.

### *Future Year 2038*

- Intersection No. 15 (Charles Street/South Hargrave Street)
- Intersection No. 18 (North Hathaway/East Barbour Street)

Intersection No. 15 results in LOS F in the PM peak hour, and Intersection No. 18 results in LOS E in the AM peak hour (worst approach only) and LOS F in the PM peak hour in the Opening Year (2022). These impacts are due to anticipated area-wide growth in accordance with City and County General Plan documents and are unavoidable for the I-10 Bypass Project, which does not generate new traffic. Through the development approval and CEQA processes, the need for and timing of improvements will be analyzed by the City of Banning. When needed, these improvements will be analyzed under the environmental review process and addressed through capital improvement projects or conditions of approval.

The need to improve the existing Intersection Nos. 15 and 18 is a result of cumulative conditions and the anticipated area-wide growth associated with cumulative projects in the Project area and the redistribution of trips associated with the Project. As previously identified, the Project does not generate new traffic. Improvements to intersections are not considered to result in growth inducing impacts. This is because the purpose of intersection improvements is to maintain an acceptable level of operational performance (i.e., level of service). Improvements to existing

intersections would not provide access to previously inaccessible areas which is a primary factor contributing to growth inducement.

The ultimate build-out concept for the I-10 Bypass Project roadway (Phase 2) would include a four-lane facility. The need and timing of this expansion phase of the I-10 Bypass Project will be analyzed by the City, the County, and conceivably Caltrans, depending on the extent of improvements proposed during Phase 2.

## **Compatibility with City and County General Plan Circulation Systems**

### *Bicycle and Pedestrian Facilities*

Currently, pedestrian and bicycle paths, lanes, or sidewalks do not exist between the City of Banning and the community of Cabazon. Any non-motorized travel between the two communities currently requires either use of I-10, trespassing along the railroad right-of-way, or trespassing on other private property.

The Project would provide sidewalks within the City of Banning, a shared use path within unincorporated Riverside County, and shoulders useable by bicyclists in the City of Banning and unincorporated Riverside County. In addition, the Project would provide shoulders along Apache Trail between the new Bypass roadway and the railroad crossing adjacent to the I-10/Morongo Trail Interchange for pedestrian and bicycle use. The Project would provide improvements to bicycle and pedestrian facilities, and no impacts to bicycle and pedestrian facilities would result.

### *Mass Transit*

The Project would provide a new route that can be used by the local mass transit system, Pass Transit, a local bus system. The Project would provide beneficial improvements to mass transit, and no impacts to mass transit would result.

### *Regional Trails*

The 2015 Riverside County General Plan documents include a proposed multipurpose trail, the San Gorgonio River Regional Trail. The proposed bridge over the San Gorgonio River would not obstruct the use of a future trail; therefore, there would be no impacts to this trail as a result of the Project.

## **XVII.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?**

**Significance Determination:** *No Impact*



The Project is included in the SCAG 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy and the 2019 Federal Transportation Improvement Program (FTIP). Therefore, the Project does not conflict with the goals and policies in these plans.

The Riverside County Congestion Management Program (CMP) was first established in 1990 under Proposition 111. Proposition 111 established a process for each metropolitan county in California to designate a Congestion Management Agency (CMA) that would be responsible for development and implementation of the CMP within county boundaries. However, the Riverside County CMP regulates development projects and does not apply to transportation projects; therefore, the Riverside County CMP does not apply to the Project. No impacts would result.

**XVII.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?**

**Significance Determination:** *No Impact*

The design of the Build Alternatives will comply with FAA standards and will not include the construction or operation of any structures that could obstruct air traffic in the vicinity of Banning Municipal Airport or require any change in air traffic patterns in the vicinity of that airport. No mitigation is required.

**XVII.d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Significance Determination:** *No Impact*

The road facilities in the Build Alternatives will be designed, constructed, and operated consistent with existing County and City design and operation standards for this type of road. As a result, the Build Alternatives will not result in increased road hazards or incompatible uses. No mitigation is needed.

**XVII.e. Result in inadequate emergency access?**

**Significance Determination:** *No Impact*

The Build Alternatives will provide alternative access to I-10 between the City and Cabazon that will improve the travel time of emergency services between those two

areas. As a result, the Build Alternatives will not result in inadequate emergency access in the study area. No mitigation is needed.

**XVII.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?**

**Significance Determination:** *No Impact*

The Build Alternatives will include paved shoulders that could be used by bicyclists and a multi-use path that will provide bicyclists and pedestrians with alternatives to using I-10 when traveling between the City and Cabazon. The road facility provided in the Build Alternatives will be designed to accommodate public transit vehicles and operations. Therefore, the Build Alternatives will benefit bicyclists and pedestrians traveling in the area; will support public transit operations; and will not conflict with adopted policies, plans, or programs regarding public transit, and bicycle and pedestrian facilities. No mitigation is needed.

**XVIII. UTILITIES AND SERVICE SYSTEMS**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XVIII. UTILITIES AND SERVICE SYSTEMS -- Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

The potential for the Build Alternatives to result in impacts related to utilities and service systems is discussed in Section 2.4, Utilities/Emergency Services, in this Final EIR/EA. The following analyses are based on information in Section 2.4.

**Would the Project:**

**XVIII.a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**Significance Determination:** *No Impact*

The construction and operation of either of the Build Alternatives involve a new roadway and bridges, would not generate wastewater, would not require the construction of new wastewater treatment facilities, and would not increase demand for wastewater treatment facilities. Portable facilities would be utilized during construction activities. Therefore, no impacts related to wastewater would occur under Alternative 5 and Alternative 12 (Preferred Alternative).

**XVIII.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?**

**XVIII.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?**

**Significance Determination:** *Less Than Significant Impact*

Because roadways do not currently exist along the alignments for Alternative 5 and Alternative 12 (Preferred Alternative), the Project would increase impervious surface area, increasing storm water runoff rates and volumes as a result. No existing storm water drainage facilities are located in the undeveloped parts of the Project area. New storm water drainage facilities would be constructed along the new roadway under Alternative 5 and Alternative 12 (Preferred Alternative). New drainage systems were included as part of the Project and have been addressed in this Final EIR/EA. As part of the Project under Alternative 5 and Alternative 12 (Preferred Alternative), some of the drainage from the facilities would be treated by permanent storm water treatment BMPs such as infiltration swales and basins to minimize the discharge of pollutants to Smith Creek and San Geronio River. The drainage ditches/swales will be approximately 10 to 20 ft wide running parallel to the roadway with inlets. Water quality basins within the designated roadway right-of-way will run linear and parallel to the roadway, ranging in width from approximately 10 ft to 75 ft. The construction-related adverse effects on water quality will be minimized based on the implementation of construction BMPs (e.g., fiber rolls, silt fencing, stabilized construction entrances/exits, sediment basins, and concrete washouts). With the BMPs properly designed, implemented, and maintained, no adverse effects are anticipated to water quality during construction of the Project. Drainage facilities are incorporated into the Projects and the impacts of the construction of these facilities would be minimized. The Project will consider features such as detention basins to address the increase in runoff due to the addition of impervious surface areas. Therefore, less than significant impacts to the environment would occur as a result of new storm water facilities, which are necessary to protect the environment by capturing roadway run-off.

**XVIII.d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**Significance Determination:** *No Impact*

Water would be used during construction to reduce fugitive dust in compliance with SCAQMD Rules 402 and 403. Construction activities will encompass grading of

approximately 82 acres for Alternative 5 and 80 acres for Alternative 12 (Preferred Alternative). Approximately 4.7 million gallons<sup>1</sup> of water would be used during construction. This water use would be spread out over a period of 6 months and would therefore, not increase water use substantially during any period. This water use would not impact current water supplies or require new entitlements or resources. Based on available funding, some landscaping may be provided as part of the Build Alternatives. All graded slopes will be revegetated with drought-tolerant native species. These native drought-tolerant plants will require minimal long-term water use. Slopes will be graded to blend into the existing terrain of the area. This will also consider drainage patterns to maintain stability. Native plants will be placed along the slopes, and will assist with slope stabilization. Additional short-term measures will be included within the final design documents to address the conditions during plant establishment. No permanent landscape irrigation is planned as part of the Project. Temporary landscape irrigation, if used during the plant establishment period, would result in a temporary minimal increase in water demand in the area compared to existing conditions. However, this minimal increase in water demand would not require or result in the construction of new water treatment facilities or the expansion of existing facilities. No impacts would occur.

**XVIII.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?**

**Significance Determination:** *No Impact*

Alternative 5 and Alternative 12 (Preferred Alternative) would not generate any wastewater because portable facilities would be utilized during construction and would not result in impacts related to the adequacy of wastewater treatment in the area.

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<sup>1</sup> Assuming a six month period, six hours of single water truck operation per day, and average output of 6,000 gallons per hour, water use was calculated using this formula: 26 weeks x 5 days/week x 6 hours/day x 6,000 gallons/hour.

**XVIII.f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

**XVIII.g. Comply with federal, state, and local statutes and regulations related to solid waste?**

**Significance Determination:** *Less Than Significant Impact*

Solid waste generated during construction of Alternative 5 and Alternative 12 (Preferred Alternative) would be disposed of in accordance with federal, State, and local regulations related to recycling, including the California Integrated Waste Management Act (Assembly Bill 939), which would minimize the amount of waste material entering local landfills. While most of the soil will be exported to an environmentally cleared site, some of this soil may be used for other projects and would not be disposed of. Only minimal amounts of solid waste would be generated during operation of Alternative 5 and Alternative 12 (Preferred Alternative). For the volume of cut and fill material required for construction, refer to Table S.4, Summary of Impacts of Alternatives, in the Executive Summary of this document. Proper handling and disposal of hazardous waste and materials in accordance with local, State, and federal regulations prior to and during construction of Alternative 5 and Alternative 12 (Preferred Alternative), as applicable, would be conducted if hazardous waste or materials are discovered during construction of the Build Alternatives. Impacts related to solid waste for Alternative 5 and Alternative 12 (Preferred Alternative) would be less than significant under CEQA.



**XIX. WILDFIRES**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XIX. WILDFIRES--</b> Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion of potential impacts related to wildfire is based on evaluation of California Fire Hazard Severity Maps, the City of Banning General Plan, the County of Riverside General Plan, and sections in this EIR/EA (Section 2.4, Utilities and Emergency Services, 2.5, Traffic and Transportation, and 2.8, Hydrology and Floodplain). Given the scope of the Build Alternatives, potential impacts related to wildfires would be less than significant for both Build Alternatives. Build Alternative 12 (Preferred Alternative) contains less area within a Very High Wildfire Severity Zone and therefore would have less impact related to wildfires than Build Alternative 5.

**XIX.a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

**Significance Determination:** *Less than Significant Impact.*

There are two medical centers in the vicinity; the Desert Regional Medical Center in Palm Springs, which is approximately 16.5 miles from Cabazon, and the San Gorgonio Memorial Hospital in Banning, which is approximately 10 miles from Cabazon. Mobility from Cabazon to Banning in the existing condition is impaired due to established deficiencies on I-10. As shown on Figure 3.4, Fire Station Locations, there are two fire stations within the immediate Project area. Additionally, the Morongo Reservation Fire Department has one station north of SR-60, approximately

7 miles from the Project area. The City of Banning, the County of Riverside, and the Morongo Reservation Fire Department coordinate their fire protection efforts and respond to calls in adjoining communities. I-10 is the only east-west connection between Cabazon and Banning, which can result in impaired emergency response times. Because several of the on- and off- ramps are forecasted to operate at unacceptable LOS (Section 2.5, Traffic and Transportation), response times can be expected to worsen under the No Build Alternative.

According to Section 1.2.5, full closures on I-10 between Cabazon and Banning has resulted in travel delays exceeding 10 hours and impact approximately 100,000 people. The I-10 “Lifeline” Emergency Action Plan (EAP) was developed by multiple local and federal agencies to safely and efficiently address closures on I-10 between Banning and Palm Springs. The EAP recommends the Project as an alternative emergency route. Both of the Build Alternatives are consistent with the EAP and will improve response times and the efficiency of emergency evacuation plans.

Build Alternative 5 would pass through a Very High Severity Wildfire Area and a High Severity Wildfire Area. Build Alternative 12 (Preferred Alternative) would pass through a High Severity Wildfire Area.<sup>1</sup> The improvements to existing roadways which are components of both Build Alternatives occur in areas of Local Responsibility in Banning and Cabazon. The City of Banning Environmental Hazards Element (2003) identifies the area for proposed roadway improvements to Westward Avenue and Hathaway Street as a High Fire Threat Zone. The City of Banning has guidelines for vegetation management in local responsibility zones to minimize combustible materials. The City also designates fuel modification zones in an effort to minimize fire danger by controlling the density and placement of flammable vegetation. In Cabazon, there is a substantial fire risk in hillside terrain due to the presence of highly flammable vegetation (County of Riverside General Plan Safety Element, 2015).

Despite this environmental setting, the operation of the Project would provide improved mobility between Banning and Cabazon, and would minimize emergency response delays between the two communities which would improve accessibility and

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<sup>1</sup> CAL FIRE. Fire Hazard Severity Zone Viewer, <http://egis.fire.ca.gov/FHSZ/> (accessed February 20, 2019).

mobility in the area and reduce traffic congestion, thereby enabling more efficient emergency response and evacuation times in the event of a wildfire.

Construction of the Project would potentially result in temporary delays and/or detours on arterial streets during construction of the Project where there are proposed roadway improvements. Implementation of the Project is expected to increase traffic on Westward Avenue, Hathaway Street, Apache Trail, and Bonita Avenue as a result of traffic from the new connections of these streets to the I-10 Bypass at the east and west ends of Alternatives 5 and 6, but would eliminate several of the forecasted deficiencies in the I-10 vicinity (as described in Section 2.5, Transportation and Traffic). However, the Build Alternatives would provide an additional connection between the City of Banning and community of Cabazon, which would alleviate traffic on I-10. Both Build Alternatives would redistribute traffic and allow motorists to bypass the I-10 mainline, and therefore the on-and-off ramps, proximate intersections, and the at grade crossing along Apache Trail as well. A Transportation Management Plan (TMP) with traffic control plans and related specifications for the construction of the Project is necessary to avoid and/or minimize circulation and delay impacts. With implementation of the TMP as described in mitigation measure TR-1 in Section 2.5 of this EIR/EA, impacts would be less than significant.

The Project does not include any elements, such as permanent road closure or long-term blocking of road access, that would impair or otherwise interfere with emergency response or evacuation in the Project area. The Project would improve accessibility and mobility between the City of Banning and the Community of Cabazon compared to the No Build Alternative. As discussed in Section 2.4, Utilities and Emergency Services, the improvements in traffic flow as a result of the Project are likely to improve emergency response times within the Project area.

**XIX.b. Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**Significance Determination:** *No Impact.*

The Project proposes improvements to existing roadways and a new roadway parallel to I-10 connecting Banning and Cabazon. The Project will not generate an increase in exposure to existing risks within the Project area, and therefore will not expose local

occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Due to the Project site's location in a valley proximate to the San Jacinto and San Gorgonio Mountains, as well as the presence of combustible materials, there is some potential for exacerbated risks in the Project vicinity associated with wildfire pollutants and/or exposure to the spread of a wildfire.<sup>1</sup> However, the Project would not result in an increase in the population within the Project area and therefore would not expose additional occupants to wildfire risks.

Although prevailing winds which exacerbate pollutant concentrations from a wildfire or contribute to the uncontrolled spread of a wildfire may occur, the Project does not increase the population or personnel in the area compared to the No Build Alternative and therefore would not increase existing risks.

**XIX.c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**Significance Determination:** *No Impact.*

Though the Project would require the relocation of several existing utilities, these modifications do not exacerbate fire risk. Build Alternative 5 requires the potential relocation of two SCE transmission lines and up to nine power poles. Build Alternative 12 (Preferred Alternative) requires the potential relocation of two SCE overhead distribution lines, up to eight power poles, three segments of fiber optic cables, one gas line, and two natural gas lines. The Project does not require the installation or maintenance of fuel breaks or emergency water sources, and the modifications to power lines and other utilities would be done under existing permits and according to current regulations; therefore, there will be no impact to wildfire risks that may result in temporary or ongoing impacts to the environment.

**XIX.d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**Significance Determination:** *No Impact.*

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<sup>1</sup> County of Riverside General Plan, Safety Element (2015)

According to the Banning General Plan (2006), landslides and slope instability are considered significant risks near the Project area. The topography is similar in the community of Cabazon.

Although both Build Alternatives would be constructed in the valley below the foothills of the landslide-prone San Jacinto Mountains to the south, the Project would not increase the exposure of people or structures to significant risks. This is because Build Alternative 5 incorporates a southern-facing retaining wall to mitigate the potential effects of slope instability and/or landslide activity in the foothills of the mountains to the south of Smith Creek. Build Alternative 5 requires more cuts to slopes and grading than Build Alternative 12 (Preferred Alternative). The area Build Alternative 12 (Preferred Alternative) crosses is relatively flat and lacks natural slopes.

Build Alternative 12 (Preferred Alternative) does not increase the exposure of people or structures to significant risks with regard to runoff or post-fire slope instability compared to the No Build Alternative. With the design features incorporated into Build Alternative 5, the impacts to people and structures with regard to runoff and post-fire slope instability are less than significant.

As established in Section 2.8, Hydrology and Floodplain, the Project contains features (e.g., bridges, cross culverts, drainage inlets, and rock slope protection) to prevent damage during potential storm events; therefore, the Project does not expose people or structures to significant risks with regard to drainage changes.

Because Alternative 5 and Alternative 12 (Preferred Alternative) would not influence future growth that would be substantially different than growth already planned for and considered in adopted General Plans and other land use plans in the study area (Section 2.2, Growth), the Build Alternatives do not present an increased risk to people or structures compared to the No Build Alternative. The Project design features would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. With the inclusion of project design features to minimize risk and prevent damage to the roadway, the Project would have a less than significant impact to people or structures with regard to post-wildfire risks.

**XX. MANDATORY FINDINGS OF SIGNIFICANCE**

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XX. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**XX.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?**

**Significance Determination:** *Less Than Significant with Mitigation*

As discussed in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, in this Final EIR/EA and in this CEQA evaluation, the potential impacts of Alternative 5 and Alternative 12 (Preferred Alternative) related to biological and cultural resources are either below a level of significance or can be mitigated to below a level of significance based on implementation of the measures incorporated in the Build Alternatives. As a result, Alternative 5 and Alternative 12 (Preferred Alternative) do not have the potential to directly or indirectly impact biological and cultural resources that would degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or



restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

**XX.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)?**

**Significance Determination:** *Potentially Significant Impact*

As discussed in Section 2.22, Cumulative Impacts, in this Final EIR/EA, the Build Alternatives would result in potentially significant aesthetics (see Section I. Aesthetics), noise impacts (see Section XII. Noise), and transportation/traffic impacts (see Section XVI. Transportation/traffic) that cannot be mitigated. These potentially significant impacts will be addressed in the Statement of Overriding Considerations for the Project. The impacts of the Build Alternatives, when considered with the impacts of other cumulative projects in the study area, could contribute to cumulative impacts related to long-term transportation, visual and aesthetics, noise, natural communities, waters of the United States, and threatened and endangered species. However, based on the implementation of avoidance, minimization, and mitigation measures provided in Chapter 2, Chapter 3, and the Project's Environmental Commitments Record (Appendix C) of this Final EIR/EA, the potential effects of the Build Alternatives related to these environmental parameters, with the exception of aesthetics, noise and transportation/traffic impacts, would be mitigated to below a level of significance. As a result, with the exception of aesthetics, noise and transportation/traffic impacts, the Build Alternatives would result in a less than significant impact related to cumulative impacts in the study area.

**XX.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Significance Determination:** *Potentially Significant Impact*

As discussed in this CEQA evaluation, with the exception of aesthetics, noise, and transportation/traffic impacts, the Build Alternatives would not result in significant adverse impacts after mitigation. As a result, with the exception of aesthetics, noise, and transportation/traffic impacts, the Build Alternatives are not anticipated to result in substantial adverse effects directly or indirectly on human beings. The potentially significant aesthetics, noise, and transportation/traffic impacts will be addressed in the Statement of Overriding Considerations for the Project.

# **Chapter 4**      **Comments and Coordination**

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Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. Coordination helps planners determine the necessary scope of environmental documentation and the level of analysis required, as well as identify potential impacts; avoidance, minimization, and/or mitigation measures; and related environmental requirements. Agency consultation and public participation for the Interstate 10 (I-10) Bypass: Banning to Cabazon (Project) has been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, public meetings, and consultation with interested parties. This chapter summarizes the results of Riverside County's (County) and the California Department of Transportation's (Caltrans) efforts to fully identify, address, and resolve Project-related issues through early and continuing coordination.

## **4.1 Public Scoping and Notice of Preparation**

### **4.1.1 Preliminary Public Meeting**

A public informational meeting for the Project held was on November 15, 2012, at Banning High School. Initial alternatives were presented for public comment. Questions raised by members of the public suggested additional alternatives, right-of-way, impacts to downtown Banning (the "City"), and impacts to environmental resources, bicycle and pedestrian access, and local circulation. The information gathered at the first public meeting resulted in the development and refinement of several new alternatives over the next year; this process is documented in the *Alternatives Screening Analysis* (September 2016).

### **4.1.2 Notice of Preparation and Scoping Meeting**

The California Environmental Quality Act (CEQA) Notice of Preparation for the Project was released November 13, 2013, and a public scoping meeting was held on November 20, 2013, also at Banning High School. The NOP is provided at the end of this chapter.

The attendance list for the scoping meeting is provided at the end of this chapter. The meeting was conducted in a workshop format, with attendees viewing display boards and talking one-on-one with PDT members. Comments were accepted in writing at the meeting and online, and consisted of the following topics:

- Acquisition of structures
- Impacts of potential additional traffic on existing streets in the City south of I-10
- An additional alternative south of I-10 but north of the Banning Municipal Airport
- Support for alignments north of I-10
- Truck traffic seeking to bypass the truck scales
- Potential for increase in noise levels, air pollution, and crime
- Suggested extension of Westward Avenue further west to 8<sup>th</sup> Street
- Placement of existing and future utilities under the road
- Support for the Project's new access to the community of Cabazon

Additional scoping comments received relate to biological resources, alternatives, right-of-way, increased truck volumes and traffic south of I-10, utility conflicts, emergency services, Native American resources, and cumulative impacts. The scoping comments are included at the end of this chapter.

A project webpage is hosted by the Riverside County Transportation Department (RCTD) at <http://rcprojects.org/i10bypass/>. During the scoping process, the website provided Project information, presented the Project's Initial Study, and allowed for the public to join the project mailing list and/or submit comments on the Project. Project meeting notices were provided in Spanish, and a Spanish translator was made available to respond to questions related to the Project.

## **4.2 Consultation and Coordination with Agencies**

### **4.2.1 Meetings**

The formulation of project alternatives and measures to avoid, minimize, and/or mitigate potential impacts has been carried out through a cooperative dialogue among representatives of the following agencies or organizations:

- Bureau of Indian Affairs (BIA)
- United States Fish and Wildlife Service (USFWS)
- California Department of Fish and Wildlife (CDFW)
- United States Army Corps of Engineers (USACE)
- California Department of Transportation (Caltrans)
- California Highway Patrol (CHP)
- Morongo Band of Mission Indians
- Riverside County Flood Control & Water Conservation District (RCFCWCD)
- Western Riverside County Regional Conservation Authority (RCA)

- Coachella Valley Conservation Authority
- City of Banning/Banning City Council
- Questar
- Level 3
- Verizon
- Southern California Edison (SCE)
- Southern California Gas Company (SoCalGas)
- Sempra Energy
- Kinder Morgan
- City of Banning Electric Utility
- Friends of the Desert Mountains
- Inland Empire Biking Alliance

Many meetings have occurred to obtain the input of stakeholders and agencies beyond the PDT; these meetings are listed below.

- **Riverside County Airport Land Use Commission (RCALUC):** January 9, 2020
- **CHP:** January 26, 2012; June 13, 2012; October 3, 2012; May 29, 2013; and January 22, 2014
- **Caltrans:** April 5, 2012; July 21, 2015; February 9, 2016; September 19, 2017; and December 6, 2017; May 3, 2019; December 17, 2019
- **Morongo Band of Mission Indians:** June 13, 2012; July 17, 2012; July 31, 2012; October 3, 2012; October 17, 2012; November 11, 2012; February 6, 2013; May 15, 2013; May 29, 2013; June 3, 2013; July 31, 2013; November 20, 2013; February 25–27, 2014; March 5, 2014; April 24–25, 2014; June 3, 2014; September 8, 2014; January 14, 2015; January 27, 2015; January 13, 2016, February 16, 2016; June 23, 2017; December 6, 2017; and February 6, 2018
- **City of Banning Staff:** July 2, 2012; January 28, 2013; March 11, 2013; September 30, 2013; June 8, 2015; June 8, 2016; January 23, 2018; February 5, 2018; and April 9, 2018
- **USFWS:** December 17, 2012; November 16, 2017; June 12, 2018; June 21, 2018; and January 22, 2021
- **CDFW:** November 16, 2017; June 12, 2018; and June 21, 2018.
- **US EPA:** September 24, 2018
- **Friends of the Desert Mountains:** March 20, 2013
- **WRCRCA:** April 23, 2013; September 19, 2013; November 16, 2017; June 21, 2018; December 19, 2019

- **Coachella Valley Conservation Authority:** May 22, 2019, and February 26, 2020
- **Utility Companies:** July 31, 2013, and September 8, 2014. Participants included SCE, SoCalGas, Kinder Morgan, Sempra Energy, Questar, Level 3, Verizon, and City of Banning Electric Utility
- **RCFC&WCD:** August 29, 2013; September 19, 2019
- **USACE:** October 1, 2013
- **Banning City Council:** August 12, 2014; June 14, 2016; February 27, 2017; February 13, 2018; and April 11, 2018
- **BIA:** September 8, 2014; October 14, 2014; January 27, 2015; and March 5, 2020
- **Desert MAC:** June 8, 2017; and February 8, 2018
- **Inland Empire Biking Alliance:** July 24, 2018

#### 4.2.2 The City of Banning

A Responsible Agency under CEQA is any agency other than the Lead Agency, which has discretionary approval power over the Project. Therefore, due to its discretionary power over elements of the Project within the City limits, the City of Banning is a Responsible Agency under CEQA. The City of Banning has been involved with the PDT and the Joint Planning Committee since 2008. The PDT comprises Caltrans, the City of Banning, the County of Riverside, the BIA, the Morongo Band of Mission Indians, CHP, and environmental and engineering consultants. The PDT is responsible for guiding the Project through the design and environmental document phase and identifying the Preferred Alternative. The Joint Planning Committee includes the City of Banning, the RCTD, and the Morongo Band of Mission Indians. The Joint Planning Committee has been involved in the multi-agency I-10 Emergency Action Plan (EAP) that aims to address emergency access and circulation problems created when I-10 is closed anywhere between Hargrave Avenue in Banning and Indian Canyon Avenue in Palm Springs.

In 2009, the Congressional description of the Project was revised at the request of the Joint Planning Committee, changing the location of the Project from north to south of I-10 (refer to the attachments at the end of this chapter for correspondence between Caltrans District 8, on behalf of the Joint Planning Committee, and Congressman Jerry Lewis). Additionally, the City of Banning, with the approval of Riverside County, transferred sponsorship and funding obligations to the County of Riverside in a letter dated November 17, 2009 (that letter is included in the attachments at the end of this chapter). Refer to Section 4.2.1, Meetings, for additional information regarding correspondence with the City of Banning.

### **4.2.3 The Morongo Band of Mission Indians**

The Morongo Band of Mission Indians is a member of the PDT and the Joint Planning Committee. The Morongo Band of Mission Indians are required to approve the Project as Alternative 12 (Preferred Alternative) was identified as the Preferred Alternative.

The Morongo Band of Mission Indians expressed support for Alternative 13 in a letter dated February 21, 2013, stating that Alternative 13 would enable development of Morongo Band of Mission Indians Tribal Land south of I-10 (that letter is included as an attachment at the end of this chapter). In a letter dated September 25, 2018, the Morongo Band of Mission Indians stated that while they had previously expressed support for Alternative 13, they believed Alternative 12 (Preferred Alternative), provided cost savings due to reduced environmental and road construction impacts and was supportive of their long-term development plans (that letter is included as an attachment at the end of this chapter). Additionally, the Project received grant money through the Morongo Band of Mission Indians because of the action to modify the location from north to south of I-10, discussed in Section 4.2.2 above. Refer to Section 4.2.1, Meetings, for additional information regarding correspondence with the Morongo Band of Mission Indians.

### **4.2.4 Bureau of Indian Affairs**

The BIA is a Cooperating Agency in the environmental review process and a member of the PDT. The BIA is required to approve the Project as Alternative 12 (Preferred Alternative) and has been selected as the Preferred Alternative. The BIA sent a letter dated September 18, 2014 to David Bricker, Deputy District Director of Caltrans District 8 to request that Caltrans consider the BIA as a Cooperating Agency under NEPA for the Project. Caltrans replied with a letter dated October 7, 2014, inviting the BIA to participate in the environmental review process as a Cooperating Agency under NEPA. The BIA responded with a letter dated October 20, 2014 that accepted Caltrans' invitation. Those letters from the BIA and Caltrans are included as attachments at the end of this chapter. Since Alternative 12 (Preferred Alternative) was identified as the Preferred Alternative, the BIA's involvement in the Project will continue after the approval of the Final EIR/EA and would be required to approve and lease Morongo Band of Mission Indian Tribal land to the County of Riverside. Refer to Sections 4.2.1, Meetings, for additional information regarding correspondence with the BIA.

### **4.2.5 State Historic Preservation Officer**

Caltrans has determined that there are properties evaluated that may be affected by the Project that are not eligible for inclusion in the National Register of Historic Places within the Area of Potential Effects (APE). Per 36 CFR Part 800, Caltrans requested the



State Historic Preservation Officer's (SHPO) concurrence on this determination on September 13, 2016. SHPO concurrence was received on May 4, 2017, which is included at the end of this chapter.

Caltrans has found that, pursuant to 36 CFR 800.4(d)(1), the Project has a finding of No Historic Properties Affected. SHPO stated "no objection" to this finding in a letter dated October 5, 2017 (also included at the end of this chapter).

#### **4.2.6 Riverside County Airport Land Use Commission (RCALUC)**

During informal consultation between Riverside County and the RCALUC in June 2017, it was determined that Alternatives 5 and 12 (Preferred Alternative) would require RCALUC review. Alternative 5 could be reviewed at the Director/staff level, but Alternative 12 (Preferred Alternative) was reviewed by the Airport Land Use Commission as a portion of the alignment within the inner zones of the Banning Municipal Airport.

An application was submitted to the RCALUC in December 2019. Notices were distributed to property owners within a 300 ft radius of the Project area, and a public hearing Commission meeting was held on January 9, 2020, at which the Project was found to be Conditionally Consistent with the 2004 Banning Municipal Airport Land Use Compatibility Plan, subject to Federal Aviation Administration (FAA) Clearance Review. An application for FAA Clearance Review was submitted in parallel to the RCALUC process. FAA completed its review and issued a letter dated January 17, 2020, with determination of No Hazard to Air Navigation with stated conditions. The RCALUC provided a letter dated January 30, 2020, summarizing these findings and conditions for moving forward. The FAA letter is included as an attachment to this chapter.

#### **4.2.7 United States Fish and Wildlife Service**

Official species lists were obtained from the United States Fish and Wildlife Service (USFWS) on April 19, 2019 and May 26, 2020. The species lists provide information about the threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur in the vicinity of a proposed project. The species lists provided by the USFWS are included at the end of this chapter.

During a meeting on September 19, 2013, the USFWS indicated concern for maintaining sand transport and not inhibiting the natural migration of drainages along the San Gorgonio and Smith Creek channels. This concern resulted in USFWS not supporting Alternative 13 that traversed the portion between the San Gorgonio River and Smith Creek.

The USFWS issued a Biological Opinion on January 8, 2021. The Biological Opinion is included at the end of this chapter. Caltrans, the RCTD, and the USFWS held a meeting on January 22, 2021 to discuss the RCTD's comments on the Biological Opinion.

#### **4.2.8 California Department of Fish and Wildlife**

During final design, the California Department of Fish and Wildlife (CDFW) would use the I-10 Bypass EIR to support its discretionary actions associated with issuing a 1602 Agreement for Streambed Alteration as part of the project review process for the WRMSHCP and the CVMSHCP. Therefore, the CDFW is a Responsible Agency under CEQA.

#### **4.2.9 California Highway Patrol**

In a Stakeholder Meeting on June 13, 2012, the CHP expressed support for the Project provided they have the ability to monitor truck traffic to prevent bypass of the CHP vehicle inspection station on parallel segments of I-10. To assist with this, the CHP requested vehicle pullouts in both directions along the new bypass roadway. Additional monitoring features, such as cameras, may be considered during future design phases.

#### **4.2.10 Permits and Approvals Required**

Refer to Table 1.6.1 in Chapter 1, Project Description, for the list of permits, reviews, and approvals required for project construction.

### **4.3 Community Outreach and Public Involvement**

When the Project began the environmental document (ED) phase in 2011, it directly connected Westward Avenue with Bonita Avenue on a conceptual alignment just south of the Morongo Band of Mission Indians Tribal Lands Section 12 boundary. The County and the PDT then began to assess the environmental constraints of the Project and meet with project stakeholders, including the City, the Morongo Band of Mission Indians, community groups, and landowners.

The largest minority in the vicinity of the Project, although located outside of the community impact study area, is the Native American Morongo Band of Mission Indians. Numerous meetings have been held with Morongo Band of Mission Indians staff, as well as a meeting held with the Morongo Band of Mission Indians Planning Commission.

The Morongo Band of Mission Indians initially opposed any alignment on Morongo Band of Mission Indians Tribal Lands, and the owners of the Robertson's Ready Mix (RRM) sand and gravel mine vigorously opposed any alignment that affected either their

existing sand and gravel operations east of the San Gorgonio River or their approved sand and gravel operations west of the San Gorgonio River. Since the County had no ability to acquire right-of-way from the Morongo Band of Mission Indians without its concurrence, the initial alternatives were all located south of the Morongo Band of Mission Indians Tribal Lands. Given the overall shortage of sand and gravel mines in the County and the General Plan policies in place to protect such facilities, the initial alternatives were all located south of the RRM property.

A meeting to explain the Project was held with the community group, Friends of the Desert Mountains, in Palm Desert on March 20, 2013. Briefings on the Project were provided to the West Desert Municipal Advisory Council on October 11, 2012, and to the San Gorgonio Pass Municipal Advisory Council on October 25, 2012.

Several residents of the community of Cabazon attended the scoping meeting; they were supportive of the Project alternatives on the south side of I-10. Most of the existing residences in Cabazon are located both south of I-10 and south of the Union Pacific Railroad (UPRR) tracks, which parallels the south side of Main Street in Cabazon. Cabazon residents must access I-10 to travel east or west from their community, and most residents must cross the UPRR tracks to reach the freeway interchanges. There are two existing at-grade crossings of the railroad: one at Apache Trail (Morongo Trail), and one at Broadway, west of the I-10/Main Street interchange.

The UPRR is a key national freight transportation route. In particular, many trains carry goods imported to the United States at the Ports of Los Angeles and Long Beach to many other areas of the country. These trains can be hundreds of freight cars long, forcing motorists to wait up to 15 minutes or more when a train is blocking the crossing. In addition, emergency service vehicles must wait for the same trains to provide emergency services to the Cabazon residential areas.

The Cabazon residents south of the UPRR saw the proposed new roadway as a direct path from Cabazon to Banning with its larger set of commercial services and employment opportunities. Three of the existing interchanges in the City of Banning (8<sup>th</sup> Street, 22<sup>nd</sup> Street, and Sunset Avenue) provide for a grade-separated crossing of the UPRR so Cabazon residents could access westbound I-10 without having to wait for crossing trains. In addition, emergency service vehicles would not have to wait for trains to access the residential part of Cabazon.

The Project Team thought that this insight merited consideration as an element of the Project's statement of Purpose and Need, which was then modified to incorporate

providing access from the City of Banning to Cabazon that did not require crossing the UPRR tracks.

The historic downtown and current commercial core of the City of Banning is located along Ramsey Street between Hargrave Avenue and Highland Home Road. Several business owners at the meeting favored a different alignment that would provide for an I-10 bypass north of I-10 along a projected extension of Ramsey Street as an I-10 frontage road from its current eastern terminus at the I-10/Ramsey Street interchange to the intersection of Malki Road/Seminole Drive near the Desert Hills Premium Outlets. Their stated rationale was that the Ramsey Street Extension would allow outlet mall customers to easily visit commercial establishments in downtown Banning.

This alternative had previously been studied by the County, the City, and the Morongo Band of Mission Indians and determined to be infeasible. However, the Project Team agreed to restudy the concept, and the Ramsey Street Extension became Alternative 7. The County then prepared an Alternatives Screening Analysis that considered the entire suite of alternatives and compared each alternative against standard screening criteria to determine whether alternatives should be carried forward in the ED. These criteria included the following:

- Does the proposed alternative meet the objectives cited in the purpose and need statement?
- Is the proposed alternative feasible (i.e., does the County have a reasonable expectation of actually implementing the alternative)?
- Does the proposed alternative have other adverse environmental consequences?

The first draft of the Alternatives Screening Analysis prepared in April 2013 considered Alternatives 1 through 13, including Alternative 7, the Ramsey Street Extension. Consistent with previous findings, the analysis determined that Alternative 7 was not feasible for the following reasons:

- The Ramsey Street Extension would require right-of-way from the Morongo Band of Mission Indians, which had consistently opposed that alignment. Since the County could not acquire such right-of-way without consent from the Morongo Band of Mission Indians, and because the Morongo Band of Mission Indians was in the record as opposing such an alternative, the alignment was deemed infeasible.
- The Ramsey Street Extension would rely upon the existing Ramsey Street and Malki Road interchanges to provide access to and from I-10. However, these interchanges, which were built in the 1960s, fail to meet Caltrans' and the Federal Highway

Administration's current design standards, particularly standards relating to the distance between ramp termini and local street intersections. When new facilities are built that affect such nonstandard designs, Caltrans standard response is to require the project sponsor (the County and other local agencies) to correct the existing deficiencies when constructing new improvements. Bringing the Ramsey Street and Malki Road interchanges up to current standards would likely require complete reconstruction of both interchanges at a cost of approximately \$75 million apiece, which is more than the current estimate for the new roadway. The Project is already facing funding challenges, and tripling the cost would make it infeasible.

In addition, the Ramsey Street Extension did not meet the new element of the project Purpose and Need: to provide new access to Cabazon that did not require crossing the UPRR tracks.

As such, Alternative 7 was removed from consideration because it was infeasible and failed to meet the project's Purpose and Need.

After studying the alternatives, the Morongo Band of Mission Indians changed its position, dropping its opposition to an alignment on Tribal Lands in Section 12 only and supporting an alignment that followed the north side of Smith Creek within Tribal Lands. This resulted in the development of Alternatives 12 and 13. Both of these alternatives proposed bending the roadway northerly from Westward Avenue approximately 4,000 feet east of Hathaway Street and paralleling the north side of Smith Creek through most of Section 12, then splitting near the east end of Section 12. Alternative 12 (Preferred Alternative) would cross Smith Creek approximately 2 miles due east of Hathaway Street, then rejoin the Alternative 5 alignment at the eastern end of the Project at Apache Trail. In contrast, Alternative 13 would remain on the north side of Smith Creek and then cross over the San Gorgonio River at its confluence with Smith Creek. However, Robertson's Ready Mix obtained the approval to develop two new wind turbines on property that Alternative 13 would cross. One of the wind turbines is directly in the path of Alternative 13, and it would cost several million dollars to acquire the right-of-way and relocate the wind turbine. Therefore, Alternative 13 was removed from consideration because it was infeasible due to the cost of right-of-way required to relocate the wind turbine.

#### **4.4 Agency Coordination Documentation**

Documentation of coordination with the following agencies is provided at the end of this chapter.

- City of Banning
- Morongo Band of Mission Indians
- BIA
- State Historic Preservation Officer
- USFWS

#### **4.5 Public Scoping Meeting Documentation**

Documentation of November 20, 2013 public scoping meeting at Banning High School is provided at the end of this chapter.

- Public Scoping Meeting Attendance List
- Public Scoping Meeting Comments Received

#### **4.6 2017 Draft EIR/EA Comment Period**

The Draft EIR/EA for the Project was circulated for public comment on December 28, 2017. A Notice of Completion of the Draft EIR was sent to the State Clearinghouse and was posted December 29, 2017.

Several methods were utilized to notify the public of the availability of the document. A notice of availability of the Draft EIR/EA with instructions on how and where to access the document and submit comments, as well as information on the public hearings, was published in the Press-Enterprise on December 29, 2017, and January 21, 2018; the Desert Sun on January 5 2018; La Prensa (Spanish-language publication) on January 5, 2018; the Patch on December 29, 2018; and the Record Gazette on January 5 and January 19, 2018. The text of the newspaper advertisements in both English and Spanish is attached to this chapter. In addition, the notice of availability was sent to all property owners and occupants within a 1,000- to 2,000-foot radius of the project improvements, notifying them of the availability of the document and of the opportunity to review and comment. Notices were also sent via email to the contact list maintained by the County, which consists of interested parties who have requested notification via the County website or via email request directly to the County.

The Draft EIR/EA along with all supporting technical studies was made available for download on a website created for the Project and managed by the Riverside County Transportation Department (<http://www.rcprojects.org/i10bypass/>). Electronic (CD) copies of the document were mailed via the U.S. Postal Service to the distribution list included in Chapter 6. Hard copies of the Draft EIR/EA were distributed to two area



public libraries (the Banning Library and the Cabazon Library), as well as made available for review at the Caltrans District 8 office, located at 464 West 4<sup>th</sup> Street, San Bernardino, CA 92401; and at the County of Riverside Transportation Department, located at 3525 14<sup>th</sup> Street, Riverside, CA 92501.

The public circulation period was originally scheduled to last 45 days, beginning on December 29, 2017, and ending on February 13, 2018. However, the County of Riverside, in coordination with Caltrans and in response to public requests, extended the circulation end date to April 30, 2018, for a 122-day total circulation period. A notice of the extension of the comment period that extended the comment period until April 30, 2018, was distributed via email to the contact list maintained by the County, and was advertised in the Banning-Beaumont Patch and on the County's transportation department website. The County's email contact list and the Banning-Beaumont Patch ad for the extension of the comment period are included as attachments to this chapter.

#### **4.7 2019 Recirculated Draft EIR/EA**

During the public review period of the 2017 Draft EIR/EA, a comment was received regarding the need to identify a Preferred Alternative. According to the decision reached in *Washoe Meadows Community v. Department of Parks and Recreation* (Court of Appeals First District, Division 5, California 2017), the court found that the presentation of various alternatives in the Draft EIR without the identification of a preferred alternative was an obstacle to informed public participation. In order to present as much information as possible to the public regarding the Project, the decision to recirculate the Draft EIR/EA was made to include discussion regarding the Locally Preferred Alternative (LPA), as the Preferred Alternative had not yet been identified. On May 3, 2019, an LPA was identified by the PDT (the LPA identification letter from the Riverside County Transportation Department is included as an attachment to this chapter). A public comment period for the 2019 Recirculated Draft EIR/EA was held for 45 days from August 12, 2019, until September 25, 2019. A Notice of Completion of the Recirculated Draft EIR/EA was sent to the State Clearinghouse and was posted August 12, 2019. A notice of availability of the Recirculated Draft EIR/EA with instructions on how and where to access the document and submit comments was published in the Record Gazette on August 9, 2019; the Press-Enterprise on August 10, 2019; the Desert Sun on August 10, 2019; and La Prensa (Spanish-language publication) on August 16, 2019. The text of the newspaper advertisements in both English and Spanish is attached to this chapter. All property owners/occupants within the area of the I-10 Bypass Project Build Alternatives as shown on Figure 6-1, and interested public members on the I-10 Bypass Project public

mailing list, were sent notifications informing them of the availability of the Recirculated Draft EIR/EA. Notices were also sent via email or mail to the contact list maintained by the County.

Similar to the 2017 public circulation period, electronic (CD) copies of the document were mailed via the U.S. Postal Service to the distribution list included in Chapter 6. Email addresses on the distribution list received an NOA. Hard copies of the Draft EIR/EA were distributed to two area public libraries (the Banning Library and the Cabazon Library), as well as made available for review at the Caltrans District 8 office, located at 464 West 4<sup>th</sup> Street, San Bernardino, CA 92401; and at the County of Riverside Transportation Department, located at 3525 14<sup>th</sup> Street, Riverside, CA 92501.

Comments previously provided from the December 2017 circulation of the Draft EIR/EA have been reviewed and will be included in the administrative record for the Project. Comments from the December 2017 circulation of the Draft EIR/EA were not individually responded to in this Final EIR/EA unless they were resubmitted during the recirculation of the Draft EIR/EA. However, for those comments that were not responded to individually, if warranted, changes were made to the Recirculated Draft EIR/EA to address them. Public comments on the Recirculated Draft EIR/EA are addressed in Appendix L of this Final EIR/EA.

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**INITIAL STUDY**

**I-10 BYPASS: BANNING TO CABAZON**

1. Project title	I-10 Bypass Banning to Cabazon
2. Lead agency name and address	Riverside County Transportation Department 3525 14 <sup>th</sup> St. Riverside CA 92501
3. Contact person and Phone number	Mary Zambon (951) 955-6759
4. Project location	Within Unincorporated County of Riverside, the City of Banning, and (some alternatives) the Morongo Indian Reservation
5. Project sponsor's name and address	Riverside County Transportation Department 3525 14 <sup>th</sup> St. Riverside CA 92501
6. General plan designation	Varies
7. Zoning	Varies
8. Description of project	Construct new two-lane roadway from the intersection of Westward Avenue and Hathaway Street in Banning to the intersection of Apache Trail and Bonita Avenue in Cabazon (unincorporated Riverside County) per the project description that follows.
9. Surrounding land uses and setting	Industrial, open space/cattle grazing, streambed, sand and gravel quarry.
10. Other public agencies whose approval is required (e.g., permits financing approval)	US Army Corp of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, Federal Highway Administration, Morongo Band of Mission Indians, Bureau of Indian Affairs, California Department of Transportation, Regional Water Quality Control Board, California Department of Fish and Wildlife, Western Riverside County Regional Conservation Agency, Coachella Valley Conservation Agency

## Project Description

### Introduction

The County of Riverside proposes to construct a new two-lane roadway with a striped median, shoulders, and a pedestrian path extending approximately 2.6 miles (mi) between the intersection of Hathaway Street and Westward Avenue in the City of Banning (Banning) and the intersection of Bonita Avenue and Apache Trail in the community of Cabazon in unincorporated Riverside County. Figure 1 shows both the regional location and project limits. Three build alternative alignments are under consideration. Two of the alternatives cross portions of the Morongo Indian Reservation. When combined with existing roadways, the new roadway would provide a new route parallel to I-10 between the I-10 Hargrave Avenue interchange in Banning and the Morongo Parkway (Apache Trail) Interchange in Cabazon. Local traffic and bicycle travel between these two interchanges must now use the freeway to make portions of this connection, and there is no current provision for pedestrians.

### Need and Purpose

#### Project Need Summary:

Banning and Cabazon are approximately three miles apart, and I-10 is the only public road connecting the two communities. There are no local roadways connecting the local communities except the freeway itself. Without a route parallel to I-10, there is no local alternate route for freeway traffic whenever the freeway is closed due to emergencies resulting in extreme traffic congestion. In recent years, I-10 has been closed several times between Cabazon and Banning due to accidents, police activity, hazardous spills or construction. The closest available detour routes force I-10 motorists to travel north to Victorville or south to Hemet or Idyllwild. Backups in excess of ten hours have resulted

The lack of local connection also forces local traffic to use the regional freeway system and congested freeway interchanges for local trips, and it adversely affects emergency access. Residents in portions of Cabazon south of the UPRR face a related problem: Any exit from their community requires crossing the UPRR at-grade crossing, where they can face lengthy delays caused by long, slow-moving trains. In addition, bicyclists must use the freeway to get from one community to the other, and pedestrians have no connection at all. Finally, the County, City and Tribal General Plans anticipate future growth in the area.

#### Project Purpose Summary:

The purpose of the proposed project is to construct a new roadway connecting Banning and Cabazon to address the needs identified above, including the following:

- Provide an emergency bypass to Interstate 10 between Banning and Cabazon
- Provide for local traffic between Banning and Cabazon that does the following:
  - Does not require use of the freeway
  - Improves general and emergency access for residents of Cabazon, particularly those residents living south of the railroad tracks
  - Provides for bicycle and pedestrian access between the two communities

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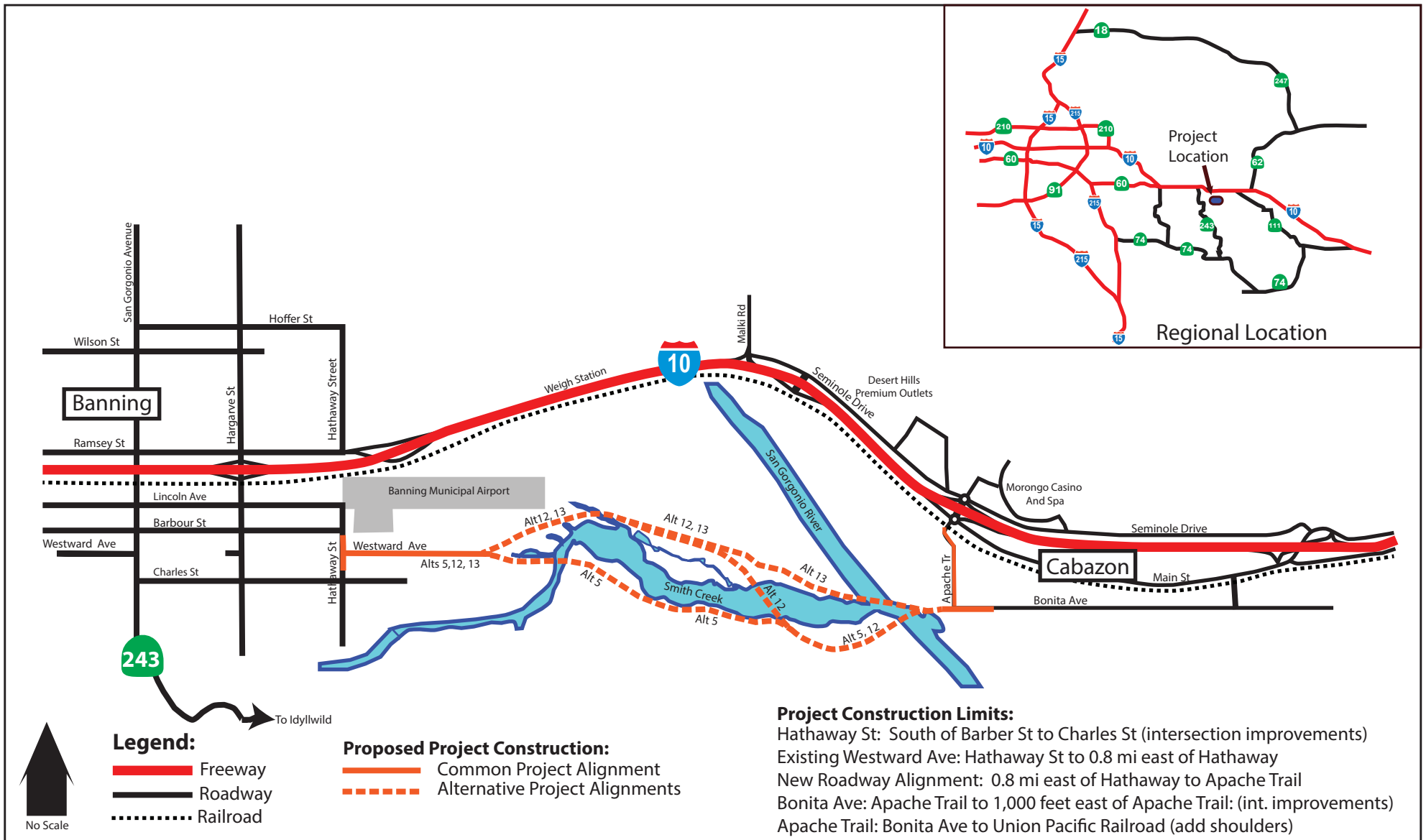


Figure 1  
 I-10 Bypass: Banning to Cabazon  
 Project Location/Project Limits

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## **Project Background**

### **Federal and State Lead Agencies**

The California Department of Transportation (Caltrans) is the federal lead agency for the proposed project under the National Environmental Policy Act (NEPA) and is proposing to prepare a federal Environmental Assessment (EA) of the project. The County of Riverside is the State lead agency under the California Environmental Quality Act (CEQA) and is proposing to prepare an Environmental Impact Report (EIR) for the Project. Caltrans and the County are proposing to combine the EA and the EIR into a single document for public review, reliant on a single set of environmental technical studies. Caltrans recently approved a Preliminary Environmental Study (PES) for the project that identified the proposed alternatives to be considered and the technical studies to be conducted. Approval of the PES launches the formal federal EA process, and, correspondingly the County is now issuing this Notice of Preparation (NOP) to formally start the State EIR process.

### **Stakeholder Agencies**

In addition to the County and Caltrans, the Project Development Team has coordinated with other local agencies with a stake hold in the proposed project including the City of Banning, the Morongo Tribe of Mission Indians, the California Highway Patrol, and local emergency responders. These agencies have provided substantial input to the project development process to date.

### **Previous Public Review**

To facilitate early public input, the County conducted a preliminary public information meeting on November 15, 2012 at Banning High School. Questions raised by members of public addressed the development of alternatives, right-of-way (ROW), impacts to downtown Banning, and impacts to environmental resources, bicycle and pedestrian access and local circulation. These questions were addressed in the development of the Alternatives Screening Analysis and will be further addressed in the EIR.

## **Alternatives Roadway Alignments**

### **Alignment Development and Screening**

During the alternatives development process, the County staff met frequently with the Stakeholder Agencies listed above to compile information and understand constraints. The County also met with representatives of key environmental resource agencies with jurisdiction over the project including the Western Riverside Regional Conservation Authority, the Coachella Valley Conservation Commission, the US Fish and Wildlife Service, the US Army Corps of Engineers, and the California Department of Fish and Wildlife. County representatives met with local citizen groups including the Friends of the Desert Mountains, West Desert Municipal Advisory Council, and the San Geronio Municipal Advisory Council, held an early public input meeting in November 2012, where they met with private property owners adjacent to the project. The input from the public, agencies and groups helped the County to develop the alternatives considered.

During this process, the County considered and developed 13 separate potential alignments for the roadway. These alignments are described in detail in the Alternatives Screening Analysis: I-10 Bypass from Banning to Cabazon (March 2013). The 13 Alternatives originally considered are shown in Figure 2.

The Screening Analysis evaluated the feasibility of each alternative (could it be reasonably built?), whether it met the Project's purpose and need criteria listed above, and the alternative's performance on key environmental factors including the following:

- Potential impacts to State and federal waters (Smith Creek, San Gorgonio River and their tributaries)
- Potential impacts to State and federal threatened and endangered species
- Potential impacts to Tribal Lands
- Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan and the Coachella Valley Multiple Species Habitat Conservation Plan
- Consistency with the Riverside County General Plan, the City of Banning General Plan, and the Morongo General Plan
- Other potential impacts such as visual impacts.

Each of the potential alternatives was assessed against the above criteria. Based upon this assessment, Alternatives 1, 2, 3, 4, 6, 7, 8, 9, 10 and 11 were removed from further consideration for reasons described in the Alternatives Screening Analysis cited above. Alternatives 5, 12 and 13 were recommended for further consideration in the environmental document as shown in Figure 3.

### **Common Elements of all the Build Alternatives**

The proposed I-10 Bypass would use existing roadways to connect to I-10 at the western and eastern ends of the project to reach the new roadway section; these connections are the same for all alternatives. Between the western and eastern connections, the proposed project would construct a new roadway between the Westward/Hathaway intersection in Banning and the Bonita Avenue/Apache Trail intersection in Cabazon, with three alternative alignments under consideration as described below. Note: In addition to I-10 Bypass traffic, the proposed project would also support local trips between Banning and Cabazon that do not need to use the freeway.

**West End Connections to I-10.** The western end of the proposed I-10 bypass starts at the I-10/Hargrave Avenue interchange, extends southerly along existing Hargrave to Lincoln Avenue then easterly along Lincoln to Hathaway Street, then southerly along Hathaway to its intersection with Westward Avenue, where the new roadway would begin. No improvements are proposed along Hargrave; proposed improvements along Lincoln would be limited to signing (and potentially striping). Proposed improvements to Hathaway would include new signing and striping, and Hathaway would be widened at the Westward intersection to provide a northbound right-turn lane and a southbound left-turn lane.



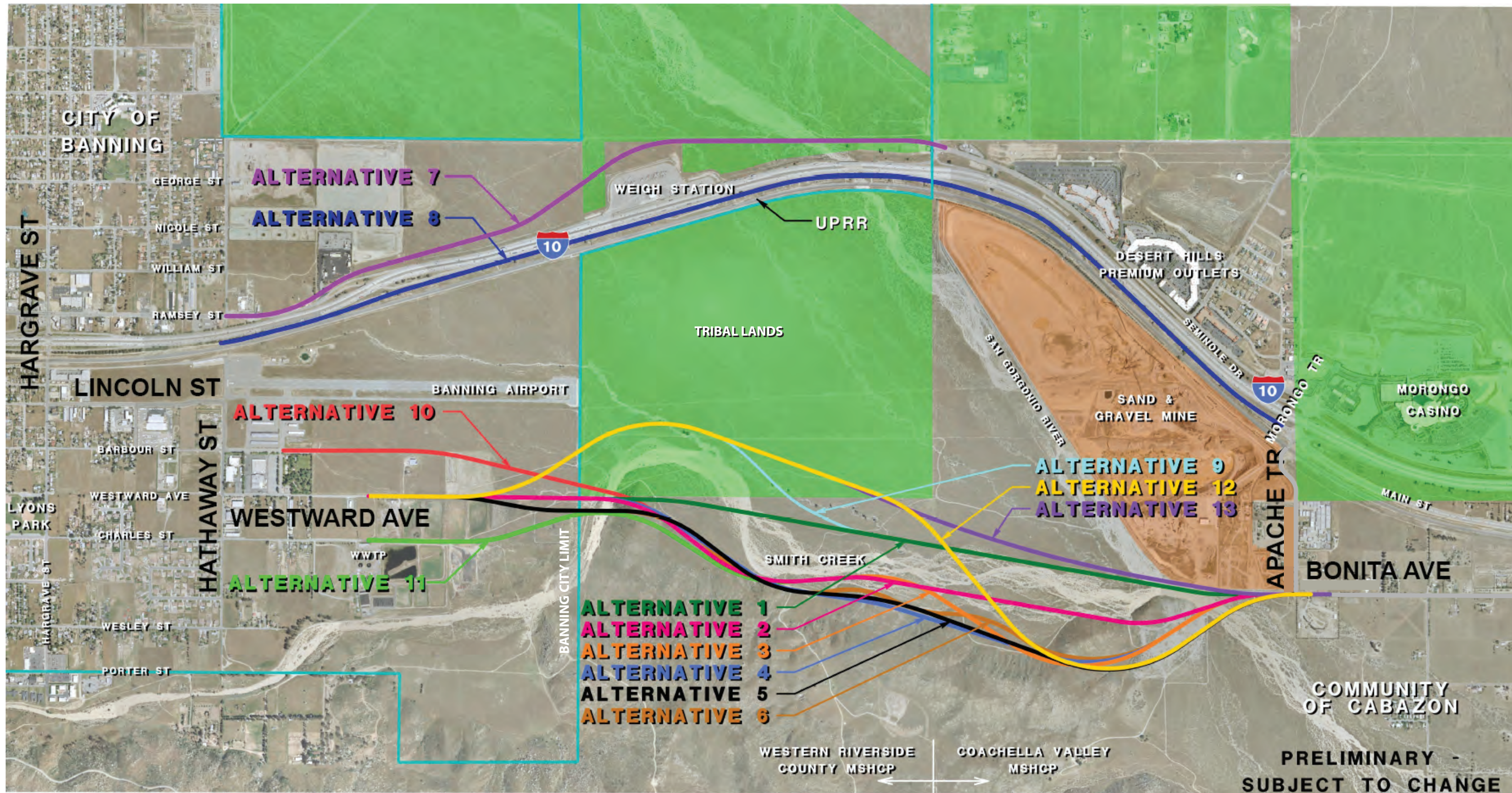


Figure 2

*I-10 Bypass: Banning to Cabazon*

**Original Alternatives Considered**



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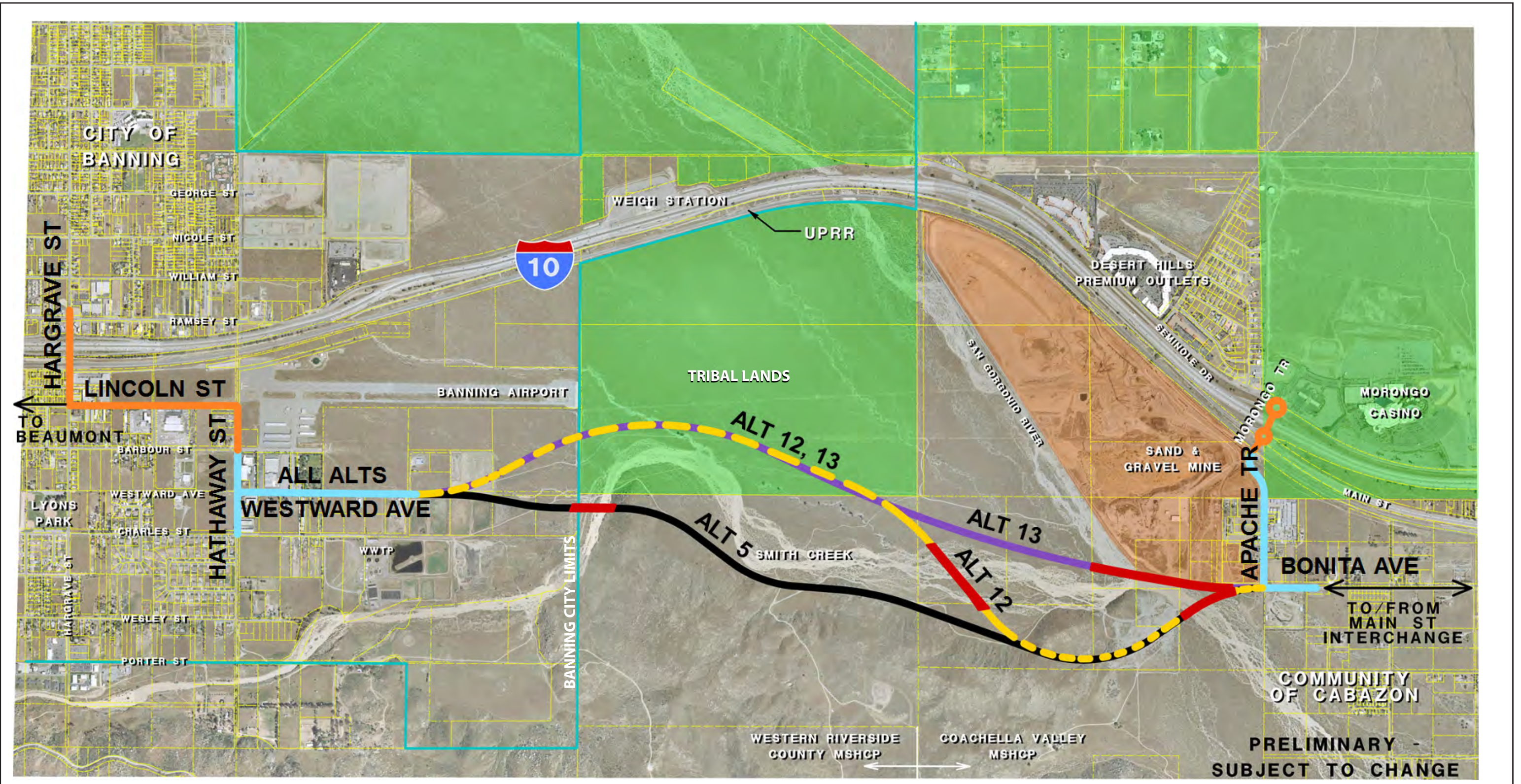


Figure 3  
 I-10 Bypass: Banning to Cabazon  
 Preliminary Alternatives for EIR

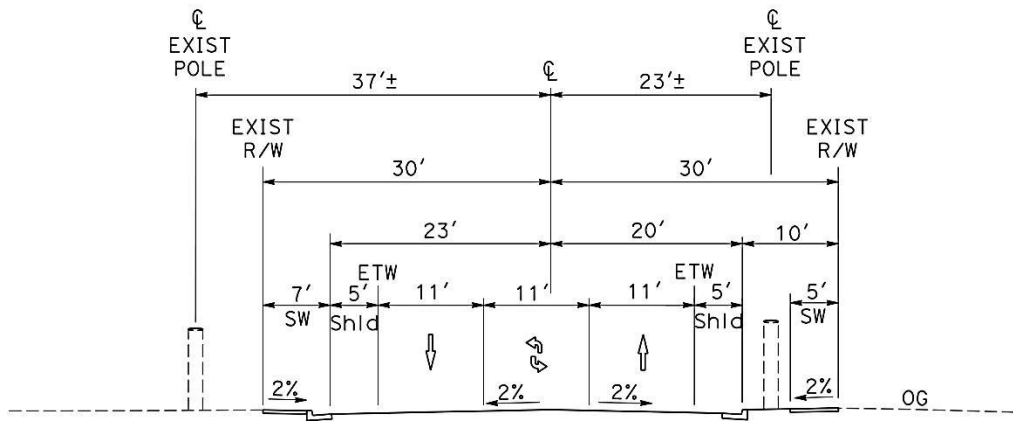
Source: Kimley Horn Associates (11/09/13)



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**East End Connections to I-10.** Proposed project improvements at the east end include widening Apache Trail from Bonita Avenue to the Union Pacific Railroad (UPRR) crossing to provide 8-foot (ft) shoulders usable as bicycle lanes in each direction. The proposed project will also reconstruct the intersection of Apache Trail and Bonita Avenue in Cabazon to become a “T” intersection, with the new roadway becoming the westbound extension of Bonita. The proposed project includes intersection improvements to provide turning lanes at the Apache/Bonita intersection. The east end connection to I-10 would utilize either the existing Morongo Parkway interchange-roundabouts with the I-10 ramps, or travel easterly along Bonita to Broadway, north on Broadway to Main Street, and then east on Main Street to access I-10 at the Main Street Interchange

**New Roadway Cross Section East of Hathaway:** The proposed roadway section, extending east of the Hathaway intersection for approximately 0.8 miles east, will utilize a reduced cross-section to stay within the existing Westward Avenue ROW and to avoid relocation of the power poles that line both sides of the street. The proposed roadway section is shown in Figure 4 and includes two 11 ft travel lanes, an 11 ft striped median, two 5 ft shoulders usable by bicyclists, and sidewalks on both sides of the road.



**Figure 4 Typical Cross Sections Hathaway St to 0.8 mi east of Hathaway**

## Unique Features of the Proposed Alternatives/Alignments

The three recommended alternatives vary in alignment between Hathaway Street and the east end of the proposed bridge over the San Gorgonio River; these alignments were shown in Figure 3.

## **Alternative 5**

As shown in Figure 3, Alternative 5 follows the existing alignment of Westward Avenue for approximately 0.8 mi then proceeds easterly to the Banning City limit and crosses Smith Creek on a new bridge approximately 1.1 mi east of Hathaway. This alternative then extends easterly parallel to the south side of Smith Creek to a new bridge over the San Gorgonio River south of its confluence with Smith Creek. From a point approximately 0.8 mi east of Hathaway to Apache Trail, the proposed new roadway segment would generally provide one 12 ft travel lane in each direction, plus a 14 ft median, two 8ft shoulders, and on the north side, an 8 foot pedestrian pathway as shown in Figure 5.

## **Alternative 12**

As shown in Figure 3, Alternative 12 follows the existing alignment of Westward Avenue for approximately 0.8 mi (same as Alternative 5) then bends northerly out of the Banning City limit and into Tribal Lands, staying north of Smith Creek to the eastern end of the Tribal Lands approximately 2.1 mi east of Hathaway. At that point, Alternative 12 crosses Smith Creek on a new bridge and follows the alignment of Alternative 5 south of Smith Creek to a new bridge over the San Gorgonio River south of its confluence with Smith Creek. From a point approximately 0.8 mi east of Hathaway to Apache Trail, the proposed new roadway segment would generally provide one 12 ft travel lane in each direction, plus a 14 ft median, and two 8ft shoulders, and on the south side, an 8 foot pedestrian path as shown in Figure 5.

## **Alternative 13**

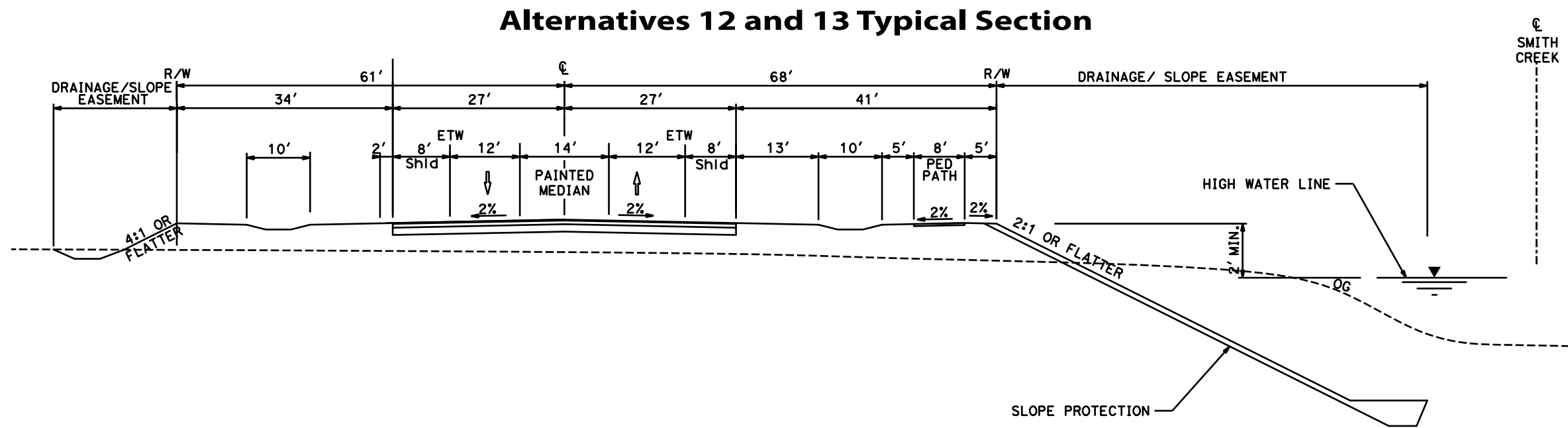
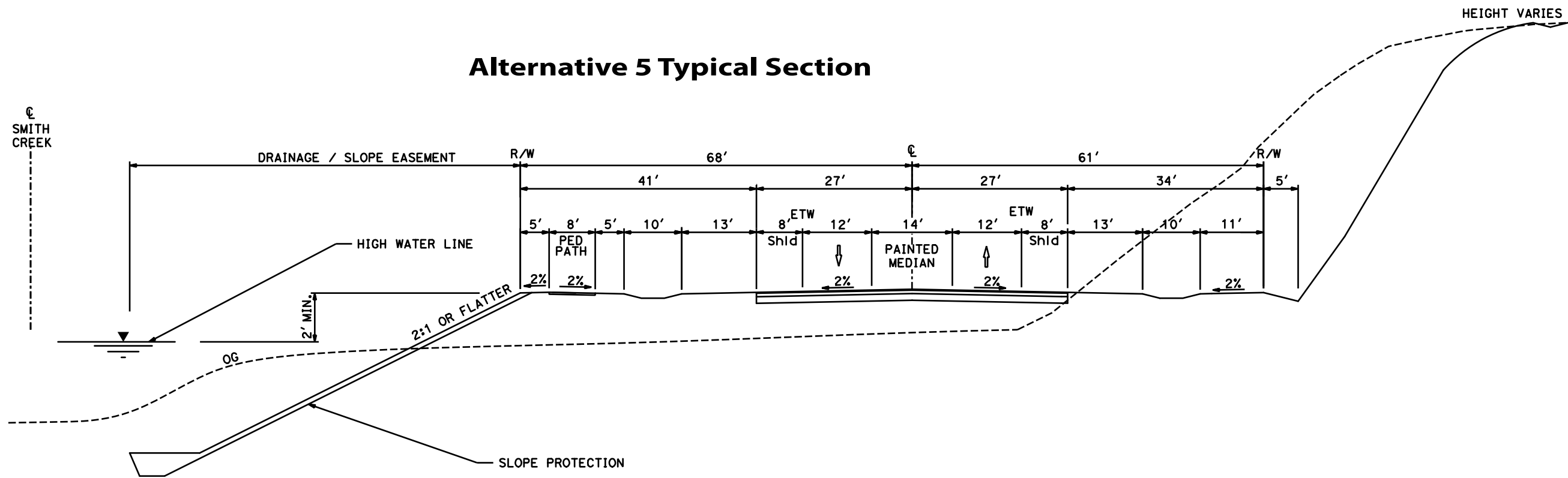
As shown in Figure 3, Alternative 13 follows the Alternative 12 alignment, staying north of Smith Creek to a point approximately 2.1 mi east of Hathaway. Alternative 13 then diverges from Alternative 12, staying north of Smith Creek to a new bridge over the San Gorgonio River just north of the Smith Creek confluence, as shown in Figure 2. The proposed new roadway segment would have the same cross section as Alternative 12, as shown in Figure 5.

## **Other Project Elements**

- The proposed project includes measures necessary to establish a stable bank where the roadway is adjacent to Smith Creek and the San Gorgonio River.
- The proposed project includes space for CHP truck enforcement areas.

## **No Build Alternative**

The environmental analysis will also include the “No Build” Alternative in which no new roadway is constructed and no additional improvements are made.



Both Views Facing East

Figure 5

*I-10 Bypass: Banning to Cabazon*

**Alternative Typical Sections**

(From Approximately 0.8 mi east of Hathaway to Apache Trail)

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## **Project Approvals Required.**

The proposed project will require the following permits, approvals and reviews:

- Approval of ROW easement from the Morongo Tribe for Alternatives 12 and 13 only (requires Bureau of Indian Affairs approval)
- State and federal approvals for impacts to waters along the Smith Creek and San Gorgonio River
- Amendment of the Riverside County General Plan Circulation Element to show the proposed roadway (CEQA document only)
- Review of the project by the Western Riverside Regional Conservation Authority
- Review of the project by the Coachella Valley Conservation Commission

**Environmental Factors Potentially Affected:**

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact") as indicated by the checklist on the following pages.

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

**Determination:**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" 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.
- 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required

  
\_\_\_\_\_  
Signature

November 8, 2013  
\_\_\_\_\_  
Date

Mary Zambon

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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**I. AESTHETICS -- Would the project:**

- a) *Have a substantial adverse effect on a scenic vista?*

**Potentially significant impact.** There are no scenic vistas within the project corridor according to the Riverside County general plan. However, there are views of the northern foothills of the San Jacinto Mountains from the area surrounding the project and from I-10. Depending on the alternative, the project may require grading into portions of the initial edge of the foothills. Such grading could be visible from viewpoints surrounding the project. Potential impacts will be examined in the EIR; including “before-and-after” visual simulations and a Visual Impact Assessment (VIA) will be prepared.

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

**Potentially significant impact.** SR-243 (the Banning to Idyllwild Highway) is a designated scenic highway located approximately 1.5 miles west of the proposed new roadway construction. The impacts to scenic resources as seen from the scenic highway and other key viewpoints will be assessed in the VIA and summarized in the EIR, including “before-and-after” visual simulations.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less than significant impact with mitigation.** The study corridor is a flat desert plain in the north, the Smith Creek floodplain in the middle, the rolling foothills of the San Jacinto Mountains in the south, and the San Gorgonio River in the east. Urbanized uses characterize portions of the desert plain including industrial buildings in the City of Banning in the west, Banning Airport in the center west, and a sand and gravel pit near the east end of the project. Depending on the alternative, the project may require grading into portions of the initial edge of the foothills. Such grading could modify the existing visual character surrounding the project. Potential impacts will be examined in the EIR, including “before-and-after” visual simulations.

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

**Less than significant impact with mitigation.** The proposed project would not include street lighting except as needed for safety at selected intersections. Lighting placement at the selected intersections will be designed to reduce the potential for stray light and glare. Headlights and glare from automobiles will be assessed in the EIR.

The project is located approximately 45 miles from the Mount Palomar Observatory in San Diego County. As such, Riverside County Ordinance #655 applies, which restricts night lighting to protect the “Dark Sky” for the observatory, so there will be no significant impacts due to substantially increased lighting.

**II. AGRICULTURE AND FORESTRY 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 to forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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**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?*

**Less than significant impact.** According to the California Department of Conservation, California Important Farmland Finder (accessed October 29, 2013), there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the immediate project corridor. Some land near the eastern end the project is designated farmland of local importance, which has primarily been used for cattle grazing. General Plan policies encourage protection of farmland and agricultural resources. This will be further assessed in the EIR.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No impact.** There are no parcels under Williamson Act contract within the project corridor according to the Riverside County Williamson Act Lands 2008/2009 map prepared by the California Department of Conservation Division of Land Resource Protection.

- c) *Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**No Impact.** There is no zoned forest land in the vicinity of the project.

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

**No Impact.** There is no identified forest land in the vicinity of the project.

- 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?*

**Less than significant impacts.** As noted above, according to the California Department of Conservation, California Important Farmland Finder (accessed October 29, 2013), there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the immediate project corridor. Some land near the eastern end of the project corridor has been identified as farmland of local importance, primarily used for cattle grazing. General Plan policies encourage protection of agricultural resources. As noted above, there is no forest land in the vicinity of the proposed project.

**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?*

<b>I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist</b>	<b>Potentially Significant Impact</b>	<b>Less than Significant Impact with Mitigation</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**Less than significant impact with mitigation.** An Air Quality Assessment will be prepared for the project and summarized in the EIR. The Assessment will address emissions of criteria pollutants that may result from the proposed project, which would provide for more direct routing of local travel between Banning and Cabazon and would also provide an improved circulation route for bicyclists between the two cities, who must now utilize the freeway. In addition the project will provide for a pedestrian path between the two communities.

The I-10 Bypass project is located within the Riverside County portion of the South Coast Air Basin (SCAB), which is currently designated as a non-attainment area for national standards for PM<sub>10</sub>,<sup>1</sup> PM<sub>2.5</sub> and Ozone. SCAQMD has developed an Air Quality Management Plan (AQMP) to demonstrate the steps required to bring the area into compliance with National Ambient Air Quality Standards (NAAQS). The 2012 AQMP forecast, the Basin will comply with the PM<sub>2.5</sub> standard by 2014 and Ozone standards by 2023. Specific control measures outlined in the plan have been designated to control air emissions. The plan incorporates a detailed listing of proposed transportation improvements (Federal Transportation Improvement Plan [FTIP]); the FTIP improvements have been modeled; this modeling demonstrates consistency with the AQMP. The proposed I-10 Bypass project is listed in the 2013 Federal Transportation Improvement Plan; therefore, the operation of the project has been included in the AQMP modeling, which demonstrates eventual compliance with the NAAQS including standards for ozone, and PM<sub>2.5</sub>.

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

**Less than Significant Impact with Mitigation.** The Air Quality Assessment will evaluate whether operational emissions of the proposed project will increase local levels of PM<sub>10</sub> and PM<sub>2.5</sub> to levels in excess of standards or will contribute substantially to an existing or projected violation of air quality standard. Because the project is part of a conforming FTIP, no violations of such standards are anticipated during the operational phase of the project.

Construction of the I-10 Bypass project will result in construction-related emissions. The AQMP has identified control measures that may be implemented to reduce construction particulate emissions to the extent feasible, such as Best Available Control Measures (BACM) for construction activities for earth-moving construction activities, disturbed surfaces, and mandatory use of track-out control devices. The EIR will incorporate feasible mitigation measures to reduce construction related emissions.

The Riverside County portion of the SCAB is currently designated as being in attainment for CO. As shown in the project's traffic study, the I-10 Bypass will improve traffic flow through the project area. Localized CO hot-spots are therefore not anticipated to occur but will be analyzed in the EIR.

- 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)?*

**Less than significant impact with mitigation.** Operation of the proposed project would not result in a considerable cumulative net increase in ozone precursor pollutants because overall vehicle miles traveled would either remain unchanged or be slightly reduced. Vehicular traffic movement during operation of the project is not anticipated to generate a net increase in criteria pollutant emissions because the project should improve local traffic flow through the area. These emissions will be discussed in the EIR.

<sup>1</sup> The Area is currently meeting PM<sub>10</sub> standards

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Construction activities will generate CO, NOx, and particulate matter pollutant emissions; however, these temporary increases will be reduced due to the use of BACMs. Construction emissions will be addressed in the EIR and mitigation measures applied.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less than significant impact.** Sensitive receptors may be affected by shifting traffic patterns. There are three single-family dwellings adjacent to the project along existing Westward Avenue, where traffic volumes will increase with the proposed project; these sensitive receptors will be evaluated in the EIR for exceedance of CO and other pollutants. Based upon the traffic volumes forecast for the roadway, no exceedance is anticipated.

- e) *Create objectionable odors affecting a substantial number of people?*

**Less than significant impact.** Odors will result from paving operations during construction of the proposed project, which would be less than significant due to the short term of project construction. Also, the project does not involve heavy industrial uses or animal husbandry that could create objectionable odors.

**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?*

**Less than significant impact with mitigation.** Preliminary surveys of biological resources have been conducted, and the results will be compiled in the Natural Environmental Study (NES) and summarized in the EIR. Based upon these surveys, the project is not anticipated to impact any federally listed endangered or threatened species directly. Western portions of the project are located within the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP), and the proposed project is a covered activity under the MSHCP and will fulfill the Plans' requirements. Surveys have found a population of Los Angeles pocket mouse (LAPM), identified as a sensitive species in the WRMSHCP, within the biological study area (BSA); impacts to this species vary by alternative and will be reported in the NES and EIR along with recommended mitigation measures.

The eastern portion of the project is located within the Cabazon Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), is a covered activity under the MSHCP, and will fulfill the Plans' requirements. The primary applicable CVMSHCP requirement is that any project protect sand flows in the San Gorgonio River; two federally endangered species located downstream in the Whitewater River are dependent on such sand flows. Project impacts on such sand flows will be assessed (because the proposed roadway would bridge the San Gorgonio River and Smith Creek, impacts to sand flows are anticipated to be minimized) and mitigation measures identified to maintain sand flows.

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

**Less than significant impact with mitigation.** Riparian/Riverine requirements of Section 6.1.2 of the WRMSHCP will be complied with. The proposed project has the potential to affect the jurisdictional Waters of the United States and the State of California located along Smith Creek, the San Gorgonio River and their tributaries in areas where



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the proposed project crosses existing streambeds. A preliminary jurisdictional delineation of waters of the U. S. and State has been completed and alternative project alignments selected to minimize impacts to such waters. Impacts to waters will be reported in the NES and summarized in the EIR along with recommended mitigation measures.

- 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?*
- 

**Less than significant impact with mitigation.** No riparian habitat or wetlands have been identified in the biological study area. However, the proposed project has the potential to impact Waters of the United States (protected under Section 404) and Waters of the State of California. A preliminary jurisdictional delineation of waters of the U. S. and State has been completed; alternative project alignments were selected to minimize impacts to such waters. Impacts to waters will trigger Clean Water Act Sections 401 and 404, and will be reported in the NES and summarized in the EIR along with recommended mitigation measures.

- 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?*
- 

**Less than significant impact with mitigation.** The WRMSHCP identifies a potential wildlife corridor along the San Gorgonio River. The proposed project includes bridges over the major water courses to minimize impacts to wildlife movement. The EIR will evaluate the potential for the proposed project to affect wildlife connectivity, as required, and identify any necessary mitigation measures.

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

**No Impact.** No such ordinances have been identified.

- 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?*
- 

**Less than significant impact with mitigation.** Portions of the project are located with the WRMSHCP. The proposed project will be evaluated for consistency with the WRMSHCP. Consistency is addressed through compliance with applicable WRMSHCP requirements such as additional surveys, riparian/riverine policies, urban/wildlands interface, and wildlife crossings to be constructed as applicable. The proposed project will also be subject to joint project review by the Western Riverside Regional Conservation Authority and the Wildlife Agencies. Mitigation measures will be identified if necessary to demonstrate consistency.

Portions of the project are located with the CVMSHCP, specifically within the Cabazon Conservation Area. The proposed project will be evaluated for consistency with the CVMSHCP, which is addressed through compliance with applicable requirements of the Cabazon Conservation Area, including preservation of fluvial sand transport. The proposed project will also be subject to Joint Project Review by the Coachella Valley Conservation Authority and the Wildlife Agencies. Mitigation Measures will be identified if necessary to demonstrate consistency.

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**V. CULTURAL RESOURCES -- Would the project:**

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**Less than significant impact with mitigation.** A cultural resources records search performed at the Eastern Information Center identified 39 cultural resources within a half-mile radius of the proposed project. These include prehistoric archaeological sites and buildings more than 50 years old. A cultural resources survey of the project Area of Potential Effects (APE) will be performed to identify all cultural resources within the APE. Results of the survey will be incorporated into the Historic Property Survey Report (HPSR), which will be summarized in the EIR. If cultural resources are identified that may be impacted by the project, archival research and/or a testing program will be implemented to determine whether any of these cultural resources qualify as historical resources as defined in §15064.5 of CEQA. If they do, mitigation measures will be identified that will reduce project impacts to a less than significant level. Measures could include avoidance through project redesign or implementation of a detailed recording and/or data recovery program.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less than significant impact with mitigation.** An Archaeological Survey Report (ASR) will identify any archaeological sites within the APE. If archaeological sites are encountered, a testing program will be carried out to determine whether any of these sites qualifies as a historical resource or a unique archaeological resource as defined in §15064.5. If any do so, appropriate mitigation measures will be identified to reduce project impacts to a less than significant level. These measures could include avoidance through project redesign or a detailed data recovery program.

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less than significant impact with mitigation.** The project site spans areas mapped as low sensitivity for paleontological resources, based upon the Riverside County General Plan Paleontological Sensitivity Map (Open Space Element, page OS-41). The map identifies the sensitivity of lands within Riverside County in relation to the potential for finding paleontological resources. Pleistocene land mammal fossils have been recovered within Riverside County in areas of low sensitivity. This scenario, and the location of portions of the project area within areas of undetermined sensitivity, suggests that there is a potential for encountering Pleistocene fossil land mammal remains. If such resources are identified, a Paleontological Investigation Report (PIR) will be prepared and impacts will be analyzed in the EIR.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less than significant impact.** There are no known cemeteries or buried human remains within the project area. Nonetheless, the unanticipated discovery of unknown human remains is a possibility. The EIR will address this issue by requiring the following mitigation measure:

If human remains are discovered at any point in the implementation process and they prove to be prehistoric, the Riverside County Transportation Department will either avoid the impact by redesign of the project (if feasible) or work with the Native American Heritage Commission to identify and engage the most likely descendent and develop an agreement for treating or repatriating the remains with appropriate dignity along with any associated grave goods, to reduce impacts to a less than significant level.

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Implementation of the project would require ground-disturbing activities. The potential for these activities to affect unidentified human remains will be analyzed in the EIR.

**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 checked="" type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact.** There are no known surface-rupturing faults or faults delineated within the most recent Alquist-Priolo Earthquake Fault Zoning Map issued for the proposed project area south of I-10; several fault zones associated with the San Andreas fault are located north of I-10, while the proposed project is south of I-10. A Geotechnical Analysis will be prepared and summarized in the EIR. Any applicable mitigation measures will be incorporated.

- ii) *Strong seismic ground shaking?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
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**Less than significant impact.** Structures, cuts, and embankments will be designed to be stable under seismic shaking through incorporation of the latest seismic design standards.

- iii) *Seismic-related ground failure, including liquefaction?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact.** Data regarding the potential for ground failure, including liquefaction, will be presented in the EIR. If localized areas with potentially liquefiable soils are present (generally in alluvial areas adjacent to stream channels), they will be identified in the geotechnical investigation, and appropriate design standards will be recommended if necessary. Incorporation of appropriate design standards will reduce potential impacts below a level of significance.

- iv) *Landslides?*
- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
|  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** Existing landslide potential will be assessed in the EIR. The potential for landslides in the new cut slopes created by Alternatives 5 and 12 will be described in the EIR. If unstable slopes or potential landslides are present, they will be identified in the geotechnical investigation, summarized in the EIR, and appropriate design standards and mitigation measures will be incorporated.

- b) *Result in substantial soil erosion or the loss of topsoil?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** The majority of the land in the study area is classified as Urban Land, Grazing Land or Farmland of local importance (although none of the land is actually farmed) by the 2012 California Department of Conservation *California Important Farmland Finder*. While there is no Prime Farmland or Farmland of Statewide Importance located in the proposed project vicinity, there are a few pockets of Farmland of Local Importance located near the eastern end of the project corridor. Appropriate design standards for drainage and erosion control measures will be recommended in the Geotechnical Analysis and incorporated in the design to limit impacts on sensitive soils and potential farmlands.

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- 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?*
- 

**Less than significant impact.** Potentially unstable areas, if present, will be identified in the EIR, and appropriate design standards will be recommended based on the Geotechnical Analysis.

- 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?*
- 

**Less than significant impact.** Expansive soils are generally not life-threatening. If present, potential impacts to roadways or structures will be identified in the EIR and appropriate design standards will be recommended.

- 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?*
- 

**No Impact.** Septic tanks and wastewater disposal systems are not part of the project, so none would be affected by the project.

**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?*
- 

**Less than significant impact.** Construction of the proposed project has the potential to contribute directly or indirectly to greenhouse gas (GHG) emissions by increasing vehicle miles traveled. Based upon the traffic study, no substantial changes in vehicle miles travelled is anticipated to result from the project. This issue will be further addressed in the EIR, as contribution to increases in GHG is expected to be minimal, and all feasible and appropriate measures recommended will be evaluated in the EIR.

- b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?*
- 

**Less than significant impact.** The proposed project does not conflict with the County's Air Quality Element and implementation of objectives outlined in AB32. Project alternatives are not anticipated to impede State, County, or City GHG reduction goals. This issue will be further addressed in the EIR.

**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?*
- 

**Less than significant impact.** The project itself would not transport, use, or dispose of hazardous materials other than construction materials. The future road project could be used for the transport of hazardous materials, subject to existing motor vehicle restrictions and requirements.

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- 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"/> |
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**Less than significant impact.** See Item VIII.a, above

- 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"/> |
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**No Impact.** There are no existing schools in the proposed project vicinity.

- 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** An Initial Site Assessment (ISA) was conducted by Geocon, Inc. (2013) to determine the likely presence of hazardous materials. A preliminary result indicates the presence of several high-pressure natural gas lines in the study area, and notes two identified hazardous waste sites near the proposed alignments. This issue will be further addressed in the EIR.

- 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** The project is located within two miles of Banning Municipal Airport, so FAA design standards will control the height of the roadbed and any structures associated with construction of the proposed project. The preliminary project designs meet FAA criteria; such design standards will be incorporated into the final design plans.

- 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"/> |
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**No impact.** There are no known private airstrips in the vicinity.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*
- |                          |                                     |                          |                          |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** When completed, the project will have a beneficial effect during certain emergency conditions:

- i) During conditions when the adjacent section of I-10 is closed, the project will provide an emergency relief route for traffic on I-10. During recent such closures, the backups on I-10 extended as long as ten hours, creating emergency conditions for motorists with medical conditions that were trapped in the backup.

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- ii) During conditions where lengthy trains are stopped on the tracks, or moving slowly and blocking the existing at-grade crossings at Apache Trail and Broadway, residents of Cabazon south of the railroad tracks are effectively trapped in their neighborhoods; emergency vehicles cannot reach them. The proposed project will provide an alternate route for emergency services from Cabazon to Banning that would not require an at-grade railroad crossing.

The project will be designed to meet Riverside County Fire Department requirements for emergency access; however, access could be impaired during the construction phase (generally, to businesses and residences along existing Westward Avenue). Accordingly, the project will coordinate with local fire, police and hospitals to ensure that access to emergency routes during the construction phase of the project are adequately maintained.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**Less than significant impact.** Proposed alignments (Alt 5 and 12) that enter the foothills also enter a high wildfire susceptibility zone. However, the project would not expose people or structures to a significant risk of loss, injury, or death involving wild land fires as 1) the project does not propose any new urbanized land uses, and 2) consistent with the practices of the Riverside County Fire Department, the roadway would be closed if a wild land fire occurred adjacent to the route and threatened motorists. However, the roadway could be used by fire trucks for fighting any such fire and depending on the exact location of the fire, the proposed project could aid in the evacuation of the area, particularly with the evacuation of Cabazon. Future projects in the area would be developed in accordance with the Fire Hazards section of the County of Riverside General Plan Safety Element. The proposed project would provide improved emergency access in the project area.

**IX. HYDROLOGY AND WATER QUALITY Would the project:**

- a) *Violate any water quality standards or waste discharge requirements?*

**Less than significant impact.** The proposed project will comply with NPDES requirements. A Water Quality Assessment Report will be prepared. Because the land disturbance will be greater than one acre, per NPDES Phase II requirements, the proposed project will need to comply with the County’s Storm Water Management Plan (SWMP) incorporating temporary and permanent BMPs, and a Storm Water Pollution Prevention Program (SWPPP) to address long-term and short-term construction water quality impacts.

- 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)?*

**Less than significant impact.** The proposed project is expected to require minor excavation for roadside drainage ditches and culvert extensions, with little dewatering anticipated. The project will increase the amount of impervious paved surfaces; however, the project is not expected to deplete groundwater supplies substantially, interfere with groundwater recharge, or create either a net deficit in aquifer volume or a lowering of groundwater table level.



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- 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?*

**Less than significant with mitigation.** A Hydrology Report and Preliminary Drainage Report will be prepared. The proposed project would maintain the existing drainage patterns. The proposed project would bridge Smith Creek and the San Gorgonio River. Culverts would be installed at all existing smaller stream crossings in order to maintain existing drainage patterns. Erosion control measures and necessary best management practices (BMPs) will be applied at the stream crossings and at cut/fill embankments to prevent erosion and siltation. This will be further addressed in the EIR.

- 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?*

**Less than significant with mitigation.** The proposed project would maintain existing drainage patterns. The proposed project alternatives add between 22 and 24 acres of new pavement. This additional pavement has the potential to increase local runoff from the pre-project conditions directly near the roadway. However, this increase is considered insignificant when compared to the large 100-year flow rates in Smith Creek and the San Gorgonio River. The small increase in roadway runoff will drain into Smith Creek and the San Gorgonio River, and will be conveyed downstream before the peak off-site flow in the major tributaries of Smith Creek and the San Gorgonio River reach the project. Therefore, the small increase will have no adverse effect on potential flooding effects downstream. On-site drainage facilities will be incorporated to intercept and convey design runoff. The Drainage Report will analyze this issue and the results will be incorporated into the EIR.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

**Less than significant with mitigation.** The proposed project would include storm water systems with the capacity to convey the design runoff. See response to IX.a.

- f) *Otherwise substantially degrade water quality?*

**Less than significant with mitigation.** BMPs will be constructed to treat increased polluted runoff that could be generated by the roadway improvements. See response to IX(a). With proper application of BMPs, the proposed project would not substantially degrade water quality.

- 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?*

**No impact.** The proposed project does not include construction of housing.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

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**Less than significant with mitigation.** A Location Hydraulic Study and Floodplain Evaluation Report will be prepared. In general, the proposed project would bridge over Smith Creek, the San Gorgonio River, and other major drainages. Any construction within the special flood hazard area (SFHA) is subject to federal floodplain management requirements. When adding cross-culverts, proper openings are necessary so that the proposed project will not impede or redirect flood flows. The issue will be assessed in the EIR, and mitigation measures identified.

- 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?*

**Less than significant with mitigation.** The proposed project would cross existing stream beds and their tributaries. A Hydraulic Analysis will be prepared and incorporated into the EIR. Proper designs such as improved transition structures upstream and downstream of the culverts, placement of erosion protection, or upsizing cross-culverts, would be incorporated to minimize significant risks involving flooding.

- j) *Inundation by seiche, tsunami, or mudflow?*

**Less than significant impact.** Because the project area is located nearly 100 miles inland from the Pacific Ocean, the proposed project would not be inundated by seiche or tsunami. The EIR will further evaluate mudflow during construction in hilly terrain.

**X. LAND USE AND PLANNING - Would the project:**

- a) *Physically divide an established community?*

**No Impact.** The project proposes improvements outside of existing residential communities.

- 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?*

**Less than significant impact.** The project is consistent with the Riverside County General Plan other than its circulation element. The project components include amending the circulation element to add the roadway, thereby correcting the inconsistency. The project is consistent with the with the City of Banning General Plan, and the entire proposed project corridor is within the Mt. Palomar Mountain Nighttime Lighting Policy area, which necessitates unique nighttime lighting standards in order to limit light leakage and spillage that may obstruct or hinder the view of the nighttime sky. A more detailed study of local plans and policies will be prepared and reported in the EIR.

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

**Less than significant with mitigation.** The western part of the proposed project is located within the WRMSHCP planning area. The WRMSHCP has the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The eastern part of the project is located in the CVMSHCP which has similar objectives. The EIR will assess the project's consistency with both plans.

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**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?*

**Less than significant with mitigation.** See Item XI.b, below.

- 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?*

**Less than significant impact.** According to the County of Riverside General Plan Multipurpose Open Space Element, the project area is located in a MRZ-3 zone, which designates land where available geologic information indicates that mineral deposits (regionally important) are likely to exist but the significance of the deposit is undetermined. A sand and gravel mine proposed for expansion is located in the eastern end of the project area. Impacts to mineral resources will be assessed in the EIR.

**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?*

**Less than significant impact with mitigation.** Depending on predicted future traffic volumes and proximity of sensitive receptors, traffic noise levels may exceed local criteria applicable to roadway noise impact for the three existing residences along Westward. A noise study will be conducted to assess operational traffic noise levels and their effects on sensitive receptors, and to recommend suitable noise abatement techniques, if feasible. The feasibility of mitigation will be assessed in the EIR.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less than significant impact with mitigation.** Less than significant impact is expected to result from groundborne vibration or groundborne noise associated with the operation of the proposed project. Groundborne noise and vibration impacts generated as a result of project construction are anticipated to be less than significant despite the use of jackhammers, vibratory compaction rollers, and other earth-moving construction equipment. Such impacts would be temporary and intermittent. No long-term exposure to excessive groundborne vibration or groundborne noise levels is anticipated; however, this topic will be addressed further in the EIR.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less than significant impact with mitigation.** Please see Item XII. a) above.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Potentially significant impact.** An increase in noise levels associated with project construction activities is expected to occur but would be temporary and intermittent. Increases in noise levels during operation of the project, above existing noise levels, will be assessed in the EIR. Construction noise will be addressed in the EIR.

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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- 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?*
- 

**Less than significant impact.** The proposed project is located near the Banning Municipal Airport. The Riverside County Airport Land Use Commission adopted a Comprehensive Land Use Plan Banning Municipal Airport in 1993; this plan includes noise level projections for the airport and environs. No habitable structures are proposed as a part of the project. None of the project alternatives is located within the airports' "Future" 65CNEL, which would be considered an excessive noise zone. As such, the proposed project is not expected to expose people to excessive airport noise.

- 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?*
- 

**No impact.** The project is not in the vicinity of a private airstrip, and no habitable structures are proposed, so it would not expose people residing or working in the project area to excessive noise.

**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)?*
- 

**Less than significant impact:** The proposed project is a roadway project that will not directly create new population growth. The EIR will assess the proposed project's ability to induce additional growth indirectly. The analysis will assess the existing development constraints for each of the parcels within the general area of the proposed project based on existing general plans and zoning, existing roadway access, railroad access, physical and natural resource constraints such as water courses, utility service, and economics (demand for development). The generalized effects of potential development on resources of concern will be assessed in the EIR. The effects of existing resource preservation programs such as the WRMSHCP and CVMSHCP will be discussed.

- b) *Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?*
- 

**No Impact.** The proposed project will not displace any existing housing units, so it will not necessitate construction of replacement housing elsewhere

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*
- 

**No Impact.** The proposed project will not displace any existing residents.

**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 public services:*

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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*Fire protection?*

**No Impact.** The project would not require construction of new fire protection facilities. The proposed project would provide a roadway connection between Banning and Cabazon other than I-10, which will expand access and improve response times during emergencies along this section of the Interstate and for surrounding areas when I-10 is backed up. This issue will be discussed in the EIR.

*Police protection?*

**No Impact:** The proposed project would provide a roadway connection between Banning and Cabazon other than I-10, which will expand access and improve response times during emergency along this section of the Interstate and for surrounding areas when I-10 is backed up. The Desert Hills (Banning) weigh station is located in the I-10 segment parallel to the bypass, and is operated by the California Highway Patrol (CHP). To preclude trucks from using the bypass to avoid the weigh station, truck enforcement turnouts will be provided in both directions to allow the CHP to enforce the weigh station restrictions. This issue will be discussed in the EIR.

*Schools?*

**No Impact:** The proposed project will not affect schools.

*Parks?*

**No Impact:** The proposed project will not affect parks.

*Other public facilities?*

**No Impact:** No other impacts to public facilities have been identified.

**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?*

**No Impact.** There are no existing local or regional parks along the proposed alignment.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**No impact.** The project does not include construction or expansion of recreation facilities. However, the proposed project would include shoulders usable as bicycle lanes, which may increase recreational opportunities for bicyclists.

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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**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?*

The “applicable plan, ordinance or policy” is the Riverside County Congestion Management Plan, which establishes levels or service standards for roadway links and intersections. Please see discussion in item b) below. The project is consistent with adopted County plans relevant to bicycle facilities and pedestrian paths. This topic will be further addressed in the EIR.

- 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?*

**Less than significant impact.** The Traffic Study prepared for the project indicates that all study area intersections will operate at levels of service consistent with the Riverside County Congestion Management Plan. This will be addressed in the EIR.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?*

**No impact.** The project would not involve air traffic.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Less than significant impact.** The project will be designed to meet applicable County road design standards.

- e) *Result in inadequate emergency access?*

**Less than significant impact with mitigation.** Upon completion, the project will improve emergency access. The County will coordinate with emergency service providers to address emergency access during construction.

- 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?*

**No impact.** The project will support alternative transportation modes by providing a safer route for bicycles and pedestrians between Banning and Cabazon.



I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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**XVII. UTILITIES AND SERVICE SYSTEMS –**

Would the project:

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

See item XVII. b.

- 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?*

**No impact.** The proposed project would not generate or cause generation of wastewater. No new water or wastewater treatment facilities or expansion of existing facilities would be required.

- 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?*

**Less than significant impact with mitigation.** The project alternatives add between 22 and 24 acres of new pavement. This additional pavement has the potential to increase local runoff from the pre-project conditions directly near the roadway. However this increase is considered insignificant when compared to the large 100-year flow rates in Smith Creek and the San Gorgonio River. The small increase in roadway runoff will drain into Smith Creek and the San Gorgonio River and be conveyed downstream before the peak off-site flow in the major tributaries of Smith Creek and the San Gorgonio River reach the project. The small increase will therefore have no adverse effect on potential flooding effects downstream, and no additional drainage facilities are needed. This issue will be addressed in the Drainage Report and summarized in the EIR.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**No impact.** See item XVII.e.

- 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?*

**No impact.** The proposed project would involve road construction. No new water supply or waste treatment capacity would be required.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

**Less than significant impact.** Operation of the facility is not anticipated to generate ongoing solid waste. Construction and demolition activities for the proposed project would generate solid waste, the majority of which would be a product of demolition. In compliance with AB 939, Riverside County has developed a Countywide

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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Integrated Waste Management Plan, which includes a demolition waste recycling program to reduce the amount of waste to be disposed of in landfills. Solid waste that remains after recycling would be disposed of in appropriate landfills within the region. The closest County waste facility is the Lamb Canyon Landfill located on SR-79 south of Beaumont. According to Riverside County staff, the county's entire waste disposal system has a minimum of 15 years of disposal capacity as required by state law.

- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

**Less than significant impact.** The project would comply with federal, state and local statutes related to solid waste.

**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?*

**Less than significant impact with mitigation.** The proposed project is not expected to interfere substantially with the movement of any know native resident or migratory fish or wildlife species; this issue will be assessed in the EIR. The proposed project must comply with the WRMSHCP and the CVMSHCP. Additionally, the project site spans areas mapped as low sensitivity for paleontological resources according the Riverside County General Plan. Pleistocene land mammal fossils have been recovered within Riverside County in areas of low sensitivity. This suggests that there is a potential for encountering Pleistocene fossil land mammal remains. A more detailed analysis of impacts to biological and cultural resources will be conducted for the EIR.

- 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)?*

**Less than significant impact with mitigation.** The EIR will contain a detailed evaluation of cumulative effects. The project is being designed consistent with planned growth identified in the Riverside County General Plan, the Banning General Plan, and the Morongo General Plan. The cumulative impacts analysis will also address any additional projects currently proposed that require a general plan amendment.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Potentially significant impact.** The potential for the project to cause substantial adverse effects on human beings, such as through visual impacts or increased noise levels, will be further evaluated in the EIR.

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## I-10 Bypass - Banning to Cabazon Public Meeting November 20, 2013

Sign-In Sheet

**Location:** Banning High School  
Multi-Purpose Room  
100 W. Westward Way  
Banning, CA 92220

**Time:** 4:00 PM – 7:00 PM

Name	Address	Phone	Email
Biff + Deborah Singletary	[REDACTED]	[REDACTED]	[REDACTED]
Juis Santana	[REDACTED]	[REDACTED]	[REDACTED]
ROSALIA CASTRO	" " " "	" "	[REDACTED]
Jim King	[REDACTED]	[REDACTED]	[REDACTED]
Mike Saaga Cruz	[REDACTED]	[REDACTED]	[REDACTED]
Don Peterson	[REDACTED]	[REDACTED]	[REDACTED]
Tim BAILIFF	[REDACTED]	[REDACTED]	[REDACTED]
Deb FRANKLIN	[REDACTED]	[REDACTED]	[REDACTED]
Kerri Mariner	[REDACTED]	[REDACTED]	[REDACTED]
Ingeborg Graves	[REDACTED]	[REDACTED]	[REDACTED]
Ernie Saldana	[REDACTED]	" "	[REDACTED]
Teresa Bui	[REDACTED]	" "	[REDACTED]
Marshall Sells	[REDACTED]	" "	[REDACTED]
Garrison Saldana	[REDACTED]	" "	[REDACTED]
Hunter Selden	[REDACTED]	" "	[REDACTED]
Gary Hironimus	[REDACTED]	[REDACTED]	[REDACTED]

Name	Address	Phone	Email
Susan Savolainen	[REDACTED]	[REDACTED]	[REDACTED]
Frances Magneson	[REDACTED]	[REDACTED]	[REDACTED]
Tim Guayra	[REDACTED]	[REDACTED]	[REDACTED]
Eric [unclear]	[REDACTED]	[REDACTED]	[REDACTED]
Bill Lamb	[REDACTED]	[REDACTED]	[REDACTED]
Estelle Lewis	[REDACTED]	[REDACTED]	[REDACTED]
Robert Guillen	[REDACTED]	[REDACTED]	[REDACTED]
CYNTHIA BARRINGTON	[REDACTED]	[REDACTED]	[REDACTED]
Joseph Merna	[REDACTED]	[REDACTED]	[REDACTED]
Shoua & Ryan [unclear]	[REDACTED]	[REDACTED]	[REDACTED]



Name	Address	Phone	Email
Les Magness	[Redacted]	[Redacted]	[Redacted]
Franklin Dore	[Redacted]	[Redacted]	[Redacted]
<i>[Handwritten signature]</i>	[Redacted]	[Redacted]	[Redacted]
Tom DAMEZ	[Redacted]	[Redacted]	[Redacted]
Merlin Johnson	[Redacted]	[Redacted]	[Redacted]
Michael Boske	[Redacted]	[Redacted]	[Redacted]
GEO. MOORADIAN	[Redacted]	[Redacted]	[Redacted]
James Donnell	[Redacted]	[Redacted]	[Redacted]
Doreen Reynolds	[Redacted]	[Redacted]	[Redacted]
Paul Weston	[Redacted]	[Redacted]	[Redacted]



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**From:** [Marcinek, John](#)  
**To:** ["Adriana Villicana"](#)  
**Cc:** [Zambon, Mary](#); [Vombaur, Susan](#); [darren.adrian@kimley-horn.com](mailto:darren.adrian@kimley-horn.com); ["Dennis.Landaal@kimley-horn.com"](mailto:Dennis.Landaal@kimley-horn.com)  
**Subject:** RE:  
**Date:** Monday, November 25, 2013 8:00:13 AM  
**Attachments:** [Preliminary-Alternatives-for-Environmental-Review-2f11.jpg](#)

---

Adriana,

Attached is an exhibit that shows the preliminary alternatives that we are studying for the I-10 Bypass. You will notice that all 3 alignments join into Westward Avenue at the east side of Banning. Our consultant engineers have indicated that the proposed road improvements can essentially stay within the existing Westward Avenue right of way. They have indicated that we may need to acquire some right of way at the intersection of Westward/Hathaway to allow for turn lanes and better corner visibility. Therefore we are not proposing to remove any houses. However, I just want to point out that these alignments are conceptual at this point and we need to go through the environmental process and detailed design to finalize the preferred alignment. Please refer to our web site for more information: <http://rcprojects.org/i10bypass/>

Thank you..... John Marcinek, Project Manager, County Of Riverside

**From:** Adriana Villicana [REDACTED]  
**Sent:** Saturday, November 23, 2013 7:21 PM  
**To:** Marcinek, John  
**Subject:**

I have a question I heard that by connecting cabazon nd banning they are going to tear houses on the east side of banning is that true

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# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: Bill Lamb Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: Questar Southern Trails Pipeline Email: [REDACTED]

Comments: Our company's 16" pipeline is in West Ward Ave & is extremely shallow going eastbound after pavement ends. We would prefer Charles St. as the by-pass route, which would avoid 3 major pipelines. Please include us in any final decisions

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? newspaper & company email
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

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# PROYECTO DE DERIVACIÓN DE LA I-10: BANNING A CABAZON

20 de noviembre 2013 • Banning High School

Tarjeta de Comentario

Nombre: \_\_\_\_\_ Teléfono: (    ) \_\_\_\_\_ Fecha: \_\_\_\_\_

Domicilio: \_\_\_\_\_

Afiliación: \_\_\_\_\_ Correo Electrónico: \_\_\_\_\_

Comentarios: *for traffic to flow on bypass  
you would need grade seperation at  
Apache and Heritage or you are  
just bldy - parking lot*

Mande comentarios por fax al 951-955-3164 o envíe esta tarjeta postal por correo.

**Comentarios tiene que ser recibidos antes del 13 de diciembre 2013.**

Solicito estar en la Lista de Correo del Proyecto.

## Alojamientos de la Reunión:

- ¿Cómo se enteró de esta reunión o el proyecto? \_\_\_\_\_
- Si usted está limitado en su capacidad para comunicarse en Inglés, fueron sus necesidades de comunicación adecuadamente satisfechas?  Sí  No  No es Aplicable
- Si estaba en necesidad de un acomodo razonable en esta reunión como resultado de una discapacidad, fueron sus necesidades de alojamiento adecuadamente satisfechas?  Sí  No  No es Aplicable
- Si usted marcó No a cualquiera de las dos preguntas anteriores, por favor explique cómo sus necesidades podrían ser acomodadas en el futuro:

*Para acomodar a personas con discapacidades, esta tarjeta estará disponible en formatos alternativos bajo petición.*



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**From:** [Marcinek, John](mailto:Marcinek, John)  
**To:** ["darren.adrian@kimley-horn.com"](mailto:darren.adrian@kimley-horn.com); [Zambon, Mary](mailto:Zambon, Mary); ["lyn.calerdine@lsa-assoc.com"](mailto:lyn.calerdine@lsa-assoc.com); [Vombaur, Susan](mailto:Vombaur, Susan)  
**Cc:** ["Dennis.Landaal@kimley-horn.com"](mailto:Dennis.Landaal@kimley-horn.com)  
**Subject:** Re: I-10 Bypass Website Comment  
**Date:** Friday, November 22, 2013 1:01:51 PM

---

Thank you for discussing the details with him.....John

----- Original Message -----

From: darren.adrian@kimley-horn.com [<mailto:darren.adrian@kimley-horn.com>]  
Sent: Friday, November 22, 2013 12:52 PM  
To: Marcinek, John; Zambon, Mary; lyn.calerdine@lsa-assoc.com <[lyn.calerdine@lsa-assoc.com](mailto:lyn.calerdine@lsa-assoc.com)>; Vombaur, Susan  
Cc: Dennis.Landaal@kimley-horn.com <[Dennis.Landaal@kimley-horn.com](mailto:Dennis.Landaal@kimley-horn.com)>  
Subject: FW: I-10 Bypass Website Comment

As indicated in his comments, he is mostly concerned about additional traffic around his neighborhood. Currently, he feels this area is somewhat isolated and does not receive much pass-thru traffic. He noted the potential for regional traffic using the new road as a bypass when the freeway gets busy with weekend traffic. He also expressed truck bypass concerns. I explained our route signing concept and the measures the project will take for monitoring trucks. I also explained the constraints we have with Alts 7 and 8. After hearing the constraints (which he understands) he suggested that we consider an alternative that maintains our easterly join to Bonita, but connects north of the airport with the extension of John Street.

Darren

-----Original Message-----

From: Adrian, Darren  
Sent: Friday, November 22, 2013 12:40 PM  
To: 'Marcinek, John'; 'Donald McDonald'  
Cc: Landaal, Dennis  
Subject: RE: I-10 Bypass Website Comment

Donald,

It was good speaking with you about the I-10 Bypass project. I will convey your concerns to the team. As discussed, please feel free to expand on your comments as the County will accept comments as part of the Scoping Meeting process up until December 13th. If you have any further questions about the project, please feel free to call John Marcinek (951-955-3727) with the County or me at the number listed below.

Thanks,  
Darren

-----  
Darren Adrian, P.E.  
Kimley-Horn and Associates, Inc.  
(714) 705-1304  
[darren.adrian@kimley-horn.com](mailto:darren.adrian@kimley-horn.com)

-----  
This e-mail from Kimley-Horn and Associates, Inc. and any files transmitted with it may contain confidential information. It is intended solely for the individual named above. If you are not the intended recipient, please notify the sender and delete it immediately. Any other use or distribution is prohibited.  
-----

-----Original Message-----

From: Marcinek, John [<mailto:JMARCINE@rctlma.org>]  
Sent: Thursday, November 21, 2013 4:20 PM  
To: 'Donald McDonald'  
Cc: Landaal, Dennis; Adrian, Darren  
Subject: RE: I-10 Bypass Website Comment

Donald McDonald,

I have asked our consultant engineers to call you to discuss your concerns. They have a looked into the pros and cons of all the different alternatives and I trust that they will be able to answer all of your questions.

Thank you ..... John Marcinek, Project Manager, County Of Riverside

-----Original Message-----

From: Donald McDonald [REDACTED]  
Sent: Thursday, November 21, 2013 4:03 PM  
To: Marcinek, John  
Subject: I-10 Bypass Website Comment

Name: Donald McDonald  
Email: [mcedee@pacbell.net](mailto:mcedee@pacbell.net)  
Phone: 909-241-6473

Message:

My concern is that any by-pass on the south side of the freeway will impact the local residents the most .I intend to support alt 7 as the best route. It will have almost no impact on residents and looks to me to be the most direct and least costly alternative.

I did not purchase my home to be in that close proximity to a major thoroughfare.

What will keep the truck traffic off our residential streets that are bypassing the truck scales? or slow traffic on the freeway almost every Friday & Sunday ?

I definitely do not want that traffic on the south side of I 10 and will do everything i can to see that it doesn't happen. Don McDonald resident [REDACTED]

--

This mail is sent via contact form on Riverside County Projects <http://rcprojects.org>

# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: Gary Hironimos Phone: [REDACTED] Date: 11-20-13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: [REDACTED]

Comments: Something stinks here. A route on the north side is better in so many ways that someone must have been paid off to eliminate it. The southern routes are nearly twice as long, include 2 major bridges + control of Smith Creek, and routes traffic through residential neighborhoods in southeast Banning. Typical Gov't project.

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? \_\_\_\_\_
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

*To accommodate persons with disabilities, this card will be made available in alternate formats upon request.*

# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: CYNTHIA BARRINGTON Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: [REDACTED]

Comments: I HAVE A CONCERN ABOUT INCREASED HIGH SPEED TRAFFIC THAT WILL USE THE ROUTE TO AVOID FWY CONGESTION, ALSO TRUCKS THAT WILL TRY TO BYPASS THE SCALES. I THINK THE ROUTE SHOULD BE CLOSED TO DAILY TRAFFIC AND ONLY OPEN FOR EMERGENCIES.

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? LETTER
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: GEORGE MOORADIAN Phone: [REDACTED] Date: 11-20-13

Address: [REDACTED]

Affiliation: APACHE TRAIL VENTURE, LLC Email: [REDACTED]

Comments: \_\_\_\_\_

WE OWN THE COMMERCIAL 5+ ACRES AT 14-030 APACHE TR.  
WE THINK THE COUNTY DESPERATELY NEEDS THE ROAD TO BONITA.

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? BY MAIL
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: Michale Cash e Phone: [REDACTED] Date: 11-20-13

Address: [REDACTED]

Affiliation: Homeowner Email: [REDACTED]

Comments: Questions; #1) How are you going to not allow the big trucks not bypass the Banning Scales? that presents a safety issue! #2) What about increased pollution? what about increased noise to nearby residents especially at night what about increased crime to nearby residents?

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

How about a horse riding trail with it, its a Stage Coach  
 I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? letter come to my house town
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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# I-10 BYPASS: BANNING TO CABAZON PROJECT 1 of 3

November 20, 2013 • Banning High School

COMMENT CARD

Name: Joe Meraz Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: [REDACTED]

Comments: 1) alternatives 10 and 11 will affect residential areas due to non-emergency daily commuting to/from Banning & Cabazon.  
2) pave Westward further north to Hargrave to allow direct access to 8th st ramps. That has a grade separation and freeway bypass traffic won't back up when trains cross like at Hwy

Fax comments to 951-955-3164 or mail this postcard.  
Comments due by December 13, 2013.  I request to be on the Project Mailing List.

Meeting Accommodations:  
• How did you hear about this meeting or project? Word of mouth  
• If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable  
• If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable  
• If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

# I-10 BYPASS: BANNING TO CABAZON PROJECT 2 of 3

November 20, 2013 • Banning High School

COMMENT CARD

Name: Joe Meraz Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: \_\_\_\_\_

Comments: 3) Westward traffic should continue west past Hathaway because there are ~~are~~ fewer residential impacts from the future daily commute traffic. Only fields and block walled developments exist. This also give more options to 8th st grade separation

Fax comments to 951-955-3164 or mail this postcard.  
Comments due by December 13, 2013.  I request to be on the Project Mailing List.

Meeting Accommodations:  
• How did you hear about this meeting or project?  
• If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable  
• If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable  
• If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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**I-10 BYPASS: BANNING TO CABAZON PROJECT** 2013  
November 20, 2013 • Banning High School

COMMENT CARD

Name: Joe Mera Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: \_\_\_\_\_

Comments: 4) If westward is paved through between Hargrave and Hathaway two options for the bypass are available. From the intersection of Hathaway & Westward traffic would be able to go north to Hargrave ramps or west to 8th street ramps

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

**Meeting Accommodations:**

- How did you hear about this meeting or project? \_\_\_\_\_
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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**I-10 BYPASS: BANNING TO CABAZON PROJECT**

November 20, 2013 • Banning High School

COMMENT CARD

Name: Joe Mera Phone: [REDACTED] Date: 11/20/13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: [REDACTED]

Comments: if the bypass is built daily traffic will use Barbour St for trips to/from south Banning and the outlet malls. This is a residential area and school bus route. ~~the~~ east/west traffic avoids Charles due to speed bumps, Barbour is narrow at its mid point and

Fax comments to 951-955-3164 or mail this postcard.

Comments due by December 13, 2013.

I request to be on the Project Mailing List.

**Meeting Accommodations:**

- How did you hear about this meeting or project? \_\_\_\_\_
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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**MERLIN JOHNSON**

**RECEIVED**

NOV 25 2013

Riv. Co. Trans. Dept.  
Traffic Engineering

November 21, 2013

Mary Zambon  
Riverside County Transportation Department  
3525 14<sup>th</sup> Street  
Riverside, California

Re: I-10 Bypass: Banning to Cabazon Project  
Comments  
Parcel Number 532130017-6

Mary Zambon

I would like to thank the County of Riverside for providing a forum where we could come together and see more or less what the plan for Westward is.

I have a couple of comments as they relate to the project as I currently understand it.

1. I would like to see underground utilities (Water and Sewer) extended east to the City limits as part of this project so that at some point in the future the proposed new road will not have to be dug up for their installation. Construction of utilities in an existing street also disrupts traffic which is what this project is all about, eliminating a bottleneck, and keeping an alternate route open for I-10. There is also nothing worse than to have a new road or street built or paved and then to have it destroyed for the installation of utilities. It makes everyone look bad, the City, the County, and the developer.
2. If alignment 12 or 13 are used, the proposed roadway and right of way, should be placed to incorporate the existing Gas, Oil, and Communications lines within the City/County right of way. If the right of way is not placed to include these existing underground facilities the usefulness of my and other properties will be greatly reduced. It only makes good sense to me to have these existing utilities within the proposed public right of way as much as possible.

Please keep me informed of any meetings that are open to the public regarding this project.

If you have any questions or need any additional information please contact me at

Sincerely



Merlin Johnson  
Owner

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# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School



COMMENT CARD

Name: Patricia Jackson Phone: ( ) \_\_\_\_\_ Date: 11/20/13

Address: \_\_\_\_\_

Affiliation: \_\_\_\_\_ Email: \_\_\_\_\_

Comments: WE NEED BETTER ROADS INTO AND OUT OF THE OUTLET MALLS. THE PLANS LOOK GOOD SO FAR.

Fax comments to 951-955-3164 or mail this postcard.  
Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? \_\_\_\_\_
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 20, 2013 • Banning High School

COMMENT CARD

Name: Deborah Singletary Phone: [REDACTED] Date: 11-20-13

Address: [REDACTED]

Affiliation: \_\_\_\_\_ Email: [REDACTED]

Comments: We desperately need access to Cabazon from Banning South of freeway + railroad tracks. Alternative #4 seems to be easiest, accessing the old Fields Rd.

Fax comments to 951-955-3164 or mail this postcard.  
Comments due by December 13, 2013.

I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? Flyer in mail
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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**I-10 BYPASS: BANNING TO CABAZON PROJECT**

November 20, 2013 • Banning High School

**COMMENT CARD**

Name: Tim BAILIFF Phone: [REDACTED] Date: 11-20-13

Address: [REDACTED]

Affiliation: BAILIFF RANCH Email: [REDACTED]

Comments: WE WOULD LIKE TO ARRANGE A MEETING TO DISCUSS YOUR PROPOSED ROUTE ON THE EAST END OF THE BY-PASS, MAIN CONCERN IS SECTION 18.

Fax comments to 951-955-3164 or mail this postcard.

**Comments due by December 13, 2013.**

I request to be on the Project Mailing List.

**Meeting Accommodations:**

- How did you hear about this meeting or project? ON-LINE AND NEWSPAPER
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

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October 2, 2008

The Honorable Jerry Lewis  
2112 Rayburn House Office Building  
Washington, D.C. 20515

**Re: Technical Amendment Request-Ramsey Street Extension**

Dear Congressman Lewis:

We are writing to thank you for your wonderful support on many issues over the years on our behalf. Today we seek assistance to modify a transportation funding action that is now supported by the Morongo Band of Mission Indians, the City of Banning, and Riverside County Supervisor Marion Ashley.

The transportation project identified as the Ramsey Street Extension in the FY 2003 Omnibus Appropriations Bill was funded at \$1.75 million. Over the intervening years this project, which is also specifically named in the expenditure plan of the Riverside County Transportation Commission voter-approved 2002 transportation sales-tax program, Measure A, has lacked the necessary consensus and full funding commitments to move forward.

Fortunately, as this year has progressed, an approach has been agreed upon which honors Tribal Sovereignty, fosters economic development and improved access to Banning's airport, and enhances public safety by creating a Pass alternative route for Interstate 10. Today there is not a functional transportation route through the Pass in the event that Interstate 10 is shut down. The entire San Geronio Pass area was paralyzed by complete closure of I-10 in a 2005 law enforcement action.

We would appreciate your essential support to refine the description of the "Ramsey Street Extension" Congressional project to "Airport Drive"<sup>1</sup> on the south side of Interstate 10 extending east from Hargrave Street in Banning to Main Street in the community of Cabazon.

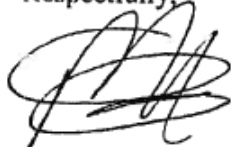
We feel the public benefit of a recommitment of the FY 2003 funding will be seen in the early construction of an I-10 alternative route, improved utilization of Banning's airport and economic growth in the community.

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<sup>1</sup> "Airport Drive" is for illustrative purposes only.

With your assistance, we can build upon an unprecedented partnership and maximize the public benefit derived from federal funding and your actions on our behalf.

Respectfully,



Robert Martin  
Tribal Chairman  
Morongo Band of Mission Indians  
11581 Potrero Rd.  
Banning, CA 92220



Brenda Salas  
Mayor  
City of Banning  
Banning, CA 92220  
99 E. Ramsey St.



Marion Ashley  
District 5 Supervisor  
County of Riverside  
4080 Lemon St. 5<sup>th</sup> Floor  
Riverside, CA 92501

**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DISTRICT DIRECTOR

464 WEST FOURTH STREET, MS 1201

SAN BERNARDINO, CA 92401-1400

PHONE (909) 383-4055

FAX (909) 383-6239

TTY 711

*Flex your power!  
Be energy efficient!***DRAFT**

March 19, 2009

Honorable Jerry Lewis  
2112 Rayburn House Office Building  
Washington, D.C. 20515

Technical Amendment Request—Ramsey Street Extension

Dear Congressman Lewis:

I am writing regarding the transportation project identified as the Ramsey Street Extension in the FY 2003 Omnibus Appropriations Bill and funded for \$1.75 Million.

This project, which resulted from a group effort by the Morongo Band of Mission Indians, the City of Banning, the County of Riverside and the California Department of Transportation, has always been intended to provide an alternative to Interstate 10 (I-10) through San Geronio Pass. This effort was the direct result of the complete closure of I-10 for approximately twelve hours during a police pursuit, shooting and investigation in 2005. During that closure, all east-west travel between Los Angeles and the Coachella Valley was effectively stopped.

Though the intention of all parties has always been to identify and construct the most effective route for an I-10 bypass, the project was informally called the "Ramsey Street Extension" by various agency staff members and was included in the 2003 Appropriations Bill, the Riverside County Transportation Commission, Measure A Program and the Regional Transportation Improvement Program under that name.

I believe that re-designating this project with a name that identifies what it is actually intended as—an "Interstate 10 By-pass from Hargrave Street in the City of Banning to State Route 111, Haughen-Lehmann Way in unincorporated Riverside County, or Bonita Avenue in the community of Cabazon"—would allow for all viable alternatives to be considered during the planning, programming, environmental and design phases. Please note that the viable alternatives would include but are not limited to: a Ramsey Street Extension, Airport Drive Improvements, and Banning Airport Access Improvements.



March 19, 2009

Page 2

We believe that this re-designation would support the intentions of the Morongo Tribe, Banning, Riverside County and Caltrans to provide a safe and reliable alternative to I-10 through San Gorgonio Pass and to insure uninterrupted private and commercial travel through this area.

If you would like to discuss this request or require further information, please contact me at (909) 383-4055.

Respectfully,

RAYMOND W. WOLFE, PhD  
District Director

bc: WAMosby  
JPagano  
PHally

JERRY LEWIS  
41st DISTRICT, CALIFORNIA

COMMITTEE:  
APPROPRIATIONS  
(RANKING MEMBER)

Congress of the United States  
House of Representatives  
Washington, DC 20515-0541

WASHINGTON OFFICE:  
ROOM 2112  
RAYBURN HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-0541  
202-225-5861  
DISTRICT OFFICE:  
1150 BROOKSIDE AVENUE  
SUITE J-5  
REDLANDS, CA 92373-0314  
909-862-8030  
909-782-5801  
1-800-233-1700  
(WITHIN CALIFORNIA)  
[www.house.gov/jerrylewis](http://www.house.gov/jerrylewis)

September 23, 2009

Ms. April Nitsos  
Caltrans  
PO Box 942873  
Sacramento, CA 94273

Dear Ms. Nitsos:

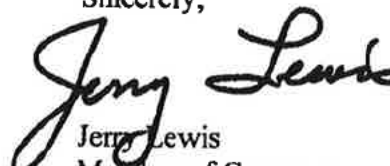
Thank you for the opportunity to clarify my intent behind an appropriation I sponsored.

As you know, I secured funding for a project entitled "Ramsey Street Extension" in the Fiscal Year 2003 Omnibus Appropriations bill. Following negotiations between the city of Banning, CA and the Morongo Band of Mission Indians, all parties decided that extending the Ramsey Street south of the I-10 freeway was the wisest solution to addressing the traffic situation in this growing region. This approach honors tribal sovereignty, fosters economic development, improves access to Banning's airport, and enhances public safety by creating an alternative route to I-10.

I concur with their decision and stand ready to assist any way I can. Redesignating the "Ramsey Street Extension" to the "I-10 By-pass" meets the intent of the legislation and should facilitate the expeditious completion of this important project.

If you have any further questions, please contact Grady Bourn at 202-225-5861 or [grady.bourn@mail.house.gov](mailto:grady.bourn@mail.house.gov).

Sincerely,

  
Jerry Lewis  
Member of Congress

JL:gb

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# City of Banning

## Public Works Department

November 17, 2009

Ms. April Nitsos  
Department of Transportation  
Caltrans Local Assistance  
P.O. Box 942873  
Sacramento, California 94273

**RE: I-10 By-pass, South (also known as Ramsey Street Extension), Transfer of Sponsorship of Earmark.**

Dear Ms. Nitsos,

This is a follow up to the letter dated October 6, 2009, requesting that the County of Riverside be the lead agency for the I-10 By-pass project. In addition to the County being the lead agency for this project, the City would also like to transfer the sponsorship for the earmark to the County of Riverside.

Both the County of Riverside and the City of Banning agree to the terms and conditions related to the transfer of this sponsorship.

If you have any questions or need additional information please feel free to contact me at (951) 922-3140 or Juan C. Perez at (951) 955-6741.

Respectfully,

Duane Burk,  
Director of Public Works

Concurred by:

Juan C. Perez, P.E. T.E.  
Director  
Riverside County  
Transportation Department

CC: Patricia Perez, Deputy Director / Neil Nilchian, PE, Project Manager, Riverside County Transportation Department

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MORONGO  
BAND OF  
MISSION  
INDIANS



A SOVEREIGN NATION

February 21, 2013

John Marcinek, Project Manager  
"I-10 Bypass Project"  
County of Riverside Transportation Department  
14<sup>th</sup> Street Annex  
3525 14<sup>th</sup> Street  
Riverside, California 92502

**SUBJECT: Letter of Support for Southern I-10 Bypass Alternative**

Dear Mr. Marcinek:

I am writing as Tribal Chairman on behalf of the Tribal Council of the Morongo Band of Mission Indians (MBMI). For over five years we have been working in concert with the County of Riverside, the City of Banning, and the State Department of Transportation (Caltrans), in support of a Southern Bypass Route for Interstate 10. Fortunately, with the substantial financial assistance from MBMI and the County of Riverside, we have moved to the point of narrowing our many route alternatives in anticipation of selecting an optimal preferred route.

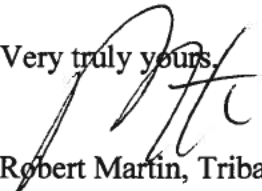
Our analysis of possible routes is informed by the Tribal Council's unanimous opposition, in 2008, to the extension of Ramsey Street. This alternative extends through Tribal lands and fails to meet the safety and mobility needs of the Banning Pass Area. Indeed, with the imminent doubling of retail space at the Desert Hills and Cabazon Outlets, there will be significant traffic volume increases and increased congestion impacting the capacity of the Malki Road under crossing and Seminole Road.

We feel strongly that alternative 13 presents a better option for meeting our regional safety, mobility, and economic development goals. The route present cost savings, reduced environmental impacts, and is supportive of our long-term development plans. Support of Alternative 13 is consistent with the 2008 resolution approved by the Tribal Council, the County of Riverside, and the City of Banning which endorsed a Southern Route and rejected the Ramsey extension, currently identified as alternative 7.

We appreciate the opportunity to comment on this very important project. If I may be of any further assistance with regard to this matter please do not hesitate to contact me at your convenience.



Very truly yours,



Robert Martin, Tribal Chairman  
Morongo Band of Mission Indians

c: Karen Woodard, Realty Administrator  
Franklin A. Dancy, Director Planning  
Eric Haley, Tribal Transportation Planner

September 25, 2018

John Marcinek, Project Manager  
"I-10 Bypass Project"  
County of Riverside Transportation Department  
14<sup>th</sup> Street Annex  
3525 14<sup>th</sup> Street  
Riverside, CA 92502

MORONGO  
BAND OF  
MISSION  
INDIANS



A SOVEREIGN NATION

**SUBJECT: Letter of Support for the Southern I-10 Bypass Alternative**

Dear Mr. Marcinek:

I am writing as Tribal Chairman on behalf of the Tribal Council of the Morongo Band of Mission Indians (MBMI). For several years we have been working in concert with the County of Riverside, the City of Banning, and the State Department of Transportation (Caltrans), in support of the Southern Bypass Route for Interstate 10. Fortunately, with the substantial financial assistance from MBMI and the County of Riverside, we have moved to the point of narrowing many route alternatives in anticipation of selecting an optimal preferred route.

The attached exhibit shows the two alternate southern routes, Alternate 5 and Alternate 12. We feel strongly that alternative 12 presents a better option for meeting our regional safety, mobility and economic development goals. Alternate 12 also provide costs savings due to reduced environmental and road construction impacts and is supportive of our long-term development plans. While we had previous supported Alternative 13, which was presented some years ago, Alternative 12 is consistent with the 2008 resolution approved by the Tribal Council, the County of Riverside, and the City of Banning which endorsed a Southern Route and rejected the Ramsey extension, identified as Alternative 7.

We appreciate the opportunity to comment on this very important project. If I may be of any further assistance with regard to this matter please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Martin", is written over the word "Sincerely,".

Robert Martin  
Tribal Chairman

Cc: Kimberly Cluff, Morongo Legal Department  
Titu Asghar, CEO Morongo  
Karen Woodard, Realty Administrator

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# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Carlsbad Fish And Wildlife Office  
2177 Salk Avenue - Suite 250  
Carlsbad, CA 92008-7385  
Phone: (760) 431-9440 Fax: (760) 431-5901  
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

April 19, 2019

Consultation Code: 08ECAR00-2019-SLI-0007

Event Code: 08ECAR00-2019-E-01957

Project Name: 5956 (210) I-10 Bypass

Subject: Updated 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](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(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

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## Project Summary

Consultation Code: 08ECAR00-2019-SLI-0007

Event Code: 08ECAR00-2019-E-01957

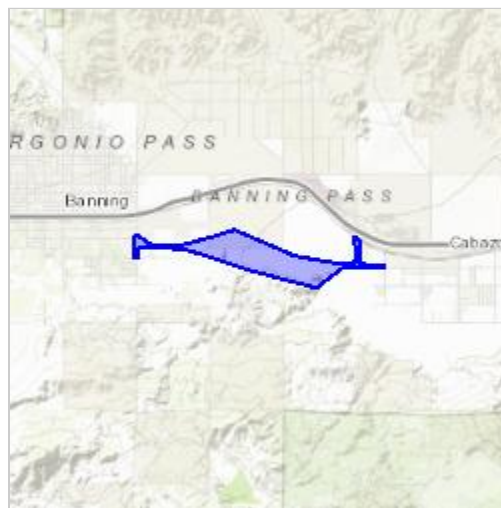
Project Name: 5956 (210) I-10 Bypass

Project Type: TRANSPORTATION

**Project Description:** The state of California Department of Transportation (Caltrans) and the county of Riverside (County propose to construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Apache Trail 1 in the unincorporated community of Cabazon, California. The new roadway and bridges would cross undeveloped land south of Interstate 10 (I-10).

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.91565678642306N116.82852201864509W>



Counties: Riverside, CA

---

## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Peninsular Bighorn Sheep <i>Ovis canadensis nelsoni</i> Population: Peninsular CA pop. There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4970">https://ecos.fws.gov/ecp/species/4970</a>	Endangered

## Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

---

## Reptiles

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4481">https://ecos.fws.gov/ecp/species/4481</a>	Threatened

## Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch <i>Astragalus lentiginosus var. coachellae</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7426">https://ecos.fws.gov/ecp/species/7426</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825

SEP 18 2014

David Bricker, Deputy District Director  
State of California – Department of Transportation  
Environmental Planning – District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, California 92401

Re: Interstate 10 Bypass Project: Banning to Cabazon

Dear Mr. Bricker:

Thank you for your letter dated September 4, 2014, regarding the proposed Interstate 10 Bypass Project. We acknowledge the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation has accepted all the United States Department of Transportation (USDOT) Secretary's responsibilities under the National Environmental Policy Act (NEPA). We recognize Caltrans assuming this FHWA responsibility in the Interstate 10 Bypass Project in conjunction with Riverside County in their responsibility under the California Environmental Quality Act (CEQA).

As you may know, the Bureau of Indian Affairs (BIA) is the oldest Bureau in the United States Department of the Interior, providing services to approximately 1.7 million American Indians and Alaska Natives. BIA has delegated responsibilities of the Secretary of the Interior under NEPA. Any action occurring on tribal trust or restricted lands subject to BIA approval, requires BIA's compliance with NEPA. Caltrans' role for FHWA and the USDOT Secretary does not satisfy BIA's responsibility to the Secretary of the Interior under NEPA.

We find the proposed process outlined in your letter, where Caltrans prepares an Environmental Assessment and presents to BIA for the discharge of our jurisdictional responsibilities, unacceptable. We believe, the BIA should be invited to become a Cooperating Agency, as defined by NEPA, in the preparation of the joint NEPA/CEQA document. As a Cooperating Agency, BIA would then be in a position to use the document for our NEPA compliance responsibility.

We trust you understand our unique compliance needs. Our staff remains committed to working with Caltrans and Riverside County in the preparation the joint document to resolve the Interstate Bypass issue. If you have any questions or need additional information, please contact Felix Kitto, Environmental Protection Specialist at (951) 276-6871 ext. 255 or John Rydzik, Chief, Division of Environmental, Cultural Resource Management and Safety at (916) 978-6051.

T. R. M. B. 214 9/17/2014

Sincerely,

**/s/ Amy Dutschke**

Regional Director

cc: Robert Eben, Southern California Agency Superintendent

Franklin Darcy  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 9220

Karen Woodard, Administrator  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 9220

William Madrigal  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 9220

Darren Adrian, PE  
Kimley-Horn and Associates, Inc.  
765 The City Drive, Suite 200  
Orange, CA 92868

Mary Zambon, Senior Transportation Planner  
County of Riverside, Transportation Department  
14<sup>th</sup> Street Annex  
3525 14<sup>th</sup> Street  
Riverside, CA 92501

J. G. 10214 9/17/2014



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825

OCT 20 2014

David Bricker, Deputy District Director  
State of California – Department of Transportation  
Environmental Planning – District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, California 92401

Re: Interstate 10 Bypass Project: Banning to Cabazon

Dear Mr. Bricker:

Thank you for your letter dated October 7, 2014, regarding the proposed Interstate 10 Bypass Project. We acknowledge the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation has accepted all the United States Department of Transportation (USDOT) Secretary's responsibilities under the National Environmental Policy Act (NEPA). We recognize Caltrans assuming this FHWA responsibility in the Interstate 10 Bypass Project in conjunction with Riverside County in their responsibility under the California Environmental Quality Act (CEQA).

In accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of NEPA, BIA accepts your invitation to be a Cooperating Agency due to our jurisdiction by law and our special expertise. As a Cooperating Agency, BIA would then be in a position to use the document for our NEPA compliance responsibility.

In accordance with the Efficient Environmental review Process codified at 23 USC 139, BIA accepts your invitation to be a Participating Agency. We also recognize and accept the responsibilities of a Participating Agency.

We look forward to working with Caltrans and Riverside County in the preparation of the joint environmental document. If you have any questions or need additional information, please contact Felix Kitto, Environmental Protection Specialist at (951) 276-6871 ext. 255 or John Rydzik, Chief, Division of Environmental, Cultural Resource Management and Safety at (916) 978-6051.

Sincerely,

Regional Director



cc: Robert Eben, Southern California Agency Superintendent

Franklin Darcy  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 9220

Karen Woodard, Administrator  
Morongo Band of Mission Indians  
12700 Pumarra Road  
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Mary Zambon, Senior Transportation Planner  
County of Riverside, Transportation Department  
14<sup>th</sup> Street Annex  
3525 14<sup>th</sup> Street  
Riverside, CA 92501

**DEPARTMENT OF TRANSPORTATION**

ENVIRONMENTAL PLANNING - DISTRICT 8

464 WEST 4<sup>TH</sup> STREET  
SAN BERNARDINO, CA 92401  
PHONE (909) 383-2841  
TTY 711  
www.dot.ca.gov



*Serious drought.  
Help save water!*

October 7, 2014

Amy Dutschke  
Regional Director  
Bureau of Indian Affairs – Pacific Regional Office  
2800 Cottage Way  
Sacramento, CA 95825

Dear Ms. Amy Dutschke

Effective October 1, 2012, the Federal Highway Administration (FHWA) assigned, and the California Department of Transportation (Caltrans) assumed, all the United States Department of Transportation (USDOT) Secretary's responsibilities under the National Environmental Policy Act (NEPA) pursuant to 23 USC 327(a)(2)(A). Caltrans assumed all of FHWA's responsibilities under NEPA for projects on California's State Highway System (SHS) and for federal-aid local streets and roads projects under FHWA's Surface Transportation Project Delivery Program. Caltrans also assumed all of FHWA's responsibilities for environmental coordination and consultation under other federal environmental laws pertaining to the review or approval of projects under NEPA Assignment. For the purposes of carrying out the responsibilities assumed under NEPA Assignment, Caltrans is deemed to be acting as FHWA with respect to the environmental review, consultation, and other actions required under those responsibilities.

Caltrans, in cooperation with Riverside County Transportation Department is initiating a complex environmental assessment for the proposed I-10 Bypass Project in Riverside County, California.

The proposed project would construct a new two-lane roadway to provide a parallel route to I-10 between the I-10 Hargrave Avenue Interchange in the City of Banning and the Morongo Trail (Apache Trail) Interchange in Cabazon. The proposed project would also include improvements to existing roads in the City of Banning and the unincorporated County of Riverside and bridge crossings at Smith Creek and San Gorgonio River. The project would provide an alternate route to Interstate 10 in case of an emergency or freeway shutdown. One of the alternatives recommended for consideration in the environmental document would cross through the Morongo Indian Reservation, precipitating BIA involvement.

Ms. Amy Dutschke  
October 7, 2014  
Page 2

In accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of NEPA we are requesting your agency to be a cooperating agency because your agency has jurisdiction by law or special expertise.

You have the right to expect that the Environmental Assessment will enable you to discharge your jurisdictional responsibilities. Likewise, you have the obligation to tell us if, at any point in the process, your needs are not being met. We expect that at the end of the process, the resulting Finding of No Significant Impact will satisfy your NEPA requirements including those related to project alternatives, environmental consequences, and mitigation.

In accordance with the Efficient Environmental Review Process codified at 23 USC 139, we are also requesting your agency to be a participating agency because we believe that your agency will have an interest in this transportation project. Participating agencies are responsible for identifying, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of the above project should include the following as they relate to your area of expertise:

1. Provide meaningful and early input on defining the purpose and need, reviewing the range of alternatives to be considered, and the methodologies and level of detail required in the alternatives analysis.
2. Participate in coordination meetings and joint field reviews as appropriate.
3. Timely review and comment on early project information to reflect the views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

Ms. Amy Dutschke  
October 7, 2014  
Page 3

We look forward to your response to our request for your agency to be a cooperating agency and a participating agency and to working with you on this transportation project. Neither of these designations implies that your agency supports the proposed project. The favor of a reply is requested by November 7, 2014. If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of this complex environmental assessment, please contact Aaron Burton (909) 383-2841.

Sincerely,



DAVID BRICKER  
Deputy District Director, Environmental Planning

Enclosures

(1) Location Map

c: John Rydzik, Chief, DECRMS  
Bureau of Indian Affairs Pacific Regional Office  
2800 Cottage Way, Room West 2820  
Sacramento, CA 95825

Franklin Dancy, Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 92220

William Madrigal  
Morongo Band of Mission Indians  
Cultural Heritage Department 12700 Pumarra Road  
Banning, CA 92220

Karen Woodard, Administrator  
Morongo Band of Mission Indians  
12700 Pumarra Road,  
Banning, CA 92220

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**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

1725 23<sup>rd</sup> Street, Suite 100  
SACRAMENTO, CA 95816-7100  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov  
www.ohp.parks.ca.gov



May 4, 2017

In reply refer to: FHWA\_2016\_0914\_001

VIA EMAIL

Gabrielle Duff, Environmental Branch Chief  
Caltrans District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

Subject: Determinations of Eligibility for the Interstate 10 Bypass Project, Riverside County, CA

Dear Ms. Duff:

Thank you for consulting with me about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The County of Riverside proposes to construct a bypass between Banning and Cabazon. A complete project description and description of the Area of Potential Effects (APE), can be found on page one and two of the Historic Property Survey Report (HPSR), and maps located in Attachment A of the HPSR.

Caltrans has determined that the following properties, located within the area of potential effect, are not eligible for the listing in the National Register of Historic Places (NRHP):

- P-33-024163 – Banning Tool and Machine
- P-33-024109 – 1750 E Westward Avenue, Banning, CA
- CA-RIV-8364H – 1920-1930 Refuse scatter
- CA-RIV-11798 – 1931/1956 Refuse scatter and ranch/stock structures
- CA-RIV-11799 – 1943/1956 rock and concrete drainage structures and trash scatter
- CA-RIV-11800 – 1958/1962 ranch complex with corrals
- CA-RIV-11801 – 1920-1930 trash scatter
- P-33-24007 – 1920 stone corral

• [REDACTED]



• [REDACTED]

Caltrans has also determined that P-33-024164 – the Deutsch Company Complex located at 700 S Hathaway Street in Banning, is eligible for the NRHP under Criteria A and C at the local level of significance. Under Criterion A the Complex is eligible for its role in the Southern California aerospace industry and for its incorporation of planned worker facilities. Under Criterion C it is eligible as an example of Desert Modern style in the City of Banning.

Based on my review of the submitted documentation I concur with the foregoing determinations.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 with e-mail at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov) or Alicia Perez at (916) 445-7020 with e-mail at [alicia.perez@parks.ca.gov](mailto:alicia.perez@parks.ca.gov).

Sincerely,



Julianne Polanco  
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

1725 23<sup>rd</sup> Street, Suite 100  
SACRAMENTO, CA 95816-7100  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov  
www.ohp.parks.ca.gov



October 5, 2017

In reply refer to: FHWA\_2016\_0914\_001

VIA EMAIL

Ms. Gabrielle Duff, Environmental Branch Chief  
Caltrans District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

Subject: Determinations of Eligibility for the Interstate 10 Bypass Project, Riverside County, CA

Dear Ms. Duff:

Thank you for your letter of September 18, 2017 requesting a revision of the SHPO letter of September 12, 2016 to reflect that Caltrans was consulting under 36 CFR Part 800 and not the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*. Caltrans also is consulting under Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92 (PRC 5024 MOU)*.

The County of Riverside proposes to construct a bypass between Banning and Cabazon. A complete project description and description of the Area of Potential Effects (APE) is located on page one and two of the Historic Property Survey Report (HPSR), and maps located in Attachment A of the HPSR.

Pursuant to 36 CFR 800.4(c)(2) Caltrans has determined that the following properties, located within the area of potential effect, are not eligible for the listing in the National Register of Historic Places (NRHP):

- P-33-024163 – Banning Tool and Machine
- P-33-024109 – 1750 E Westward Avenue, Banning, CA
- CA-RIV-8364H – 1920-1930 Refuse scatter
- CA-RIV-11798 – 1931/1956 Refuse scatter and ranch/stock structures
- CA-RIV-11799 – 1943/1956 rock and concrete drainage structures and trash scatter
- CA-RIV-11800 – 1958/1962 ranch complex with corrals
- CA-RIV-11801 – 1920-1930 trash scatter
- P-33-24007 – 1920 stone corral
- [REDACTED]



Caltrans has also determined that P-33-024164 – the Deutsch Company Complex located at 700 S Hathaway Street in Banning, is eligible for the NRHP under Criteria A and C at the local level of significance. Under Criterion A the Complex is eligible for its role in the Southern California aerospace industry and for its incorporation of planned worker facilities. Under Criterion C it is eligible as an example of Desert Modern style in the City of Banning.

Due to the limited nature of work within the vicinity of the historic property, Caltrans has found pursuant to 36 CFR 800.4(d)(1) that no historic properties will be affected by this undertaking.

Based on my review of the submitted documentation I have the following comments:

- 1) The APE delineated for the proposed project appears adequate.
- 2) The steps taken to identify historic properties that may be affected by this undertaking is satisfactory.
- 3) I concur with the above determinations of eligibility.
- 4) I have no objection to the finding of no historic properties affected for this undertaking.
- 5) Be advised that under certain circumstances, like unanticipated discovery, Caltrans may have additional responsibilities under 36 CFR Part 800.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 with e-mail at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov) or Alicia Perez at (916) 445-7020 with e-mail at [alicia.perez@parks.ca.gov](mailto:alicia.perez@parks.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julianne Polanco', is written over a horizontal line.

Julianne Polanco  
State Historic Preservation Officer

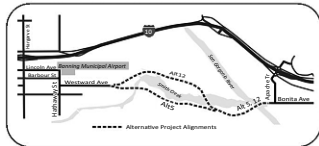
# Public Hearing

## Notice of Availability of a Draft Environmental Impact Report/ Draft Environmental Assessment and Announcement of Public Hearing

### I-10 Bypass: Banning to Cabazon Project

#### PUBLIC HEARING: WHERE AND WHEN

**Date:** January 25th, 2018  
**Time:** 5:00 to 7:00p.m.  
**Place:** Banning High School, Multi-Purpose  
Room 100 W. Westward Way Banning, CA 92220



#### WHAT IS BEING PLANNED?

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronimo River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

Pursuant to Section 15072(g)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

#### WHY THIS PUBLIC NOTICE?

Caltrans and the County of Riverside have studied the proposed project and prepared the *Draft Environmental Impact Report/Draft Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Significant environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. Cumulative impacts include potential for substantial impacts related to visual, noise, and natural communities. This notice is to advise you that the DEIR/DEA is available for you to read. An open house public hearing will be held to give you an opportunity to ask questions of Project Team members and obtain information on the Project.

#### WHAT'S AVAILABLE?

The *DEIR/DEA* will be available for 45 days from December 29, 2017 until February 13, 2018. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact info below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

#### WHERE YOU COME IN

Would you like to make any comments on the project, the alternative alignments or the *DEIR/DEA*? **Please submit your comments in writing no later than February 13, 2018** to Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. The date we will begin accepting comments is December 29, 2017. Responses to comments received during the public review period will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be taken until after the review period is complete and the *FEIR/FEA* is prepared.

#### CONTACT

For more information about this project or to receive a copy of the *DEIR/DEA*, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.

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# PUBLIC NOTICES - "YOUR RIGHT TO KNOW"

Call 951-368-9222 or email: [legals@pe.com](mailto:legals@pe.com)

**SUPERIOR COURT OF CALIFORNIA COUNTY OF SACRAMENTO, SITTING AS THE JUVENILE COURT**  
**In the Matter of: ALLISYN NOELLE MCMAHON**  
 (A minor born: 11/17/16)  
 Case No.: 237883  
**PUBLISHED**  
**WELFARE AND INSTITUTIONS CODE SECTIONS 294 & 366.26**

THE PEOPLE OF THE STATE OF CALIFORNIA TO: GLENN ANDREW SPAULDING OR ANYONE CLAIMING TO BE THE FATHER OF THE ABOVE-NAMED ALLISYN NOELLE MCMAHON, FEMALE CHILD BORN ON 11/17/16 TO SARAH KRISTINA MCMAHON, THE MOTHER. PUBLISHED NOTICE OF HEARING AND NOTICE TO PARENT OF RIGHTS AND PROCEDURES TO WELFARE AND INSTITUTIONS CODE SECTIONS 294 AND 366.26.

1. YOU ARE HEREBY NOTIFIED THAT on 3/17/18, at 8:30 a.m., in Department 135 of the Sacramento County Superior Court of California, located at 3341 Power Inn Road, Sacramento, CA 95826, a hearing will take place pursuant to Welfare and Institutions Code, Section 366.26, to either terminate your parental rights or to establish a guardianship for your child or to place your child in long-term foster care.

2. You are further notified that the Sacramento County Department of Health and Human Services, Petitioner, will recommend the following action: termination of parental rights permanently and a court order that the above-named minor be placed for adoption.

3. You have the right to personally appear in court and be heard in this matter.

4. On the above date the Court will determine the best permanent plan for your child. Evidence will be presented. After hearing the evidence presented by the parties, the Court will make one of the following orders:

a. Terminate your parental rights permanently and order that the child be placed for adoption;

b. Without permanently terminating your parental rights, identify adoption as the permanent placement goal and order that efforts be made to locate an appropriate adoptive family for your child for a period not to exceed 60 days;

c. Without permanently terminating your parental rights appoint a legal guardian for your child and issue letters of guardianship; or,

d. Order that your child be placed in long-term foster care, subject to the regular review of the Juvenile Court.

5. You may have the right to have an attorney represent you at the hearing. If you cannot afford an attorney, the Court will appoint an attorney for you, unless you knowingly and willingly waive your right to representation by an attorney. You have the right to present evidence at the hearing.

6. You have the right to request a trial on the issue of what permanent plan is best for your child. You have the right to present evidence. You have the right to use the Court's power to compel the attendance of witnesses to testify on your behalf. You have the right to confront and cross-examine any adverse witnesses. You have the right to confront and cross-examine the preparers of any reports submitted to the Court by the Sacramento County Department of Health and Human Services, Petitioner. You have the right to assert the privilege against self-incrimination.

7. Any order of the Court permanently terminating your parental rights shall be final and you shall have no legal rights to the care, control or custody of the child.

8. Ten (10) days prior to the hearing, the Sacramento County Department of Health and Human Services, Petitioner, will prepare an assessment report containing its recommendation in this matter. You have the right to read the report and obtain a copy of the report. You should immediately contact the social worker assigned to your child dependency case or your attorney if you have any questions or if you would like to read and obtain a copy of the report.

9. If you fail to appear at the hearing, the Court will proceed in your absence to adopt one of the above-mentioned permanent plans. Such proceedings may include the termination of your parental rights so that your child may be placed for adoption. If you have any questions regarding this procedure, please

contact the specified below or an attorney. DATE: November 30, 2017.  
**SHERRI Z. HELLER, Ph.D.**  
 Director  
 Penelope Peters, Paralegal  
 Department of Health and Human Services  
 Paralegal Services  
 (916) 875-8792  
 12/8, 12/15, 12/22, 12/29/17  
**CNS-3077052#**  
**THE PRESS ENTERPRISE**

**SUPERIOR COURT OF CALIFORNIA COUNTY OF SACRAMENTO, SITTING AS THE JUVENILE COURT**  
**In the Matter of: ALLISYN NOELLE MCMAHON**  
 (A minor born: 11-17-16)  
 Case No(s): 237883  
**PUBLISHED**  
**WELFARE AND INSTITUTIONS CODE SECTIONS 294 & 366.26**

THE PEOPLE OF THE STATE OF CALIFORNIA TO: GLENN ANDREW SPAULDING, OR ANYONE CLAIMING TO BE THE FATHER ABOVE-NAMED FEMALE CHILD BORN ON NOVEMBER 17, 2016 TO SARAH KRISTINA MCMAHON, THE MOTHER. PUBLISHED NOTICE OF HEARING AND NOTICE TO PARENT OF RIGHTS AND PROCEDURES TO WELFARE AND INSTITUTIONS CODE SECTIONS 294 AND 366.26.

1. YOU ARE HEREBY NOTIFIED THAT on March 1, 2018, at 8:30 a.m., in Department 135 of the Sacramento County Juvenile Court, Superior Court of California, located at 3341 Power Inn Road, Sacramento, CA 95826, a hearing will take place pursuant to Welfare and Institutions Code, Section 366.26, to either terminate your parental rights or to establish a guardianship for your child or to place your child in long-term foster care.

2. You are further notified that the Sacramento County Department of Health and Human Services, Petitioner, will recommend the following action: termination of parental rights permanently and a court order that the above-named minor be placed for adoption.

3. You have the right to personally appear in court and be heard in this matter.

4. On the above date the Court will determine the best permanent plan for your child. Evidence will be presented. After hearing the evidence presented by the parties, the Court will make one of the following orders:

a. Terminate your parental rights permanently and order that the child be placed for adoption;

b. Without permanently terminating your parental rights, identify adoption as the permanent placement goal and order that efforts be made to locate an appropriate adoptive family for your child for a period not to exceed 60 days;

c. Without permanently terminating your parental rights appoint a legal guardian for your child and issue letters of guardianship; or,

d. Order that your child be placed in long-term foster care, subject to the regular review of the Juvenile Court.

5. You may have the right to have an attorney represent you at the hearing. If you cannot afford an attorney, the Court will appoint an attorney for you, unless you knowingly and willingly waive your right to representation by an attorney. You have the right to present evidence at the hearing.

6. You have the right to request a trial on the issue of what permanent plan is best for your child. You have the right to present evidence. You have the right to use the Court's power to compel the attendance of witnesses to testify on your behalf. You have the right to confront and cross-examine any adverse witnesses. You have the right to confront and cross-examine the preparers of any reports submitted to the Court by the Sacramento County Department of Health and Human Services, Petitioner. You have the right to assert the privilege against self-incrimination.

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9. If you fail to appear at the hearing, the Court will proceed in your absence to adopt one of the above-mentioned permanent plans. Such proceedings may include the termination of your parental rights so that your child may be placed for adoption. If you have any questions regarding this procedure, please

# Turn this



**FOR SALE BY OWNER**

**THE PRESS-ENTERPRISE**  
 INLAND SOUTHERN CALIFORNIA'S  
**ClassifiedCenter**



**CITY OF LAKE ELSINORE**  
 DREAM EXTREME.

**NOTICE OF PUBLIC HEARING**

**NOTICE IS HEREBY GIVEN** that the City Council of the City of Lake Elsinore, California, will hold a Public Hearing on January 9, 2018, at the Lake Elsinore Cultural Center, 183 North Main Street, Lake Elsinore, California, 92530, at 7:00 p.m., or as soon thereafter as the matter may be heard, to consider the following related items:

**Planning Application No. 2017-17 (Fairway Business Park II):** Subdivide 5.11 acres into seven parcels and construct six industrial buildings. The Project is located on the northwesterly side of Chaney Street and southwesterly of Minthorn Street, at the southerly end of Birch Street (APN: 377-140-027).

Pursuant to CEQA Guidelines Section 15162, no new environmental documentation is necessary because all potentially significant effects have been adequately analyzed in an earlier Mitigated Negative Declaration (MND) and none of the conditions described in Section 15162 exist.

**ALL INTERESTED PERSONS** are hereby invited to attend this Public Hearing to present written information, express opinions or otherwise present evidence in the above matters. If you require accommodation to participate in a Public Hearing, please contact the City Clerk's office at (951) 674-3124 ext. 269. All Agenda materials are available for review at City Hall the Friday before the Public Hearing and on the website at [www.lake-elsinore.org](http://www.lake-elsinore.org).

**FURTHER INFORMATION** on this item may be obtained by contacting Damaris Abraham, Senior Planner in the Planning Division at (951) 674-3124, ext. 913.

December 29, 2017

Susan M. Domen, MMC  
 Susan M. Domen, MMC,  
 City Clerk

**CITY OF LAKE ELSINORE**  
 DREAM EXTREME.

**NOTICE OF A PUBLIC HEARING**

**NOTICE IS HEREBY GIVEN** that the City Council of the City of Lake Elsinore on January 9, 2018, will conduct a Public Hearing per Elections Code Section 10010 at 7:00 p.m. or as soon thereafter as the matter can be heard, in the Cultural Center, 183 N. Main Street, Lake Elsinore, CA, in which the Council will:

**Receive public comments regarding the transition of the City from At-Large elections for members of the City Council to By-District elections, the time frame for this transition, the criteria and factors that should go into the drawing of maps of single-member voting districts, the composition of districts, and other matters related to the election of members of the City Council.**

**ALL INTERESTED PERSONS** are hereby invited to attend said hearing to present written information, express opinions or otherwise present evidence to this matter. Further information may be obtained from the City Clerk's Department at (951) 674-3124 ext. 269.

**AVISO DE AUDIENCIA PUBLICA**

**POR LA PRESENTE SE DA AVISO** que el Concejo Municipal de La Ciudad de Lake Elsinore convocara una audiencia publica por Seccion deCodigo de Elecciones 10010 el jueves, 9 de enero de 2018 a las 7:00 p.m., tan pronto posible despues cuando el asunto se pueda escuchar, en el Centro Cultural, 183 N. Main Street, Lake Elsinore, CA, en el que el Concejo:

**Recibir comentarios publicos sobre la transición de la Ciudad de las elecciones generales para los miembros del Concejo Municipal a las elecciones por distritos, el plazo para esta transición, los criterios y factores que deben ir en el dibujo de mapas de los distritos electorales de un solo miembro, composición de los distritos y otros asuntos relacionados con la elección de miembros del Concejo Municipal.**

**A TODAS PERSONAS INTERESADAS** se les invita a asistir a tal audiencia para presentar información escrita, expresar sus opiniones o de otra manera presentar evidencia a este asunto. Se puede obtener más información en la Oficina de la Secretaría de la Ciudad al (951) 674-3124 ext. 269.

December 29, 2017

Susan M. Domen, MMC  
 Susan M. Domen, MMC,  
 City Clerk

**KEEP YOUR EYES ON THE PRIZE**

**SUPERIOR COURT OF THE STATE OF CALIFORNIA, COUNTY OF RIVERSIDE, JUVENILE DIVISION, CITATION TO A HEARING**  
 Case No. SWJ1700058

In re the Matter of: MAX PIERCE HARTLEY, (DOB: 1/27/2017) (Minor(s))

**THE PEOPLE OF THE STATE OF CALIFORNIA TO: THE UNKNOWN FATHER, AND ANYONE CLAIMING TO BE THE FATHER, OF THE ABOVE STATED MINOR(S):**

By order of this Court you are hereby cited and required to appear before a Judge of the Superior Court, located at 30775-D Auld Road, Murrieta, CA 92563, on March 19, 2018, at 8:00 a.m., in Department 2003, to show cause, if any, why the above-named minor(s) should not be declared free from the custody and control of her/his/their parents, pursuant to a hearing held in accordance with Welfare and Institutions Code Section 366.26. This hearing is for the purpose of terminating your parental rights forever and ordering that the minor be placed for adoption.

You are hereby notified of the following provisions of Welfare and Institutions Code: Section 366.26(e)(2) provides that "if you appear without counsel and are unable to afford counsel, the Court shall appoint counsel for you, unless such representation is knowingly and intelligently waived."

Section 366.26 provides: "The Court may continue the proceeding for a period not to exceed 30 days as necessary to appoint you counsel, and to enable counsel to become acquainted with your case."

Section 366.26(b)(1) provides: "At the hearing, the court shall do one of the following: (1) Permanently sever your parental rights and order that the child be placed for adoption; (2) Without permanently terminating your parental rights, appoint a legal guardian for the minor and issue letters of guardianship; or (3) Order that the minor be placed in long-term foster care, subject to the regular review of the juvenile court."

Given under my hand and seal of the Superior Court of the County of Riverside, State of California, this 6th day of December, 2017.

(SEAL)  
 W. Samuel Hamrick, Jr.,  
 Executive Officer  
 Superior Court of the State of California, in and for the County of Riverside.

By: Deputy  
 GREGORY P. PRIAMOS,  
 County Counsel  
 JAMES E. BROWN,  
 COURT REPORTER/WILKERSON,  
 Deputy County Counsel  
 30755-D Auld Road, Suite 2221, Murrieta, California 92563  
 (951) 358-4125  
 Attorneys for the Petitioner  
 Department of Public Social Services  
 12/15, 12/22, 12/29, 1/5

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## Public Hearing

**Notice of Availability of a Draft Environmental Impact Report/ Draft Environmental Assessment and Announcement of Public Hearing**

### I-10 Bypass: Banning to Cabazon Project

**PUBLIC HEARING: WHERE AND WHEN**

Date: **January 25th, 2018**  
 Time: **5:00 to 7:00p.m.**  
 Place: **Banning High School, Multi-Purpose Room 100 W. Westward Way Banning, CA 92220**

**WHAT IS BEING PLANNED?**

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronio River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

Pursuant to Section 15072(g)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

**WHY THIS PUBLIC NOTICE?**

Caltrans and the County of Riverside have studied the proposed project and prepared the *Draft Environmental Impact Report/Draft Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Significant environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. Cumulative impacts include potential for substantial impacts related to visual, noise, and natural communities. This notice is to advise you that the DEIR/DEA is available for you to read. An open house public hearing will be held to give you an opportunity to ask questions of Project Team members and obtain information on the Project.

**WHAT'S AVAILABLE?**

The *DEIR/DEA* will be available for 45 days from December 29, 2017 until February 13, 2018. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact info below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

**WHERE YOU COME IN**

Would you like to make any comments on the project, the alternative alignments or the *DEIR/DEA*? **Please submit your comments in writing no later than February 13, 2018** to Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. The date we will begin accepting comments is December 29, 2017. Responses to comments received during the public review period will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be taken until after the review period is complete and the *FEIR/FEA* is prepared.

**CONTACT**

For more information about this project or to receive a copy of the *DEIR/DEA*, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivot.com](mailto:MZAMBON@rivot.com). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.

**CITY OF COLTON NOTICE INVITING BIDS**

The City of Colton, Public Works Department ("City") will receive sealed bids for **24" Transmission Pipeline** for the project of the **CITY CLERK** (located at 650 North La Cadena Drive, Colton, California, 92324), no later than **January 18, 2018, 4:00 P.M., Thursday**, at which time or thereafter said bids will be opened and read aloud. Bids received after this time will be returned unopened. Bids shall be valid for 60 calendar days after the bid opening date.

Bids must be submitted on the City's Bid Forms. Bids must be prepared on the approved Bid forms and in the manner prescribed in the Instructions to Bidders. Bids must be submitted in a sealed envelope which is plainly marked on the outside with the following: **"ATTN: SEALED BIDS FOR 24" TRANSMISSION PIPELINE PROJECT. DO NOT OPEN WITH REGULAR MAIL."**

WORK: The Works consists of, but is not limited to, provision of all equipment, materials and labor necessary to complete construction approximately 17,260 LF of 24" ductile iron pipe and appurtenances as specified in the Construction Drawings and Bid Specifications.

Bidders may obtain a copy of the Contract Documents at **A&I Reprographics** beginning Tuesday, January 2, 2018. The location can be found at 898 S Via Lata, Colton, CA 92324 or phone at 909-937-0700 or email your request to [bid@aandirepro.com](mailto:bid@aandirepro.com). There is a non-refundable fee for the cost of the plans. Contact A&I for the required fee. The documents can also be reviewed at McGraw Hill plan rooms.

Bids must be accompanied by cash, a certified or cashier's check, or a Bid Bond in favor of the City in an amount not less than ten percent (10%) of the submitted Total Bid Price.

**A Non-Mandatory Pre-Bid Meeting** will be held starting at the Corporate Yard Conference Room, 160 S. 10th Street, Colton, CA 92324 on the following date(s) and time(s): **January 9, 2018, 9:00 A.M.** and email your request to [isotto@coltonca.gov](mailto:isotto@coltonca.gov). All workers' respective bidders may visit the Project Site without making arrangements.

**QUESTIONS:** All questions must be submitted in writing by 4:00 P.M. on **January 11, 2018, Thursday** to [Jesse.Sotto@coltonca.gov](mailto:Jesse.Sotto@coltonca.gov). No questions will be received after this time.

Each bid shall be accompanied by the security referred to in the Contract Documents, the non-collusion declaration, the list of proposed subcontractors, and all additional documentation required by the Instructions to Bidders.

The successful bidder will be required to furnish the City with a Performance Bond equal to 100% of the successful bid, and a Payment (Labor and Materials) Bond equal to 100% of the successful bid, prior to execution of the Contract. All bonds are to be secured from a surety that meets the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California.

Pursuant to Public Contract Code Section 22300, the successful bidder may substitute certain securities for funds withheld by City to ensure his performance under the Contract.

The Director of Industrial Relations has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract, and a surety that meets the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California.

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This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal for, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of registration. For current Public Works Contractor Registration with the Department of Industrial Relations, if awarded the Contract, Bidder and subidders of every tier shall maintain active Public Works Contractor Registration with the Department of Industrial Relations for the duration of the Project. It shall be Bidder's sole responsibility to evaluate and include in his bid the cost of complying with all labor compliance requirements.

Each bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s) for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: Bidders shall possess the following California Contractor's license in order to perform the Work of this Project: **Class "A" or Class "C-34."** Each bidder shall also have a minimum experience of five (5) years and must have completed at least (3) three similar projects within the past ten (10) years. (See Instructions to Bidders, Page 5, Section 10 for more details).

Pursuant to Public Contract Code Section 3400(b), if the City has made any findings designating certain materials, products, things, or services by specific brand or trade name, such findings and the materials, products, things, or services and their specific brand or trade names will be set forth in the Special Conditions.

Award of Contract: The City shall award the Contract for the Project to the lowest responsive, responsible bidder as determined from the base bid alone by the City. The City reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact Jess Sotto of the Water Division, Public Works Department at (909) 370-5551 or by e-mail at [isotto@coltonca.gov](mailto:isotto@coltonca.gov).

12/29, 1/5



# THE PRESS-ENTERPRISE

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Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc.: I-10 Bypass - NOA /

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673, under date of August 25, 1995, Case Number 267864, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

**12/29/2017**

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: December 29, 2017

At: Riverside, California



Legal Advertising Representative, The Press-Enterprise

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT  
3525 14TH ST  
RIVERSIDE, CA 92501

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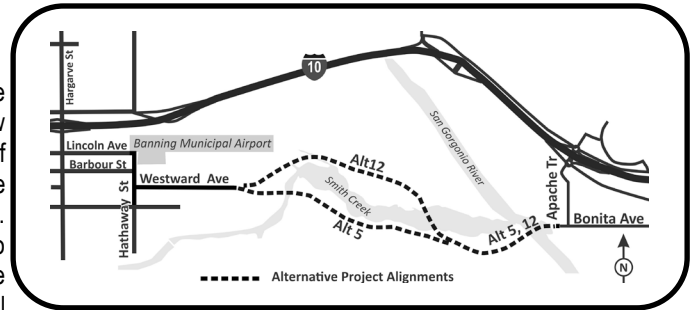
# Public Notice

## Notice of Availability of a Recirculated Draft Environmental Impact Report/ Draft Environmental Assessment

### I-10 Bypass: Banning to Cabazon Project

#### WHAT IS BEING PLANNED?

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronimo River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.



Pursuant to Section 15072(f)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

#### WHY THIS PUBLIC NOTICE?

The County of Riverside and Caltrans have studied the proposed project and prepared the *Recirculated Draft Environmental Impact Report/Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. The DEIR/DEA was previously circulated for public review from December 29, 2017 to April 30, 2018. **This Recirculated DEIR/DEA is being recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. This notice is to advise you that the Recirculated DEIR/DEA is available for you to read.**

#### WHAT'S AVAILABLE?

The Recirculated *DEIR/DEA* will be available for 45 days from August 12, 2019 until September 25, 2019. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact information below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4<sup>th</sup> Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

#### WHERE YOU COME IN

Would you like to make comments on the project, the alternative alignments or the Recirculated *DEIR/DEA*? **Please submit your comments in writing no later than September 25, 2019** to Mary Zambon, Environmental Project Manager, Riverside County Transportation Department, 3525 14<sup>th</sup> St., Riverside CA 92501. Comments received during the public review period for the Recirculated DEIR/DEA will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. Comments previously provided on the DEIR/EA (circulated in December 2017) have been reviewed and will be included in the administrative record for the Project, and will not be responded to individually in the FEIR/FEA. Options for submitting comments that will be responded to in the FEIR/FEA include:

- Resubmit your previous comments from the December 2017 circulation of the Draft EIR/EA.
- Submit new comments on the Recirculated Draft EIR/EA.

The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be made until after the review period is complete and the *FEIR/FEA* is prepared.

#### CONTACT

For more information about this project or to receive a copy of the Recirculated *DEIR/DEA*, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.

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**COUNTY OF RIVERSIDE**  
**TRANSPORTATION AND**  
**LAND MANAGEMENT AGENCY**

*Mojahed Salama, P.E.*  
*Deputy for Transportation/Capital Projects*  
*Richard Lantis, P.L.S.*  
*Deputy for Transportation/Planning and*  
*Development*

*Patricia Romo, P.E.*  
*Director of Transportation*

**Transportation Department**

May 3, 2019

Subject: I-10 Bypass – Banning to Cabazon  
Memorandum to File

The I-10 Bypass Project proposes to provide a new local roadway connecting the City of Banning and community of Cabazon that would:

- Accommodate local trips on a local roadway
- Provide an alternate route between Banning and Cabazon in the event of a closure on the I-10 Freeway
- Improve public safety and emergency response access
- Provide a safe route for pedestrians and bicyclists
- Provide a connection from Cabazon to Banning that does not require an at-grade crossing of the RR tracks

The Project Development Team (PDT) originally identified Alternatives 5 and 12 for detailed evaluation within the Draft Environmental Impact Report/ Environmental Assessment (EIR/EA) in order to comply with CEQA and NEPA. See attached Map. As the studies and stakeholder coordination have developed, the PDT determined that Alternative 12, the route through the southern portion of Morongo Band of Mission Indians land, should be designated as the Locally Preferred Alternative (LPA). This was because Alternative 12 would result in fewer environmental impacts to biological resources, cultural resources, and visual/aesthetic resources. Alternative 12 would also be consistent with the draft land use plans prepared by the Morongo Band of Mission Indians. Regardless, the EIR/EA evaluated both Alternative 5 and Alternative 12 in detail as part of the environmental analysis.

The County supports the recommendation of the PDT and will identify Alternative 12 as the LPA in the upcoming recirculation of the Draft EIR/EA.

Sincerely,

Patricia Romo  
Director of Transportation  
Riverside County Transportation Department

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**PROOF OF PUBLICATION**

**STATE OF CALIFORNIA SS.  
COUNTY OF RIVERSIDE**

RIVERSIDE CO TLMA  
8TH FLOOR - ATTN:STAN DERY  
PO BOX 1090  
RIVERSIDE CA 92502

I am over the age of 18 years old, a citizen of the United States and not a party to, or have interest in this matter. I hereby certify that the attached advertisement appeared in said newspaper (set in type not smaller than non paniel) in each and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

01/05/18

I acknowledge that I am a principal clerk of the printer of The Desert Sun, printed and published weekly in the City of Palm Springs, County of Riverside, State of California. The Desert Sun was adjudicated a Newspaper of general circulation on March 24, 1988 by the Superior Court of the County of Riverside, State of California Case No. 191236.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 5th of January 2018 in Palm Springs, California.

*Stan Dery*

**DECLARANT**

Public Notices
Public Notices

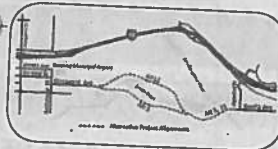
## Public Hearing

**Notice of Availability of a Draft Environmental Impact Report/Draft Environmental Assessment and Announcement of Public Hearing**

**I-10 Bypass: Banning to Cabazon Project**

**PUBLIC HEARING: WHERE AND WHEN**

Date: January 25th, 2018  
Time: 5:00 to 7:00pm  
Place: Banning High School, Multi-Purpose Room, 100 W. Westward Way, Banning, CA 92220



**WHAT IS BEING PLANNED?**

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronio River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

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**WHAT'S AVAILABLE?**

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**WHERE TO COME IN**

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**CONTACT**

For more information about this project or to receive a copy of the DEIR/DEA, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language Interpreter, etc) can be made by contacting the individual noted above.

DS-0000481028



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<b>Employment Empleo</b>	<b>Employment Empleo</b>
<b>Oportunidades de empleo Employment Opportunities</b>	<b>Oportunidades de empleo Employment Opportunities</b>
Research Analyst	
BA in Fin., Econ., or Bus. Admin.-Fin. Research & analysis of investment opp., client-focused portfolio & perf analytics & doc. ad-hoc quantitative & written research; Supt construction & maint of firm perf composites & provide perf & positioning analytics for rptg & marketing collateral. Signature Resources Capital Management in Irvine, CA. Fax resume to Mark Mowrey 949-262-7727.	
<b>Announcements Anuncios</b>	<b>Articulos deportivos Sporting Goods</b>
<b>ENCONTRADOS FOUND</b>	<b>•CASH FOR GUNS•</b> We Buy ALL Firearms Why Risk Breaking Calif Laws? Licensed Dealer Makes It Legal-Ethical-Easy Estate Collections From Small To Lrg 714-417-1363 <b>OCGunsNGear.com</b>
Found on Dec 31st: Young Male German Shepherd in area of Arlington Western hills & Norco. Call <b>951-359-5231</b>	<b>Se compra Wanted to Buy</b> Buying pre-1975 baseball cards football, basketball, non-sport & old sport collectibles <b>619-732-8302 CASH!</b>
<b>Pets Mascotas</b>	<b>Real Estate Bienes raíces</b>
<b>Perros Dogs</b>	<b>Home Sales Venta de hogares</b>
<b>Chihuahuas 1 (F) &amp; (M's) \$100 ea. vera good natured Ready for good homes 951.219.8675</b>	<b>Venta de casas Homes Sale</b>
<b>YorkieTerrier mix \$275; Adult (M) \$275 Chil-Wenie \$100 Shots, Family Raised Cash 909-823-0503</b>	<b>ANZA FSBO 2.7 Ac cust4bd3ba view lot 2280sf hm, frpic, kit w/grnte cntrs, tile rf horses permitted, \$325k 760-485-7686</b>
<b>Merchandise Mercancías</b>	<b>RIVERSIDE 4BD 3BA Victoria Heights hm Large secluded lot, pool. Asking \$685,00 Dan 951-313-3697 or Greg 951-218-2099</b>
<b>Venta Renta Utenzillos Appliance Sales Rentals</b>	<b>Other Real Estate Otras Inmobiliarias</b>
<b>Four matching Kenmore appl. Refg./freezer, MW,DW &amp; stove. xint cond. all AI-mind \$650 for all 951.834.8089</b>	<b>Venta de terrenos ranchos Acreage Land Ranches</b>
<b>Miscelaneos Ventas Misc for Sale</b>	<b>RUNNING SPRINGS 31308 Easy Drive. Perfect for cabin development. \$35K Dan 951-313-3697 or Greg 951-218-2099</b>
<b>BIREWOOD (FREE Del.-Riv. Corning, Norco &amp; Eastvale) Half cord Plus \$951.520.5520</b>	
<b>The 411-4-911 www.residentialert signs.com</b>	

**Propiedad de montaña Mountain Property**

SanBernardino 5 vacant lots, 1 with pad for cabin.Arrowbear Lake. \$35K.Agts Dan 951.313.3697 or Greg 951.218.2099

**Rentals Alquiler Casa**

**Departamentos No amueblados Unfurnished Apts**

**ANAHEIM**  
155 N. Ridgeway, 1BD, 1BA, \$1595/Mo. Stove, W/D hk-up, Vinyl Flrs Throught, Nattiee 714-801-7288

**COSTA MESA**  
241 Avocado St. #25 2BD, 1BA, \$1,795/m. Stove, Dishwasher, Pool, Lndry Facility, Rachel 949-650-7958

**COSTA MESA**  
241 Avocado St. #27 2BD, 1BA, \$1,795/m. Stove, Dishwasher, Pool, Ldy Facility, Rachel 949-650-7958

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**Condo Twnhs Rentals**

**Fullerton**

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**Rentals Alquiler Casa**

**Cypress- 4bd, 1.5ba 8211 Olga Ave. lrg yard, lawn srvc incl., pet OK w/dep. no smk inside. \$2,500. 714-296-3552**

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**Hoteles y Moteles Motels & Hotels**

**Anah - See Us First From \$230 a Week . WE BEAT ANY BODY'S PRICES. Lrg Rms, pool, BBQ 714-821-3330; 714-821-3690**

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Drywall, Patching, matching texture. #701067 951.235.7830

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**Departamentos No amueblados Unfurnished Apts**

**Now Accepting Applications RANCHO WEST APARTMENTS**  
42200 MAIN STREET, TEMECULA 92590 **AFFORDABLE** housing complex now accepting applications for 1 & 2 BR apts. 1BD starting from \$556/mo & 2BR starting from \$622/mo. Amenities include pool, spa, laundry rooms, play grounds, picnic areas, stove, dishwasher and refrigerators. Call 951-699-5449 or TDD# 1-800-735-2929. We are an equal opportunity provider and employer.

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**ALL COUNTIES FENCE & SUPPLY Family Owned Serving the Inland Empire since 1970 Mill Direct No Middleman Large inventory selection Install & Material Sales. Free Est. upon request Open Mon-Fri 9am-5pm (951) 639-8221 Lic# 717249**

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**Departamentos No amueblados Unfurnished Apts**

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**PUBLIC NOTICE**

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Call 1-714-796-2209  
Fax 714-796-2238 • [ocregister.com](http://ocregister.com)

**Riverside County**  
Call 1-951-368-9222  
Fax 951-368-9018 • [marketplace.pe.com](http://marketplace.pe.com)

**Reunión Pública**

**Aviso de Disponibilidad del Reporte de Impacto Ambiental Preliminar/ Evaluación Ambiental Preliminar y Anuncio de Reunión Pública**

**Proyecto Interestatal-10 Derivación: Banning a Cabazon**

**REUNIÓN PÚBLICA: DONDE Y CUANDO**

**Fecha:** 25 de enero de 2018  
**Hora:** 5:00 a 7:00p.m.  
**Lugar:** Banning High School, Multi-Purpose Room 100 W. Westward Way Banning, CA 92220

**¿QUÉ SE ESTÁ PLANEANDO?**

El Condado de Riverside, en cooperación con la Ciudad de Banning y el Departamento de Transportación de California (Caltrans, por su acrónimo en inglés), propone construir una nueva carretera de dos carriles que se extiende aproximadamente 3.3 millas desde la intersección de Hathaway Street y Westward Avenue en la Ciudad de Banning, al este hasta la intersección de Bonita Avenue y Apache Trail en la comunidad de Cabazon. El proyecto propuesto incluye puentes sobre el Arroyo Smith y el Río San Gorgonio, pavimentación de dos carriles, una mediana, arcones pavimentados, drenajes, un camino de uso compartido y baquetas. El proyecto propuesto serviría para acomodar los viajes locales en una carretera local y proporcionaría una ruta alternativa entre Banning y Cabazon en el caso de un cierre en la I-10. Dos alternativas alineaciones para la nueva carretera se están considerando junto con la alternativa de No Acción/No Proyecto.

De acuerdo con la Sección 15072 (f) (5) de las Directrices de la Ley de Calidad Ambiental de California (CEQA, por su acrónimo en inglés), se determinó que el sitio del proyecto no está presente en ninguna de las listas enumeradas en la Sección 65962.5 del Código de Gobierno incluyendo, pero no limitado a listas de instalaciones de desechos peligrosos, tierras designadas como propiedad de desechos peligrosos y sitios de eliminación de desechos peligrosos, y la información en la Declaración de Sustancias y Residuos Peligrosos requerida bajo la subdivisión (f) de esa sección.

**¿POR QUÉ ESTE AVISO?**

Caltrans y el Condado de Riverside han estudiado el proyecto propuesto y han preparado el Reporte de Impacto Ambiental Preliminar/Evaluación Ambiental Preliminar (DEIR/DEA, por sus acrónimos en inglés), que considera los impactos ambientales de las dos alineaciones alternativas y la alternativa de No Acción/No Proyecto. Los efectos ambientales significativos incluyen el ruido, el tráfico, el uso de la tierra, los impactos visuales y acumulativos. Los impactos acumulativos incluyen el potencial de impactos sustanciales relacionados con lo visual, el ruido y comunidades naturales. Este aviso es para avisarle que el DEIR/DEA está disponible para que lo lea. Se realizará una reunión pública para darle la oportunidad de hacer preguntas a los miembros del Equipo del Proyecto y obtener información sobre el Proyecto.

**¿QUE ESTA DISPONIBLE?**

*El DEIR/DEA* estará disponible por 45 días a partir del 29 de diciembre de 2017 hasta el 13 de febrero de 2018. El documento estará disponible para su revisión en los siguientes lugares, en el sitio web [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), o comunicándose con el Departamento de Transportación del Condado de Riverside (información de contacto a continuación).

- Departamento de Transportación del Condado de Riverside, 3525 14th Street, Riverside, CA 92501. Lunes – Viernes, 8:00am hasta 5:00pm.
- Oficina del Distrito de Caltrans, 464 West 4th Street, San Bernardino, CA 92401. Lunes – Viernes, 8:00am hasta 5:00pm.
- Biblioteca Banning, 21 West Nicolet St, Banning, CA 92220. Durante las horas regulares de la biblioteca.
- Biblioteca Cabazon, 50425 Carmen Ave, Cabazon, CA 92230. Durante las horas regulares de la biblioteca.

**DONDE ENTRA USTED**

¿Desea hacer algún comentario sobre el Proyecto, las alineaciones alternativas o el DEIR/DEA? **Por favor envíe sus comentarios por escrito antes del 13 de febrero de 2018** a Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. La fecha en que comenzaremos a aceptar comentarios es el 29 de diciembre de 2017. Respuestas a los comentarios recibidos durante el período de revisión pública se incluirán en el Reporte de Impacto Ambiental Final/Evaluación Ambiental Final (FEIR/FEA, por sus acrónimos en inglés) y se considerarán en la selección de la Alternativa Preferida. *El FEIR/FEA* identificará la Alternativa Preferida. Después de la selección de la Alternativa Preferida, el Condado solicitará la aprobación del EIR por parte de la Junta de Supervisores del Condado para el cumplimiento de CEQA, y Caltrans decidirá si emite un Resultado de No Significativo o requiere una Declaración de Impacto Ambiental (EIS, por su acrónimo en inglés) para cumplir con la Ley de Política Ambiental Nacional. Aviso de dicha decisión se dará a cualquier persona que solicite una notificación. No se tomará ninguna decisión hasta que se complete el período de revisión y se prepare el FEIR / FEA.

**CONTACTO**

Para obtener más información sobre este Proyecto o para recibir una copia del *DEIR/DEA*, por favor comuníquese con Mary Zambon, Departamento de Transportación del Condado de Riverside, al (951) 955-6759 o [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Bajo la Ley de Estadounidense con Discapacidades del Acto de Discapacidades de 1990, las solicitudes de adaptaciones (documentos en formatos alternativos, intérprete de lenguaje de señas estadounidense, etc.) se pueden realizar contactando el individuo mencionada anteriormente.

**AVISO LEGAL**

**NINOS INCAPACITADOS PUEDEN RECIBIR AYUDA A TRAVES DE LAS ESCUELAS PUBLICAS**

Padre de familia, si su niña/o tiene entre las edades del nacimiento y los 22 años y Ud. sospecha que él o ella posee algún problema físico o mental que haga difícil su aprendizaje, Ud. puede comunicarse con el distrito escolar de su localidad o el Ministerio de Educación del Condado de Orange para obtener más información sobre la ayuda que hay disponible para su hijo/a. Especialistas en la educación de niños incapacitados examinarán a su niño/a para determinar si él o ella necesita servicios de educación especial ya sea que él o ella vaya a alguna escuela pública, privada o parroquial.

Las leyes federales y estatales requieren que las escuelas públicas provean educación gratis y apropiada para niños con incapacidades. Los programas se ofrecen en las escuelas públicas a través del Condado de Orange para niños incapacitados que tienen entre los 3 y los 22 años de edad. Los programas educacionales son coordinados con otras agencias públicas y privadas, programas preescolares, programas de desarrollo infantil, escuelas privadas no sectorizadas, centros de ocupación regional, y programas de educación adulta o post-secundaria para individuos con incapacidades. Si Ud. tiene niños entre las edades de nacimiento a los 3 años que estén experimentando algún tipo de problema o retraso, Ud. puede comunicarse con el Centro Regional del Condado de Orange para un examen y evaluación gratis. Dado el caso, tanto el Centro Regional como las escuelas públicas coordinarán y proveerán los servicios que sean necesarios.

Estudiantes, padres de familia, tutores legales u otros que hayan experimentado algún tipo de discriminación o que deseen presentar alguna queja o agravo pueden hacerlo comunicándose con el Director de Educación Especial del distrito escolar de su localidad.

Para información general sobre Educación Especial, llame al Director de Educación Especial del Ministerio de Educación del Condado de Orange al teléfono (714) 966-4130.

Para comunicarse con el Centro Regional del Condado de Orange llame al teléfono (714) 796-5145.

**DISTRITOS ESCOLARES POR AREA EN EL CONDADO DE ORANGE**

Área de Anaheim: (714) 517-7525 ext. 4120  
Distrito Escolar de la Ciudad de Anaheim

Área de Capistrano: (949) 234-9275  
Distrito Escolar Unificado de Capistrano

Área de Garden Grove: (714) 663-6233  
Distrito Escolar Unificado de Garden Grove

Área Noroeste de Anaheim: (714) 828-1766  
Distrito Escolar Post-Secundario de Anaheim  
Distrito Escolar de Centralia  
Distrito Escolar de Cypress  
Distrito Escolar de Los Alamitos  
Distrito Escolar de Magnolia  
Distrito Escolar de Savanna

Área de Irvine: (949) 936-5234  
Distrito Escolar Unificado de Irvine

Área de Newport y Costa Mesa: (714) 424-5058  
Distrito Escolar Unificado de Newport-Mesa

Aviso Legal Asistencia Para Niños Incapacitados del Condado de Orange (Continuación)

Área Norte de Orange: (714) 641-5400  
Distrito Escolar de Buena Park  
Distrito Escolar de Fullerton  
Distrito Escolar Post-Secundario de Fullerton  
Distrito Escolar de la Ciudad de La Habra  
Distrito Escolar Unificado de Lowell  
Orange County Superintendent of Schools

Área Noreste de Orange: (714) 985-8662  
Distrito Escolar Unificado de Brea/Olinda  
Distrito Escolar Unificado de Placentia-Yorba Linda  
Orange County Superintendent of Schools

Área de Orange: (714) 628-5550  
Distrito Escolar Unificado de Orange

Área de Santa Ana: (714) 558-5832  
Distrito Escolar Unificado de Santa Ana

Área del Sur de Orange: (949) 580-3411  
Distrito Escolar Unificado de Laguna Beach  
Distrito Escolar Unificado de Saddleback Valley

Área de Tustin: (714) 730-7301 ext. 314  
Distrito Escolar Unificado de Tustin

Área del Oeste de Orange: (714) 903-7000  
Distrito Escolar de Fountain Valley  
Distrito Escolar de la Ciudad de Huntington Beach  
Distrito Escolar Unificado de Huntington Beach  
Distrito Escolar de Ocean View  
Distrito Escolar de Westminster

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Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc.: I-10 Bypass - NOA /

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673, under date of August 25, 1995, Case Number 267864, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

**12/29/2017**

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: December 29, 2017

At: Riverside, California



Legal Advertising Representative, The Press-Enterprise

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT  
3525 14TH ST  
RIVERSIDE, CA 92501

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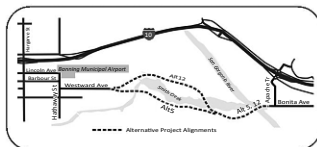
# Public Hearing

## Notice of Availability of a Draft Environmental Impact Report/ Draft Environmental Assessment and Announcement of Public Hearing

### I-10 Bypass: Banning to Cabazon Project

#### PUBLIC HEARING: WHERE AND WHEN

**Date:** January 25th, 2018  
**Time:** 5:00 to 7:00p.m.  
**Place:** Banning High School, Multi-Purpose  
Room 100 W. Westward Way Banning, CA 92220



#### WHAT IS BEING PLANNED?

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronio River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

Pursuant to Section 15072(g)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

#### WHY THIS PUBLIC NOTICE?

Caltrans and the County of Riverside have studied the proposed project and prepared the *Draft Environmental Impact Report/Draft Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Significant environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. Cumulative impacts include potential for substantial impacts related to visual, noise, and natural communities. This notice is to advise you that the DEIR/DEA is available for you to read. An open house public hearing will be held to give you an opportunity to ask questions of Project Team members and obtain information on the Project.

#### WHAT'S AVAILABLE?

The *DEIR/DEA* will be available for 45 days from December 29, 2017 until February 13, 2018. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact info below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

#### WHERE YOU COME IN

Would you like to make any comments on the project, the alternative alignments or the *DEIR/DEA*? **Please submit your comments in writing no later than February 13, 2018** to Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. The date we will begin accepting comments is December 29, 2017. Responses to comments received during the public review period will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be taken until after the review period is complete and the *FEIR/FEA* is prepared.

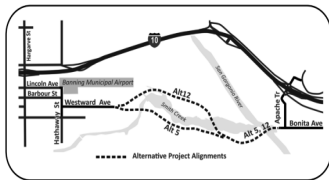
#### CONTACT

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#### WHAT'S AVAILABLE?

The *DEIR/DEA* will be available for 45 days from December 29, 2017 until February 13, 2018. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact info below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

#### WHERE YOU COME IN

Would you like to make any comments on the project, the alternative alignments or the *DEIR/DEA*? **Please submit your comments in writing no later than February 13, 2018** to Mary Zambon, Senior Transportation Planner, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. The date we will begin accepting comments is December 29, 2017. Responses to comments received during the public review period will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be taken until after the review period is complete and the *FEIR/FEA* is prepared.

#### CONTACT

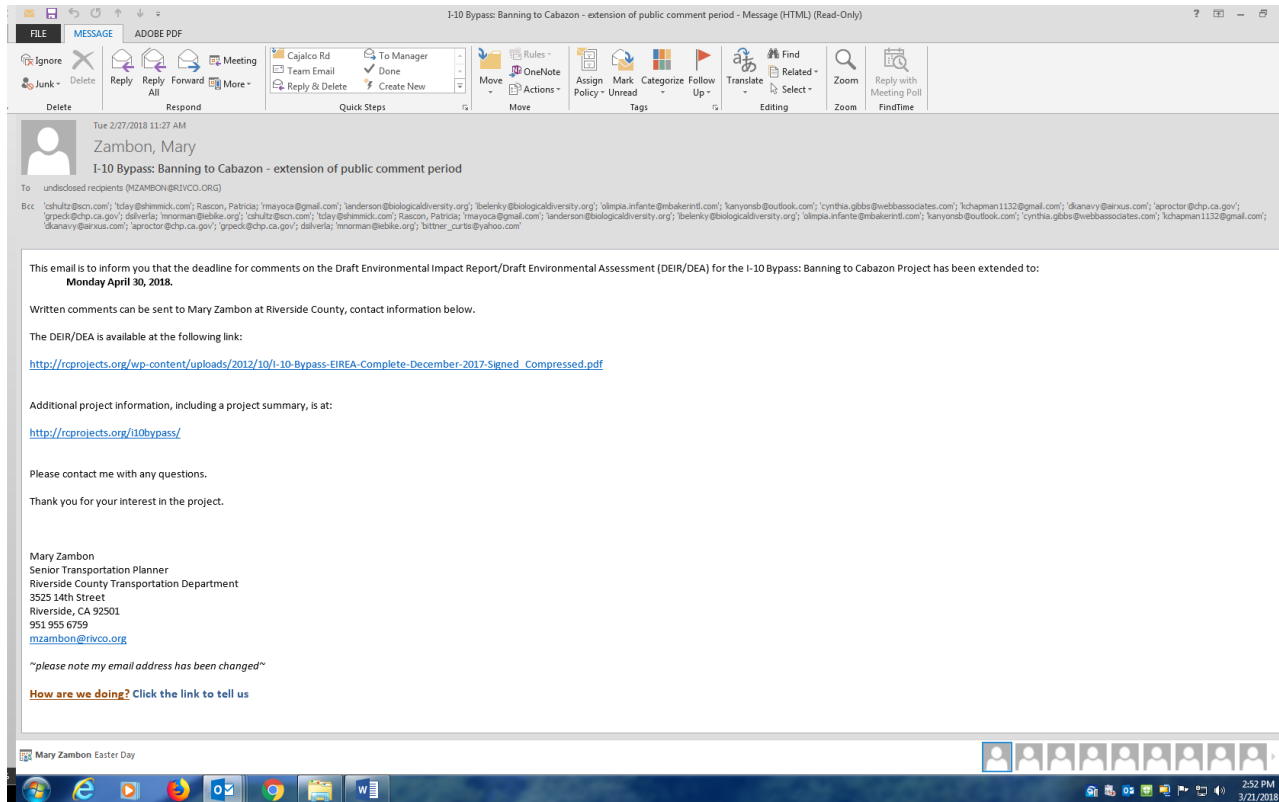
For more information about this project or to receive a copy of the *DEIR/DEA*, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.



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## Email sent to group on 2/27/2018 at 11:27 AM

'cshultz@scn.com'; 'tclay@shimmick.com'; Rascon, Patricia <prascon@cifac.org>; 'rmayoca@gmail.com'; 'ianderson@biologicaldiversity.org'; 'ibelenky@biologicaldiversity.org'; 'olimpia.infante@mbakerintl.com'; 'kanyonsb@outlook.com'; 'cynthia.gibbs@webbassociates.com'; 'kchapman1132@gmail.com'; 'dkanavy@airxus.com'; 'aproctor@chp.ca.gov'; 'grpeck@chp.ca.gov'; dsilverla <dsilverla@me.com>; 'mnorman@iebike.org'; 'cshultz@scn.com'; 'tclay@shimmick.com'; Rascon, Patricia <prascon@cifac.org>; 'rmayoca@gmail.com'; 'ianderson@biologicaldiversity.org'; 'ibelenky@biologicaldiversity.org'; 'olimpia.infante@mbakerintl.com'; 'kanyonsb@outlook.com'; 'cynthia.gibbs@webbassociates.com'; 'kchapman1132@gmail.com'; 'dkanavy@airxus.com'; 'aproctor@chp.ca.gov'; 'grpeck@chp.ca.gov'; dsilverla <dsilverla@me.com>; 'mnorman@iebike.org'; 'bittner\_curtis@yahoo.com'



## Email sent to group on 2/27/2018 at 11:30 AM

'nwilliams@s-econsulting.com'; 'patacakeallen@aol.com'; 'policy@iebike.org'; Guill, Rebekah <rguill@RIVCO.ORG>; Ross, Ryan <rmross@RIVCO.ORG>; Peebles, Robert <rpeebles@riversidesheriff.org>; 'rsantos@sunesys.com'; Arroyo, Ruben <ruarroyo@RIVCO.ORG>; 'RuthKirk@frontier.com'; 'rwaters0424@gmail.com'; Bangle, Scott <sbangle@RIVCO.ORG>; 'sevda@cpm-partners.com'; 'soo.dan@verizon.net'; Persi, Stephanie <spersi@RIVCO.ORG>; 'spierce@ci.banning.ca.us'; 'steve.agor@skanska.com'; 'tclay@shimmick.com'; 'Wendy.Kerr@arcadis.com'

The screenshot shows a Microsoft Outlook window titled "I-10 Bypass: Banning to Cabazon Project - extension of comment period - Message (HTML) (Read-Only)". The email is from Mary Zambon, dated Tuesday, 2/27/2018 at 11:30 AM. The subject is "I-10 Bypass: Banning to Cabazon Project - extension of comment period". The recipients list includes: 'nwilliams@s-econsulting.com'; 'patacakeallen@aol.com'; 'policy@iebike.org'; Guill, Rebekah; Ross, Ryan; Peebles, Robert; 'rsantos@sunesys.com'; Arroyo, Ruben; 'RuthKirk@frontier.com'; 'rwaters0424@gmail.com'; Bangle, Scott; 'sevda@cpm-partners.com'; 'soo.dan@verizon.net'; Persi, Stephanie; 'spierce@ci.banning.ca.us'; 'steve.agor@skanska.com'; 'tclay@shimmick.com'; 'Wendy.Kerr@arcadis.com'.

The body of the email contains the following text:

This email is to inform you that the deadline for comments on the Draft Environmental Impact Report/Draft Environmental Assessment (DEIR/DEA) for the I-10 Bypass: Banning to Cabazon Project has been extended to:  
**Monday April 30, 2018.**

Written comments can be sent to Mary Zambon at Riverside County, contact information below.

The DEIR/DEA is available at the following link:  
<http://rcprojects.org/wp-content/uploads/2012/10/I-10-Bypass-EIREA-Complete-December-2017-Signed-Compressed.pdf>

Additional project information, including a project summary, is at:  
<http://rcprojects.org/i10bypass/>

Please contact me with any questions.  
Thank you for your interest in the project.

Mary Zambon  
Senior Transportation Planner  
Riverside County Transportation Department  
3525 14th Street  
Riverside, CA 92501  
951 955 6759  
[mzambon@rivco.org](mailto:mzambon@rivco.org)

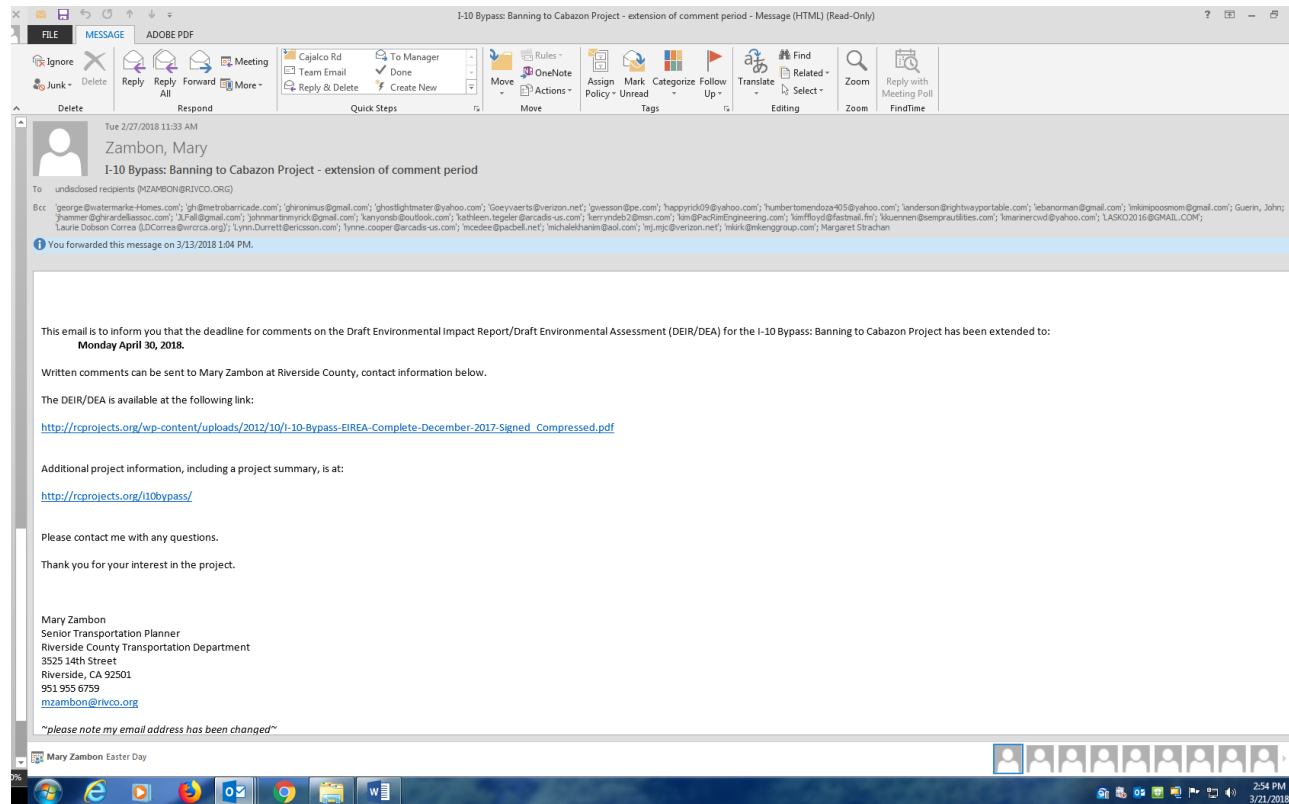
*\*please note my email address has been changed\**

**How are we doing?** [Click the link to tell us](#)

The screenshot also shows the Windows taskbar at the bottom with the system clock displaying 2:53 PM on 3/21/2018.

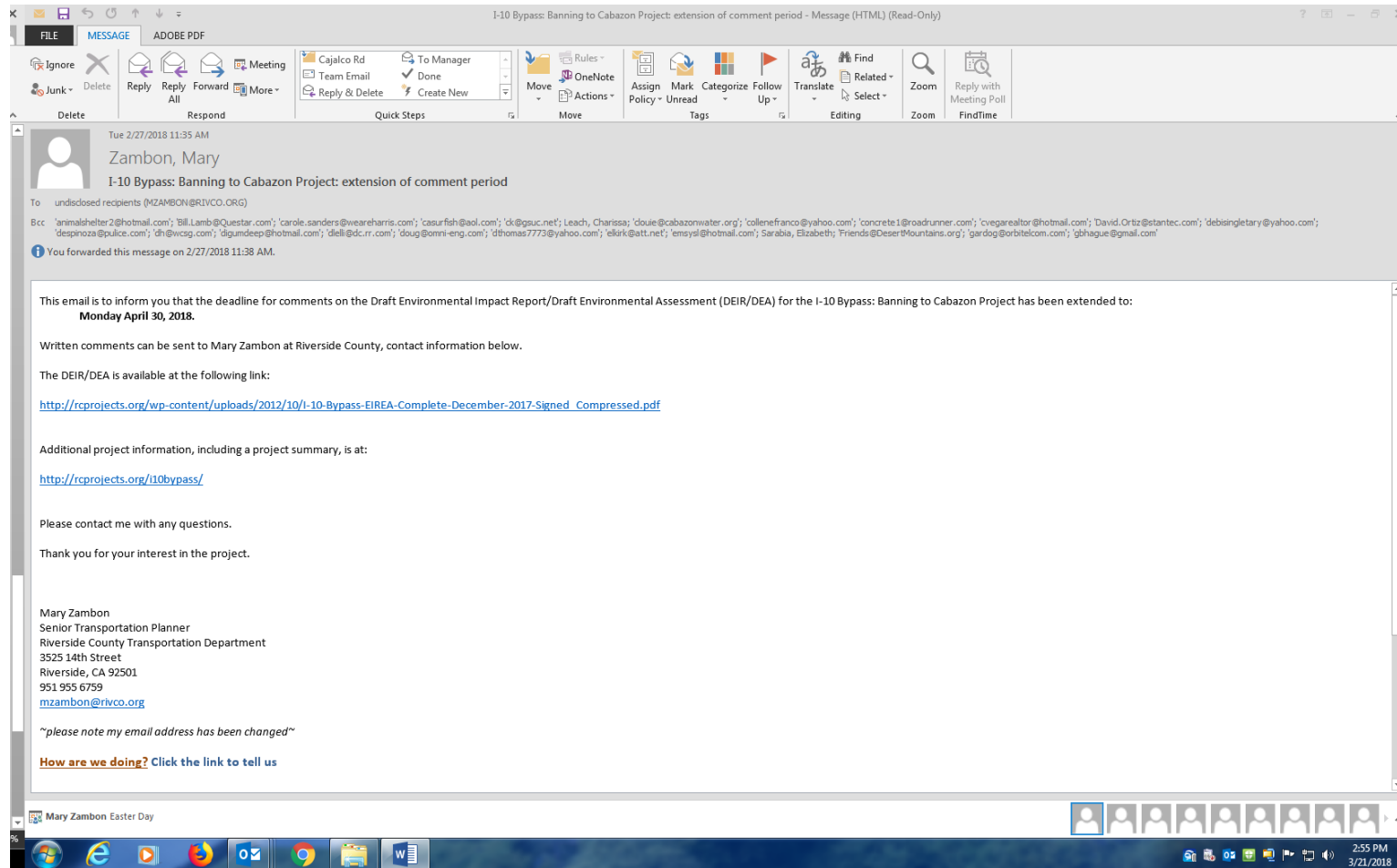
## Email sent to group on 2/27/2018 at 11:33 AM

'george@watermarke-Homes.com'; 'gh@metrobarriade.com'; 'ghironimus@gmail.com'; 'ghostlightmater@yahoo.com'; 'Goeyvaerts@verizon.net'; 'gwesson@pe.com'; 'happyrick09@yahoo.com'; 'humbertomendoza405@yahoo.com'; 'ianderson@rightwayportable.com'; 'iebanorman@gmail.com'; 'imkimipoosmom@gmail.com'; Guerin, John <JGUERIN@RIVCO.ORG>; 'jhammer@ghirardelliassoc.com'; 'JLFall@gmail.com'; 'johnmartinmyrick@gmail.com'; 'kanyonsb@outlook.com'; 'kathleen.tegeler@arcadis-us.com'; 'kerryndeb2@msn.com'; 'kim@PacRimEngineering.com'; 'kimffloyd@fastmail.fm'; 'kkuennen@semprautilities.com'; 'kmarinercwd@yahoo.com'; 'LASKO2016@GMAIL.COM'; 'Laurie Dobson Correa (LDCorrea@wrcra.org)'; 'Lynn.Durrett@ericsson.com'; 'lynne.cooper@arcadis-us.com'; 'mcedee@pacbell.net'; 'michalekhanim@aol.com'; 'mj.mjc@verizon.net'; 'mkirk@mkenggroup.com'; Margaret Strachan <mstrachan951@gmail.com>



**Email sent to group on 2/27/2018 at 11:35 AM**

'animalshelter2@hotmail.com'; 'Bill.Lamb@Questar.com'; 'carole.sanders@weareharris.com'; 'casurfish@aol.com'; 'ck@gsuc.net'; Leach, Charissa <cleach@RIVCO.ORG>; 'clouie@cabazonwater.org'; 'collenefranco@yahoo.com'; 'concrete1@roadrunner.com'; 'cvegarealtor@hotmail.com'; 'David.Ortiz@stantec.com'; 'debisingletary@yahoo.com'; 'despinoza@pulice.com'; 'dh@wscg.com'; 'digumdeep@hotmail.com'; 'dllelli@dc.rr.com'; 'doug@omni-eng.com'; 'dthomas7773@yahoo.com'; 'elkirk@att.net'; 'emsysl@hotmail.com'; Sarabia, Elizabeth <ESarabia@RIVCO.ORG>; 'Friends@DesertMountains.org'; 'gardog@orbitelcom.com'; 'gbhague@gmail.com'





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## Banning-Beaumont, CA

News Feed Neighbor Posts **Classifieds** Calendar

*This post was contributed by a community member. The views expressed here are the author's own.*

Local Classified |  Announcement

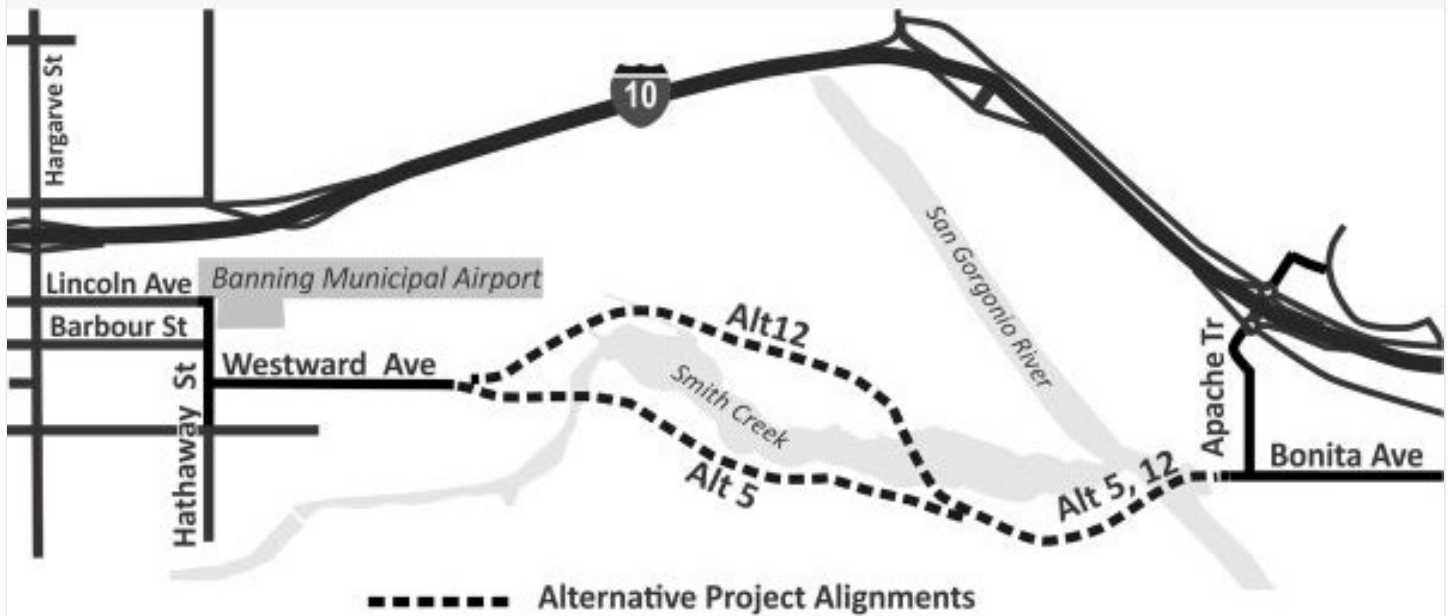


**Darren Adrian**, Neighbor

Banning-Beaumont, CA | Feb 2018

### I-10 Bypass: Banning to Cabazon Public Input Extended





The deadline for comments on the Draft Environmental Impact Report/Draft Environmental Assessment (DEIR/DEA) for the I-10 Bypass: Banning to Cabazon Project has been extended to:

Monday April 30, 2018.

Written comments can be provided on the website listed below.

The DEIR/DEA is available at the following link:

[http://rcprojects.org/wp-content/uploads/2012/10/I-10-Bypass-EIREA-Complete-December-2017-Signed\\_Compressed.pdf](http://rcprojects.org/wp-content/uploads/2012/10/I-10-Bypass-EIREA-Complete-December-2017-Signed_Compressed.pdf)

Additional project information, including a project summary, is at:

<http://rcprojects.org/i10bypass/>

**LOCAL NEWS**

# Make A Wish wishes to make bigger impact in the Pass area

BY JULIE FARREN  
Record Gazette

Make A Wish has granted dreams for children with critical illnesses throughout the United States and internationally, but also has reached out to families in the San Geronio Pass area.

In the Orange County, Riverside and San Bernardino County area, more than 480 children are waiting for their wishes to come true.

That also includes children in the Beaumont-Cherry Valley area. Jessica Orozco, corporate and community engagement coordinator for Make A Wish in Orange County-Riverside and San Bernardino counties, says that more than 350 children in this area have been granted



Make a Wish recipient, Luke, lives in Beaumont with his family. His wish was to go to Disney World.

wishes.

But what people do not realize is how expensive it can be to fund these wishes. Each Make A Wish that is granted costs \$7,500. Locally, four to five Beaumont chil-

dren have had wishes granted and their destination choice: Disneyland and Disney World. Make A Wish was founded in 1980. The first recipient was a 7-year-old boy named Chris, who wanted to be a police officer. He was given a helicopter ride and became a police officer in the Phoenix Police Department for a day.

Chris passed away a few months later, Orozco said.

"If not for him, other kids wouldn't have their wishes granted," she said. From that point on, Make A Wish formed 60 chapters in the United States and has 41 international affiliates. It is in 50 countries and has granted more than 415,000 wishes in the past 39 years.

According to Make A Wish,

15,617 wishes have been granted in the United States last year. Seventy-five percent of the wishes require travel, she said. Orozco said that there are key phrases in Make A Wish stories. They include: "I wish to have," "I wish to be," "I wish to meet," "I wish to give," and "I wish to go to."

Any fundraising that takes place means that that money stays in this area. Make A Wish also accepts in-kind support such as gift cards, toys and backpacks.

There are many ways to

raise money, such as peer-to-peer online campaigns, fitness challenges, auctions, golf tournaments and employee competitions.

The non-profit organization also accepts unused airline miles. Last year, Make A Wish used 2.9 billion air miles. The children who have been granted wishes are inspirational as well.

One child wishes to feed the homeless in San Bernardino; another child wants to give toys to the pediatric unit of the hospital that cared for him.

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<p><b>FAST &amp; FURIOUS PRESENTS: HOBBS &amp; SHAW</b> (PG-13)</p> <p>FRI: 12:00 3:30 7:15 10:15 SAT: 12:00 3:30 7:15 10:15 SUN: 12:00 3:30 7:15 10:15 MON &amp; TUE: 12:00 3:30 7:15 WED: 12:00 3:30 7:15 THUR: 12:00 3:30 7:15</p>	<p><b>DORA AND THE LOST CITY OF GOLD</b> (PG)</p> <p>FRI: 12:30 3:45 7:00 9:30 SAT: 12:30 3:45 7:00 9:30 SUN: 12:30 3:45 7:00 9:30 MON &amp; TUE: 12:15 3:30 6:45 THUR: 12:15 3:30 6:45</p>	<p><b>THE LION KING</b> (PG)</p> <p>FRI: 3:30 6:45 9:30 SAT: 12:15 3:30 6:45 9:30 SUN: 12:15 3:30 6:45 MON &amp; TUE: 3:30 6:45</p>	<p><b>THE ANGRY BIRDS MOVIE 2</b> (PG)</p> <p>WED: 12:30 3:45 7:00 THUR: 3:45 7:00</p> <p>SPECIAL ENGAGEMENT. NO PASSES ALLOWED.</p>
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If you find your name, stop by our office at 218 N. Murray Street and you're on your way to the Fox Cineplex.

## Public Notice

### Notice of Availability of a Recirculated Draft Environmental Impact Report/Draft Environmental Assessment

#### I-10 Bypass: Banning to Cabazon Project

##### WHAT IS BEING PLANNED?

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronio River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

Pursuant to Section 15072(f)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

##### WHY THIS PUBLIC NOTICE?

The County of Riverside and Caltrans have studied the proposed project and prepared the Recirculated Draft Environmental Impact Report/Environmental Assessment (DEIR/DEA), which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. The DEIR/DEA was previously circulated for public review

from December 29, 2017 to April 30, 2018. This Recirculated DEIR/DEA is being recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. This notice is to advise you that the Recirculated DEIR/DEA is available for you to read.

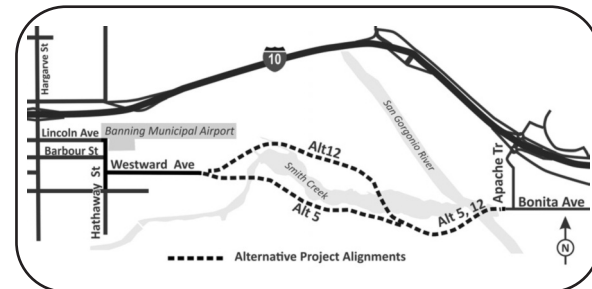
##### WHAT'S AVAILABLE?

The Recirculated DEIR/DEA will be available for 45 days from August 12, 2019 until September 25, 2019. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact information below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

##### WHERE YOU COME IN

Would you like to make comments on the project, the alternative alignments or the Recirculated DEIR/DEA? Please submit your comments in writing no later than September 25, 2019 to Mary Zambon, Environmental Project Manager, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. Comments received during the public review period for the Recirculated DEIR/DEA will be included in the Final Environmental Impact Re-



port/Final Environmental Assessment (FEIR/FEA) and will be considered in selection of the Preferred Alternative. Comments previously provided on the DEIR/DEA (circulated in December 2017) have been reviewed and will be included in the administrative record for the Project, and will not be responded to individually in the FEIR/FEA. Options for submitting comments that will be responded to in the FEIR/FEA include:

- [Resubmit your previous comments from the December 2017 circulation of the Draft EIR/EA.](#)
- [Submit new comments on the Recirculated Draft EIR/EA.](#)

The FEIR/FEA will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be made until after the review period is complete and the FEIR/FEA is prepared.

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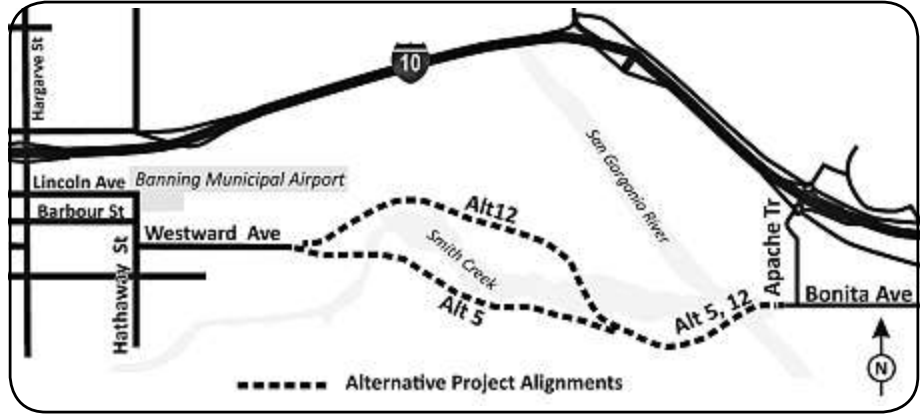
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# Public Notice

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**WHAT IS BEING PLANNED?**

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Pursuant to Section 15072(f)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

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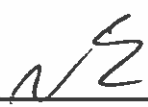
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**08/10/2019**

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At: Riverside, California



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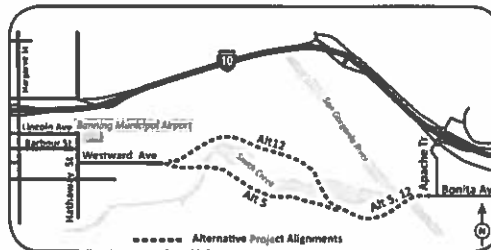
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Pursuant to Section 15072(f)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

##### WHY THIS PUBLIC NOTICE?

The County of Riverside and Caltrans have studied the proposed project and prepared the *Recirculated Draft Environmental Impact Report/ Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. The DEIR/DEA was previously circulated for public review from December 29, 2017 to April 30, 2018. This Recirculated DEIR/DEA is being recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. This notice is to advise you that the Recirculated DEIR/DEA is available for you to read.

##### WHAT'S AVAILABLE?

The Recirculated *DEIR/DEA* will be available for 45 days from August 12, 2019 until September 25, 2019. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact information below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4th Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

##### WHERE YOU COME IN

Would you like to make comments on the project, the alternative alignments or the Recirculated *DEIR/DEA*? Please submit your comments in writing no later than September 25, 2019 to Mary Zambon, Environmental Project Manager, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. Comments received during the public review period for the Recirculated DEIR/DEA will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. Comments previously provided on the DEIR/EA (circulated in December 2017) have been reviewed and will be included in the administrative record for the Project, and will not be responded to individually in the FEIR/FEA. Options for submitting comments that will be responded to in the FEIR/FEA include:

- Resubmit your previous comments from the December 2017 circulation of the Draft EIR/EA.
- Submit new comments on the Recirculated Draft EIR/EA.

The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be made until after the review period is complete and the *FEIR/FEA* is prepared.

##### CONTACT

For more information about this project or to receive a copy of the Recirculated DEIR/DEA, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.





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# AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY



CHAIR January 30, 2020

Steve Manos  
Lake Elsinore

Mr. John Marcinek, P.E.  
County of Riverside Transportation Department  
3525 Fourteenth Street  
Riverside CA 92501

VICE CHAIR  
Russell Betts  
Desert Hot Springs

COMMISSIONERS

Arthur Butler  
Riverside

RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW

John Lyon  
Riverside

File No.: ZAP1038BA19  
Related File Nos.: I-10 Bypass  
APN: Multiple  
Compatibility Zone: Zone B1, C, D, E

Steven Stewart  
Palm Springs

Richard Stewart  
Moreno Valley

Dear Mr. Marcinek:

Gary Youmans  
Temecula

On January 9, 2020, the Riverside County Airport Land Use Commission (ALUC) found ZAP1038BA19 (I-10 Bypass), a proposal to establish an improved roadway extending from the westerly terminus of Bonita Avenue (at its intersection with Apache Trail) in the unincorporated community of Cabazon to the current easterly terminus of Westward Avenue in the City of Banning, **CONDITIONALLY CONSISTENT** with the 2004 Banning Municipal Airport Land Use Compatibility Plan, pending Federal Aviation Administration (FAA) review, which has now been completed, subject to the following conditions, as amended to incorporate the provisions of the FAA's Determination of No Hazard to Air Navigation letters issued on January 17, 2020 (new conditions, as added pursuant to FAA letter subsequent to hearing, shown in **bold type**).

STAFF

Director  
Simon A. Housman

John Guerin  
Paul Rull  
Barbara Santos

**CONDITIONS (applying to proposed power poles and light poles):**

County Administrative Center  
4080 Lemon St., 14th Floor  
Riverside, CA 92501  
(951) 955-5132

[www.rcaluc.org](http://www.rcaluc.org)

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses/activities are not a part of this project and shall be prohibited at this site:
  - (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
  - (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
  - (c) Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water

features, aquaculture, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

- (d) Any use or activity which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

**The following conditions were added subsequent to the January 9, 2020 ALUC hearing.**

- 3. The Federal Aviation Administration has conducted an aeronautical studies of the proposed project (Aeronautical Study Nos. 2019-AWP-15283-OE and 2019-AWP-15463-OE through 2019-AWP-15469-OE) and has determined that neither marking nor lighting of the proposed power pole and light pole structures is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 L Change 2 and shall be maintained in accordance therewith for the life of the project.**
- 4. The proposed power poles shall not exceed a height of 70 feet above ground level and a maximum elevation at top point of 2,195 feet above mean sea level.**
- 5. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.**
- 6. Temporary construction equipment used during actual construction of the structures shall not exceed 70 feet in height and a maximum elevation of 2,195 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.**
- 7. Within five (5) days after construction of each structure reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://oeaaa.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable structure.**

Supporting documentation was provided to the Airport Land Use Commission and is available online at [www.rcaluc.org](http://www.rcaluc.org), click Agendas, click 01-09-20 Agenda, Bookmark Agenda Item 3.8.

As noted above, the Federal Aviation Administration No Hazard to Air Navigation letters were issued on January 17, 2020, and are not included in the online agenda referenced above. Therefore, they are included as an attachment to this letter.

If you have any questions, please contact John Guerin, ALUC Principal Planner, at (951) 955-0982.

Sincerely,  
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



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Simon A. Housman, ALUC Director

Attachments: Notice of Airport in Vicinity  
Aeronautical Study Numbers 2019-AWP-15283-OE and 2019-AWP-15463-OE  
through 2019-AWP-15469-OE

cc: Mary Zambon, Riverside County Transportation Department  
Darren Adrian, Kimley-Horn and Associates  
Art Vela, P.E., City of Banning Public Works  
Carl Szoyka, Manager, Banning Municipal Airport  
Morongo Band of Mission Indians  
ALUC Case File

Y:\AIRPORT CASE FILES\Banning\ZAP1038BA19\ZAP1038BA19.LTR.doc



# NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 10101 Hillwood Parkway  
 Fort Worth, TX 76177

Aeronautical Study No.  
 2019-AWP-15283-OE

Issued Date: 01/17/2020

John Marcinek, P.E.  
 Riverside County Transportation Department  
 3525 14TH ST  
 Riverside, CA 92501

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Power Line Power Pole - 70 ft
Location:	Beaumont, CA
Latitude:	33-55-07.10N NAD 83
Longitude:	116-50-50.70W
Heights:	2114 feet site elevation (SE)
	70 feet above ground level (AGL)
	2184 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 07/17/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

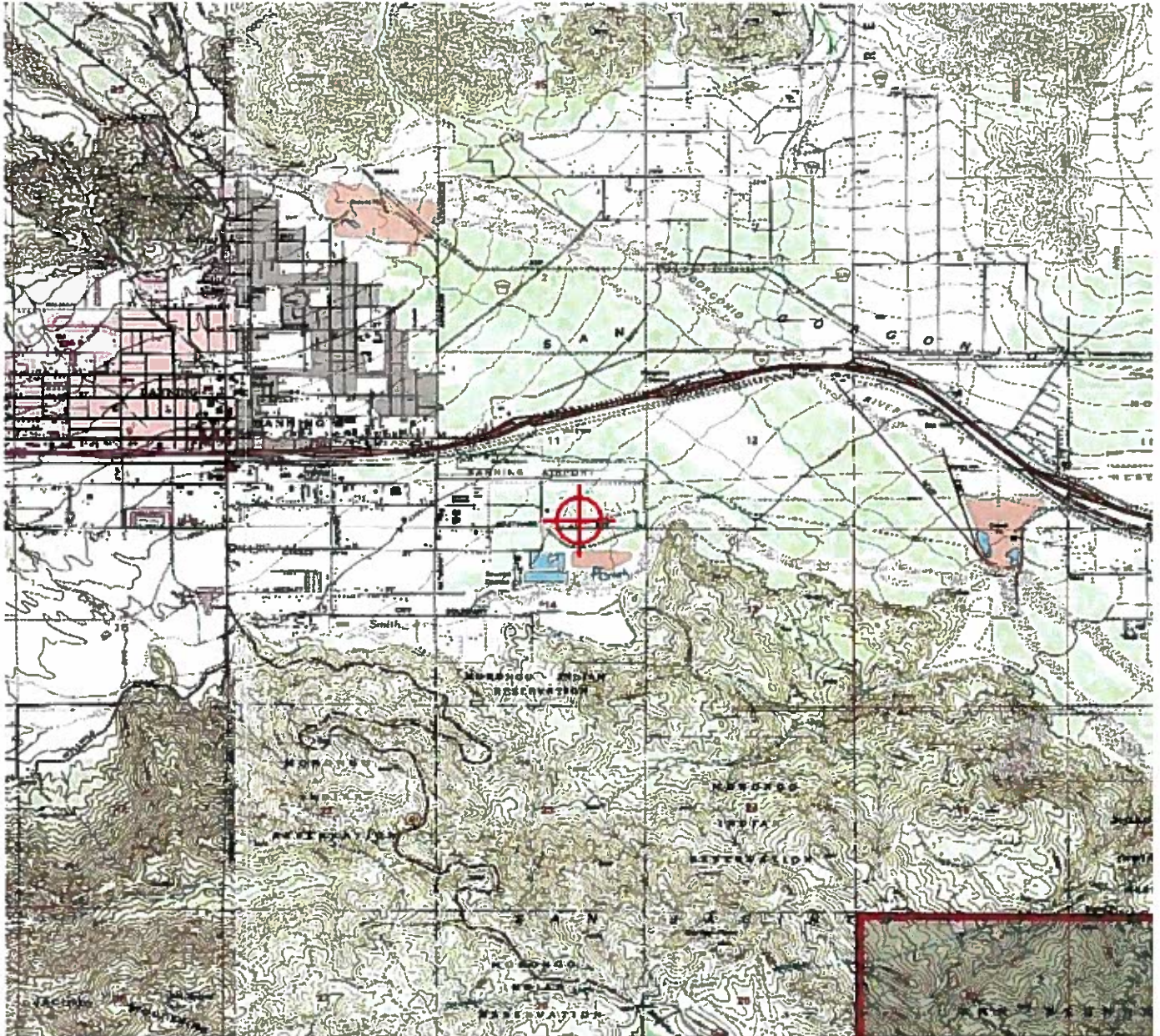
If we can be of further assistance, please contact our office at (907) 271-5863, or [robert.van.haastert@faa.gov](mailto:robert.van.haastert@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-AWP-15283-OE.

**Signature Control No: 425036149-428144699**  
Robert van Haastert  
Supervisor

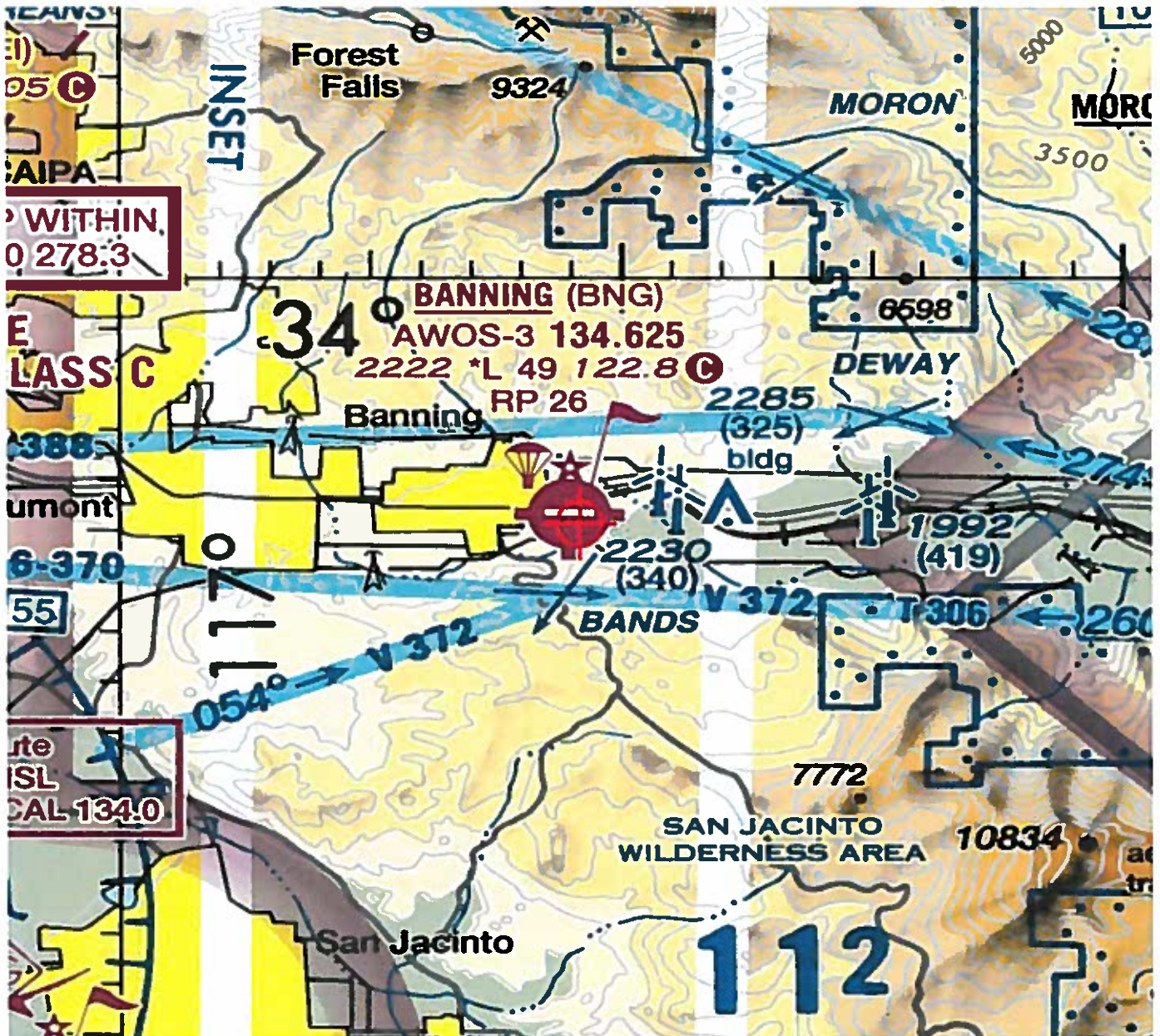
( DNE )

Attachment(s)  
Map(s)











# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Carlsbad Fish And Wildlife Office  
2177 Salk Avenue - Suite 250  
Carlsbad, CA 92008-7385  
Phone: (760) 431-9440 Fax: (760) 431-5901  
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

May 26, 2020

Consultation Code: 08ECAR00-2020-SLI-1121

Event Code: 08ECAR00-2020-E-02598

Project Name: I-10 Bypass

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](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(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

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## Project Summary

Consultation Code: 08ECAR00-2020-SLI-1121

Event Code: 08ECAR00-2020-E-02598

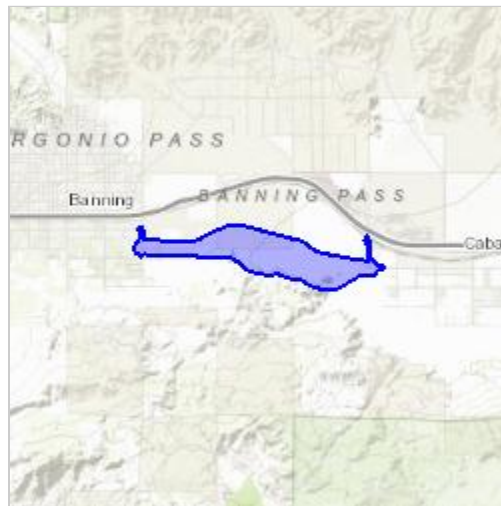
Project Name: I-10 Bypass

Project Type: TRANSPORTATION

**Project Description:** The state of California Department of Transportation (Caltrans) and the county of Riverside (County propose to construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Apache Trail 1 in the unincorporated community of Cabazon, California. The new roadway and bridges would cross undeveloped land south of Interstate 10 (I-10).

**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.91622587228052N116.82897064502583W>



Counties: Riverside, CA

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## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Peninsular Bighorn Sheep <i>Ovis canadensis nelsoni</i> Population: Peninsular CA pop. There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4970">https://ecos.fws.gov/ecp/species/4970</a>	Endangered

### Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

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## Reptiles

NAME	STATUS
<p>Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4481">https://ecos.fws.gov/ecp/species/4481</a></p>	Threatened

## Flowering Plants

NAME	STATUS
<p>Coachella Valley Milk-vetch <i>Astragalus lentiginosus var. coachellae</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7426">https://ecos.fws.gov/ecp/species/7426</a></p>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



## COACHELLA VALLEY CONSERVATION COMMISSION



Cathedral City ◦ Coachella ◦ Desert Hot Springs ◦ Indian Wells ◦ Indio ◦ La Quinta ◦ Palm Desert ◦ Palm Springs  
Rancho Mirage ◦ Riverside County ◦ Coachella Valley Water District ◦ Imperial Irrigation District ◦ Mission Springs Water District

June 11, 2020

Mary Zambon  
Environmental Project Manager  
Riverside County Transportation Department  
3525 14th Street  
Riverside, CA 92501

### RE: Joint Project Review 19-001

Dear Ms. <sup>Mary</sup>Zambon:

The Coachella Valley Conservation Commission (CVCC) has completed Joint Project Review (JPR) 19-001. The County of Riverside (County) proposes to construct the I-10 Bypass (proposed project), a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning east to the intersection of Bonita Avenue and Apache Trail in the unincorporated community of Cabazon. Only the eastern portion of the proposed project is within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) boundary. The project is within the Cabazon Conservation Area.

The Draft JPR was distributed to the County, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the applicant on March 17, 2020.

The project is consistent with the CVMSHCP as proposed if conditioned for conservation of fluvial sand transport, the required Avoidance and Minimization Measures, and applicable Land Use Adjacency Guidelines. As described in CVMSHCP Section 4.2.2.2, maintenance of fluvial sand transport in the Cabazon Conservation Area is a local Permittee obligation. Development consistent with ensuring no net loss of fluvial sand transport may occur in Fluvial Sand Transport Only areas, and such development is a Covered Activity under the CVMSHCP. Consistent with CVMSHCP Section 4.2.2.2.4, Section 4.3.1 Conservation Objectives and Required Measure 1 for the Cabazon Conservation Area, Riverside County as a local Permittee is required to ensure that the proposed project:

1. Protects the fluvial sand transport Essential Ecological Process in the Cabazon Conservation Area
2. Ensures no net reduction in fluvial sand transport in these areas.
3. Requires that natural flows onto parcels in the fluvial sand transport areas shall be conveyed offsite in the natural pre-disturbance direction of flow.



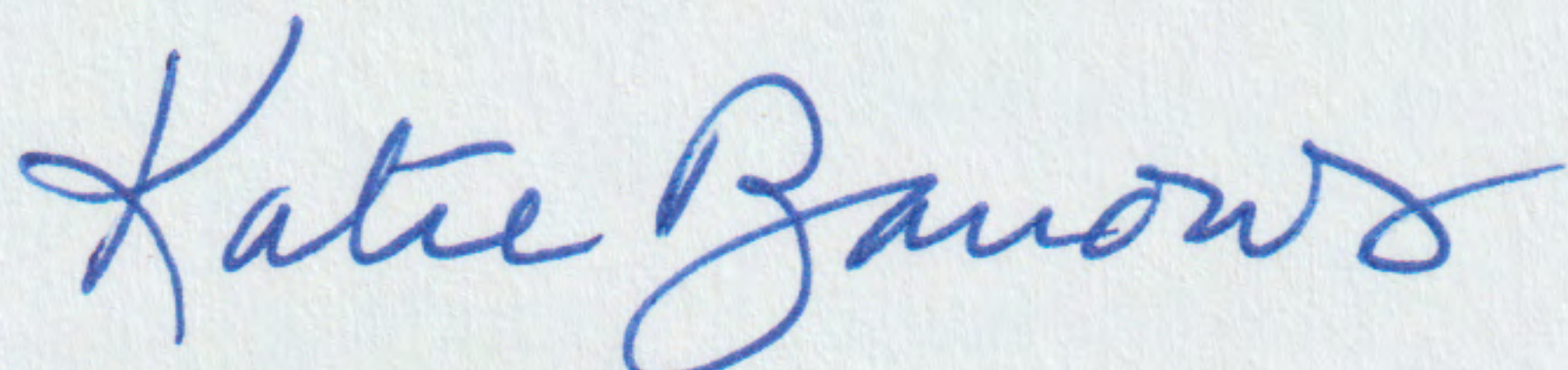
4. Ensures that development on the property shall not impede water-borne sand transport across the parcel in its natural direction of flow. In addition, water-borne sediments and floodwaters shall not be artificially retained onsite.
5. Ensures concentration of flows and increase in flow velocity offsite are minimized to the maximum extent feasible to avoid downstream erosion and scour. Alternatively, a flood control structure for the area that is designed to ensure no net reduction of sediment transport from the sand source area to the sand deposition area where aeolian sand transport processes are active may be used to achieve the Conservation Objective of fluvial sand transport as described in Section 4.2.2.2.4.

The applicant has produced a Hydraulic Study (May 2015) (*Attachment 2*), and a Draft Drainage Report (January 2020) (*Attachment 3*) for the project.

The Federal Environmental Impact Report will detail how the project will meet the five conditions above and indicate that two-dimensional hydraulic modeling will occur early in the final design to more accurately establish bridge abutment locations with the intent to remain outside of the 100-year storm event and maintain sand transport. More specifically, the primary flow during the 100-year flood event will not encroach into the bridge abutments. Smaller meandering streams that are not connected to the primary flow cross section or portions of the primary flow cross section less than 12 inches deep are not considered encroachments.

A copy of the Final JPR is enclosed. If you have questions on this JPR, please do not hesitate to contact me or Jim Sullivan at [jsullivan@cvag.org](mailto:jsullivan@cvag.org) or 760-346-1127.

Sincerely,



Katie Barrows  
Director of Environmental Resources

Cc: Joanna Gibson, CDFW  
Jenness McBride, USFWS

Enclosure



MORONGO  
BAND OF  
MISSION  
INDIANS



A SOVEREIGN NATION

MORONGO BAND OF MISSION INDIANS  
TRIBAL HISTORIC PRESERVATION OFFICE  
12700 PUMARRA RD BANNING, CA 92220  
OFFICE: 951-755-5259 FAX: 951-572-6004  
EMAIL: THPO@MORONGO-NSN.GOV

VIA ELECTRONIC EMAIL

8/27/2020

Re: I-10 Bypass Project, Riverside County, CA

Andrew Walters  
Branch Chief-Environmental Support/Cultural Studies  
Caltrans District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401

Dear Mr. Andrew Walters:

The Morongo Band of Mission Indians (Tribe) Tribal Historic Preservation Office (THPO) continues to consult with the lead agency on the I-10 Bypass Project, Riverside County, CA, Caltrans District 8.

The THPO presents this letter of concurrence, pursuant to 36 CFR 800.4(c)(2), that Caltrans has determined the eight (8) bedrock milling sites within the area of potential effect (APE) are not eligible for inclusion in the National Register of Historic Places (NRHP).

The eight bedrock milling sites are located within the Alternative 12 (Preferred Alternative). Per the *Final EIR/EA, I-10 Bypass Project: Banning to Cabazon*, it is defined and required that measures and practices will be implemented during the construction phase of this project. In reference to the list of potential avoidance and preservation measures that were developed, these are:

- Avoidance
- Burial
- Relocation
- Cutting out and relocating the milling features
- Implemented mitigation measures under CR-1, CR-2, CR-3 and CR-4

We look forward to working with you to preserve these cultural resources; as outlined in the mitigation measures.

Please do not hesitate to contact me should you have any questions by telephone, at cell # (951) 663.2842 or by email: [abrierty@morongo-nsn.gov](mailto:abrierty@morongo-nsn.gov)

Respectfully,

A handwritten signature in cursive script that reads "Ann Brierty".

Ann Brierty,  
Tribal Historic Preservation Officer  
Morongo Band of Mission Indians

Cc: Karen Woodard, Realty Administrator  
Mary Zambon,, Environmental Project Manager

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## United States Department of the Interior

### U.S. FISH AND WILDLIFE SERVICE

Ecological Services  
Carlsbad Fish and Wildlife Office  
2177 Salk Avenue, Suite 250  
Carlsbad, California 92008



In Reply Refer to:  
FWS-WRIV/ERIV-18B0125-21F0415

January 8, 2021  
*Sent Electronically*

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Department of Transportation, District 8  
464 West Fourth Street, 6th Floor  
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Jay Hinshaw  
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Subject: Biological Opinion for the Interstate 10 Bypass: Banning to Cabazon, Riverside County, California

Dear Aaron Burton and Jay Hinshaw:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion on the Interstate 10 (I-10) Bypass (Project) and its effects on the threatened coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher) in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The Project is receiving Federal funding through the Federal Highway Administration (FHWA) and requires the granting of the right-of-way from the Bureau of Indian Affairs (BIA). The California Department of Transportation (Caltrans) has assumed FHWA's responsibilities for section 7 consultation pursuant to 23 U.S.C. 327, and under authorities identified in the signed NEPA assignment Memorandum of Understanding between FHWA and Caltrans (effective December 23, 2016). The Riverside County Transportation District (RCTD) is the non-federal applicant for this Project.

The requests from Caltrans and BIA to initiate consultation were dated April 15, 2020, and July 20, 2020 respectively. Both agencies requested consultation for the federally threatened desert tortoise [Mojave population DPS (*Gopherus agassizii*); desert tortoise] and the gnatcatcher. After discussion, due to the absence of desert tortoise diagnostic indicators during protocol surveys, and the degraded status of habitat and lack of historical records within the Project area, both agencies withdrew their requests for consultation on desert tortoise. Desert tortoise will not be discussed further in this biological opinion.

A portion of the Project alignment is within Morongo Band of Mission Indians Tribal Trust Lands (Tribal Lands) and requires the conveyance of a right-of-way. The remainder of the Project alignment is within the Western Riverside Multiple Species Habitat Conservation Plan (Western Riverside MSHCP) and Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP) Plan Areas. Caltrans and RCTD are permittees in both MSHCPs, and the Project is a covered activity in both MSHCPs. The gnatcatcher is a covered species under the Western Riverside MSHCP. Caltrans and RCTD propose to receive authorization for the project-related incidental take of gnatcatcher through the Western Riverside MSHCP. In order for Caltrans and RCTD to receive incidental take through the Western Riverside MSHCP, the proposed action must be consistent with the Western Riverside MSHCP and its associated implementation agreement and permit.

The gnatcatcher is not a covered species in the Coachella Valley MSHCP. After reviewing the proposed action, and in discussions with Caltrans and the local applicant; based on historic occurrence information, the quality of potentially suitable habitat within the Project footprint, and conservation measures provided in the biological assessment, we have determined implementation of the proposed Project is not likely to adversely affect gnatcatcher within the Coachella Valley MSHCP Plan Area. The following discussion of gnatcatcher in this document does not include the Coachella Valley MSHCP Plan Area.

This biological opinion is based on information provided in the following documents:

(1) *Intra-Service Formal Section 7 Consultation/Conference for Issuance of Endangered Species Act Section 10(a)(1)(B) Permit TE-088609-0 for the Western Riverside County Multiple Species Habitat Conservation Plan*, dated June 22, 2004 (FWS-WRIV-870.19); (2) *I-10 Bypass: Banning to Cabazon, Recirculated Draft Environmental Impact Report/Environmental Assessment* (August 2019); (3) *Determination of Biologically Equivalent or Superior Preservation Report, I-10 Bypass Project: Banning to Cabazon, District 8, RIV031202, Riverside County, California* (July 19, 2019; as amended); (4) *Intra-Service Reinitiation of Consultation and Amendment to the Biological Opinion Regarding Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit (TE088609-1) for the Western Riverside County Multiple Species Conservation Plan, Riverside County, California*, dated September 22, 2011 (FWS-WRIV-11B0266-11F0413); (5) *Biological Assessment, I-10 Bypass Project: Banning to Cabazon, Bureau of Indian Affairs, Riverside County, California* –Project area within Morongo Band of Mission Indians Tribal Lands (received July 20, 2020); (6) *Biological Assessment, I-10 Bypass Project: Banning to Cabazon, Riverside County, California, 5956(210)* – Project area within Coachella Valley MSHCP (received July 20, 2020); (7) an email, dated October 1, 2020 from the California Department of Fish and Wildlife (CDFW) and the Service documenting the consistency of the proposed Project with the Western Riverside MSHCP Determination of Biologically Equivalent or Superior Preservation requirements; and (8) electronic and verbal communication with your offices. A complete record of this consultation is on file at the Carlsbad Fish and Wildlife Office.

## CONSULTATION HISTORY

The Service was first notified of the proposed Project via email received December 6, 2012. On August 7, 2013, Caltrans informed the Service via email that an Environmental Impact Statement (EIS) was being pursued to discuss alternatives and ensure stakeholder involvement.

On November 15, 2017, Caltrans and RCTD met with the Service and CDFW, hereinafter Wildlife Agencies, and the Western Riverside Regional Conservation Authority (RCA). The meeting focused on potential impacts to Los Angeles pocket mouse, a species covered under the Western Riverside MSHCP, and incorporation of wildlife movement features as part of Project design. Following the meeting, the Service provided RCTD representatives examples of small mammal crossing designs via email on November 21, 2017.

On January 8, 2018, the Service received a Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the proposed Project. On April 30, 2018 the Service and CDFW provided comments on the DEIR/EA via a joint letter (FWS/CDFW-18B0125-18TA0601).

On July 19, 2019, the Service received a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report to address Project related impacts to Western Riverside MSHCP riparian/riverine resources and occupied Los Angeles pocket mouse habitat. On August 8, 2019, the Service received a Notice of Availability/Notice of Intent of a revised DEIR/EA available for review. Due to the substantive nature of the comments submitted April 30, 2018, the Wildlife Agencies requested additional review time to compare the content presented within the DBESP with language presented within the recirculated DEIR/EA.

On September 25, 2019, the Wildlife Agencies provided comments on the recirculated DEIR/EA (FWS/CDFW-WRIV/ERIV-18B0125-19CPA0302) and DBESP (FWS/CDFW-WRIV/ERIV-18B0125-19CPA0291) for the proposed Project.

In response to our September 25, 2019 comments, RCTD provided a revised DBESP to the Service via email on February 25, 2020. Our review of the updated document noted the revised DBESP did not address many of the provided comments. Additional feedback was provided via email April 24, 2020 (FWS/CDFW-WRIV/ERIV-18B0125-19CPA0291), and during a call held with the RCA, Wildlife Agencies, Caltrans, and RCTD on May 5, 2020 to address outstanding concerns.

On March 17, 2020, the Wildlife Agencies received a Joint Project Review (JPR) under the terms of the Coachella Valley MSHCP for the proposed Project. Following discussions with CDFW, the Service deferred to CDFW's comments, which were submitted to the Coachella Valley Conservation Commission (CVCC) via email April 17, 2020. The CVCC and Riverside County Transportation Department have not responded to the Service or CDFW and the Project implementation of the Coachella Valley MSHCP is incomplete.

On April 15, 2020, Caltrans informed the Service of its intent to initiate formal consultation to address Project related impacts to gnatcatcher within the Western Riverside and Coachella Valley MSHCPs. During a phone call with Caltrans on April 28, 2020, we requested a biological



assessment, and inclusion of the BIA to address Project related impacts to the gnatcatcher on Tribal Lands.

On October 1, 2020, the Wildlife Agencies completed review of the DBESP (as amended) and concurred the programmatic DBESP addresses Sections 6.1.2 and 6.3.2 of the MSHCP. The Wildlife Agencies agreed with RCTD that the Western Riverside MSHCP wildlife movement measures for the Special Linkage Area, Section 3.3.10 (The Pass Area Plan), will be addressed in the Environmental Impact Report for the project.

## **BIOLOGICAL OPINION**

### **DESCRIPTION OF THE PROPOSED ACTION**

The Project is located in the San Gorgonio Pass area of Southern California. The road alignment runs through the City of Banning (Banning), Tribal Lands, and the unincorporated community of Cabazon (Cabazon) in Riverside County and is within the Plan Areas of both the Western Riverside County MSHCP and Coachella Valley MSHCP areas.

At this time, no local roadway connects Banning and Cabazon. The two communities, located approximately 3 miles apart, are required to utilize I-10 as the primary roadway connection for local traffic. This creates several problems for both local and regional travelers during periods of high use on the Interstate, as well as safety issues for bicyclists and pedestrians within the area. The proposed Project would create a new roadway across undeveloped land south of I-10 to connect Banning and Cabazon, with a future roadway grade-separation at railroad tracks in Cabazon. Establishing a new transportation facility would provide a route through the area for pedestrians and bicyclists, serve as an alternate transportation route in the event of a closure on I-10, and improve access times for emergency services within the local area.

Alternative 12, as identified in the recirculated DEIR/EIS, has been identified as the Preferred Alternative considered for construction. As currently designed, the Project would improve 0.5 miles of existing Westward Avenue from the Westward Avenue/Hathaway Street intersection in Banning, east to the current end of the paved road. Improvements within the area include repaving existing travel lanes, striping, paving roadway shoulders, and improvements to existing sidewalks, curbs, and gutters. At the paved terminus of Westward Avenue, the Project would then extend Westward Avenue approximately 2.8 miles east to the existing intersection of Morongo Trail and Bonita Avenue in Cabazon. This new roadway would consist of two 12-foot-wide travel lanes, one in each direction, a 14-foot striped median, 8-foot paved shoulders, and an 8-foot-wide multi-use pathway. To address the increase in impermeable surfaces, the Project includes detention basins to collect sheet flow from the roadway.

To traverse the two primary hydrological features within the Project boundary, the new roadway would include a 1,100-foot and a 900-foot bridge to span the 100-year floodplains of Smith Creek and San Gorgonio River respectively. The bridges would be designed to accommodate wildlife movement, a planned equestrian trail, and to preserve fluvial sand transport for downstream aeolian delivery to habitat for species that require windblown sand, including the federally

endangered Coachella Valley milkvetch (*Astragalus lentiginosus* var. *coachellae*) and federally threatened Coachella Valley fringe-toed lizard (*Uma inornata*) within the Coachella Valley.

Although the Project is a two-lane facility, RCTD aims to grade and delineate an ultimate 129 ft right-of-way, thereby allowing room for a future four-lane facility. Based on available funding, bridges over Smith Creek and the San Gorgonio River may be constructed with adequate width to accommodate a four-lane facility.

Prior to construction, the Project footprint would be surveyed and fenced to protect adjacent native habitat. The vegetation within the construction footprint would be cleared outside of the bird nesting season to the extent possible. If vegetation is removed during bird nesting season, preconstruction nesting surveys would be conducted as described in conservation measure CM 1. Once the habitat is deemed to be clear of nesting birds, the vegetation and topsoil would be cleared and grubbed.

The I-10 Bypass Project would be constructed within the designated footprint as follows:

- Utility relocations involving trenching, placement of new pipe; relocation or erection of new electrical poles including necessary equipment for clearing work area, trenching and hauling material.
- Clearing and grubbing of areas to be excavated including equipment to remove vegetation, rocks and other materials contained within the top 2 feet of the existing surface. Remove materials and debris from the site in preparation for grading activities.
- Excavation and grading with large excavators, hauling trucks, water trucks, compactors and other equipment to support hillside excavations, construction of slopes and embankment sections for the new roadbed. Some areas of large rock excavation or blasting may be necessary.
- Trenching operations, excavation and supporting activities for construction of storm drain, graded ditches, concrete lined ditches, culverts and wildlife crossings.
- Excavation, drilling, pile driving, falsework and concrete necessary for construction of the bridge structures.
- Grading equipment, compactors, water trucks and paving machines would be used as necessary to construct the new paved roadway.
- Grading equipment, compactors, water trucks, and concrete trucks would be used as necessary for construction of curbs, sidewalks, and other necessary flatwork.
- Trucks and necessary equipment for installing signs, traffic signals, pavement markings, native planting and other tasks would be used to finish the roadway.

Based on preliminary estimates, the duration of Project related activities is anticipated to last 24 to 30 months. Equipment and materials would enter the Project area from existing access points in Banning or Cabazon, with staging areas and haul routes limited to the designated disturbance footprint. As the proposed Project has not yet been funded for final design, Caltrans and RCTD would submit final design plans to the Service prior to ground disturbing activities. Based on current engineering designs, disturbance from Project related actions would result in disturbance to 128.07 acres of undeveloped area. Of the area affected, 21.59 acres permanent impacts and 15.44 acres of temporary impacts occur on Tribal Lands, 14.84 acres of permanent impacts and 12.76 acres of temporary in the Western Riverside MSHCP Plan Area, and 35.64 acres of permanent impacts 27.8 acres of temporary impacts on Coachella Valley MSHCP Plan Area lands.

Following construction of the proposed Project, temporary disturbance areas and adjacent graded slopes would be revegetated with native upland scrub habitat consistent with species composition existing within adjacent undisturbed habitats. A Habitat Management and Monitoring Plan (HMMP) would be developed to guide restoration activities. During the plant establishment period, the restored vegetation would be periodically maintained to control non-native weeds. Other operations may include inspection and maintenance of storm drains and wildlife crossings to ensure they are functioning as designed. It is anticipated restoration actions would result in reestablishing suitable gnatcatcher habitat within 3 to 5 years.

### **Western Riverside MSHCP**

Within the Western Riverside MSHCP boundary, the Project area includes vacant land, free-range cattle grazing, and scattered residences. Smith Creek flows along the foothills adjacent to the southern boundary of the Project area. The San Gorgonio River traverses this area with the confluence of Smith Creek and the San Gorgonio River in the southeast of the Project study area. Several gated dirt roads that connect Westward Avenue to Bonita Avenue provide access to private property and Tribal Lands. The area is also crossed by several utility corridors, including electrical transmission lines, gas and oil transmission mains, and fiber optic cables.

### **Special linkage**

The Project footprint crosses a Western Riverside MSHCP Special Linkage Area. This area between Banning and Cabazon is one of the few remaining areas that afford wildlife movement and connectivity between the San Bernardino Mountains and the San Jacinto Mountains. Though bisected by I-10, culverts and bridges situated in the Banning/Cabazon Pass do provide opportunity for wildlife movement. Per the Section 3.3.10 of the Western Riverside MSHCP:

*Special Linkage Area: This Special Linkage Area will contribute to assembly of a portion of the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. Tribal coordination regarding American Indian Lands will be necessary in this area. The San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage includes locations within and outside the MSHCP Plan Area. Features of the entire linkage area are described in Missing Linkages: Restoring Connectivity to the California Landscape (Penrod et al. 2001). A copy of this report is attached as Exhibit 24 to Comment Letter D in Volume V of the MSHCP. Local*

*Permittees will apply the following rebuttable presumption of significance, taken from Appendix G to the 1998 State CEQA Guidelines, in CEQA review of proposed public and private projects within this Special Linkage Area and apply mitigation measures as appropriate: "Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?" Draft and Final CEQA documentation prepared by Local Permittees for projects within this Special Linkage Area will be forwarded to the RCA for informational purposes to provide for MSHCP coordination regarding this area.*

In a November 30, 2020, email discussion between the Wildlife Agencies and RCTD regarding the Project's Western Riverside MSHCP consistency determination, the RCTD documented The Pass Plan Area special linkage requirements will be addressed within the Project's EIR/EA to complete implementation the Western Riverside MSHCP.

### **Coachella Valley MSHCP**

The eastern-most portion of Project area lies within Cabazon Conservation Area of the Coachella Valley MSHCP, south of I-10, and includes low-density residences and mobile homes south of the Union Pacific Railroad tracks with higher-density housing and limited commercial uses in a small core area north of Main Street. The principal purpose of the Conservation Area is protection of the San Gorgonio River and tributaries to maintain a functional fluvial sand transport system for the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area. As a Coachella Valley MSHCP covered activity the Project is subject to the Joint Project Review (JPR) with the CVCC to verify implementation of the Coachella Valley MSHCP.

### **Conservation Measures**

To avoid, minimize, and offset effects to gnatcatcher and the habitats upon which they depend, Caltrans, the BIA, and the local applicant have included the following conservation measures (CM) to be implemented for the duration of Project related actions. A complete list of Project avoidance and minimization measures, and best management practices, can be found within Section 3 of the BIA biological assessment (BIA 2020), Section 4.3 of the DBESP (Caltrans 2020a), and Section 1.4.5 of the I-10 Bypass Project: Banning to Cabazon Biological Assessment (Caltrans 2020b):

- CM 1. To minimize effects to gnatcatcher, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as February 15 through August 31) or a preconstruction nesting bird survey would be conducted within 3 days prior to project activities including equipment staging, clearing, grubbing, construction, and/or ground disturbance, to ensure the gnatcatcher are not disturbed by construction-related activities.
  - a. Should nesting gnatcatcher be found on or within 300 feet of the Project site during the preconstruction survey, an appropriate buffer shall be established by a qualified biologist. No construction or clearing would be conducted

within the buffer area until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist would monitor active nests to ensure established buffers are effective.

- CM 2. Prior to ground disturbing activities, highly visible barriers (such as orange construction fencing) would be installed around plant communities adjacent to the Project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type would be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, would not be allowed to operate within the ESAs. All construction equipment would be operated in a manner to prevent accidental damage to habitat adjacent to the Project footprint. No structure of any kind, or incidental storage of equipment or supplies, would be allowed within these protected zones. Silt fence barriers would be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.
- CM 3. A designated biologist, familiar with gnatcatcher life history and habitat requirements, would be retained and will be responsible for overseeing compliance with conservation measures and coordination with other involved regulatory agencies. The designated biologist would be on the Project site during all Project activities and would have the authority to halt activities that violate measures applicable to the proposed Project. The names and qualification of individuals to serve as designated biologists would be submitted to the Service for review and approval.
- CM 4. Lighting would be limited to installations at intersections for safety and incorporate wildlife-friendly designs.
- CM 5. To offset permanent and temporary impacts to native vegetation communities, a HMMP would be developed in coordination with the Service to restore Riversidean alluvial sage scrub (RAFSS) and *Acacia greggii* shrubland (shrubland) within the Project area at a 1:1 ratio. Only native plant species, preferably from seed or stock sourced in or near the Project area, would be used in restoration. The HMMP would include items such as appropriate native seed mixes, identify site activities, maintenance and monitoring performance standards, and responsible parties. To ensure success of the restoration area, a draft HMMP would be submitted to the Service for review and approval no later than 30 days prior to initial ground-disturbing activities.
- CM 6. To provide for the safety of the motoring public, and conservation of local fauna, permanent wildlife fencing would be installed along the length of the new roadway following completion of the Project. Per the Project's DBESP, RCTD would develop the fencing plan in coordination with the Wildlife Agencies.



## **Action Area**

Regulations implementing the Act (50 CFR § 402.02) describe the action area as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. For this Project, the action area is defined as the Project footprint and surrounding habitat within 500 feet of the construction footprint that may be exposed to Project-related effects such as increased noise, light, and dust levels and human activity during construction and maintenance activities.

## **ANALYTICAL FRAMEWORK FOR THE SECTION 7(A)(2) DETERMINATIONS**

### **Jeopardy Determination**

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the range-wide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the Effects of the Action, which are all consequences to listed species caused by the proposed action that are reasonably certain to occur; and (4) the Cumulative Effects, which evaluate the effects of future, non-Federal activities in the action area on the species.

For the section 7(a)(2) determination regarding jeopardizing the continued existence of the species, the Service begins by evaluating the effects of the proposed Federal action and the cumulative effects. The Service then examines those effects against the current status of the species to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the species in the wild.

## **STATUS OF THE SPECIES**

### **Coastal California Gnatcatcher**

The Service listed the gnatcatcher as threatened on March 30, 1993 (58 FR 16742). We designated critical habitat for gnatcatcher on October 24, 2000 (65 FR 63680) and revised that designation on December 19, 2007 (72 FR 72010). The status of the gnatcatcher is described in detail in the latest [five-year review](#) for this species (Service 2010) and the [12-Month Finding on the petition to delist](#) the species (Service 2016). Please refer to the above documents for detailed information on the habitat affinities, life history requirements, status and distribution, threats, and conservation needs of the gnatcatcher.

## **ENVIRONMENTAL BASELINE**

The regulations implementing the Act (50 CFR § 402.02) define the environmental baseline as the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR § 402.02).

### **Current Status within the Action Area**

The Banning Pass area is a transition zone for a number of species. The federally listed gnatcatcher subspecies typically occurs west of the Banning Pass, with occasional observations occurring within the vicinity of the Project area. Surveys performed in support of the proposed Project, documented a single gnatcatcher individual in 2016. The observation occurred in RAFSS habitat on Tribal Lands. Grinnell and Swarth (1913) noted two gnatcatchers near Cabazon in May 1908, and the California Natural Diversity Database identifies another two individuals, located approximately 1 and 1.5 miles southeast of the Project area in 2011 (CNDDDB 2020).

The biological assessments estimate that within the 128.07-acre Project disturbance area, a combined 40.76 acres of suitable gnatcatcher habitat are present in the Western Riverside MSHCP Plan Area (3.73 acres) and on Tribal Lands (37.03 acres). This area provides gnatcatcher breeding, feeding and sheltering habitat. Given recent and historical observations within the vicinity of the action area, we expect the habitat in the Project footprint to support up to one breeding pair of gnatcatchers.

## **EFFECTS OF THE ACTION**

Regulations implementing the Act (50 CFR § 402.02) define the effects of the action as all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR § 402.17).

The regulations for section 7(a)(2) note that "a conclusion of reasonably certain to occur must be based on clear and substantial information, using the best scientific and commercial data available" [50 CFR § 402.17(a)]. When considering whether activities caused by the proposed action (but not part of the proposed action) or activities reviewed under cumulative effects are reasonably certain to occur, we consider factors such as: (1) past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action; (2) existing plans for the activity; and (3) any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

The 40.76 acres of gnatcatcher habitat within the Action Area are within Tribal Lands and the Western Riverside MSHCP Plan Area. No designated critical habitat for gnatcatcher occurs within the Action Area. Direct disturbance to gnatcatchers and their habitat will occur as a result of Project construction, operations, and maintenance, including vegetation clearing, excavation, and vehicle operations. Construction activities associated with the proposed action will result in impacts to suitable habitat within the Action Area, including 18.28 acres of temporary impacts (15.44 acres on Tribal Lands and 2.84 acres in the Western Riverside MSHCP Plan Area) and 22.48 acres of permanent impacts (21.59 and 0.89 acres on Tribal Lands and in the Western Riverside MSHCP Plan Area respectively) to suitable gnatcatcher habitat.

Fugitive dust generated by construction vehicles and equipment could accumulate on plant leaf surfaces. Dust collecting on leaf surfaces could reduce photosynthesis and metabolism rates in plants and subsequently affect plant vigor. A decrease in primary production during seasons when photosynthesis occurs could result in a reduction in native vegetation and a decrease in foraging habitat for the gnatcatcher. Noise and vibration from heavy equipment may temporarily disrupt the normal behavior patterns of gnatcatcher that might be foraging in the general area of the proposed action.

Additionally, the proposed Project has the potential to spread invasive plant species to adjacent native habitats along the Project alignment as a result of construction equipment contamination by invasive species and by the removal and disposal of invasive species, thus allowing seed to spread along the roadway. The spread of invasive species could affect species composition within suitable gnatcatcher habitat by creating competition for resources.

The Project could result in soil compaction, altered topography, altered hydrologic patterns, sedimentation, loss of vegetation, and erosion, which could cause changes in the existing vegetation communities. In addition, soil compaction could decrease the water infiltration rate for plants. Soil compaction would affect vegetation by reducing water absorption, which could mean that less water is available for plants, making it more difficult for plants to spread their roots. Over time, this could lead to a conversion in the vegetation community type. Collectively, these effects can result in habitat fragmentation of suitable habitat that could support the gnatcatcher.

Although the Project will directly affect suitable gnatcatcher habitat, with implementation of the CMs identified above, it is expected that possible adverse effects to nesting gnatcatcher within the Action Area will be minimized.

### **Future Operations**

Areas within the permanent impact footprint will be paved, fenced, or otherwise be rendered unattractive or inaccessible to gnatcatchers for future foraging, nesting, or dispersal. Future operation of the I-10 Bypass facility may degrade adjacent restored upland habitat through increased light, noise, and human activity that have the potential to disturb gnatcatchers foraging and nesting in these areas. The adverse effects of lighting will be reduced with the installation of wildlife-friendly lighting technology at intersections, and omission of any additional lighting along the new facility alignment.

With the installation of wildlife fencing along the ultimate right-of-way, the potential for disturbance via human activity (e.g., casual trespass and illegal dumping) into native habitat

adjacent to the Project area will be minimized. Due to the vagile nature of gnatcatchers, and historically low numbers in the action area, we anticipate any individuals within the vicinity of the Project area will seek shelter away from the facility and limit exposure to potential disturbance related to future ongoing operations. Therefore, we anticipate that the potential effects to gnatcatcher survival and reproduction from future operations will be insignificant.

### **Effect on Recovery**

There is no recovery plan for the gnatcatcher; however, as a covered species under the Western Riverside MSHCP, projects demonstrating consistency with the Plan support a consistent approach in supporting gnatcatcher recovery within the Plan Area boundaries. The Western Riverside MSHCP requires avoidance and minimization measures for gnatcatchers to the maximum extent feasible and the offset of unavoidable impacts through restoration and/or conservation of gnatcatcher habitat at locations that augment existing populations and/or provide habitat connectivity as described for the Western Riverside MSHCP reserve assembly. The proposed project will result in impacts to gnatcatchers and gnatcatcher habitat, but all temporarily affected RAFSS will be restored. As the proposed Project is at the edge of the species known range, and not known to support a significant number of gnatcatcher nesting pairs, implementation of the Project as proposed will not impede recovery of this species over its known range.

### **CUMULATIVE EFFECTS**

Cumulative effects are effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR § 402.02). Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. At this time, we are unaware of any upcoming non-federal actions within the vicinity of the Project area that are reasonably certain to occur.

### **CONCLUSION**

#### **Tribal Trust Land**

After reviewing the current status of the gnatcatcher, the environmental baseline for the action area, the effects of the proposed activities, and the cumulative effects, we have determined that the activities considered in this biological opinion are not likely to jeopardize the continued existence of the gnatcatcher. We have reached this conclusion for the following reasons:

1. Implementation of the proposed Project is not expected to result in an appreciable reduction in the numbers, reproduction, or distribution of gnatcatchers in the long term or range-wide and will not impede recovery of the species.
2. Impacts to gnatcatcher within the action area will be reduced by implementation of the conservation measures identified in the "Project Description" of this biological opinion.
3. Permanent and temporary impacts will be offset via restoration identified in the HMMP following Project completion

## **Western Riverside MSHCP Plan Area**

Based on our review of the information provided to us, we have determined the proposed Project is consistent with relevant Western Riverside MSHCP policies and procedures. The status of the gnatcatcher and the effects of implementing the MSHCP on the gnatcatcher were previously addressed in our biological opinion dated June 22, 2004, where we concluded that the level of anticipated take in the Western Riverside MSHCP Plan Area was not likely to result in jeopardy to the species. We do not anticipate any adverse effects to the gnatcatcher that were not previously evaluated in the biological opinion for the Western Riverside MSHCP. Therefore, it is our conclusion that implementation of the proposed Project will not result in jeopardy to the gnatcatcher.

### **INCIDENTAL TAKE STATEMENT**

#### **INTRODUCTION**

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. The Service further defines “harm” to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not the purpose of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the proposed protective measures and the terms and conditions of an incidental take statement and occurs as a result of the action as proposed.

The measures described below are non-discretionary, and must be undertaken by Caltrans and the BIA so that they become binding conditions of any grant or permit issued to RCTD, for the exemption in section 7(o)(2) to apply. Caltrans and the BIA has a continuing duty to regulate the activity covered by this incidental take statement. If Caltrans and the BIA: (1) fails to assume and implement the terms and conditions, or (2) fails to require RCTD to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Caltrans and the BIA must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR § 402.14(i)(3)].

#### **AMOUNT OR EXTENT OF TAKE**

The regulations for section 7(a)(2) clarify that the Service may use surrogates to express the amount or extent of anticipated take when “exact numerical limits on the amount of anticipated incidental take may be difficult” (80 FR 26832). The implementing regulations [50 CFR § 402.14(i)(1)(i)] require that the Service meet three conditions for the use of a surrogate. To use a surrogate, the Service must:

1. Describe the causal link between the surrogate and take of the listed species;
2. Describe why it is not practical to express the amount of anticipated take or to monitor take-related impacts in terms of individuals of the listed species; and



3. Set a clear standard to determine when the proposed action has exceeded the anticipated amount or extent of the taking:

### **Coastal California Gnatcatcher**

As described in the “Environmental Baseline” section, we estimate that up to one nesting gnatcatcher territory overlaps the Project action area. The estimated level of take for gnatcatcher is based on the number of gnatcatcher pairs estimated to overlap the construction footprint and the amount of occupied habitat that will be impacted by construction activities. One gnatcatcher pair with their territory affected by habitat removal is expected to be displaced and die or experience reduced reproduction as a result of habitat loss on Tribal Lands.

Take of gnatcatcher is exempted as follows:

- IT 1. Take in the form of harm (i.e., reduced survival and reproduction) of one gnatcatcher pair due to the permanent removal of 22.48 acres of suitable gnatcatcher habitat and the temporary removal of 18.28 acres of suitable gnatcatcher habitat. The amount or extent of incidental take will be exceeded if more than 3.73 acres of gnatcatcher habitat is removed in the Western Riverside MSHCP Plan Area or and more than 37.03 acres of gnatcatcher habitat is removed on Tribal Lands, or if more than one gnatcatcher territory is affected by habitat removal.

### **REASONABLE AND PRUDENT MEASURES**

We have determined that the following reasonable and prudent measures are necessary and appropriate to minimize the impact of the incidental take of gnatcatcher:

- RPM 1. Prior to the onset of ground disturbing activities, Caltrans and RCTD will identify whether the final engineering plans and Project footprint deviate from information presented to the Service in the biological assessment and that they include design features to secure wildlife connectivity as presented in the Western Riverside MSHCP DBESP and EIR/EA.
- RPM 2. Caltrans and RCTD will monitor Project related actions and inform the Service of non-compliance and any gnatcatcher observations for the duration of Project related activities.

### **TERMS AND CONDITIONS**

To be exempt from the prohibitions of section 9 of the Act, Caltrans and the BIA must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline monitoring and reporting requirements. These terms and conditions are non-discretionary.

- TC 1.1 Prior to initiating any portion of construction activities that will directly impact gnatcatcher habitat, RCTD will submit to the Palm Springs Fish and Wildlife Office GIS data and figure(s) showing the impact area based on final project designs relative to the impact area depicted in the documents provided to support this consultation. The figure will include vegetation mapping, all federally listed

species observations from project-specific surveys (identified to the year and source of the survey), and a table showing the final impacts by habitat type.

- TC 2.1 RCTD will commit to implement all conservation measures listed in the BIA's biological assessment, Western Riverside MSHCP DBESP, Caltrans Natural Environmental Study, and measures in the EIR/EA related to wildlife connectivity.
- TC 2.2 The Project's designated biologist will report non-compliance to the Service within 48-hours via phone or electronic mail.
- TC 2.3 Ensure Service personnel have the right to access and inspect the Project site during project implementation (with prior notification from us) for compliance with the Project description, conservation measures, and terms and conditions of this biological opinion.

## **REPORTING REQUIREMENTS**

Pursuant to 50 CFR § 402.14(i)(3), the Caltrans and the BIA must report the progress of the action and its impact on the species to the Service as specified in this incidental take statement. We have determined that the following measures are necessary to monitor and report on project impacts:

- RR 1. Caltrans and the BIA will provide annual reporting of the activities conducted under this biological opinion. Any such reports shall be filed not later than March 31<sup>st</sup> for the preceding calendar year. Reporting requirements for restoration activities will be laid out within the HMMP.

## **DISPOSITION OF SICK, INJURED, OR DEAD SPECIMENS**

Upon locating dead, injured, or sick individuals of threatened or endangered species, initial notification must be made to our Division of Law Enforcement in either San Diego, California, at 619-557-5063, or in Torrance, California, at 310-328-6307. The Palm Springs Fish and Wildlife Office should also be notified via telephone (760-322-2070) and in writing via email or mail.

## **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- CR 1. To enhance wildlife connectivity between the San Jacinto and San Bernardino mountain ranges we recommend Caltrans and the BIA work with the Service and other interested stakeholders to investigate increasing the permeability of the transportation facilities within the area and conserve undeveloped habitat within the Banning Pass area.

### REINITIATION NOTICE

Reinitiation of consultation is required and will be requested by the Federal agencies or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

1. If the amount or extent of taking specified in the incidental take statement is exceeded;
2. If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
3. If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this biological opinion; or
4. If a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions regarding this letter, please contact [John M. Taylor](#)<sup>1</sup> of this office at 760-322-2070, extension 418.

Sincerely,

Scott A. Sobiech  
Field Supervisor

cc:  
Mary Zambon – Riverside County Transportation Department

---

<sup>1</sup> [john\\_m\\_taylor@fws.gov](mailto:john_m_taylor@fws.gov)

### LITERATURE CITED

- [BIA] Bureau of Indian Affairs. 2020. Biological Assessment, I-10 Bypass Project: Banning to Cabazon, Buraru of Indian Affairs, Riverside County, California. Dated June 2020.
- [Caltrans] California Department of Transportation. 2020a. Determination of Biologically Equivalent or Superior Preservation Report, I-10 Bypass Project: Banning to Cabazon, District 8, RIV031202, Riverside County, California. July 19, 2019; as amended.
- [Caltrans] California Department of Transportation. 2020b. I-10 Bypass Project: Banning to Cabazon Biological Assessment. Riverside County, California. District 8-RIV-00, Federal Project No. DEMO03L 5956 (210). June 2020.
- [CNDDDB] California Natural Diversity Database. 2020. Coastal California gnatcatcher occurrence observations. <https://wildlife.ca.gov/data/cnddb>. Site accessed May 12, 2020.
- Grinnell, J. and H.S. Swarth. 1913. An Account of the Birds and Mammals of the San Jacinto Area of Southern California with Remarks Upon the Behavior of Geographic Races on the Margins of Their Habitats. University of California Publications in Zoology. Vol. 10. No. 10. Pp. 197-406. University of California Press. October 31, 1913.
- [Service] U.S. Fish and Wildlife Service. 2010. Coastal California gnatcatcher (*Polioptila californica californica*) 5-year review. U.S. Fish and Wildlife Service, Region 8, Carlsbad, California.
- [Service] U.S. Fish and Wildlife Service. 2016. Endangered and threatened wildlife and plants; 12-Month Finding on a petition to delist the coastal California gnatcatcher. Federal Register 81:59952-59975.

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# Chapter 5 List of Preparers

The public agency and consultant staff listed in this section were responsible for:

- Preparing the technical reports for the Project
- Preparing the Environmental Impact Report (EIR)/Environmental Assessment (EA) for the Project
- Conducting internal quality assurance/quality control (QA/QC) reviews of the technical reports and the Draft EIR/EA
- Conducting peer reviews of the technical reports and the Draft EIR/EA
- Conducting agency reviews of the technical reports and the Draft EIR/EA

The public agencies and consultant firms listed in this table are:

- Public Agencies
  - California Department of Transportation (Caltrans) District 8
  - Riverside County Transportation Department
  - City of Banning
- Consultants
  - Kimley-Horn and Associates, Inc.
  - LSA Associates, Inc.
  - Analytical Environmental Associates, Inc.
  - dBF Associates, Inc.
  - Geocon Incorporated

Name/Job Title	Project Responsibilities
<b>PUBLIC AGENCIES</b>	
<b>California Department of Transportation, District 8</b>	
Aaron Burton Senior Environmental Planner	Environmental document review
Shawn Oriaz Associate Environmental Planner	Environmental document review
Julie Lugaro Generalist	Environmental document review
Scott Quinnell Branch Chief	Review of the Natural Environment Study (NES)
Gabrielle Duff Branch Chief, Cultural Resources	Review of the Historic Property Survey Report (HPSR)
Olufemi A. Odufalu, P.E. Environmental Engineering Oversight Chief	Review of the Noise Study Report (NSR)

<b>Name/Job Title</b>	<b>Project Responsibilities</b>
Maggi Elgizery Associate Environmental Planner/ Biologist	Review of the NES
Miriam Bishop Landscaping	Review of Visual Impact Assessment (VIA)
Roy King Hydraulics Coordinator	Review of Location Hydraulic Study
Rusty Thornton Traffic	Review of Traffic Analysis
<b>Riverside County Transportation Department</b>	
John Marcinek, P.E. Project Manager	Project Manager
Mary Zambon Environmental Project Manager	Environmental document review
Susan Vombaur Assistant Project Manager/Traffic	Environmental document review and traffic analysis review
Russell Williams Environmental/Development Review	Environmental oversight
Claudia Steiding, CPSWQ, QSD/P Senior Transportation Planner/NPDES Coordinator	Review of the Water Quality Assessment Report (WQAR) and Water Quality section.
Alan French, P.E. Senior Civil Engineer	Review of the Drainage and Location Hydraulic Studies
Elmer Datuin, P.E. Senior Civil Engineer	Review of Geotechnical Reports
<b>City of Banning</b>	
Arturo Vela, P.E. Director of Public Works/City Engineer	Review of improvements in the City of Banning
<b>CONSULTANTS</b>	
<b>Kimley-Horn and Associates – Project Report, Engineering, and Environmental</b>	
Dennis Landaal, P.E. Senior Engineer	Project Manager
Darren Adrian, P.E. Senior Engineer	Deputy Project Manager
Marie Santos, P.E. Senior Engineer	Project Engineer
Dave Sorenson, T.E. Senior Engineer	Traffic Engineer
Sam McWhorter, P.E. Senior Engineer	Storm Water and Water Quality
Pat Hart, RLA Landscape Architect	VIA
Stephanie Lam, P.E. Analyst	Assistant Engineer
<b>Analytical Environmental Services</b>	
Charlane Gross, M.A., RPA	Preparation of the Historic Resources Evaluation Report (HRER)
Stephen Van Worner, M.A.	Preparation of the HRER
Susan Walter	Preparation of the HRER
Anna C. Noah, Ph.D., RPA	Preparation of the HRER, Archaeological Survey Report (ASR)
Richard Carrico, M.A.	Preparation of the ASR

Name/Job Title	Project Responsibilities
<b>dBf Associates, Inc.</b>	
Steve Fiedler Project Manager	Preparation of the NSR
Jell Fuller Project Manager	Preparation of the NSR
<b>Geocon Incorporated</b>	
Yong Wang, GE 2775	Preparation of the Preliminary Foundation Report and Preliminary Geotechnical Design Report
Joseph J. Vettel, GE 2401	Preparation of the Preliminary Foundation Report
Paul D. Theriault, CEG 2374	Preparation of the Preliminary Foundation Report and Preliminary Geotechnical Design Report
<b>LSA Associates, Inc.</b>	
Rob McCann Principal	Environmental Project Manager and quality assurance/quality control (QA/QC)
Lyn Calderine (no longer with LSA) Principal	Environmental Project Manager and QA/QC, Preparation of the Alternatives Analysis, Growth Technical Analysis, and Community Impacts Analysis
King Thomas Associate	Environmental Project Manager and QA/QC
Connie Thoman (no longer with LSA) Senior Environmental Planner	Preparation of the Draft Environmental Impact Report/Environmental Assessment (EIR/EA)
Christine Huard-Spencer (no longer with LSA) Senior Environmental Planner	Preparation of the Draft EIR/EA
Amanda Johnson Senior Environmental Planner	Preparation of the Draft EIR/EA
Hilary Haskell (no longer with LSA) Assistant Environmental Planner	Preparation of the Draft EIR/EA
Cayla McDonell (no longer with LSA) Assistant Environmental Planner	Assistant Project Manager - Preparation of the Draft EIR/EA, assisted with the preparation of the Alternatives Analysis, Community Impact Assessment, and Growth-Related Indirect Impact Analysis
Ryan Bensley Associate	Preparation of Community Impact Assessment and Growth Analysis and associated sections of the Draft EIR/EA
Alexandria Fiorini (no longer with LSA) Assistant Environmental Planner	Preparation of the Community Impact Assessment (CIA) and associated sections of the Draft EIR/EA
J.T. Stephens Senior Noise Specialist	Preparation of the Noise Section of the Draft EIR
Jason Liu Senior Noise Specialist	Assisted with the preparation of the Noise Section of the Draft EA
Tin Cheung (no longer with LSA) Senior Air Quality Specialist	Assisted with the preparation of the Air Quality sections of the Draft EIR/EA
Nicole West Associate	Assisted with the preparation of the Water Quality Section of the Draft EA

Name/Job Title	Project Responsibilities
Laura Magee (no longer with LSA) Biologist	Assisted with the preparation of the Natural Communities, Plant Species, Animal Species, Threatened and Endangered Species, and Invasive Species Sections of the Draft EA
Patrick Kallas (no longer with LSA) Assistant Environmental Planner	Assisted with the preparation of the Hydrology and Floodplains Section of the Draft EA, assistance with the preparation of the Draft EIR/EA
Abby Annicchiarico Assistant Environmental Planner	Assisted with the preparation of the Draft EIR/EA
Andrea Bean Assistant Environmental Planner	Assisted with the preparation of the Draft EIR/EA
Shelby Cramton Environmental Planner	Assisted with the preparation of the Draft EIR/EA
Tung-Chen Chung, Ph.D. (no longer with LSA) Principal	Management and QA/QC of the Air Quality Analysis (AQA)
Keith Lay (no longer with LSA) Associate Air Quality/Acoustic Specialist	Preparation of the AQA
Jodi Ross-Borrego Principal Biologist	Managed and prepared the NES and Jurisdictional Delineation. Assisted with the preparation of the natural communities, wetlands, plant species, animal species, threatened and endangered species, and invasive species sections of the Draft EIR/EA
John Ko Associate Biologist	Prepared responses to public comments associated with biological resources, NES Errata, and revisions to the biological resources sections of the Draft and Final EIR/EA
Julie McNamara Assistant Biologist	Assisted with the preparation of the natural communities, wetlands, plant species, animal species, threatened and endangered species, and invasive species sections of the Draft EIR/EA
Wendy Davis Associate Biologist	Assisted with preparation of the Determination of Biologically Equivalent or Superior Preservation (DBESP)
Stan Spencer Associate Biologist	Assisted with preparation of the DBESP
Gary Dow Associate Graphics Technician	Manager of graphics preparation for the technical reports and the Draft EIR/EA
Matt Philips Graphics Specialist	Developed graphics for the technical reports and the Draft EIR/EA
Jade Dean (no longer with LSA) Assistant GIS Specialist	Geographic Information Systems (GIS) graphics preparation and generation of technical data from GIS files for the technical reports and the Draft EIR/EA
Zac Henderson, Principal Principal GIS Specialist	GIS graphics preparation
Meredith Canterbury Senior GIS Specialist	GIS graphics preparation
Beverly Inloes, Associate Senior Technical Editor/Word Processor	Edited and word processed the technical reports and the Draft EIR/EA

<b>Name/Job Title</b>	<b>Project Responsibilities</b>
Jennette Bosseler Senior Technical Editor/Word Processor	Edited and word processed the technical reports and the Draft EIR/EA
Chantik Virgil Senior Word Processor	Word processed the technical reports and the Draft EIR/EA
Ana Hernandez (no longer with LSA) Word Processor	Word processed the Draft EIR/EA
Elysse James (no longer with LSA) Technical Editor	Edited the Draft EIR/EA
Lauren Johnson Technical Editor	Edited the Draft EIR/EA



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## **Chapter 6**      **Distribution List**

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The Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA), Recirculated Draft EIR/EA, and/or Notice of Availability was distributed to Federal, State, regional, and local agencies and elected officials, as well as Native American representatives, utility providers, and other interested parties listed on the following pages. In addition to the list provided below, all property owners/occupants within the area of the I-10 Bypass Project Build Alternatives shown on Figure 6-1 and interested public members on the I-10 Bypass Project public mailing list were sent notification informing them of the availability of the Draft EIR/EA and Recirculated Draft EIR/EA.

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**Cooperating/Participating  
Agencies/Federal**

Amy Dutschke, Regional Director  
Bureau of Indian Affairs  
2800 Cottage Way  
Sacramento, CA 95825

Bureau of Land Management  
1201 Bird Center Drive  
Palm Springs, CA 92262

Natural Resources Conservation Service  
CEQA/NEPA Review  
25864 Business Center Drive, Ste K  
Redlands, CA 92374-4515

U.S. Fish and Wildlife Service  
Attn: Karin Cleary-Rose  
777 East Tahquitz Canyon Way, Ste. 208  
Palm Springs, CA 92262

Bureau of Land Management  
CA Desert Office  
Attn: Ben Gruber  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553

U.S. Army Corps of Engineers  
Regulatory  
Los Angeles District  
915 Wilshire Blvd., Ste 1101  
Los Angeles, CA 90017

Director Airports Branch  
Federal Aviation Administration  
777 South Aviation Blvd., Ste. 150  
El Segundo, CA 90245

Regional Director  
Federal Emergency Management Agency  
1111 Broadway, Ste.1200  
Oakland, CA 94607-4052

Director  
Office of Environmental Management  
U. S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Federal Transit Administration, Region IX  
90 7th Street, Ste. 15-300  
San Francisco, CA 94103

Chief  
Federal Aviation Administration  
Western-Pacific Region Airports Division  
15000 Aviation Blvd, Room 3024  
Lawndale, CA 90261

**State Agencies**

California Dept of Fish & Wildlife  
Eastern Sierra, Inland Desert Region  
3602 Inland Empire Boulevard Ste. C-220  
Ontario, CA 91764

California Highway Patrol  
Desert Hills CVEF  
47250 Interstate 10  
Banning, CA 92220

Colorado River Basin Regional  
Water Quality Control Board  
73-720 Fred Waring Drive, Ste. 100  
Palm Desert, CA 92260

Commander  
California Highway Patrol  
Inland Division  
847 E. Brier Drive  
San Bernardino, CA 92408

CA State Clearinghouse  
1400 10th Street #12  
Sacramento, CA 95814

Caltrans  
Division of Aeronautics  
MS 40  
P. O. Box 942874  
Sacramento, CA 94274-0001

California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

## **Participating Agencies/ Regional/County Agencies**

South Coast Air Quality Management District  
Attn: CEQA Review  
21865 E. Copley Drive  
Diamond Bar, CA 91765

Southern California Association of  
Governments  
Attn: Intergovernmental Review  
900 Wilshire Blvd., Ste. 1700  
Los Angeles, CA 90017-3435

Riverside County Park and Open Space  
District  
Scott Bangle  
MS 2970

Riverside County Airport Land Use  
Commission / Planning  
John Guerin  
MS 1070

Riverside County Planning Department  
Attn: Charissa Leach  
MS 1070  
[Add copies for Planning Commissioners;  
one for District 4 & one for District 5.  
Send to mail stop 1070, attention  
Elizabeth Sarabia]

Riverside County Transportation  
Commission  
Attn: Anne Mayer  
MS 1031

Riverside County Agricultural Commissioner  
Attn: Rueben Arroyo  
MS 1250

Riverside County Executive Office  
Stephanie Persi  
MS 1020

Riverside County Farm Bureau  
Attn: Rachael Johnson  
21160 Box Springs Road, Ste. 102  
Moreno Valley, CA 92557

Riverside County Flood Control District  
Attn: Joan Valle or Randy Sheppard  
MS 2990

Riverside County Fire Department  
Planning & Engineering  
MS 224

Riverside County Economic Development  
Agency  
Attn: Rob Fields  
MS 1330

Riverside County Sheriff's Department  
Robert Peebles  
rpeebles@riversidesheriff.org

Riverside County Sheriff's Department,  
Palm Desert Station  
Captain Jason Huskey

Riverside County Sheriff's Department,  
Indio Station  
46-800 S. Jackson St.  
Indio, CA 92201

Riverside County Waste Management  
Ryan Ross  
MS 5950

Western Riverside County Regional  
Conservation Authority  
MS 1033

City of Cathedral City  
Attn: Robert Rodriguez  
68-700 Avenida Lalo Guerrero  
Cathedral City, CA 92234

City of Beaumont  
Public Works  
550 E. Sixth Street  
Beaumont, CA 92223

City of Calimesa  
Public Works  
908 Park Avenue  
Calimesa, CA 92320

City of La Quinta  
Attn: Bryan McKinney  
P.O. Box 1504  
La Quinta, CA 92253-1504



City of Desert Hot Springs  
Attn: Development Dept.  
11999 Palm Drive  
Desert Hot Springs, CA 92240

City of Indio  
Attn: Timothy Wassill  
83101 Avenue 45  
Indio, CA 92202

Coachella Valley Association of  
Governments  
Attn: Tom Kirk  
73-710 Fred Waring Drive,  
Ste. 200  
Palm Desert, CA 92260

City of Palm Desert  
Attn: Mark Greenwood  
73-510 Fred Waring Drive  
Palm Desert, CA 92260

City of Palm Springs  
Attn: Flinn Fagg  
3200 East Tahquitz Canyon Way  
Palm Springs, CA 92262

Beaumont - Cherry Valley Recreation &  
Parks District  
P.O. Box 490  
Beaumont, CA 92223

Coachella Valley Resource Conservation  
District  
USDA Service Center  
81077 Indio Blvd., Ste. A  
Indio, CA 92201

Beaumont - Cherry Valley Water Districts  
Daniel K. Jagers  
P.O. Box 2037  
Beaumont, CA 92223

Southern California Association of  
Governments  
Riverside County Regional Office  
3403 10th Street, Ste. 805  
Riverside, CA 92501

Riverside County Clerk Office  
  
Hand Delivered

San Jacinto Basin Resource  
Conservation District  
Gayle Holyoak  
950 North Ramona Blvd., Ste. 6  
San Jacinto, CA 92582

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

Riverside LAFCO  
6216 Brockton Ave., Suite 111-B  
Riverside, CA 92507-4277

Western Riverside Council of  
Governments  
MS1032

Water Quality Control Board Colorado  
River Basin  
73-720 Fred Waring Drive, Ste. 100  
Palm Desert, CA 92260

**Participating Agencies/  
Local Agencies**

Banning Police  
125 E. Ramsey Street  
Banning, CA 92220

Banning Fire  
Fire Administration Office  
1550 E. Sixth St.  
Beaumont, CA 92223

City of Banning  
Public Works  
99 E. Ramsey Street  
Banning, CA 92220

City of Banning  
99 E Ramsey Street  
Banning, CA 92220

City of Banning Water and Wastewater  
Utilities Department  
176 E Lincoln Street  
P.O. Box 998  
Banning, CA 92220

Banning Unified School District  
161 W Williams Street  
Banning, CA 92220

Banning Municipal Airport  
200 S Hathaway Street  
Banning, CA 92220

### **Interest Groups**

Audubon Society  
San Bernardino Valley Audubon  
P.O. Box 10973  
San Bernardino, CA 92423

California Native Plant Society  
4500 Glenwood Drive, Bldg. A  
Riverside, CA 92501

Center for Biological Diversity  
Attn: Ileen Anderson  
660 S. Figueroa St., Ste. 1000  
Los Angeles, CA 90017

Coachella Valley Mountains Conservancy  
73-710 Fred Warning Drive, Ste. 112  
Palm Desert, CA 92260

Friends of the Desert Mountains  
P.O. Box 1281  
Palm Desert, CA 92261

Sierra Club, San Gorgonio Chapter  
George Hague  
4079 Mission Inn Avenue  
Riverside, CA 92501  
george.hague@sangorgonio.sierraclub.org

California Native Plant Society  
2707 K Street, Ste. 1  
Sacramento, CA 95816-5113

Friends of the Desert Mountains  
Attn: Tammy Martin  
51-500 HWY 74, P.O. Box 1281  
Palm Desert, CA 92261  
Friends@DesertMountains.org

Dan Silver  
Endangered Habitats League  
8424 Santa Monica Boulevard, Ste. A 592  
Los Angeles, CA 90069-4267  
dsilverla@me.com

Banning Chamber of Commerce  
60 E Ramsey Street, Ste. C  
Banning, CA 9222

### **Electeds Officials/ Federal/State**

The Honorable Dianne Feinstein  
United States Senate  
11111 Santa Monica Boulevard, Ste. 915  
Los Angeles, CA 90025

The Honorable Kamala Harris  
United States Senate  
11845 West Olympic Blvd., Ste. 1250W  
Los Angeles, CA 90064

The Honorable Mike Morrell  
California State Senate (District 23)  
10350 Commerce Center Drive,  
Ste. A-220  
Rancho Cucamonga, CA 91730

The Honorable Raul Ruiz  
United States Congress  
(California 36th District)  
43875 Washington Street, Ste. F  
Palm Desert, CA 92211

The Honorable Chad Mayes  
California State Assembly (42nd District)  
41608 Indian Trail, Ste. 1  
Rancho Mirage, CA 92270

***Elected Officials/County***

V. Manuel Perez  
Riverside County Board of Supervisors  
Supervisor – District 4  
MS 1004

Jeff Hewitt  
Riverside County Board of Supervisors  
Supervisor – District 5  
MS 1005

***Elected Officials/City of Banning***

City of Banning City Council  
City Manager's Office  
99 E Ramsey Street  
Banning, CA 92220

Mayor Art Welch  
City of Banning City Hall  
99 E. Ramsey Street  
Banning, CA 92220

Mayor Pro Tem Daniela Andrade  
City of Banning City Hall  
99 E. Ramsey Street  
Banning, CA 92220

Councilmember Don M. Peterson  
City of Banning City Hall  
99 E. Ramsey Street  
Banning, CA 92220

Councilmember David Happe  
City of Banning City Hall  
99 E. Ramsey Street  
Banning, CA 92220

Councilmember Colleen Wallace  
City of Banning City Hall  
99 E. Ramsey Street  
Banning, CA 92220

***Schools***

Robert T. Guillen, Superintendent  
Banning Unified School District  
161 West Williams Street  
Banning, CA 92220

## **Native American Representatives**

Augustine Band of Cahuilla Indians  
Amanda Vance, Tribal Chairperson  
P.O. Box 846  
Coachella, California 92236

Morongo Band of Mission Indians  
Dana Morey, Environmental Manager  
12700 Pumarra Road  
Banning, CA 92220

Ramona Band of Cahuilla Mission Indians  
Joseph Hamilton, Chairman  
PO Box 391670  
Anza, CA 92539

Morongo Band of Mission Indians  
Travis Armstrong  
12700 Pumarra Road  
Banning, CA 92220

Morongo Band of Mission Indians  
Robert Martin, Chairperson  
12700 Pumarra Road  
Banning, CA 92220

Morongo Band of Mission Indians  
Tribal Elder Ernest H. Siva  
12700 Pumarra Road  
Banning, CA 92220

San Manuel Band of Missions Indians  
Carla Rodriguez, Chairwoman  
26569 Community Center Drive  
Highland, CA 92346

Santa Rosa Band of Mission Indians  
John Marcus, Chairman  
P.O. Box 391820  
Anza, CA 92539

Serrano Nation of Indians  
Goldie Walker  
P.O. Box 343  
Patton, CA 92369

San Manuel Band of Missions Indians  
Ann Brierty  
Policy/Cultural Resources Department  
26569 Community Center Drive  
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Los Coyotes Band of Mission Indians  
Shane Chapparosa, Chairperson  
2300 Camino San Ignacio  
Warner Springs, CA, 92086

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AT&T (Long Distance)  
Joseph Forkert 22311 Brookhurst Street  
Huntington Beach, CA 92646

Cabazon Water  
Ellie Lemus  
P.O. Box 297  
Cabazon, CA 92230

Questar Southern Trails Pipeline  
Bill Lamb  
931 April Lane  
Banning, CA 92220  
Bill.Lamb@Questar.com (310) 739 5896

Questar Southern Trails Pipeline  
Lori Creer Mail Stop OC129  
P.O. Box 45360  
Salt Lake City, UT 84145-0360

Southern California Edison Company  
Kimberlie Gurule  
Facilities Mapping, Bldg D.  
1444 E. McFadden Avenue  
Santa Ana, CA 92705

Southern California Edison Company  
Frank Jasso  
36100 Cathedral Canyon Drive  
Cathedral City, CA 92234

Southern California Gas-Land & ROW  
Kevin Kuennen  
251 E. 1st Street  
Beaumont, CA 92223  
kkuennen@semprautilities.com

Southern California Gas Company  
Luis Ramirez Mail Location 9314  
9400 Oakdale Avenue  
Chatsworth, CA 91311-6511

Southern California Gas Company  
Attn: Planning Department P.O. Box 3003  
Redlands, CA 92373-0306

Level 3  
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1025 Eldorado Blvd-33A522  
Broomfield, CO 80021

Southern California Edison Company  
Carolyn Hensley 300 N. Pepper Avenue  
Rialto, CA 92376

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Kerri Mariner  
P.O. Box 297  
Cabazon, CA 92230  
kmarinercwd@yahoo.com

Frontier Communications  
9 South 4th St.  
Redlands, CA 92373

San Gorgonio Pass Water Agency  
Stephen Stockton  
1210 Beaumont Avenue  
Beaumont, CA 92223

Mission Springs Water District  
Danny Friend 66575 E. 2nd Street  
Desert Hot Springs, CA 92240

Cabazon Water District  
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Cabazon, CA 92230  
clouie@cabazonwater.org

Cabazon Water District  
Rick Hall  
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Cabazon, CA 92230

David Henderson  
Operations Manager, TFS  
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Century Link  
100 South Cincinnati Ave, Suite 1200  
Tulsa, OK 74103

Optel, Inc.  
Attn: George Millron  
2811-B McGaw Avenue  
Irvine, CA 92614

Charter Communications  
Attn: Lee Hobson  
83-473 Avenue 45  
Indio, CA 92201

Crown Castle Fiber  
Western Regional Office  
226 N. Lincoln Avenue  
Corona, CA 92882

## Libraries

Banning Public Library  
21 W Nicolet Street  
Banning, CA 92220  
Send hard copy for public review

Cabazon Public Library  
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Cabazon, CA 92230  
Send hard copy for public review

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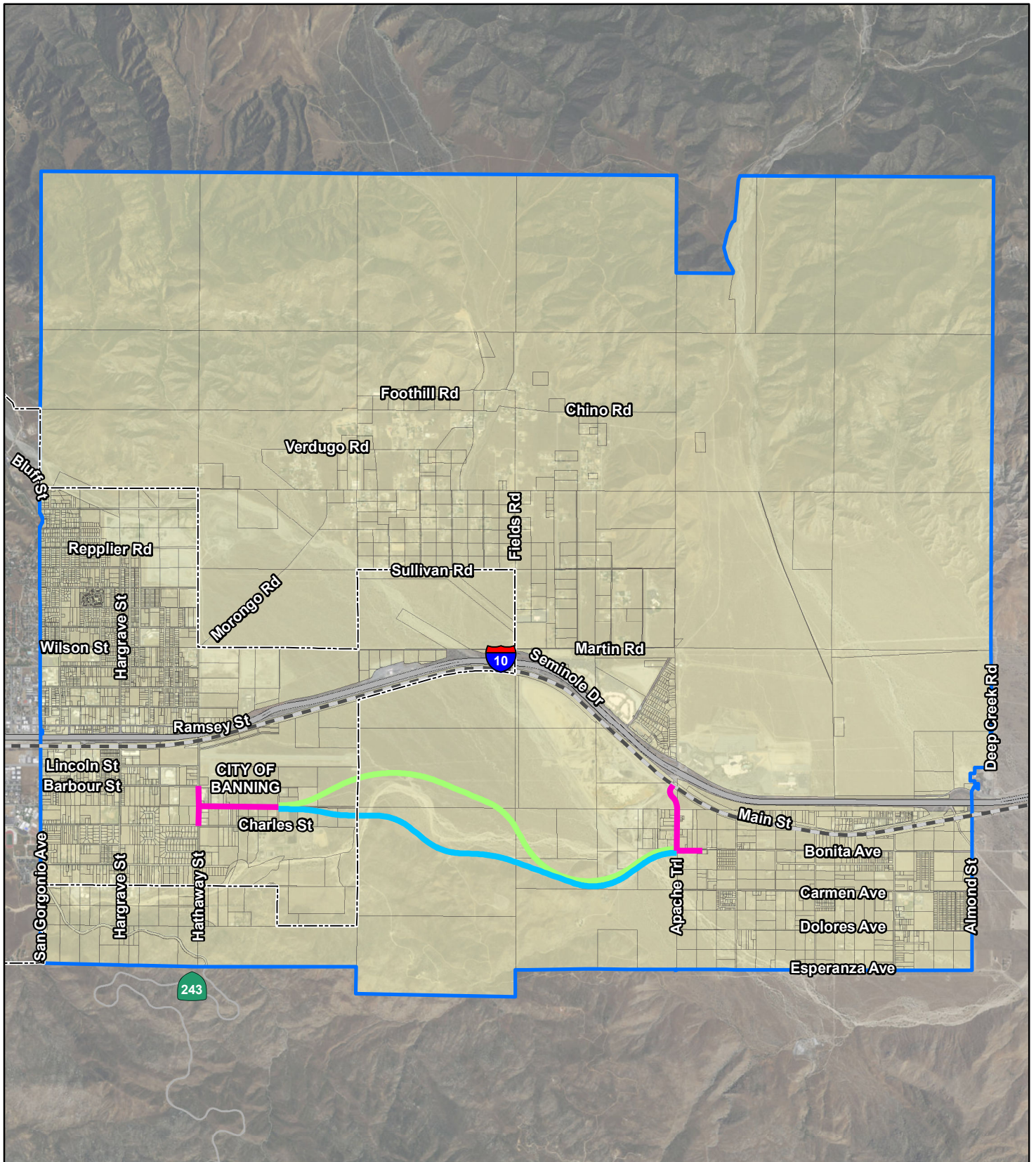
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LEGEND

- Alternatives 5 and 12
- Alternative 5
- Alternative 12
- Distribution Area
- Selected Parcels
- City/County Boundary
- Union Pacific Railroad

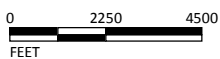


FIGURE 6-1

*I-10 Bypass: Banning to Cabazon*  
 Notice of Availability Distribution Area

SOURCE: ESRI (2015); Kimley Horn (Aerial: 2012; Data: 2014; 2017); Riverside County (2017)

I:\KHA1101\GIS\MailingList.mxd (10/24/2017)

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# **Appendix A** CEQA Environmental Checklist

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Supporting documentation for all CEQA checklist determinations is provided in Chapter 2 (Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures) and Chapter 3 (California Environmental Quality Act Evaluation) of this EIR/EA. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts and avoidance, minimization, and/or compensation measures is under the appropriate topic headings in Chapters 2 and 3.

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## CEQA ENVIRONMENTAL CHECKLIST

8-RIV-00	N/A	DEMO03L 5956 (210)
Dist.-Co.-Rte.	P.M/P.M.	Federal Project No.

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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS – Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
 <b>II. AGRICULTURE AND FOREST RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</b>				
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 type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

**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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
<b>V. CULTURAL RESOURCES – Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
<b>VI. ENERGY – Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS – Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
<b>VIII. GREENHOUSE GAS EMISSIONS – Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:</b>				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
<b>X. HYDROLOGY AND WATER QUALITY – Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XI. LAND USE AND PLANNING – Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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"/>

**XII. MINERAL RESOURCES – Would the project:**



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
<b>XIII. NOISE – Would the project result in:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
<b>XIV. POPULATION AND HOUSING – Would the project:</b>				
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>XV. PUBLIC SERVICES – Would the project:</b>				
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 public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XVI. RECREATION – Would the project:</b>				
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"/>
<b>XVII. TRANSPORTATION/TRAFFIC – Would the project:</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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"/>
<b>XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XVIII. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE – Would the project:**

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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# **Appendix B** Title VI Policy Statement

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**DEPARTMENT OF TRANSPORTATION**

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*Making Conservation  
a California Way of Life.*

April 2018

**NON-DISCRIMINATION  
POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page:  
[http://www.dot.ca.gov/hq/bep/title\\_vi/t6\\_violated.htm](http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm).

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov), or visit the website [www.dot.ca.gov](http://www.dot.ca.gov).

A handwritten signature in blue ink, appearing to read "Laurie Berman".

LAURIE BERMAN  
Director

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# **Appendix C** Avoidance, Minimization and/or Mitigation Summary

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## **Environmental Commitments Record**

This document includes all the avoidance, minimization and or/mitigation measures to minimize environmental impacts documented in Chapter 2.

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

This program is a record/ list of the project's Avoidance, Minimization, and/or Mitigation Measures and Standard Project Measures. It is a living monitoring record that is used to ensure that each measure listed is followed through and achieved, during future project phases, such as during construction. Each item is monitored and signed off once it is completed. The County will ensure commitments are incorporated into the Final Design Plans and Specifications and, during construction, a Resident Engineer will oversee the contractor physically implementing the measures. The County will involve California Department of Transportation (Caltrans) staff in monitoring and overseeing the ECR as items progress over time. As a living program, updates may be made to it; e.g., if permits result in new measures being committed to, the new measures will be added to the ECR.

Mitigation measures are identified in Table C-1 with an asterisk.

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**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<b>COMMUNITY IMPACTS</b>					
COM-1	<b>Disturbance Area.</b> Every effort will be made during the Design and Construction phases to further minimize grading/disturbed areas to minimize impacts on the rural community character of the areas surrounding the Project.	Project Engineer and Resident Engineer	During final design		
<b>UTILITIES AND EMERGENCY SERVICES</b>					
Temporary construction-related impacts on emergency services would be addressed through a Traffic Management Plan (TMP) as described in TR-1, below.					
<b>TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES</b>					
TR-1	<p>During final design, the County of Riverside's (County) Project Engineer will prepare a detailed Traffic Management Plan (TMP). The objective of the TMP is to minimize the potential impacts that construction activities may have on the traveling public and emergency services providers. Preparation of the TMP will be coordinated with the emergency services providers in the Project vicinity to minimize response delays resulting from traffic delays, temporary lane closures, and detours during Project construction.</p> <p>The TMP for the Project will include the following elements and strategies:</p> <ul style="list-style-type: none"> <li>• During construction, the contractor will be required to coordinate all temporary detour plans with applicable fire, emergency, medical, and law enforcement providers in order to minimize temporary delays in provider response times.</li> <li>• The TMP will include construction staging, detours, and lane closures, as applicable.</li> <li>• Traffic control plans and related specifications, to be completed during final design of the Project, will be</li> </ul>	Project Engineer	During final design		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>developed in accordance with the Work Area Traffic Control Handbook (also referred to as the WATCH Manual), Section 5 of the Caltrans Traffic Manual, Caltrans Standard Plans, and applicable County of Riverside requirements. These plans and specifications will include elements such as: advance roadside signs and portable changeable message signs (CMSs), traffic surveillance, and lane/shoulder closures, as well as temporary signing/stripping on local streets.</p> <ul style="list-style-type: none"> <li>• The Project will implement a Public Awareness Campaign (PAC). The purpose of this PAC is to keep the surrounding community abreast of the Project's progress and construction activities that could affect the public's travel plans, as well as minimize delays or confusion to the motoring public during construction activities. Mailers/flyers and local newspaper advertising will be used to disseminate this information.</li> <li>• The project will implement the following construction strategies to minimize construction-related impacts:</li> <li>• Perform major construction activities at off-peak hours (e.g., at night or during the weekends) when feasible and reasonable.</li> <li>• Coordinate construction with adjacent projects. Coordination is important to address possible temporary increases in traffic due to detours from adjacent projects.</li> <li>• The Project will include provisions for maintaining pedestrian and bicycle access at all times during construction.</li> </ul>				



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>One traffic lane (existing streets modified as part of the Project) will remain open at all times during construction.</li> <li>The Project will include contingency plans that specify the actions that will be taken in the event that something unexpected occurs with respect to construction activities or traffic operations. The Contractor will review these plans and incorporate them into the Contractor's contingency plan.</li> </ul>				
<b>VISUAL / AESTHETICS</b>					
<b>V-1*</b>	<p><b>Structure Elements.</b> The County of Riverside's (County) Project Engineer/Resident Engineer will ensure the mitigation and minimization elements, and enhancements (below) are incorporated into final design and construction of the Project, and that they are consistent with applicable goals and policies of the County, the City of Banning (City), the community of Cabazon, and the Morongo Band of Mission Indians. These are anticipated to include the following:</p> <ul style="list-style-type: none"> <li>Architectural treatment on bridge elements visible from the roadway will incorporate detailing to scale elements to adjacent features and site-specific aesthetic features (local or historic references) to minimize/mitigate community impact by enhancing the regional sense of place.</li> <li>Gore paving will incorporate contrasting paving treatment both as a safety feature and as mitigation to reduce the visual mass of proposed paving areas. The shared use pathway will incorporate materials and colors that resemble natural surroundings.</li> </ul>	Project Engineer, Resident Engineer and County or Consultant Landscape Architect	During final design and construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>• Selective rock/boulder placement will be incorporated into fill slopes and cut areas to mimic the natural landscape.</li> <li>• Slopes, particularly those abutting undisturbed areas, will include rounded contour grading rather than rectilinear grading. This will provide easing edges and slope rounding (Caltrans Highway Design Manual, 304.4 and 109.3). Contour grading with slope rounding and land-forming will be provided to minimize the visual impacts of graded slopes against existing landforms and to mitigate for loss of unity between native surroundings and graded areas.</li> <li>• During construction, the Resident Engineer will ensure that the Contractor constructs the Project consistent with aesthetic and design features included in the Project specifications.</li> </ul>				
V-2*	<p><b>Landscaping/Plantings.</b> The County’s Project Engineer/ Resident Engineer will ensure that planting to mitigate the loss of existing vegetation will be included in the final design. The following revegetation measures will be included in final design and during project construction and will take place at appropriate times of the year, for vegetative success, but will not be deferred more than 8 months after construction is complete:</p> <ul style="list-style-type: none"> <li>• All graded slopes will be revegetated so that drought-tolerant, native species cover is established to the extent possible.</li> <li>• Planting will be site-specific and will vary according to slope aspect and elevation.</li> <li>• Temporary irrigation will be used as necessary to</li> </ul>	Project Engineer, Resident Engineer and County or Consultant Landscape Architect	During final design		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>establish planting. Permanent irrigation systems are not anticipated.</p> <ul style="list-style-type: none"> <li>• Seeding and revegetation will be provided for all disturbed ground and graded slopes to restore the visual unity of the site and the integrity of the setting.</li> <li>• Drainage and storm water elements (i.e., swales, basins) will be addressed as visually integrated elements of the revegetation planting. Rip-rap and other constructed elements will be colored to match the native soil to minimize visual intrusion. Basins will be graded to provide a natural rather than man-made appearance.</li> <li>• Trees removed during project construction will be replaced with native desert trees at a ratio of 5:1 (5 caliper inches of newly installed trees for each 1-caliper inch of trees removed).</li> </ul>				
V-3*	<p><b>Light and Glare.</b> Due to the rural character and sensitivity of the area, the County's Project Engineer will ensure that final Plans, Specifications, and Estimates (PS&amp;E) specify the use of lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the roadway or bridge deck, as applicable. Lighting will be limited to only those locations where it is absolutely necessary for safety, such as intersections on each end of the Project. Lighting will only be provided at the bridges if absolutely necessary for safety, and light will be excluded from wildlife corridors below (possibly by being recessed or closer to the bridge deck). In most cases, lighting will consist of County or City of Banning lighting standards that are up to 35 feet in height, and the minimum required for driver safety.</p>	Project Engineer and County or Consultant Landscape Architect	<p>During final design</p> <p>During</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>Lighting will be designed using Illuminating Engineering Society’s design guidelines and in compliance with International Dark-Sky Association–approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that are shielded and direct the light only toward objects requiring illumination. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties or open spaces, or backscatter into the nighttime sky. The lowest allowable wattage will be used for all lighted areas, and the number of nighttime lights needed to light an area will be minimized.</p> <p>Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency, with daylight sensors or timers with an on/off program. Lights will provide good color rendering with natural light qualities, with the minimum intensity needed for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing. Light-emitting diode (LED) lighting will avoid the use of blue-rich white light lamps (BRWL) and use a correlated color temperature that is no higher than 3,000 Kelvin, consistent with the International Dark-Sky Association’s Fixture Seal of Approval Program. In addition, LED lights will use shielding to ensure that nuisance glare and light spill does not affect sensitive residential viewers. Technologies to reduce light pollution evolve over time; design measures that are currently available may help but may not be the most effective means of controlling light pollution once the project is designed. Therefore, all design measures used to</p>	Resident Engineer	construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>reduce light pollution will use the technologies available at the time of project design to allow for the highest potential reduction in light pollution.</p> <p>The County's Resident Engineer, or Project Engineer under contract to the County, will ensure that the Lighting Plan included in the PS&amp;E is implemented by the County's Construction Contractor or Project Construction Contractor under contract to the County, during construction.</p>				
<b>V-4</b>	<p><b>Selected Material.</b> Topsoil will be stockpiled and spread over disturbed areas once construction is completed and before any permanent erosion control or seed mixes are applied to assist in success of plant growth for this sensitive landscape.</p>	<p>Project Engineer, Resident Engineer and County or Consultant Landscape Architect</p>	<p>During construction</p>		
<b>CULTURAL RESOURCES</b>					
<b>CR-1*</b>	<p><b>Cultural Materials.</b> If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a California Department of Transportation (Caltrans) qualified archaeologist can assess the nature and significance of the find.</p>	<p>County of Riverside, Resident Engineer and Resident Archaeologist or Project Archaeologist</p>	<p>During construction</p>		
<b>CR-2*</b>	<p><b>Human Remains.</b> If human remains are discovered, California Health and Safety Code (H&amp;SC) 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. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC),</p>	<p>County of Riverside and the Resident Engineer</p>	<p>During construction</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>who, pursuant to Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact the Caltrans District 8 Environmental Branch Chief so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.</p>				
<p><b>CR-3*</b></p>	<p><b>Avoidance and Preservation.</b> Prior to project construction, the County, or their duly-appointed representative shall develop a Cultural Resources Mitigation and Monitoring Plan (CRMMP) in consultation with the Morongo Band of Mission Indians Tribal Historic Preservation Officer (THPO) that (a) identifies types and locations of resources likely to be encountered; (b) testing/evaluation/treatment measures for each resource type; (c) documentation requirements; and (d) a list of acceptable and prescribed study techniques; as stated in the response to Comment III, any artifacts recovered must be sent to the Western Science Center after studies completed under the CRMMP are completed.</p> <p>During the preparation of final Plans, Specifications and Estimates (PS&amp;E), the County Resident Archaeologist, or Project Archaeologist under contract to the County, shall develop specific avoidance and preservation actions for the following prehistoric resource (bedrock milling features) locations, consistent with the listed requirements:</p> <ul style="list-style-type: none"> <li>• CA-RIV-1397: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])</li> <li>• CA-RIV-1398: Avoid or bury (Alternative 5 only)</li> <li>• CA-RIV-1399: Avoid, bury, or relocate nearby</li> </ul>	<p>Resident Archaeologist or Project Archaeologist</p> <p>County of Riverside and the Morongo Band of Mission Indians</p> <p>Project Archaeologists and Tribal Monitors</p>	<p>During final design</p> <p>During final design</p> <p>During construction</p>		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>(Alternative 5 only)</p> <ul style="list-style-type: none"> <li>• CA-RIV-1400: Avoid, bury, or relocate (Alternative 5 only)</li> <li>• CA-RIV-1403: Avoid, bury, relocate, or excise milling feature and relocate (Alternative 5 only)</li> <li>• CA-RIV-11796: Avoid, bury, or relocate nearby (both Alternative 5 and Alternative 12 [Preferred Alternative])</li> <li>• CA-RIV-11797: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])</li> <li>• CA-RIV-12311: Avoid or bury (both Alternative 5 and Alternative 12 [Preferred Alternative])</li> </ul> <p>Prior to approval of final PS&amp;E, the County and the Morongo Band of Mission Indians shall consult to develop final disposition sites for each of the relocated sites.</p> <p>For sites with “relocate” or “excision” mitigation, such mitigation shall be accomplished as one of the first items of work during construction.</p> <p>For sites with “avoid or bury” measures, final project plans shall include plans and specifications to accomplish the measure. Archaeologists appointed by the County and Tribal Monitors shall oversee the implementation of all such measures throughout the duration of all ground-disturbing activities.</p>				
<b>CR-4*</b>	<p><b>Construction Monitoring.</b> Prior to the beginning of construction, all construction workers shall receive training by a qualified professional archaeologist and a representative of the Morongo Band of Mission Indians. The training shall focus on the types of resources, which could be uncovered during construction and what to do if and when they are found. A pamphlet shall be produced</p>	Resident Archaeologist or Project Archaeologist and Morongo Band of Mission Indians			

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>which includes pictures of typical archaeological resources, a summary of cultural resources laws, and a list of contacts (with telephone numbers) in the event of a discovery.</p> <p>All construction monitoring shall be completed in teams minimally comprised of a qualified professional archaeologist and a representative of the Morongo Band of Mission Indians.</p>	Representative			
<b>HYDROLOGY AND FLOODPLAINS</b>					
<b>HYD-1</b>	<p><b>Bridge Design.</b> During final design, the County of Riverside (County) Project Engineer shall ensure the low chords of bridges at Smith Creek and the San Gorgonio River will be designed to be above the 100-year water surface elevation, and the number, size, and shape of piers will be designed to minimize obstructions to the potential floodplain flows. Two-dimensional hydraulic modeling will occur early in the final design (prior to 60 percent submittal) to establish bridge abutment locations more accurately with the intent to remain outside of the 100-year storm event. More specifically, the primary flow during the 100-year flood event will not encroach into the bridge abutments.</p>	Project Engineer	During final design		
<b>HYD-2</b>	<p><b>Channel Construction Work.</b> During construction, the County's Resident Engineer shall ensure that areas allowed for construction equipment within the San Gorgonio River and Smith Creek channels will be limited to those areas needed to construct the Project improvements. In addition, the County Project Engineer would ensure that grades and impacted vegetation would be restored to the existing conditions within the channels after the completion of construction activities (see requirements in avoidance and minimization Measure V-2).</p>	<p>Project Engineer and the Resident Engineer</p> <p>Project Engineer and the Resident Engineer</p>	<p>During construction</p> <p>Upon completion of construction</p>		

Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<b>WATER QUALITY AND STORM WATER RUNOFF</b>					
WQ-1*	<b>Construction Storm Water Pollution Prevention Plan (SWPPP).</b> During construction, the County of Riverside's (County) Project Engineer will require the Resident Engineer to comply with the State Water Resources Control Board (SWRCB) Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2012-0006-DWQ) and United States Environmental Protection Agency (EPA) Construction General Permit No. CAR120001 (for Alternative 12 [Preferred Alternative]) by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP).	Project Engineer and the Resident Engineer	During construction		
WQ-2*	<b>Treatment Control BMPs.</b> The County's Project Engineer will ensure that the final Plans, Specifications and Estimates (PS&E) comply with Colorado River Basin Region MS4 Permit Order No. R7-2013-0011, NPDES No. CAS617002. Based on the permit, the Project Engineer will incorporate storm water treatment BMPs for pollutants of concern while preserving the existing hydrology to the maximum extent practical into the final project specifications. This will include pervious roadside ditches along much of the alignment to filter storm water prior to being discharged from the Project site. Areas without pervious roadside ditches will consider similar pervious graded swales, natural ditches, and basins to promote infiltration prior to discharging from the Project site.	Project Engineer	During PS&E		
WQ-3*	<b>Debris and Sediment Control.</b> The County's Project Engineer will incorporate measures to control debris and sediment from comingling with storm water run-off. These measures could include, but not be limited to, debris fences for hillsides where required by the Geotechnical Engineer, drainage ditches at the top of slopes, and desilting basins for sediment-prone areas.	Project Engineer	During PS&E		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<b>GEOLOGY/SOILS / SEISMICITY</b>					
<b>GEO-1*</b>	<p>During final design, the County of Riverside’s (County) Project Engineer, or a Project Geotechnical Engineer or Project Geologist under contract to the County, will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards (e.g., rock falls, seismic shaking, or related secondary seismic impacts) that may be present along the Project alignment. The performance standard for this report will be the geotechnical design standards of the State of California and the California Department of Transportation (Caltrans), as applicable. The report will include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Evaluation of potential ground shaking and recommendations regarding construction procedures and/or design criteria to minimize the effect of ground shaking and effects related to ground shaking in the long term.</li> <li>• Demonstration that stabilization measures such as abutments, flywalls, or excavations will be implemented in the existing rockfall areas, or that stabilization measures independent of the abutments and/or flywalls are included in the final project design.</li> <li>• Demonstration that the design of all proposed abutments and/or flywalls is geotechnically suitable for project area soils, and verification that the Project design has considered and addressed the possibility of scour associated with the San Gorgonio River and Smith Creek.</li> <li>• Demonstration that side slopes can be designed and graded so that surface erosion of the engineered fill is not increased compared to existing, natural conditions.</li> </ul>	Project Engineer, Project Geotechnical Engineer, or Project Geologist	During final design		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	The County's Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and Project specifications. The County's Resident Engineer will require the Construction Contractor to implement the measures recommended in the design-level geotechnical report as included in the Project specifications.				
<b>GEO-2*</b>	The County's Resident Engineer will maintain a quality assurance/quality control plan during construction. The plan will include observing, monitoring, and testing by the Project Geotechnical Engineer and/or the Project Geologist under contract to the County prior to and during construction. The purpose of the plan is to confirm that the geotechnical/geologic recommendations from the design-level geotechnical report and from standard design and construction practices are fulfilled by the Construction Contractor. Additionally, if different site conditions are encountered, the plan shall allow appropriate changes to be made to accommodate such issues. The geotechnical engineer or geologist will submit weekly reports to the County (activities within County jurisdiction), the City (activities within City jurisdiction), and the Morongo Band of Mission Indians (activities within Tribal jurisdiction) during all project-related grading, excavation, and construction activities.	Resident Engineer  Geotechnical Engineer or Project Geologist	During construction  During construction; weekly		
<b>GEO-3*</b>	If blasting is required, the County's Project Engineer will require the Construction Contractor to prepare a blasting plan to minimize potential blasting hazards related to blasting activities. The blasting plan will address all applicable standards in accordance with the United States Department of the Interior, Office of Surface Mining. The issues to be addressed in the blasting plan include, but are not limited to the hours of blasting activity, notification of adjacent property owners, noise and vibration, and dust control.	Project Engineer	During final design		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
GEO-4*	<p>During construction, foundation excavations will be observed by a representative of the Project Geotechnical Engineer to evaluate whether the exposed soil conditions are consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required. Excavation depths greater than 5 feet (ft) will need to be sloped and shored in accordance with California Division of Occupational Safety and Health Administration (Cal-OSHA) guidelines. For temporary construction purposes, a slope ratio of 1H:1V (horizontal:vertical) may be used for cuts in existing fill not exceeding 20 ft to a depth 5 ft above the water table. The top of the excavation will be a minimum of 15 ft from the edge of the existing improvements. Excavations steeper than those recommended or closer than 15 ft from an existing improvement will be shored in accordance with applicable Cal-OSHA codes and regulations.</p>	<p>Project Geotechnical Engineer or Representative and the Resident Engineer</p>	<p>During construction</p>		
GEO-5*	<p>Upon development of the final bridge plans, the County's Project Geotechnical Engineer or Project Geologist under contract to the County will conduct a field investigation with one boring located near each proposed abutment and/or bent location where no borings have been previously drilled. These borings will be drilled to a depth of 60 to 100 ft or to Standard Penetration Test and modified California split-spoon/barrel sampling at 5 ft intervals to evaluate the soil profile type. Additional sampling will be needed within the structure backfill to evaluate potential settlement.</p> <p>Laboratory testing will also need to be conducted for shear strength, unit weight, moisture content, and if necessary, consolidation (compression) testing of the on-site soil and granitic rock to evaluate soil bearing capacity, settlement, and the use of spread footings and/or deep foundation</p>	<p>Project Geotechnical Engineer or Project Geologist</p>	<p>Upon development of the final bridge plans</p>		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	systems. Appropriate tests will be conducted to evaluate the suitability of on-site materials for backfill. Corrosion testing will be performed on soils expected to be in contact with proposed structures.				
<b>PALEONTOLOGY</b>					
<b>PAL-1*</b>	<p>The County of Riverside (County) shall appoint a qualified paleontologist that shall implement a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP should be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) and include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• The paleontologist, or his/her representative, shall attend a preconstruction meeting.</li> <li>• Excavation and grading activities in geologic units with high paleontological sensitivity (Older Surficial Sediments) shall be identified and monitored by a qualified paleontological monitor. Deposits with low paleontological sensitivity (Surficial Sediments) shall be monitored on a spot-check basis. No paleontological monitoring is required in geologic units with no paleontological sensitivity (plutonic rocks, metasedimentary rocks).</li> <li>• In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and the paleontologist contacted to assess the find for scientific significance. If any fossil remains are discovered in sediments with a low paleontological sensitivity rating (Surficial Sediments), the paleontologist shall make recommendations as to whether monitoring shall be required in these sediments as well.</li> </ul>	County of Riverside, Resident Engineer and Project Paleontologist	PRIMP preparation: Prior to construction; Paleontological monitoring during construction; Resource preparation, curation, and report preparation after construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>• Collected resources that are scientifically significant shall be prepared to the point of identification and permanent preservation. This includes washing and picking of mass samples to recover small vertebrate and invertebrate fossils and removal of surplus sediment around larger specimens to reduce the storage volume for the repository and the storage cost for the Project.</li> <li>• Scientifically significant resources shall be identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of an appropriate facility that will make them available for study by qualified individuals.</li> <li>• At the conclusion of the monitoring program, a report of findings with an appended inventory of specimens shall be prepared. When submitted to the County, the report and inventory will signify completion of the program to mitigate impacts to paleontological resources.</li> </ul>				
<b>HAZARDOUS WASTE/MATERIALS</b>					
<b>HAZ-1*</b>	<p><b>Site Investigations.</b> Prior to completion of the Project Approval/Environmental Document (PA/ED) phase, the County of Riverside (County) will conduct Site Investigations to determine the potential for contaminated soils at the following sites, if within the property being acquired for the Project (also included in Table 2.11.1):</p> <ul style="list-style-type: none"> <li>• Jack Stanfield Co. Inc., 1910 East Westward Avenue (western side of the Project site; hydrocarbons).</li> <li>• Banning Rifle Range (southwest of the Project site; metals, explosives, perchlorate, and ammunition debris).</li> </ul>	County of Riverside	Prior to PA/ED		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>• Banning Water Reclamation Facility (City of Banning Sewer Treatment Plant, Banning Wastewater Treatment Facility, and Banning STP-Non NPDES 01-0222), 2242 East Charles Street (southwestern portion of the Project site and the southern adjacent property, metals and solvents).</li> <li>• Morongo Band of Mission Indians Tribal Land (northern central portion of the Project site; hydrocarbons).</li> <li>• Banning Airport. 200 South Hathaway Street (500 feet [ft] north of the western portion of the project site; hydrocarbons).</li> <li>• Chevron Station No. 9-7410, 48690 Seminole Drive (950 ft north of Apache Trail; hydrocarbons).</li> <li>• Perfection Plating, 1284 East Lincoln Street (940 ft northwest of the Project site; metals and solvents).</li> <li>• TYCO Electronics Corporation (Deutsch Engineered Connecting Devices), 700 South Hathaway Street (470 ft north of project site).</li> <li>• Robertson’s Read Mix (Matich Corporation Cabazon Plant, Beaumont Concrete Company, Cabazon Plant 11, Shank Balsour Beatty), 13990 Apache Trail (northeastern adjacent property; metals and solvents).</li> <li>• L to Z ENT Inc. (D&amp;W Law), 896 South Hathaway Street (southwestern adjacent property; metals, solvents; and hydrocarbons).</li> <li>• Informal Dump Sites (debris scatter) (from west to east, 182 ft, 370 ft, and 423 ft from the Alternative 5 alignment; metals, solvents and hydrocarbons).</li> <li>• Former Sheep Dip (407 ft from the Alternative 5 alignment; pesticides).</li> </ul>				

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>Former Orchards, south of E. Westward Avenue (158 ft from Alternative 5 alignment, and 150 ft from Alternative 5 alignment; pesticides, herbicides, or heavy metals).</li> </ul> <p>The results of the Site Investigations soil sampling will determine if any liabilities or environmental concerns are associated with the right-of-way parcel acquisitions as a result of hazardous materials/wastes. Based on the results of the soil sampling, avoidance, minimization or mitigation measures may include, removal and disposal of impacted soils, or realignment of the Project to avoid impacted soils.</p>				
<b>AIR QUALITY</b>					
<b>AQ-1*</b>	<p>During clearing, grading, earthmoving, or excavation operations, the County of Riverside’s (County) Resident Engineer will direct the Project Contractor to ensure excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust) and consistent with Wind Erosion Control Best Management Practices (BMPs) identified in Caltrans’ Construction Site BMP Manual (May 2017):</p> <ul style="list-style-type: none"> <li>All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust.</li> <li>Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is completed for the day. More frequent watering may be required if dust is observed leaving the construction site.</li> <li>All material transported on site or off site will be either</li> </ul>	Resident Engineer	During clearing, grading, earthmoving, or excavation operations		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>sufficiently watered or securely covered to prevent excessive amounts of dust.</p> <ul style="list-style-type: none"> <li>• The area disturbed by clearing, grading, earth-moving, or excavation operations will be minimized to prevent excessive amounts of dust.</li> <li>• Cease clearing, grading, earthmoving, and excavation operations within unpaved areas when wind speeds exceed 25 miles per hour.</li> </ul> <p>These control techniques will be indicated in the Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.</p>				
<b>AQ-2*</b>	Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications. Additionally, engine tampering to increase horsepower is prohibited.	Project Engineer	During final design and construction		
<b>AQ-3*</b>	During construction, the County's Resident Engineer will direct the Project Contractor to ensure all trucks that haul excavated or graded material on site will comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.	Resident Engineer	Prior to and during construction		
<b>AQ-4*</b>	The County's Resident Engineer will direct the Project Contractor to adhere to Caltrans Standard Specifications for Construction (Sections 7-1.02C [Emissions Reduction], 10-5 [Dust Control], 14-9.02 [Air Pollution Control], 14-9.03 [Air Monitoring], and 18-1.03 [Construction]).	Resident Engineer	Prior to and during construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
AQ-5*	Should the County’s Project Geologist determine that asbestos-containing materials (ACMs) are present at the Project study area during final inspection prior to construction, the appropriate methods will be implemented to remove ACMs.	Project Geologist	Prior to construction		
<b>NOISE</b>					
N-1	<b>Noise Control, California Department of Transportation (Caltrans) Standard Specifications and Standard Special Provisions Section 14-8.02.</b> To minimize construction noise impacts on sensitive land uses adjacent to the Project site, the County of Riverside’s (County) Resident Engineer shall direct the Project Contractor to comply with Caltrans Standard Specifications and Caltrans Standard Special Provisions Section 14-8.02. The noise level from the Contractor’s operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 A-weighted decibels (dBA) maximum instantaneous noise level ( $L_{max}$ ) at a distance of 50 feet. In addition, the Contractor shall equip all internal combustion engines with their manufacturer-recommended muffler and shall not operate any internal combustion engine on the job site without the appropriate muffler. No internal combustion engine will be operated on the Project site without said muffler.	Resident Engineer and Project Contractor	During construction		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
NOI-1*	<p><b>Construction Noise.</b> The County of Riverside’s (County) Resident Engineer shall verify that all construction plans include notes stipulating the following:</p> <ul style="list-style-type: none"> <li>• Grading and construction contractors shall use equipment that generates lower vibration levels such as rubber-tired equipment rather than metal-tracked equipment.</li> <li>• To the extent feasible, sound control blankets shall be placed such that the line of sight from ground-level construction equipment and sensitive receptors would be blocked. For example, an 8-foot (ft) high sound control blanket that has a minimum Sound Transmission Class (STC) rating of 28 would provide a noise level reduction of 11 A-weighted decibels (dBA) when the construction equipment is located approximately 50 ft from the sound control blanket while the receptor is located approximately 10 ft on the other side.</li> <li>• Construction haul truck and materials delivery traffic shall avoid residential areas whenever feasible.</li> <li>• The construction contractor shall place noise-generating construction equipment and locate construction staging areas away from sensitive uses, whenever feasible.</li> <li>• The construction contractor shall schedule high-noise producing activities between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption to sensitive uses.</li> <li>• All residential units located within 500 ft of the construction site shall be sent a notice regarding the construction schedule. A sign, legible at a distance of 50 ft shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities.</li> </ul>	Resident Engineer	Prior to construction		

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No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
NOI-2*	<p><b>Blasting.</b> The County’s Project Engineer shall verify that all construction plans include notes stipulating that all blasting activities be designed such that blasting vibration levels are lower than the vibration damage potential threshold criteria for structures located within the project area.</p> <p>To avoid potential impact to power transmission lines and gas lines located near planned blasting activities during construction, the County of Riverside’s (County) Resident Engineer shall coordinate with Southern California Edison and Southern California Gas Company. This coordination will occur once more detailed information (e.g. size of the proposed blasting charge and its distance to nearest electric and gas utility lines) becomes available regarding planned blasting activities during construction.</p>	Project Engineer	Prior to and during construction		
<b>NATURAL COMMUNITIES</b>					
NC-1*	<p><b>Protection of Vegetation and Wildlife Within Riversidean Alluvial Fan Sage Scrub.</b> Prior to clearing or construction, the County of Riverside’s (County) Resident Engineer will direct the Project Contractor to ensure that highly visible barriers (e.g., orange construction fencing) will be installed around Riversidean Alluvial Fan Sage Scrub (RAFSS) communities adjacent to the Project’s construction footprint to designate Environmentally Sensitive Areas (ESAs) to be preserved. No grading or fill activity of any type will be permitted within these ESAs. RAFSS is habitat for the coastal California gnatcatcher. Therefore, prior to construction, vegetation should be removed outside the gnatcatcher breeding season (February 15 through August 31). If vegetation cannot be removed outside the gnatcatcher nesting season (February 15 through August 31), nesting gnatcatcher surveys shall be conducted within 3 days prior to project ground</p>	Resident Engineer	Prior to clearing or construction		

Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	disturbance to ensure the gnatcatcher and other nesting birds protected under the MBTA and California Fish and Game Code are not disturbed by construction-related activities (i.e., brush clearing and noise). Should nesting gnatcatchers be found on or in the immediate vicinity (approximately 300 feet) of the Project site, no construction or clearing will be conducted until the Project biologist determines that the young have fledged or the nest is no longer active. Following construction, temporary impacted areas shall be restored with coastal sage scrub and Riversidean alluvial fan sage scrub. Permanent loss of coastal sage scrub and Riversidean alluvial fan sage scrub will be restored in accordance with the requirements described in the Biological Opinion. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment shall be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.				
NC-2*	<b>Maintenance Facilities.</b> During construction, the County's Resident Engineer will ensure that all equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland habitat areas. The designated upland areas will be located so as to prevent the runoff from any spills from entering waters of the United States.	Resident Engineer	During construction		
NC-3*	<b>Biological Monitoring.</b> Prior to clearing or construction, the County will appoint a biologist that will monitor construction of the Project to ensure that vegetation removal and ESAs are properly constructed and followed.	County-Appointed Biologist	During construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<b>NC-4</b>	<b>Revegetation.</b> Permanent and temporary impacts to native vegetation communities will be restored at a 1:1 ratio. Prior to construction, a restoration plan will be prepared by a Restoration Ecologist that specifies appropriate native seed mixes, site preparation activities including potential invasive species removal, and soil compaction, as well as installation methods and maintenance and monitoring performance standards. All graded slopes will be revegetated with native species, and topsoil will be stockpiled and spread as per Visual Measures V-2 and V-4.	Restoration Ecologist	Prior to construction		
<b>WILDLIFE CORRIDORS</b>					
<b>WC-1*</b>	<b>Noise and Lighting.</b> During construction, if work must be conducted at night, the County of Riverside's (County) Resident Engineer will ensure noise and direct lighting will be directed away from the wildlife corridors. Construction will be limited to daylight hours to the extent feasible. Roadway lighting would be restricted and shielded away from adjacent native habitat areas in compliance with Ordinance No. 655 – Regulating Light Pollution within 45 miles of the Palomar Observatory. Permanent lighting will only be provided near the wildlife corridors if absolutely necessary for safety. If permanent lighting is implemented, recessed lighting and/or glare shields would be used to prevent light from shining into the wildlife corridor habitat.	Resident Engineer	During construction		
<b>WC-2*</b>	<b>Wildlife Barriers.</b> During construction, the County's Resident Engineer will ensure that wildlife corridors will be kept clear of all equipment or structures that could potentially serve as barriers to wildlife passage, except where construction needs to occur in Smith Creek and the San Gorgonio River for pier and abutment installation. Environmentally Sensitive Area (ESA) or exclusion fencing would provide openings for wildlife to move through the corridors during construction.	Resident Engineer	During construction		

Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
WC-3*	<b>Wildlife Corridor Fencing.</b> A fencing plan will be prepared in consultation with the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) during final design and fencing will be installed along the entire length of the Project on both sides of the roadway. The proposed wildlife fence would consist of a 4–5-foot barbwire fence, with small wire mesh on the lower half that would exclude most reptiles and small mammals. The wildlife fence is not intended to exclude all animals, but would exclude most of the species that are known to commonly use the San Geronio River Linkage branch and guide animals toward the wildlife crossings and bridges.	Resident Engineer	During final design		
WC-4*	<b>Wildlife Crossing Design.</b> The wildlife crossings will be designed for small-to-medium-size wildlife species consistent with the U.S. Department of Transportation's (USDOT) <i>Wildlife Crossing Structure Handbook, Design and Evaluation in North America</i> , the California Department of Transportation's (Caltrans) <i>Wildlife Crossings Guidance Manual</i> , and the WRMSHCP. Native grasses, forbs, and shrubs that are included in the <i>Chilopsis linearis</i> woodland, <i>Acacia greggii</i> shrubland, Coastal Sage Scrub, and Riversidean Alluvial Fan Sage Scrub will be planted on slopes at bridges and culverts to provide cover for wildlife and to encourage the use of the wildlife crossings.	Resident Engineer	During final design		
<b>WETLANDS AND OTHER WATERS</b>					
WET-1	<b>Compensatory Mitigation.</b> Compensatory mitigation is anticipated to be required to offset the loss of non-wetland jurisdictional waters (as described in Section 2.16.3) by the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) at a minimum 1:1 mitigation ratio. Compensatory mitigation may	USACE, CDFW, and RWQCB	During federal and State regulatory processes		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>consist of mitigation banking, an in-lieu fee, or habitat restoration. The Coachella Valley Conservation Commission has established the Coachella Valley In-Lieu Fee Program to mitigate for permanent impacts to waters of the US and streambanks. Temporarily affected riparian habitat would be replaced with in-kind habitat restored in place within the Project area. Mitigation for effects to any regulated USACE non-wetland waters or waters of the U.S. and State will be consistent with the USACE <i>Compensatory Mitigation for Losses of Aquatic Resources</i> (USACE 2008), also known as the USACE Compensatory Mitigation Rule. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such impacts is ultimately subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.</p>				
<b>WET-2</b>	<p><b>Section 401 Certification.</b> The County of Riverside (County) will obtain a Section 401 Certification from the Regional Water Quality Control Board for activities that may result in impacts to State Water Quality Standards. If the USACE decides not to take jurisdiction over the ephemeral waters, the RWQCB may require a Waste Discharge Requirements for impacts to state waters under the Porter-Cologne Act.</p>	County of Riverside	During federal and State regulatory processes		
<b>WET-3</b>	<p><b>Section 404 Permit.</b> The County will obtain a Section 404 permit from the United States Army Corps of Engineers for activities that would discharge materials into a water of the United States. The 2020 NWPR and legal challenges make implementation of this rule uncertain; however, the USACE will provide guidance at the time of permitting.</p>	County of Riverside	During federal and State regulatory processes		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
WET-4	<b>Section 1602.</b> The County will submit a complete notification package and associated fees to the California Department of Fish and Wildlife for a Streambed Alteration Agreement.	County of Riverside	During federal and State regulatory processes		
WET-5	<b>Environmentally Sensitive Area Demarcation for Adjacent Waters of the U.S. and Waters of the State.</b> Prior to clearing or construction, the County of Riverside's (County) Resident Engineer will direct the Project Contractor to ensure that highly visible barriers (e.g., orange construction fencing) will be installed around waters of the U.S. and waters of the state adjacent to the Project's construction footprint to designate Environmentally Sensitive Areas (ESAs) to be preserved. No grading or fill activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment shall be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.	Resident Engineer and Construction Contractor	Prior to clearing or construction		
<b>ANIMAL SPECIES</b>					
LAPM-1*	<b>Trench Coverings.</b> Within the construction limits in any potentially suitable habitat for Los Angeles pocket mouse in or adjacent to Smith Creek, the County of Riverside's (County) Resident Engineer shall direct the Construction Contractor to ensure that all excavated, steep-walled holes or trenches more than 2 feet (ft) deep are covered with plywood at the close of each working day or shall provide one or more escape ramps constructed of earthen fill or wooden planks to prevent entrapment of Los Angeles pocket mouse during construction. The ramps shall be located at no greater than 100 ft intervals, with slopes less	Resident Engineer and Construction Contractor	During construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	than 45 percent, and shall be at least 1 ft in width.				
<b>LAPM-2*</b>	<b>Pipe Coverings.</b> All construction pipes, poles, culverts, or similar structures with a diameter of 1.5 inches or greater stored at a construction site for one or more overnight periods shall be thoroughly inspected by a qualified permitted biologist for the presence of Los Angeles pocket mouse before the pipe is subsequently buried, capped, or otherwise used or moved in any way. Unburied pipes laid in trenches overnight shall be capped. If Los Angeles pocket mouse is discovered inside a pipe, the section of pipe containing the Los Angeles pocket mouse shall not be moved until a qualified biologist has been consulted. Under the direct supervision of a qualified biologist, if necessary, the pipe may be removed from the path of construction activity.	Resident Engineer and County-Appointed Biologist	During construction		
<b>LAPM-3*</b>	<b>Ground-Disturbing Activity Monitor.</b> The County shall appoint a qualified biological monitor that shall be present during ground-disturbing activities within suitable habitat for Los Angeles pocket mouse. The monitor shall be responsible for ensuring the project is in compliance with conditions set forth by the United States Fish and Wildlife Service (USFWS) in the incidental take authorization for Los Angeles pocket mouse pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP).	Resident Engineer and Biological Monitor	During construction (ground-disturbing activities)		
<b>LAPM-4*</b>	<b>Environmentally Sensitive Areas.</b> Notes will be placed on project construction plans informing contractors that areas designated as having long-term conservation value outside the Project footprint are environmentally sensitive and that construction activity is excluded from those areas.	Project Engineer	During final design		

Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
LAPM-5*	<p><b>Lighting.</b> In addition to the lighting restrictions in avoidance and minimization Measure WC-1 included in Section 2.15.3.2, the proposed roadway will not be lit except for limited lighting at those locations where it is absolutely necessary for safety, such as intersections on each end of the Project and possibly at bridges (if required for safety). Any lighting located near Los Angeles pocket mouse habitat with long-term conservation value will incorporate shielding so that lighting can be directed onto the roads and away from the adjacent habitat. Light will be excluded from wildlife corridors below bridges (possibly by being recessed or closer to the bridge decks). Indirect effects resulting from an increase in light and glare associated with vehicles and daytime and nighttime construction activities will be reduced by incorporating shielded lighting near environmentally sensitive areas adjacent to the project.</p>	Project Engineer and Resident Engineer	During final design and construction		
LAPM-6*	<p><b>Roadside Maintenance.</b> Indirect impacts of exotic plant infestations, litter, and fire will be reduced by regular roadside maintenance to remove litter and weeds from the right-of-way.</p>	Resident Engineer and Construction Contractor	During operation		
BO-1*	<p><b>Burrowing Owl Pre-Construction Surveys.</b> A pre-construction survey within 30 days prior to ground disturbance is mandatory in suitable habitat for the burrowing owl. Additionally, a 30-day pre-construction focused survey on Morongo Band of Mission Indians Tribal Land will be required per the Migratory Bird Treaty Act (MBTA). If burrowing owls are found to be present in the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) portion of the biological study area (BSA) during subsequent pre-construction surveys, avoidance or project-specific mitigation will be developed and authorized through consultation with the Western Riverside County Regional Conservation Authority</p>	Resident Engineer and County-Appointed Biologist	Prior to construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>and the California Department of Fish and Wildlife (CDFW), as outlined in Table 9.2, and Appendix E, Summary of MSHCP Species Survey Requirements, in the WRMSHCP. If burrowing owls are found to be present within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) portion of the BSA, coordination with the wildlife agencies is required per Section 4.4 of the CVMSHCP. Additionally, if burrowing owls are found to be present on Morongo Band of Mission Indians Tribal Land, coordination with the United States Fish and Wildlife Service (USFWS) will be required.</p>				
<p><b>MB-1*</b></p>	<p><b>Bird Nesting Season.</b> To avoid potential effects to fully protected raptors and other nesting birds protected by California Fish and Game Code Sections 3503, 3503.5, and 3513, vegetation clearing and preliminary ground-disturbance activities will be completed outside the bird breeding season (typically set as February 15 through August 31), or a pre-construction nesting bird survey by a qualified biologist will be conducted 72 hours prior to commencement of project activities, including equipment staging, clearing, grubbing, construction, or ground-disturbing activities. If identified active nests are detected, an appropriate buffer shall be established by the qualified biologist. The buffer area shall be avoided until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist will monitor active nests to ensure established buffers are effective.</p>	<p>Resident Engineer and County-Appointed Biologist</p>	<p>Prior to construction</p>		
<p><b>MB-2*</b></p>	<p><b>Le Conte’s Thrasher.</b> Le Conte’s thrasher is a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The biological study area (BSA) lies within modeled Le Conte’s thrasher habitat. Section 4.4 of the CVMSHCP provides measures that address construction in Conservation Areas within</p>	<p>County-Appointed Biologist and Resident Engineer</p>	<p>Prior to construction and during the nesting season</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>modeled Le Conte’s thrasher habitat. These measures include the following:</p> <ul style="list-style-type: none"> <li>• During the nesting season (January 15 through June 15), but prior to the start of construction activities, an Acceptable Biologist will conduct an audio playback survey consistent with Le Conte’s thrasher protocol developed by the Coachella Valley Conservation Commission’s Biological Working Group. The surveys will occur on the construction site and within 500 feet (ft) of the construction site, or to the property boundary if less than 500 ft. The same survey protocol will be used for detection for Le Conte’s thrasher regardless of which MSHCP it occurs within (Coachella Valley or Western Riverside County).</li> <li>• If nesting Le Conte’s thrashers are found, a 500 ft buffer, or a buffer to the property boundary if it is less than 500 ft away, will be established around the nest site. The buffer will be staked and flagged.</li> <li>• No construction will be permitted within the buffer during the breeding season from January 15 through June 15.</li> </ul>				
<b>THREATENED AND ENDANGERED SPECIES</b>					
DT-1*	<p><b>Designation of Field Contact Representative.</b> The County of Riverside (County) will designate a Field Contact Representative (FCR) to be responsible for overseeing compliance with the protective stipulations and coordination with other involved regulatory agencies. The FCR will be on the project site during ground-disturbing activities and Environmentally Sensitive Area (ESA) fence installation as needed and will have the authority to halt activities that violate measures applicable to the project. The FCR may be a crew chief or field supervisor, a project manager, any</p>	<p>County and Resident Engineer</p> <p>Field Contact Representative</p>	<p>Prior to construction</p> <p>During construction (ground-disturbing activities)</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	other employee of the project proponent, or a contracted biologist.				
DT-2*	<p><b>Tortoise Education for Contractor Employees.</b> The County’s designated FCR shall prepare a desert tortoise education program prior to project construction. All personnel will be required to participate in the program to receive environmental awareness training. The program will cover the following topics regarding the desert tortoise (Mojave population):</p> <p>Distribution, general behavior and ecology, sensitivity to human activity, state and federal legal protections, penalties for violations of state and federal laws and reporting requirements and project protective conservation measures.</p>	County, Resident Engineer, and Field Contact Representative	Prior to and during construction		
DT-3*	<p><b>Temporary Tortoise-Proof Fence.</b> Prior to construction, the County’s designated FCR shall ensure that temporary tortoise-exclusionary fencing will be installed on all portions of the project site that are accessible to desert tortoise during construction. The fence will be installed per Chapter 8 of the 2009 Desert Tortoise Field Manual or the most currently accepted United States Fish and Wildlife Service (USFWS) desert tortoise fence design criteria. The authorized biologist will approve and inspect the location and construction of the fence. Workers will be informed that their activities will be restricted to the construction area within the desert tortoise barriers.</p>	Resident Engineer and Field Contact Representative	Prior to and during construction		
DT-4*	<p><b>Clearance Surveys within Temporary Tortoise-Proof Fence.</b> The County’s designated FCR shall ensure that focused clearance surveys for desert tortoises and their burrows will be conducted within the fenced area after fence installation and prior to ground-disturbing activities. Surveys will be conducted by an authorized biologist</p>	Resident Engineer and Field Contact Representative	Prior to and during construction		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>according to Chapter 6 of the 2009 Desert Tortoise Field Manual or the most current USFWS protocol to verify the presence/absence of desert tortoise within the fenced area. The following will be required according to the Manual:</p> <ul style="list-style-type: none"> <li>A clearance survey with 100 percent coverage of the fenced project. Clearance surveys consist of at least two consecutive surveys of the site. Each survey will involve walking transects less than or equal to 15 feet wide under typical conditions and less in areas vegetated by dense vegetation or when conditions limit the ability of the surveyor to locate desert tortoises. Clearance surveys should be conducted when desert tortoises are most active (April through May or September and October) and timed to follow the pre-construction survey.</li> </ul>				
DT-5*	<p><b>Translocation Plan.</b> The County's designated FCR shall prepare a translocation plan in accordance with the 2009 Desert Tortoise Field Manual and approved by the USFWS. The translocation plan will address any desert tortoises that may be found within the fenced area during the focused surveys or construction activities. Desert tortoise translocation and clearance methods may include temporarily penning desert tortoises within the area surrounding their burrows, relocating desert tortoises from the area of direct effect to an area in the immediate vicinity of the project, or translocating desert tortoises to a designated area outside their home range.</p>	Resident Engineer and Field Contact Representative	Prior to and during construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
DT-6*	<p><b>Tortoises Encountered During Construction.</b> During construction, the County shall contract an authorized biologist that will be on call. If a desert tortoise is discovered on the project site during construction, all work that will adversely affect the tortoise will stop and the on-call biologist will immediately assess the situation to determine the appropriate action. If it is determined that the desert tortoise needs to be relocated, it will be relocated in accordance with the translocation plan.</p>	County, Resident Engineer, and County-Appointed Biologist	During construction		
DT-7*	<p><b>Tortoises and Construction Equipment.</b> For the duration of the project, the County shall ensure that under no circumstances will equipment be moved if a tortoise is present next to or under equipment. If this occurs, the authorized biologist will be notified and will determine the appropriate action to take in accordance with the translocation plan.</p> <p>No firearms, dogs, or pets will be allowed at the project site. Firearms carried by authorized security and law enforcement personnel are exempt.</p> <p>Trash and discarded food items will be promptly contained within closed, raven-proof containers. Container contents will be regularly removed from the construction site to reduce the attraction to ravens and other predators of the desert tortoise.</p>	County of Riverside and Resident Engineer	During construction		
DT-8*	<p><b>Personnel and Construction Vehicles.</b> During construction, the County's Resident Engineer shall ensure that vehicular traffic and parking at work sites and along existing roads will be conducted to minimize the potential for running over desert tortoises and to prevent damage to tortoise habitat.</p> <p>Vehicles will be parked in designated parking/staging areas</p>	Resident Engineer and County-Appointed Biologist	During construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>that have been fenced and cleared of desert tortoises.</p> <p>Vehicles required for construction activities will not be driven or parked outside of existing road or work site rights-of-way or otherwise designated parking/staging areas. If vehicles must be left at the work sites overnight, they will not be parked outside existing rights-of-way or otherwise designated parking/staging areas.</p> <p>To ensure that construction personnel will see and be able to avoid desert tortoises on roadways, drivers will travel no more than 20 miles per hour on all dirt roads.</p>				
DT-9*	<p><b>Disposition of Dead or Injured Tortoises.</b> Upon locating desert tortoises killed or injured by construction activities, the County shall give initial notification within 24 hours of their finding that must be made in writing to the USFWS Division of Law Enforcement (370 Amapola Avenue, Suite 114, Torrance, CA 90501). The report shall include the date, time, and location of the carcass, a photograph (if possible), the cause of death (if known), and any other pertinent information. Injured animals shall be transported to a qualified veterinarian or rehabilitator licensed by the State of California. If any treated desert tortoises survive, the USFWS shall be contacted regarding the final disposition of the animals.</p> <p>The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) shall endeavor to place the remains of intact desert tortoises with educational or research institutions holding the appropriate State and federal permits per their instructions.</p> <p>Arrangements regarding the proper disposition of potential museum specimens shall be made with the institution by Caltrans as a representative of the FHWA before implementation of the project.</p>	County of Riverside, Resident Engineer, and County-Appointed Biologist	During construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<b>BIOLOGICAL OPINON MEASURES</b>					
<p><b>Measure included on p. 2.19-11 through 2.19-13 (and refer to the Biological Opinion, included as an attachment to Chapter 4)</b></p>	<p><b>Conservation Measures:</b></p> <ol style="list-style-type: none"> <li>1. To minimize effects to gnatcatcher, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as February 15 through August 31) or a pre-construction nesting bird survey would be conducted within 3 days prior to project activities including equipment staging, clearing, grubbing, construction, and/or ground disturbance, to ensure the gnatcatcher are not disturbed by construction-related activities.                             <ol style="list-style-type: none"> <li>a. Should nesting gnatcatcher be found on or within 300 feet of the Project site during the pre-construction survey, an appropriate buffer shall be established by a qualified biologist. No construction or clearing would be conducted within the buffer area until the nest becomes inactive for reasons unrelated to project activities. The qualified biologist would monitor active nests to ensure established buffers are effective.</li> </ol> </li> <li>2. Prior to ground-disturbing activities, highly visible barriers (such as orange construction fencing) would be installed around plant communities adjacent to the Project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type would be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, would not be allowed to operate within the ESAs. All construction equipment would be operated in a manner to prevent accidental damage to habitat adjacent to the Project footprint. No structure of any kind, or incidental storage of equipment or supplies, would be allowed</li> </ol>	<p>County of Riverside, Resident Engineer, and County-Appointed Biologist</p>	<p>Prior to and during construction</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>within these protected zones. Silt fence barriers would be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.</p> <p>3. A designated biologist, familiar with gnatcatcher life history and habitat requirements, would be retained and will be responsible for overseeing compliance with conservation measures and coordination with other involved regulatory agencies. The designated biologist would be on the Project site during all Project activities and would have the authority to halt activities that violate measures applicable to the proposed Project. The names and qualifications of individuals to serve as designated biologists would be submitted to the USFWS for review and approval.</p> <p>4. Lighting would be limited to installations at intersections for safety and incorporate wildlife-friendly designs.<sup>1</sup></p> <p>5. To offset permanent and temporary impacts to native vegetation communities, a Habitat Mitigation and Monitoring Plan (HMMP) would be developed in coordination with the USFWS to restore Riversidean alluvial sage scrub (RAFSS) and Acacia greggii shrubland (shrubland) within the Project area at a 1:1</p>				

<sup>1</sup> Refer to measure V-3 for additional project lighting specifications.

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<p>ratio. Only native plant species, preferably from seed or stock sourced in or near the Project area, would be used in restoration. The HMMP would include items such as appropriate native seed mixes and identify site activities, maintenance and monitoring performance standards, and responsible parties. To ensure success of the restoration area, a draft HMMP would be submitted to the USFWS for review and approval no later than 30 days prior to initial ground-disturbing activities.</p> <p>6. To provide for the safety of the motoring public, and conservation of local fauna, permanent wildlife fencing would be installed along the length of the new roadway following completion of the Project. Per the Project's Determination of Biological Equivalent or Superior Preservation (DBESP), the Riverside County Transportation Department (RCTD) would develop the fencing plan in coordination with the Wildlife Agencies.</p>				
<p><b>Measure included on p. 2.19-13 (and refer to the Biological Opinon, included as an attachment to Chapter 4)</b></p>	<p><b>Reasonable and Prudent Measures:</b></p> <ol style="list-style-type: none"> <li>1. Prior to the onset of ground-disturbing activities, Caltrans and RCTD will identify whether the final engineering plans and the Project footprint deviate from information presented to the USFWS in the biological assessment and ensure that they include design features to secure wildlife connectivity as presented in the WRMSHCP DBESP and the Environmental Impact Report/ Environmental Assessment (EIR/EA).</li> <li>2. Caltrans and RCTD will monitor Project-related actions and inform the USFWS of non-compliance and any gnatcatcher observations for the duration of Project-related activities.</li> </ol>	<p>County of Riverside and Caltrans</p>	<p>Prior to and during construction</p>		



**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<p><b>Measure included on p. 2.19-13 through 2.19-14 (and refer to the Biological Opinion, included as an attachment to Chapter 4)</b></p>	<p><b>Terms and Conditions:</b></p> <ol style="list-style-type: none"> <li>1. Prior to initiating any portion of construction activities that will directly impact gnatcatcher habitat, RCTD will submit to the Palm Springs USFWS Office Geographic Information System (GIS) data and figure(s) showing the impact area based on final project designs relative to the impact area depicted in the documents provided to support this consultation. The figure(s) will include vegetation mapping, all federally listed species observations from project-specific surveys (identified to the year and source of the survey), and a table showing the final impacts by habitat type.</li> <li>2. RCTD will commit to implement all conservation measures listed in the BIA's biological assessment, the WRMSHCP DBESP, the Caltrans Natural Environmental Study, and measures in the EIR/EA related to wildlife connectivity.</li> <li>3. The Project's designated biologist will report non-compliance to the USFWS within 48-hours via phone or electronic mail.</li> <li>4. Ensure that USFWS personnel have the right to access and inspect the Project site during project implementation (with prior notification from USFWS) for compliance with the Project Description, conservation measures, and terms and conditions of the Biological Opinion.</li> </ol>	<p>County of Riverside and County-Appointed Biologist</p>	<p>Prior to and during construction</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
<p><b>Measure included on p. 2.19-14 (and refer to the Biological Opinion, included as an attachment to Chapter 4)</b></p>	<p><b>Reporting Requirements:</b></p> <p>1. Caltrans and the BIA will provide annual reporting of the activities conducted under the Biological Opinion. Any such reports shall be filed not later than March 31st for the preceding calendar year. Reporting requirements for restoration activities will be laid out within the HMMP.</p>	<p>Caltrans and BIA</p>	<p>During and following construction</p>		
<p><b>INVASIVE SPECIES</b></p>					
<p><b>INV-1</b></p>	<p><b>Invasive Species Control.</b> In compliance with the Executive Order on Invasive Species (EO 13112) and guidance from the Federal Highway Administration (FHWA), any landscaping and erosion control for the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. Precautions would include inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. At a minimum, this program will include the following measures incorporated for compliance with EO 13112, as well as the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) and the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP):</p> <ul style="list-style-type: none"> <li>• During construction, the County of Riverside's (County) Project Contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one project location to another.</li> </ul>	<p>Resident Engineer, County-Appointed Biologist, and Project Contractor</p>	<p>During construction</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>• During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.</li> <li>• During construction, the County's Project Contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed to prevent excessive amounts of dust due to dry or windy conditions.</li> <li>• During construction, the County's Project Contractor shall ensure that all stockpiled material is sufficiently watered or covered to prevent excessive amounts of dust.</li> <li>• During construction, soil, gravel, and rock will be obtained from weed-free sources.</li> <li>• Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.</li> <li>• After construction, affected areas adjacent to native vegetation will be revegetated with plant species that are native to the area and approved by a County-appointed biologist.</li> <li>• After construction, all revegetated areas will avoid the use of species listed on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory that have a high or moderate rating.</li> <li>• Erosion control and revegetation sites will be monitored after construction to detect and control the introduction/ invasion of non-native species.</li> <li>• Eradication procedures (e.g., spraying and/or hand weeding) will be outlined if an infestation occurs. The use of herbicides will be prohibited within and adjacent</li> </ul>	<p>County's Project Contractor</p>             <p>County-Biologist appointed by the County</p>	<p>During construction</p>             <p>During operation</p>		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	to native vegetation except as specifically authorized and monitored by the Biologist. <ul style="list-style-type: none"> <li>• All woody invasive species (e.g., tamarisk, tree tobacco) will be removed from the project limits.</li> </ul>				
<b>ENERGY</b>					
<b>E-1</b>	The County’s Engineer shall incorporate a construction efficiency plan, into the Project Plans, Specifications, and Estimates package where applicable. This construction efficiency plan will include the following: <ul style="list-style-type: none"> <li>• Select disposal sites as close as practicable to the Interstate 10 (I-10) construction area to minimize haul distances and excavation-related fuel consumption.</li> <li>• Reuse existing rail, steel, and lumber wherever possible, such as for falsework, shoring, and other applications during the construction process.</li> <li>• Recycle asphalt taken up from roadways, if practicable and cost-effective.</li> <li>• Use newer, more energy-efficient equipment and maintain older construction equipment in good working order.</li> <li>• Schedule construction operations to result in the most efficient use of construction equipment possible.</li> <li>• Promote employee carpooling.</li> </ul>	County of Riverside and Project Engineer	During final design		
<b>E-2</b>	The County’s Engineer shall incorporate a maintenance efficiency plan into the Project Plans, Specifications, and Estimates package where applicable. This maintenance efficiency plan will include the following: <ul style="list-style-type: none"> <li>• Maintain maintenance equipment in good working order.</li> </ul>	County of Riverside and Project Engineer	Prior to construction		

**Table C-1 Avoidance and Minimization Measures / Commitments Summary (June 2021)**

No.	Avoidance and Minimization Measures / Commitments	Responsible Party	Timing/ Phase	Action Taken to Comply with Measures	Date of Completed Compliance
	<ul style="list-style-type: none"> <li>Schedule maintenance operations to result in the most efficient use of maintenance equipment possible.</li> </ul>				
<b>E-3</b>	The County's Engineer shall incorporate a lighting plan into the Project Plans, Specifications, and Estimates package where applicable. This area lighting plan will identify lighting fixtures that are energy efficient and identify placement of individual lighting fixtures used for roadway lighting that will provide safety lights for pedestrians and motorists. Also see measures V-3, WC-1 and LAPM-5 for additional information regarding other measures to minimize lighting impacts.	County of Riverside and Project Engineer	During final design		
<b>GREENHOUSE GAS EMISSIONS</b>					
<b>GHG-1*</b>	During construction, the County of Riverside's (County) Resident Engineer shall direct the Project Contractor to ensure that the Build Alternatives will incorporate the use of energy-efficient lighting such as light-emitting diode (LED) traffic signals, as described in the County CAP Transportation Measure R2-T5.	Project Engineer, Resident Engineer, and Project Contractor	During construction		
<b>GHG-2*</b>	During construction, the County's Resident Engineer shall direct the construction contractor to comply with California Code of Regulations (CCR) Title 13, Section 2449(d)(3), which was adopted by the California Air Resources Board (ARB) on June 15, 2008. This regulation restricts idling of construction vehicles to no longer than 5 consecutive minutes. Compliance with this regulation will reduce harmful emissions from diesel-powered construction vehicles during construction of the Build Alternatives, as described in County CAP Transportation Measure R2-T8.	Project Engineer, Resident Engineer, and Construction Contractor	During construction		

\* Mitigation measures are identified with an asterisk.

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## Appendix D List of Acronyms and Abbreviations

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°C	Celsius
°F	Fahrenheit
A/E	Future noise conditions (A)pproach or (E)xceed the NAC
AADT	average annual daily trips
AAQS	ambient air quality standards
AB	Assembly Bill
ac	acres
ACM	asbestos-containing materials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADT	average daily traffic
AEP	Association of Environmental Professionals
AGR	Agricultural Water Supply
ALP	Airport Layout Plan
amsl	above mean sea level
APE	Area of Potential Effects
APN	Assessor's Parcel Number
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
ASTM	American Society for Testing Materials
avg.	average
AWSC	all-way stop-controlled
BACM	best available control measures
Banning	City of Banning
Basin	South Coast Air Basin
Basin Plan	Colorado River Basin Plan
BIA	Bureau of Indian Affairs
BMPs	Best Management Practices
BO	Biological Opinion
BSA	biological study area
BUSD	Banning Unified School District
CA/T	Central Artery/Tunnel
Cabazon	community of Cabazon
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
California Register	California Register of Historical Resources
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CASSA	Criteria Area Species Survey Area

CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEB	Continuing Education of the Bar
CEHCP	California Essential Habitat Connectivity Project
CEHCP Report	California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California
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 of 1992
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHMIRS	California Hazardous Material Incident Report System
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIDH	cast-in-drilled hole
City	City of Banning
CMP	Congestion Management Plan
CMS	changeable message sign
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
COC	Contaminants of concern
CO-CAT	Coastal Ocean Climate Action Team
COLD	Cold Freshwater Habitat
County	County of Riverside
CPUC	California Public Utilities Commission
CSS	Coastal Sage Scrub
CTP	California Transportation Plan
CVAG	Coachella Valley Association of Governments
CVCC	Coachella Valley Conservation Commission
CVMSHCP	Coachella Valley Multiple-Species Habitat Conservation Plan
CWA	Clean Water Act
dB	decibel(s)
dBA	A-weighted decibel(s)
dBA L <sub>eq</sub>	equivalent continuous sound level measured in A-weighted decibels
DBESP	Determination of Biological Equivalent or Superior Preservation
DPM	diesel exhaust organic gases

DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EAP	Emergency Action Plan
EB	eastbound
ED	Environmental Document
EDR	Environmental Database Review
EI	Expansion Index
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMI	Emissions Inventory Data
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESA	Environmentally Sensitive Areas
FAA	Federal Aviation Administration
FCAA	Federal Clean Air Act
FCR	Field Contact Representative
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
FRSH	Freshwater Replenishment
ft	foot/feet
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FUDS	Formerly Used Defense Sites
GHG	greenhouse gas
GIS	Geographic Information System
GWR	Groundwater Recharge
H	High
H	height
H <sub>2</sub> S	hydrogen sulfide
HAZNET	Hazardous Materials Facility and Manifest Data
HCP	Habitat Conservation Plan
HFC-134a	s, s, s, 2-tetrafluoroethane
HFC-152a	difluoroethane
HFC-23	fluoroform
HIST	Historic Underground Storage Tank
HMMP	Habitat Mitigation and Monitoring Plan
hr	hour
I-10	Interstate 10
I-15	Interstate 15

I-215	Interstate 215
IDR	Indian Reservation Database
in/sec	inches per second
IND	Industrial Service
IPCC	Intergovernmental Panel on Climate Change
IRIS	Integrated Risk Information System
ITS	Intelligent Transportation Systems
IUST	Indian Underground Storage Tank Database
KOA	Kampgrounds of America, Inc.
Kqdi	Cretaceous-age granitic bedrock
kV	kilovolt
L	Low
L	length
LAPM	Los Angeles pocket mouse
lbs/day	pounds per day
LED	light-emitting diode
LEDPA	Least Environmentally Damaging Practicable Alternative
$L_{eq}$	equivalent continuous noise level
$L_{eq}(h)$	1-hour A-weighted equivalent continuous sound level
LID	Low Impact Development
$L_{max}$	maximum instantaneous noise level
LOS	level of service
LUST	Leaking Underground Storage Tank
M	Moderate
MBTA	Migratory Bird Treaty Act
MEP	Maximum Extent Practicable
$mg/m^3$	milligrams per cubic meter
mgd	million gallons per day
mi	mile(s)
mig	dike rock
ML	Moderate-Low
MLD	Most Likely Descendant
MM	Mitigation Measure
$M_{max}$	maximum moment magnitude
mph	miles per hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resources Zone
ms	metasedimentary bedrock
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
MUN	Municipal and Domestic Water Supply
mya	million years ago
N/A	not applicable
$N_2O$	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria

NAHC	Native American Heritage Commission
NATA	National Air Toxics Assessment
National Register	National Register of Historic Places
NCCP	Natural Communities Conservation Plans
NEPA	National Environmental Policy Act
NEPSSA	Narrow Endemic Plant Species Survey Area
NHPA	National Historic Preservation Act
No.	number
NO <sub>2</sub>	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
NOT	Notice of Termination
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NWP	Nationwide Permit
O <sub>3</sub>	ozone
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSMRE	Office of Surface Mining Reclamation and Enforcement
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
PA/ED	Project Approval/Environmental Document
PAC	Public Awareness Campaign
Pb	lead
PCE	tetrachloroethylene
PDF	Project Design Features
PDT	Project Development Team
pH	percentage of hydrogen
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in size
PM <sub>2.5</sub>	particulate matter less than 2.5 microns n size
POAQC	project of air quality concern
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Proposed Project	Interstate 10 Bypass Project: Banning to Cabazon
Qa	Quaternary-age alluvial gravel
Qf	Quaternary-age alluvial fan deposits
Qg	sand-stream channel deposits
Qudf	undocumented fill
RAFSS	Riversidean Alluvial Fan Sage Scrub
RAP	Relocation Assistance Program

RC	Resource Change
RCA	Western Riverside County Regional Conservation Authority
RCALUC	Riverside County Airport Land Use Commission
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act of 1976
RCRA-SQG	Resource Conservation and Recovery Act –Small Quantity Generator
RCTC	Riverside County Transportation Commission
RCTD	Riverside County Transportation Department
REC1	Water Contact Recreation
REC2	Non-Contact Water Recreation
RGALF	Recovered Government Archive Landfill
ROG	reactive organic gases
ROW	right-of-way
RRM	Robertson’s Ready Mix Sand and Gravel Mine
RSA	resource study area
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	southbound
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCG	Southern California Gas
SCS	Sustainable Communities Strategy
SCW	South Coast Wildlands
SDC	Seismic Design Criteria
sec	seconds
sf	square feet/foot
SF <sub>6</sub>	sulfur hexafluoride
SGPHS	San Geronio Pass Historical Society
SHPO	State Historic Preservation Office
SI	Substantial Increase
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SR-111	State Route 111
SR-243	State Route 243
SR-60	State Route 60
SR-62	State Route 62
SR-74	State Route 74
SSSC	side-street stop-controlled
SWEEPS	Statewide Environmental Evaluation and Planning System



SWMP	Statewide Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	temporary construction easements
TCE	trichloroethylene
TCWG	Transportation Conformity Working Group
TMDL	Total Maximum Daily Loads
TMP	Traffic Management Plan
TMP	Transportation Management Plan
TNM	Traffic Noise Model
TSCA	Toxic Substances Control Act
TWLTL	two-way left-turn lane
U.S.	United States
U.S. Census Bureau	United States Census
UBC	Uniform Building Code
UPRR	Union Pacific Railroad
US-60	United States Route 60
US-70	United States Route 70
US-99	United States Route 99
USACE	United States Army Corps of Engineers
USBM	United States Bureau of Mines
USC	United States Code
USDOT	U.S. Department of Transportation
USFWS	United States Fish and Wildlife Service
UST	underground storage tanks
V/C	volume-to-capacity ratio
VCP	Voluntary Cleanup Program
VMT	vehicle miles traveled
VOC	volatile organic compounds
Vol.	volume
VPD	vehicles per day
VPH	vehicles per hour
W	width
WARM	Warm Freshwater Habitat
WATCH	Work Area Traffic Control Handbook
WB	westbound
WDR	Waste Discharge Requirements
WDS	Waste Discharge System
WILD	Wildlife Habitat
WPCP	Water Pollution Control Plan
WQMP	Water Quality Management Plan
WQS	Water Quality Standards
WRMSHCP	Western Riverside County Multiple-Species Habitat Conservation Plan
µg/m <sup>3</sup>	micrograms per cubic meter

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

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- *Air Quality Analysis* (LSA Associates, Inc., September 2014; Errata, December 2017; May 2019; May 2021)
- *Alternatives Screening Analysis* (County of Riverside and Caltrans District 8, September 2016)
- *Archaeological Survey Report* (Analytical Environmental Services, February 2016)
- *Community Impact Assessment* (LSA Associates, Inc., May 2017)
- *Drainage Report* (Kimley-Horn and Associates, Inc., January 2020)
- *Extended Phase I Report* (Analytical Environmental Services, February 2016)
- *Growth-Related Indirect Impact Analysis* (LSA Associates, Inc., January 2017)
- *Historic Property Survey Report* (Analytical Environmental Services, August 2016; Errata, December 2017)
- *Historic Resources Evaluation Report* (Analytical Environmental Services, June 2016)
- *Extended Phase I Report* (Analytical Environmental Services, February 2016; Errata, December 2017)
- *Initial Site Assessment* (Geocon Incorporated, February 2016, updated September 2020)
- *Jurisdictional Delineation Report* (LSA Associates, Inc., January 2015)
- *Location Hydraulic Study* (Kimley-Horn and Associates, Inc., May 2015)
- *Natural Environment Study* (LSA Associates, Inc. April 2015; Errata, December 2017; April 2019; March 2020; October 2020)
- *Noise Study Report* (dBF Associates, Inc., October 2016; Errata, December 2017)
- *Noise Abatement Decision Report* (Kimley-Horn and Associates, Inc., April 2017; Errata, December 2017)
- *Paleontological Resources Technical Memorandum* (LSA Associates, Inc., December 2017)
- *Preliminary Foundation Report, I-10 Bypass Project, San Gorgonio River Bridge, Banning, California* (Geocon, Inc., August 2014).
- *Preliminary Foundation Report, I-10 Bypass Project, Smith Creek Bridge, Banning, California* (Geocon, Inc., August 2014)
- *Preliminary Geotechnical Design Report* (Geocon Incorporated, August 2014)
- *Summary Floodplain Encroachment Report* (Kimley-Horn and Associates, Inc., May 2017)

- *Traffic Operational Analysis Report* (Kimley-Horn and Associates, Inc., April 2015)
- *Visual Impact Assessment* (Kimley-Horn and Associates, Inc., March 2015)
- *Water Quality Assessment Report* (Kimley-Horn and Associates, Inc., April 2015)

# **Appendix F** Concept Plans

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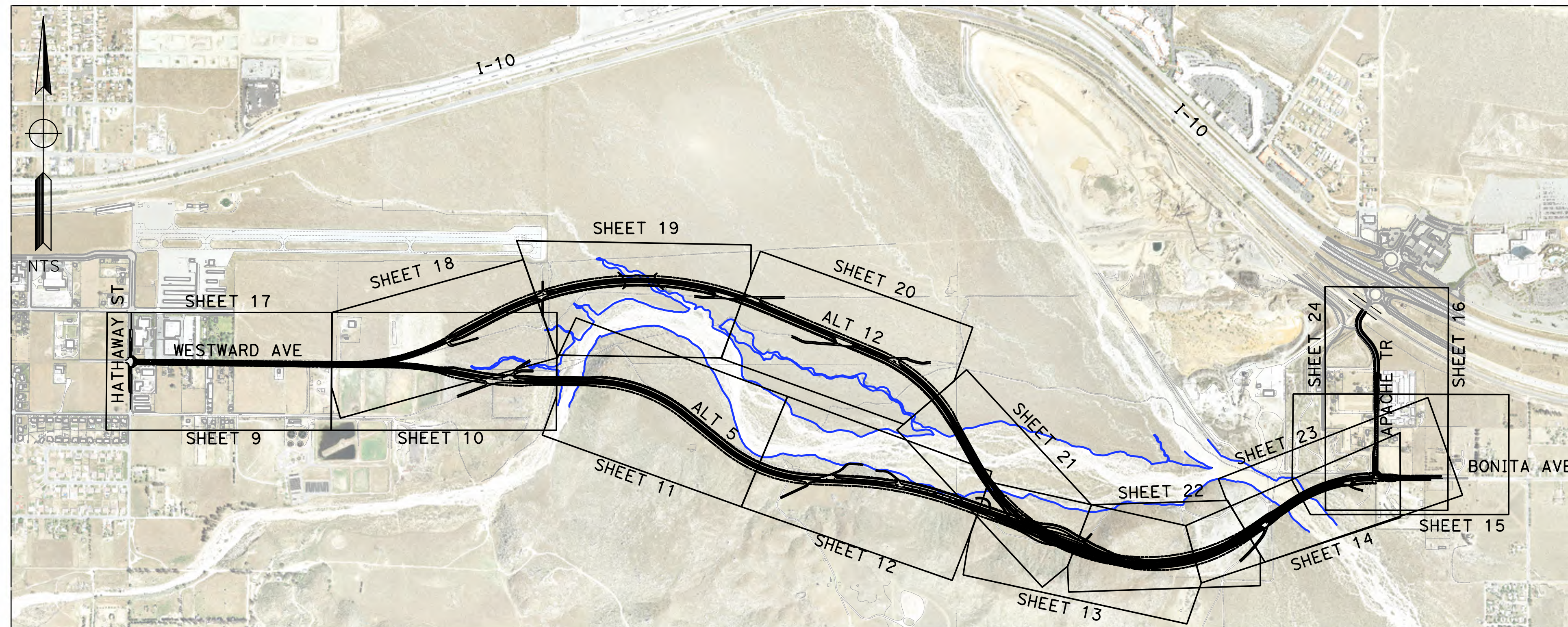
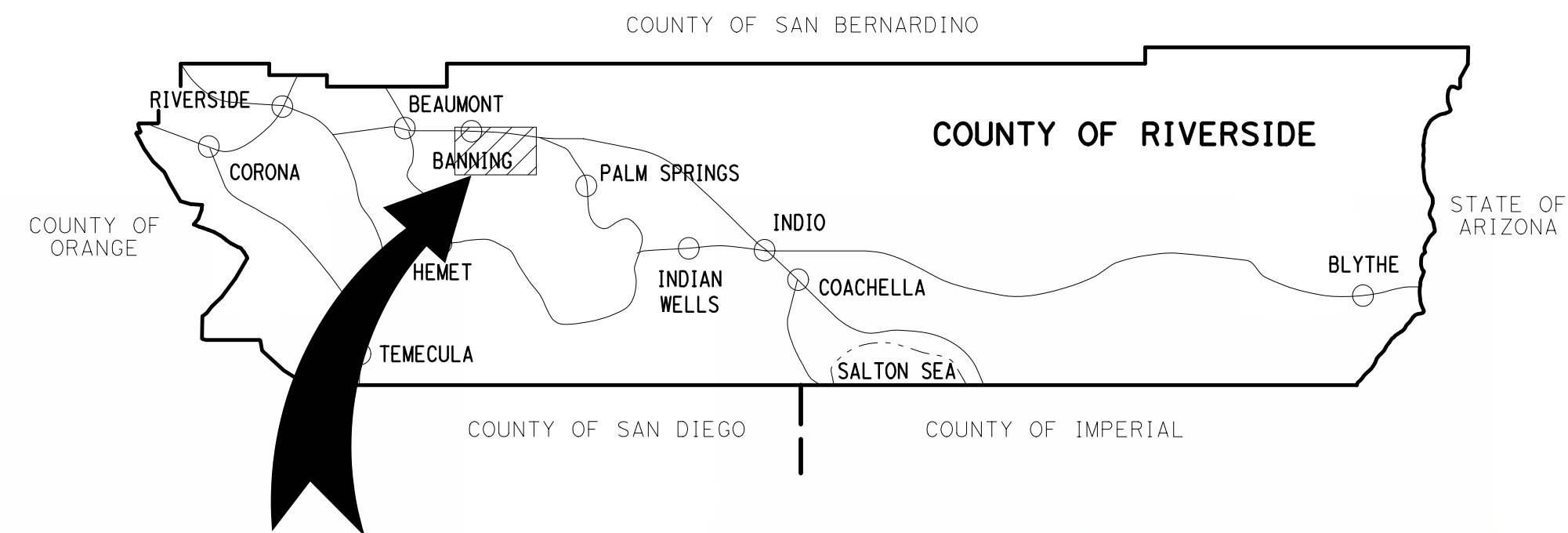


**COUNTY OF RIVERSIDE  
TRANSPORTATION DEPARTMENT**

**I-10 BYPASS: BANNING TO CABAZON**

**ROADWAY EXTENSION PROJECT  
CONCEPTUAL ALTERNATIVE 5 AND 12**

**FROM INTERSECTION OF  
HATHAWAY STREET AND WESTWARD AVENUE  
TO INTERSECTION OF  
BONITA AVENUE AND APACHE TRAIL  
CITY OF BANNING AND COMMUNITY OF CABAZON  
FEDERAL AID NO. DEM003L 5956 (210)**



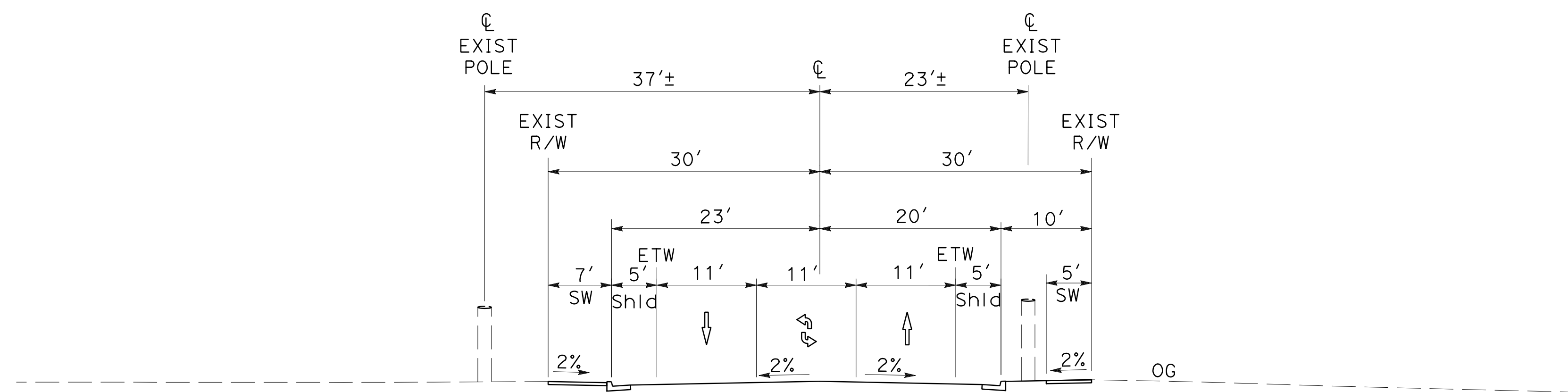
**VICINITY MAP**

**INDEX OF SHEETS**

SHEET No.	DESCRIPTION
1	TITLE
2 - 8	TYPICAL CROSS SECTIONS
9 - 16	ALTERNATIVE 5 LAYOUT
17 - 24	ALTERNATIVE 12 LAYOUT

NOVEMBER 7, 2018

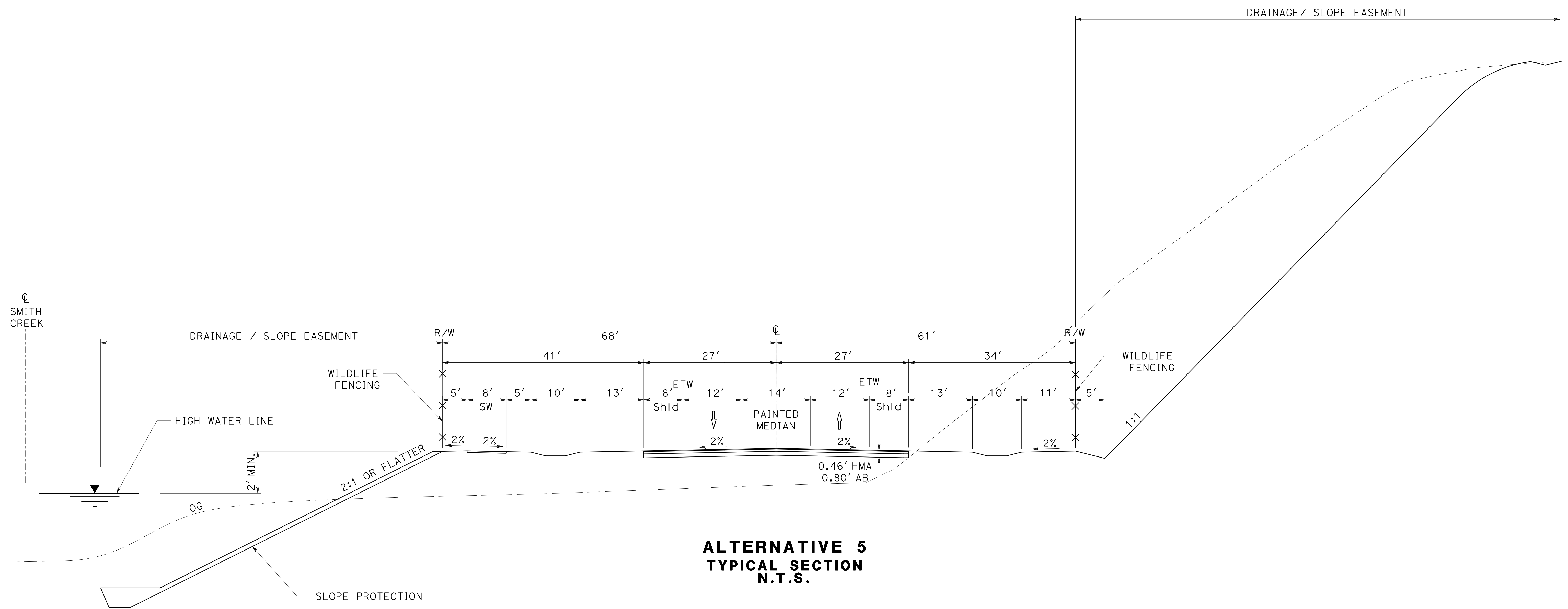




**WESTWARD AVENUE**  
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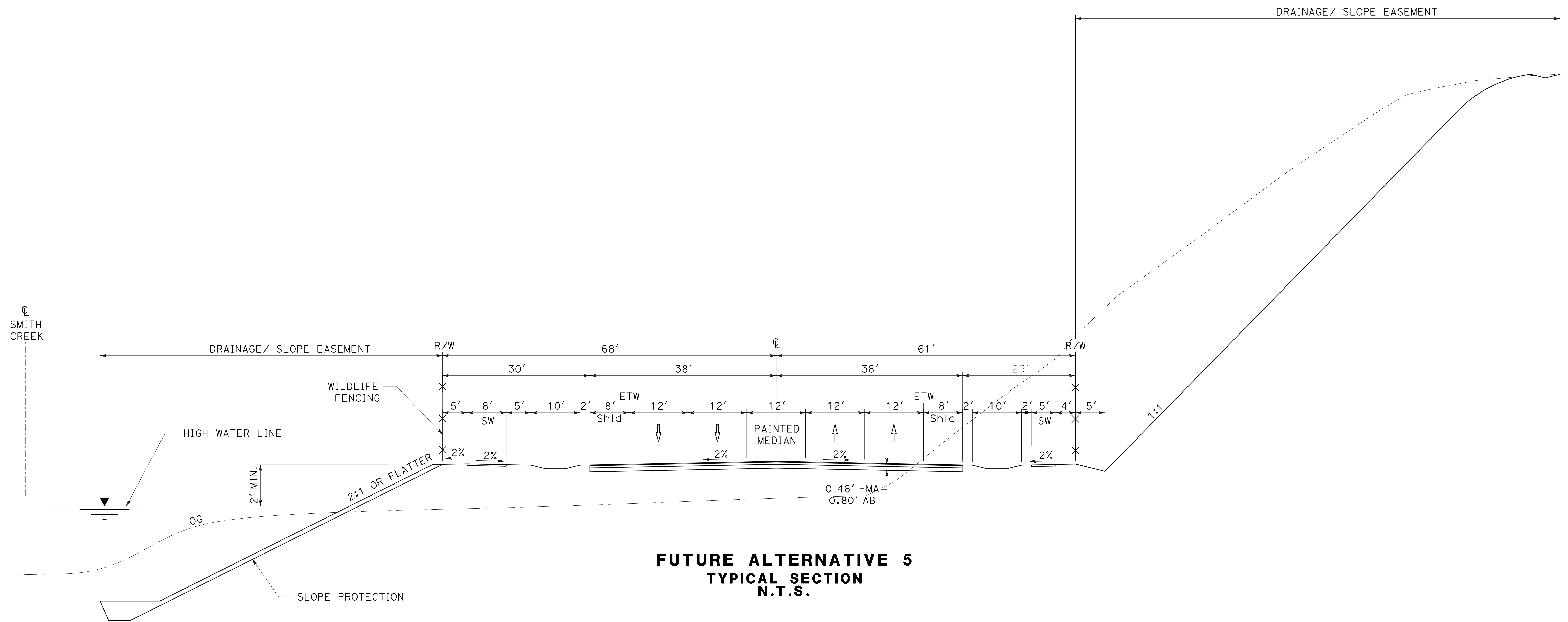
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 TYPICAL SECTIONS

SHEET 2 OF 24  
 NOVEMBER 7, 2018



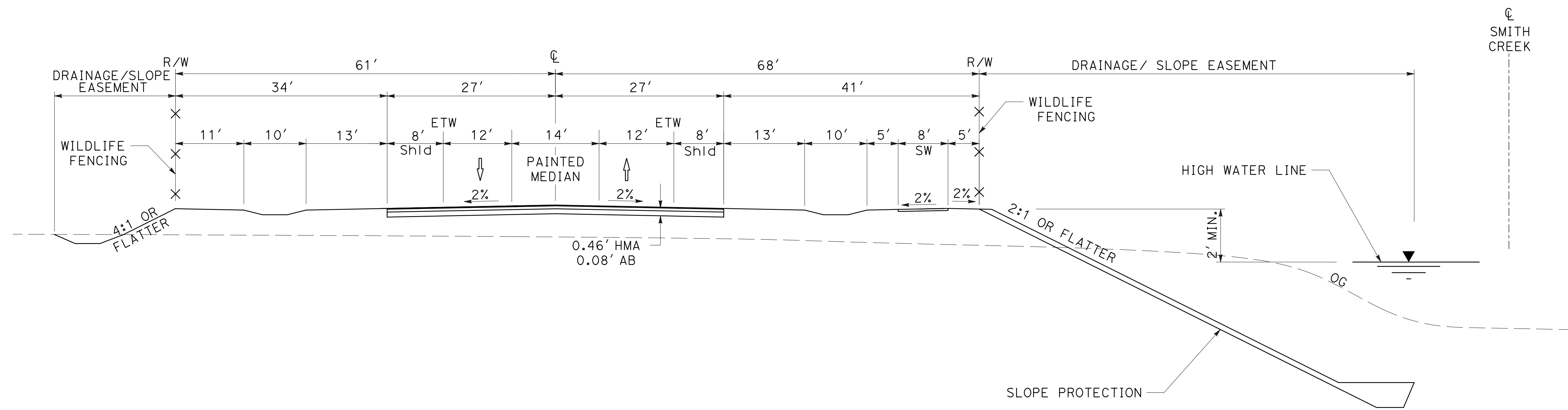
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 TYPICAL SECTIONS

SHEET 3 OF 24  
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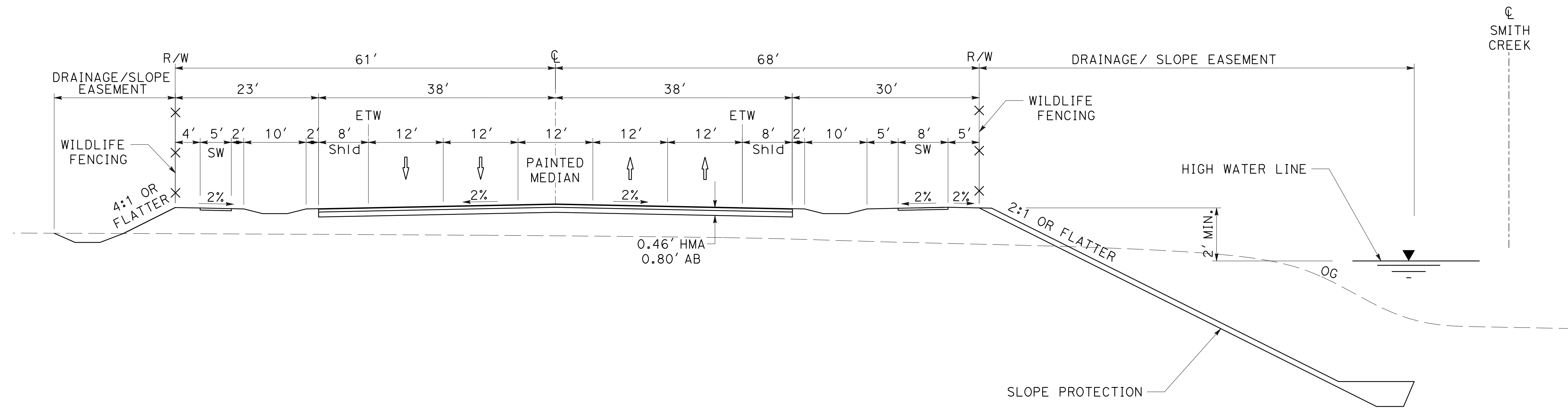


I-10 BYPASS PROJECT  
TYPICAL SECTIONS

SHEET 4 OF 24  
NOVEMBER 7, 2018

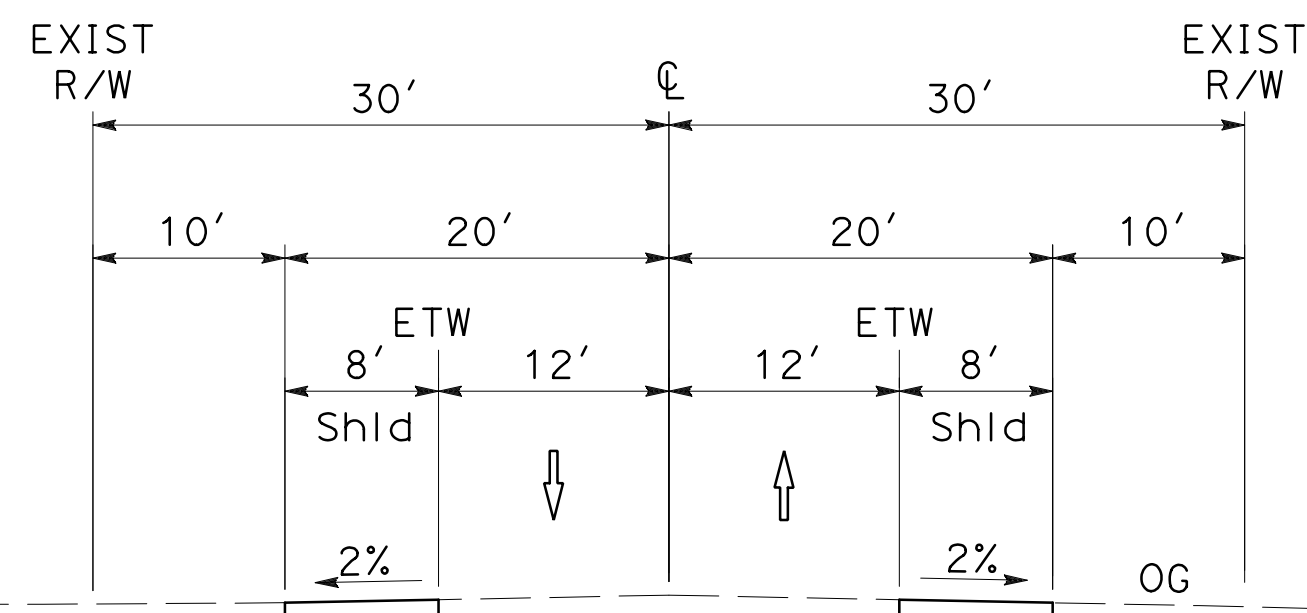


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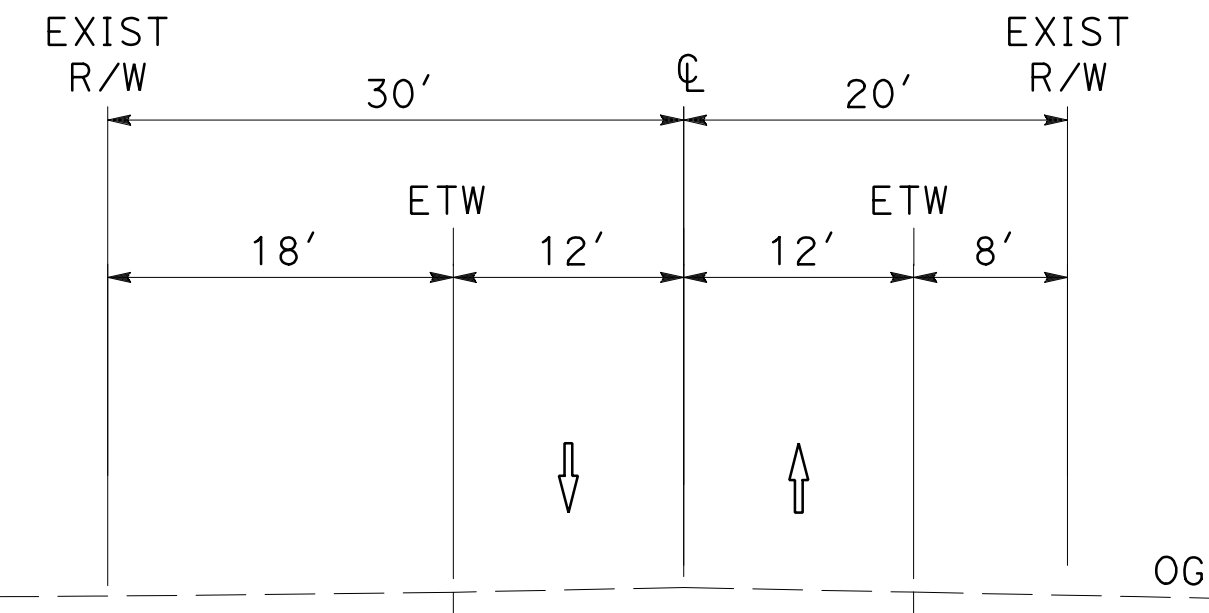


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TYPICAL SECTION  
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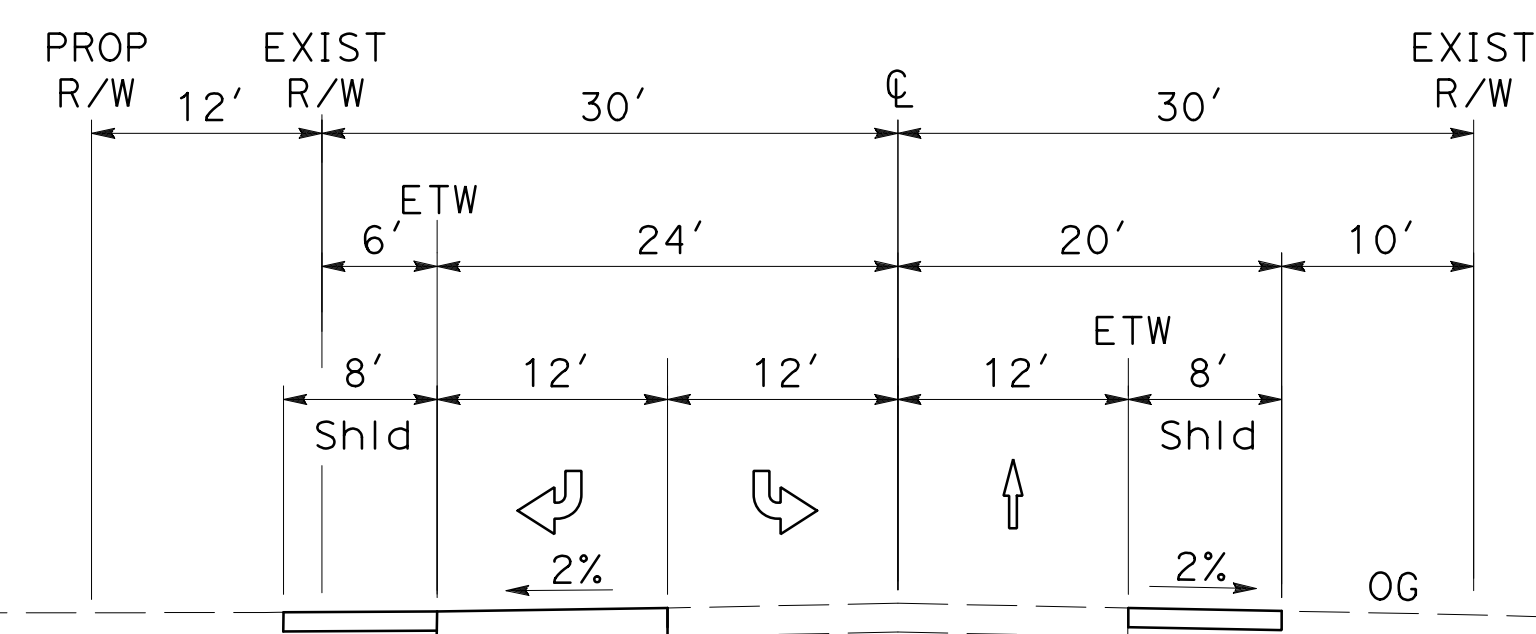




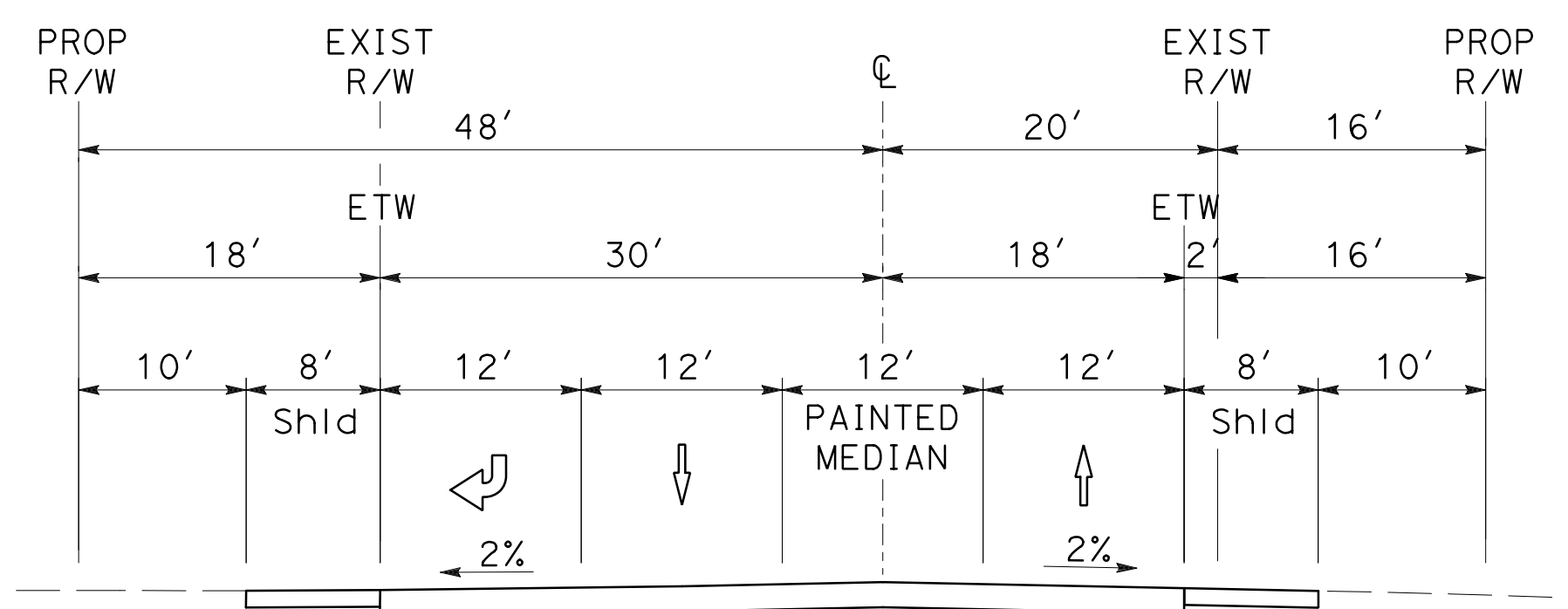
**APACHE TRAIL  
(BONITA AVE TO UPRR R/W)  
TYPICAL SECTION  
N.T.S.**



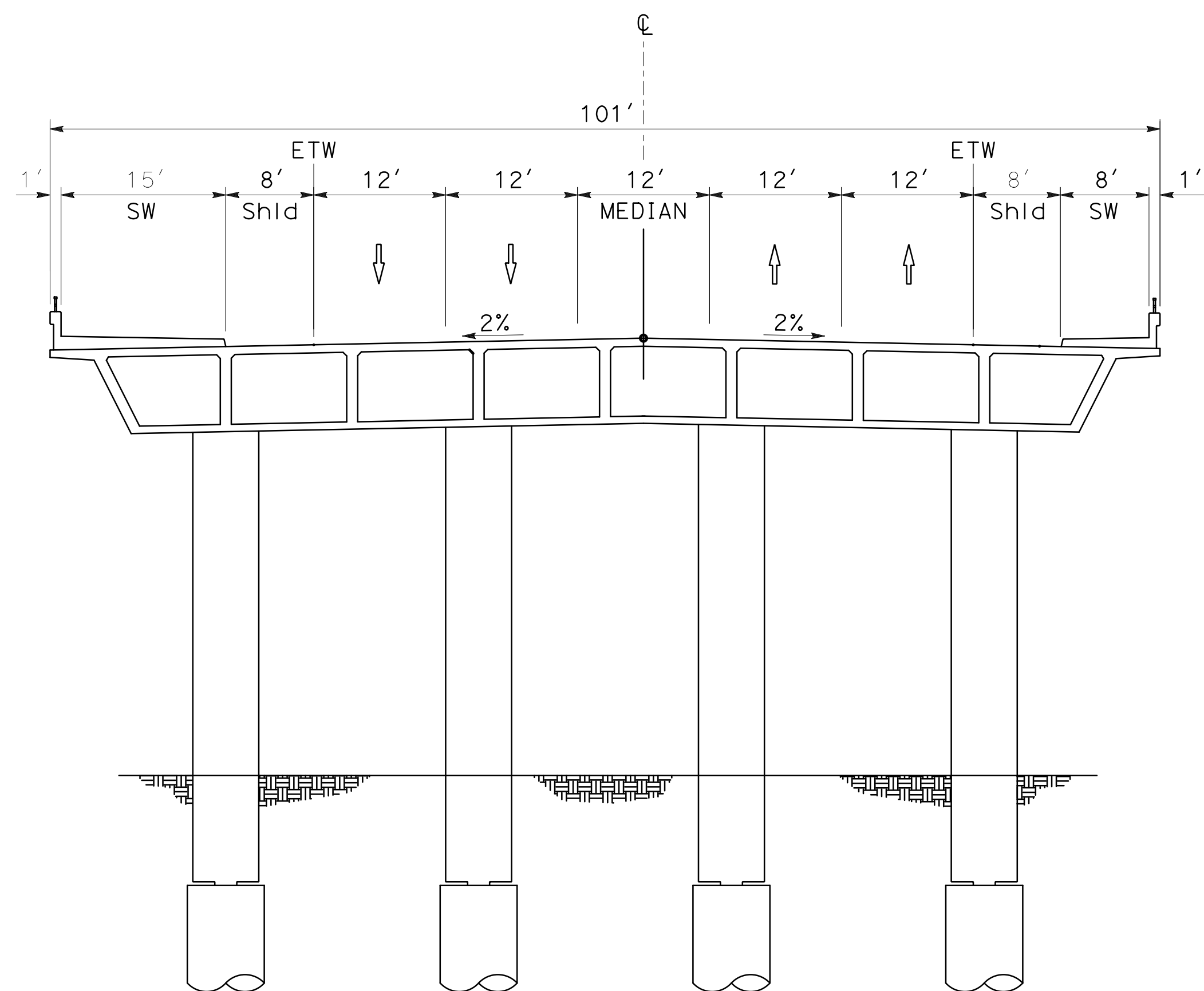
**BONITA AVENUE  
(EAST OF APACHE TRAIL)  
TYPICAL SECTION  
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**APACHE TRAIL  
(AT INTERSECTION WITH BONITA AVENUE)  
TYPICAL SECTION  
N.T.S.**

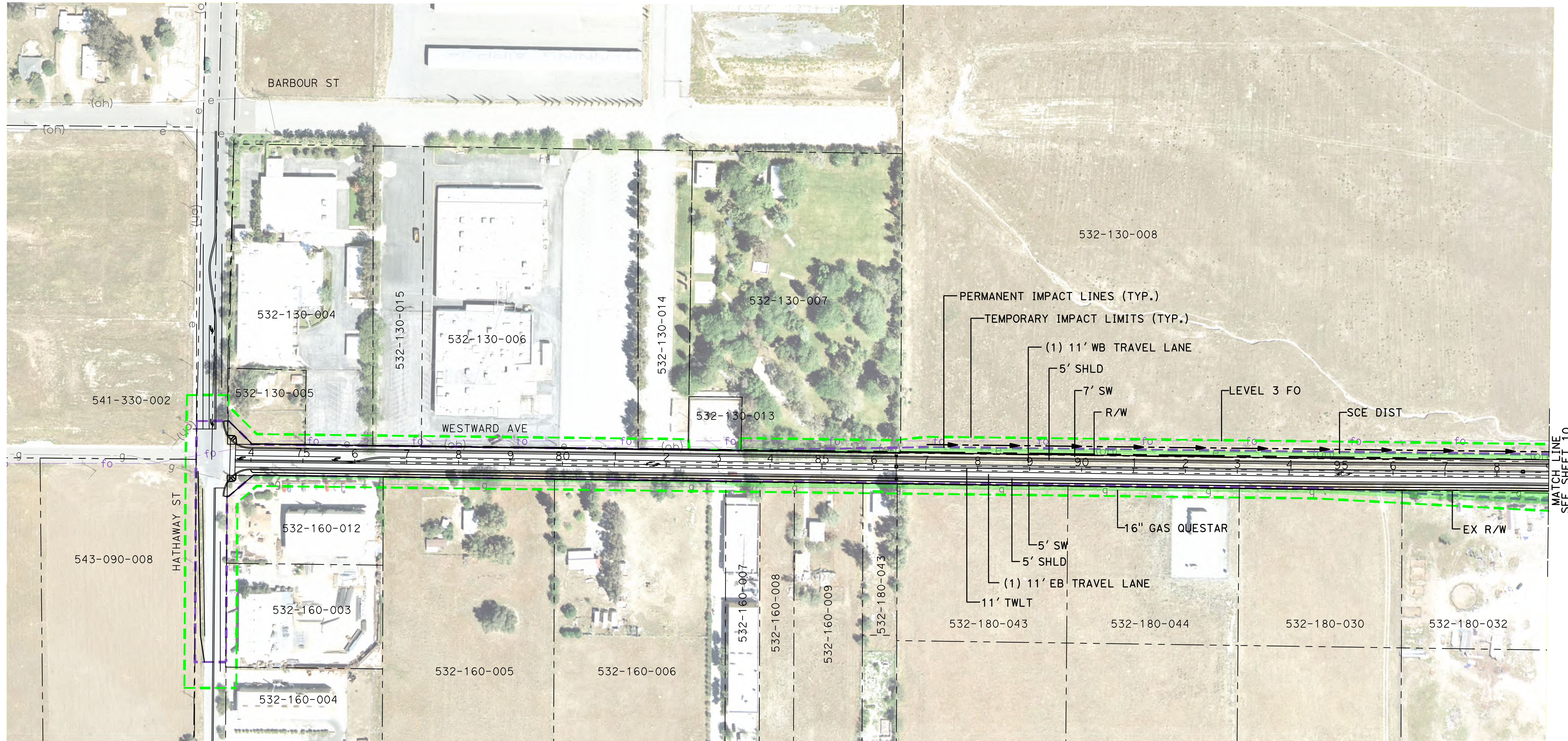


**BONITA AVENUE  
(AT INTERSECTION WITH APACHE TRAIL)  
TYPICAL SECTION  
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**ULTIMATE BRIDGE  
TYPICAL SECTION  
N.T.S.**



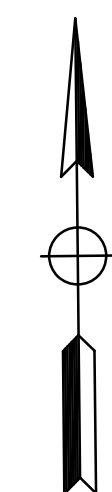


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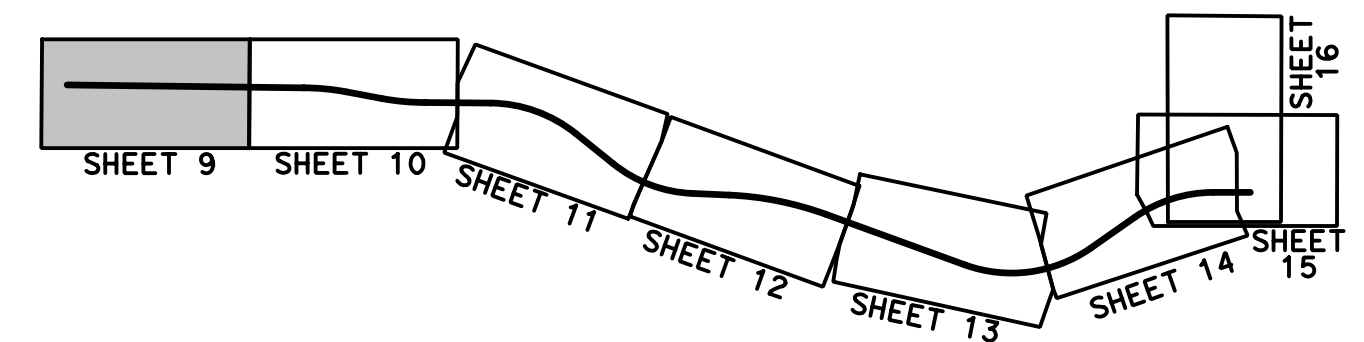
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	PERMANENT IMPACT LIMITS		ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
	EX R/W/PARCEL LINES		WILDLIFE CROSSING
	PROP R/W		
	DRAINAGE SWALE		
	CUT		
	FILL		

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



SCALE: 1" = 100'

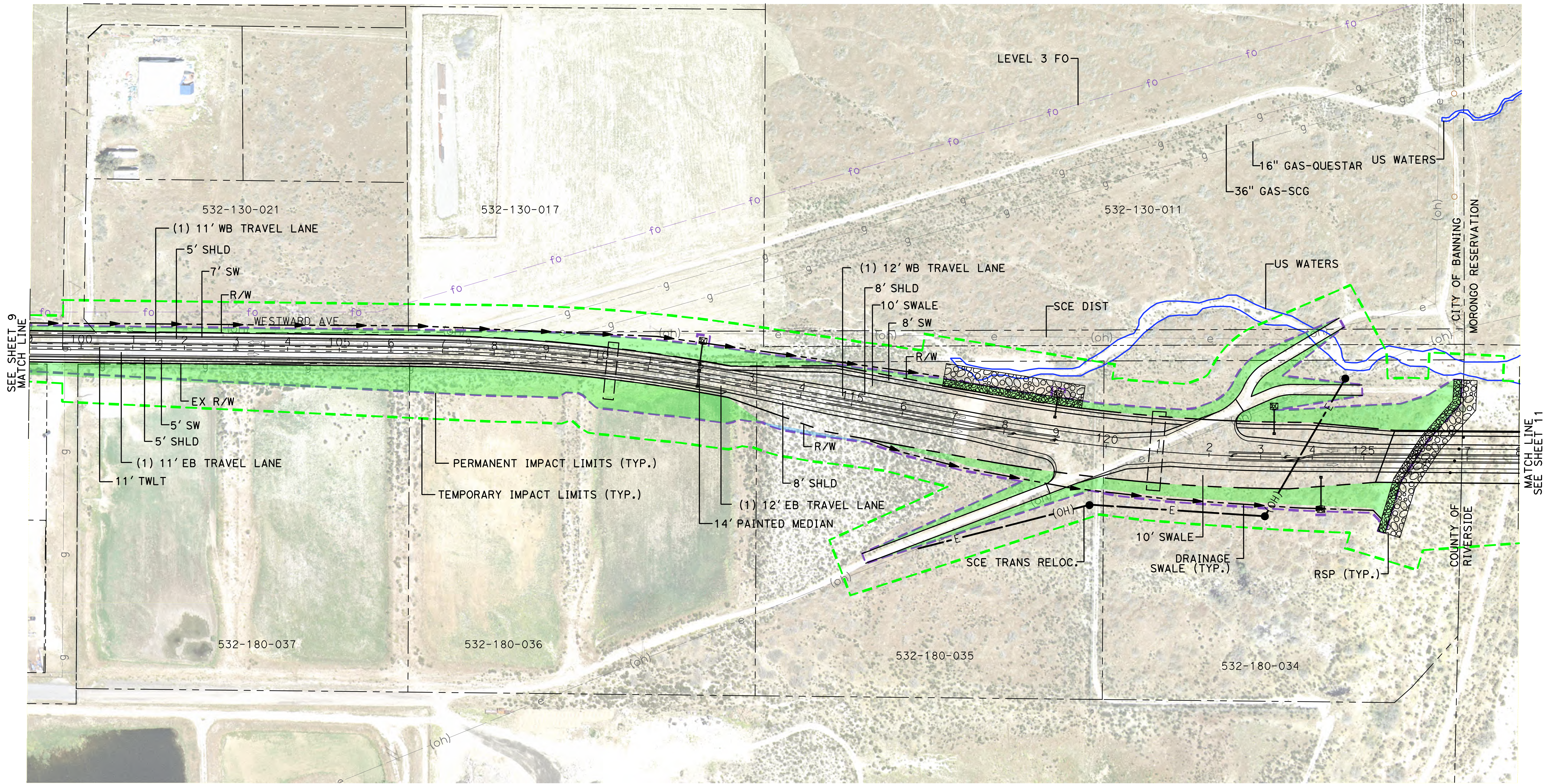


**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 9 OF 24  
NOVEMBER 7, 2018**





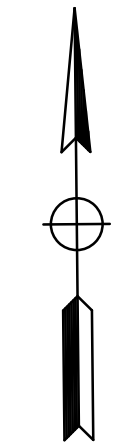
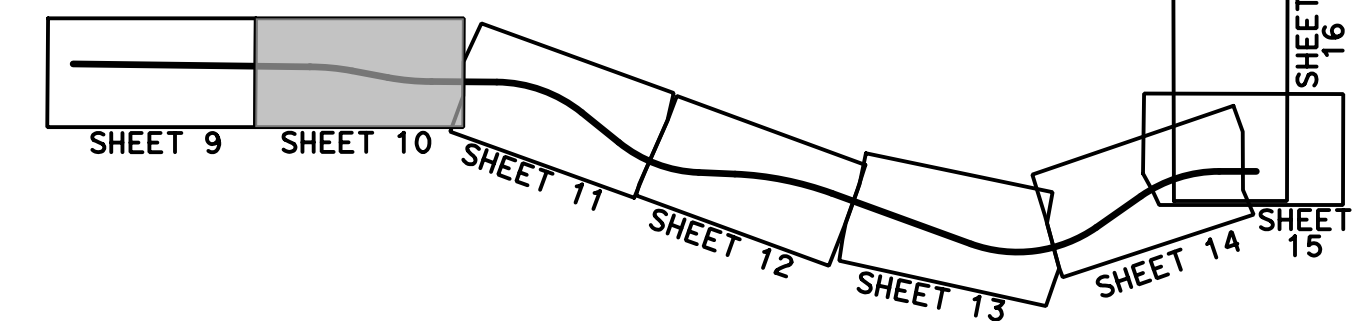


**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL
- BELOW GROUND ROCK SLOPE PROTECTION
- ■ ■ ■ ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



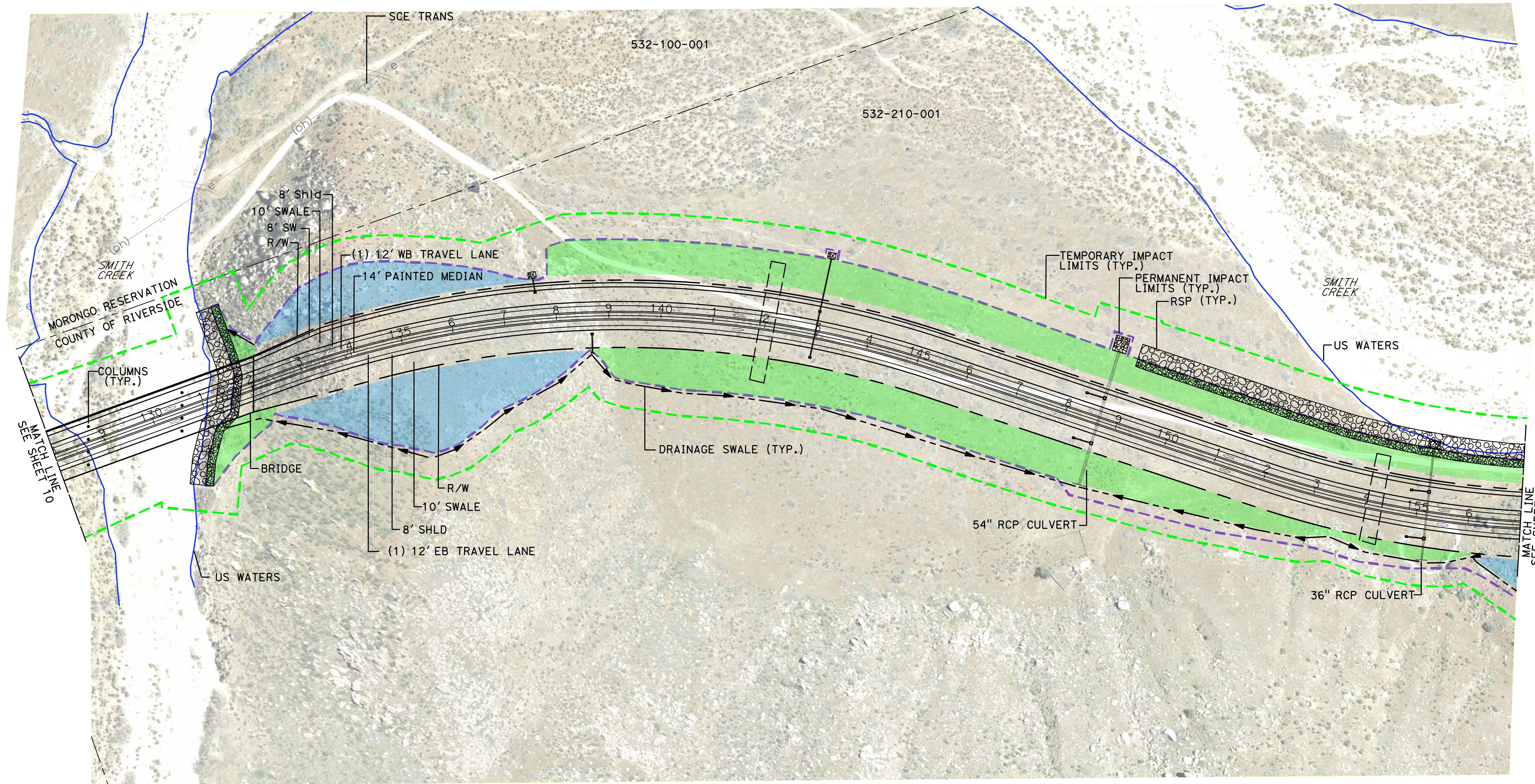
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 10 OF 24  
NOVEMBER 7, 2018**





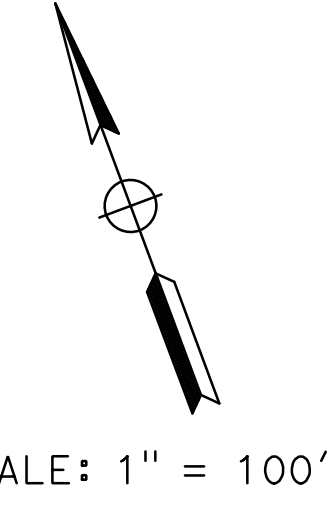
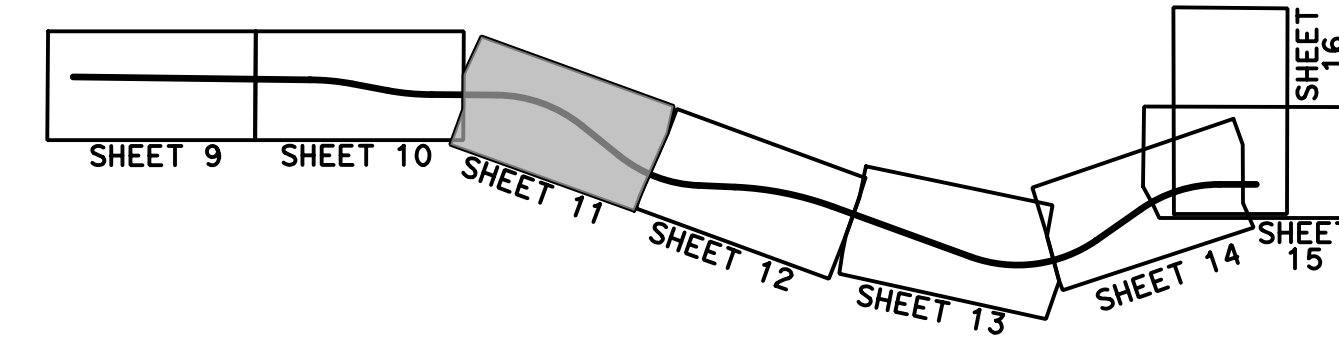


**LEGEND**

- |  |                         |  |   |
|--|-------------------------|--|---|
|  | TEMPORARY IMPACT LIMITS |  | BELOW GROUND ROCK SLOPE PROTECTION          |
|  | PERMANENT IMPACT LIMITS |  | ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION |
|  | EX R/W/PARCEL LINES     |  | WILDLIFE CROSSING                           |
|  | PROP R/W                |  |   |
|  | DRAINAGE SWALE          |  |   |
|  | CUT                     |  |   |
|  | FILL                    |  |   |

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC

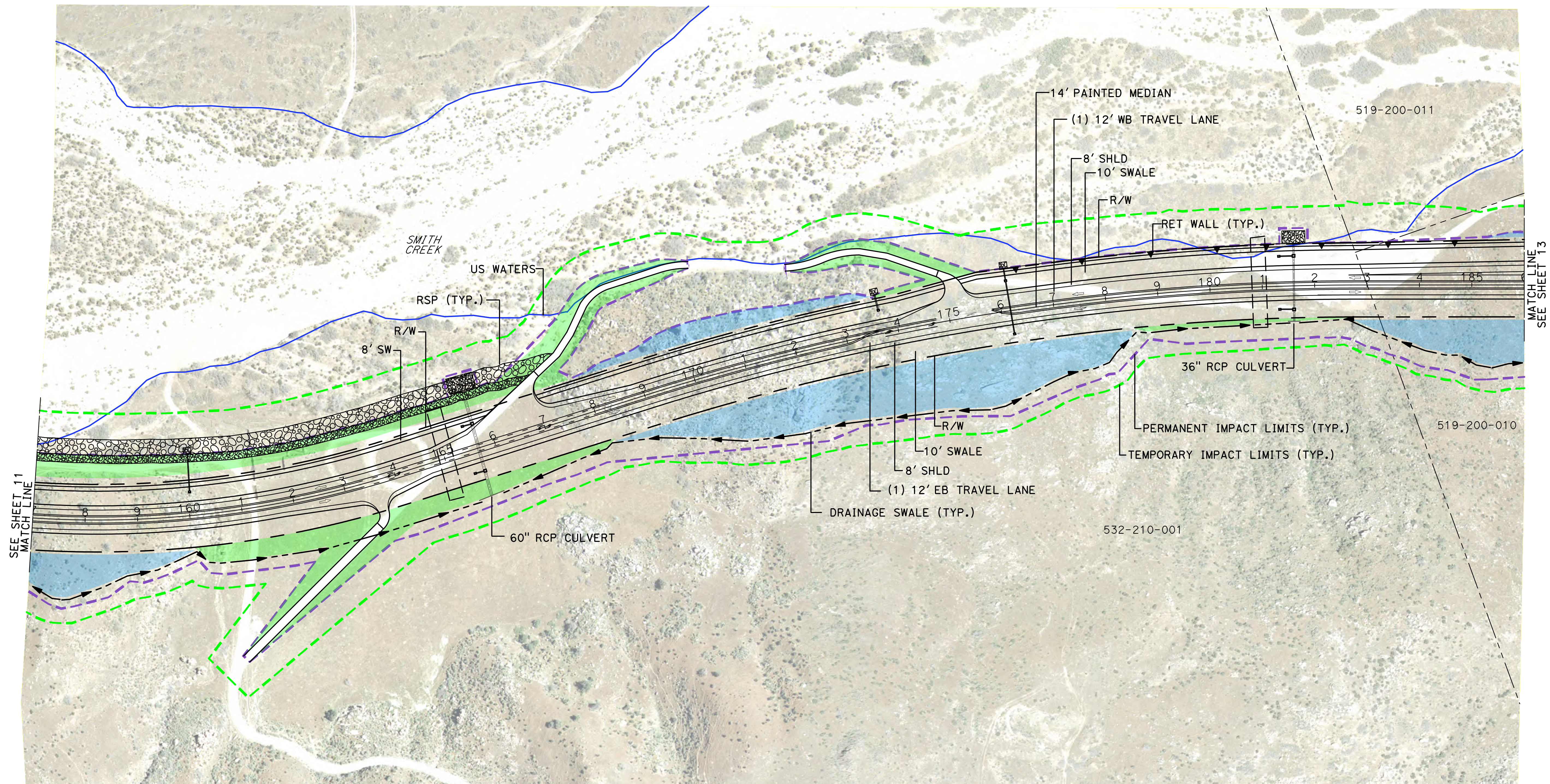


**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 11 OF 24  
NOVEMBER 7, 2018**





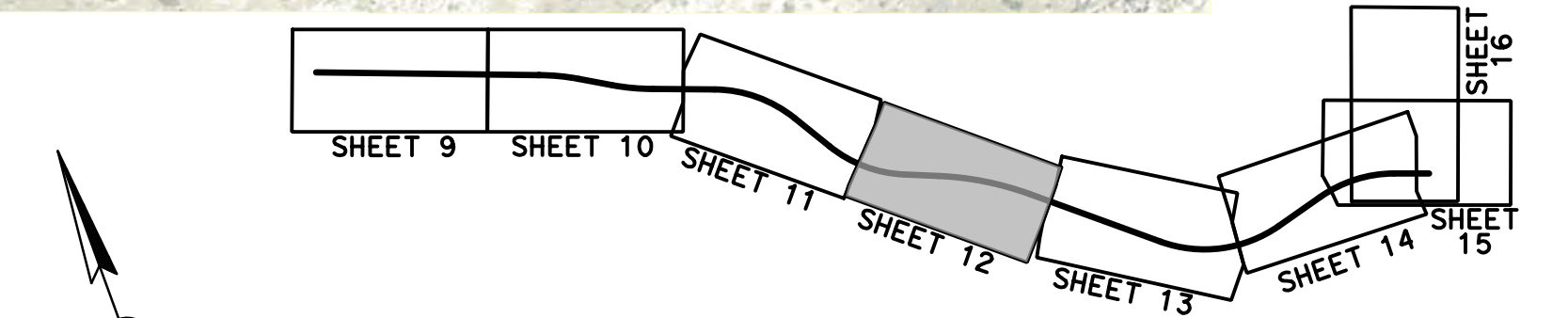


SEE SHEET 11  
MATCH LINE

MATCH LINE  
SEE SHEET 13

LEGEND	
	TEMPORARY IMPACT LIMITS
	PERMANENT IMPACT LIMITS
	EX R/W/PARCEL LINES
	PROP R/W
	DRAINAGE SWALE
	CUT
	FILL
	BELOW GROUND ROCK SLOPE PROTECTION
	ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
	WILDLIFE CROSSING

ABBREVIATIONS			
RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON
SHLD	SHOULDER	R/W	RIGHT-OF-WAY
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD
RET	RETAINING	EX	EXISTING
PROP	PROPOSED	fo	EXISTING FIBER OPTIC
tc	EXISTING TELECOM	oh	EXISTING OVERHEAD UTILITY
g	EXISTING GAS	e	EXISTING ELECTRIC



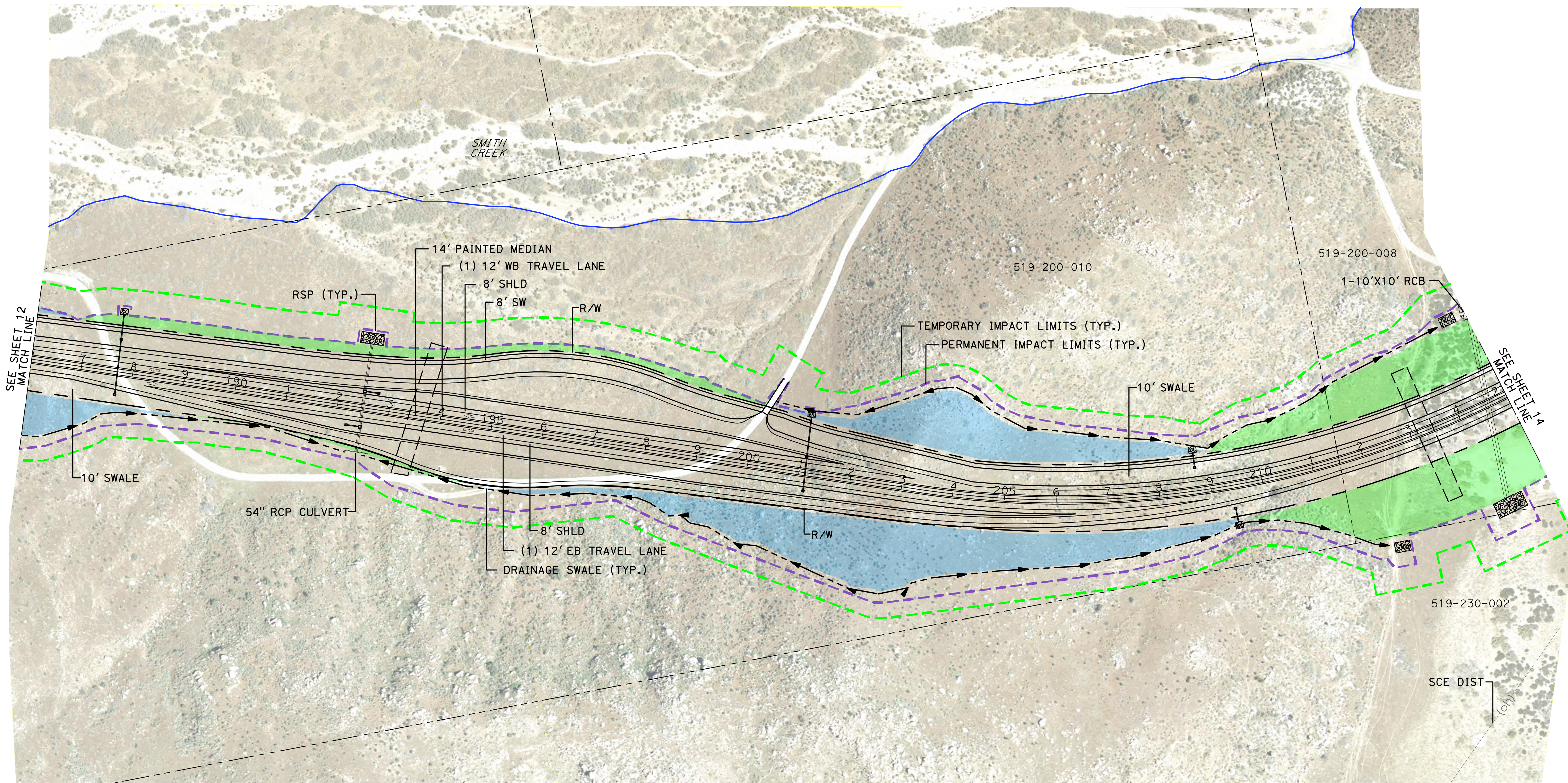
**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 12 OF 24  
NOVEMBER 7, 2018**

SCALE: 1" = 100'





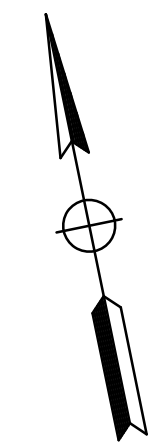
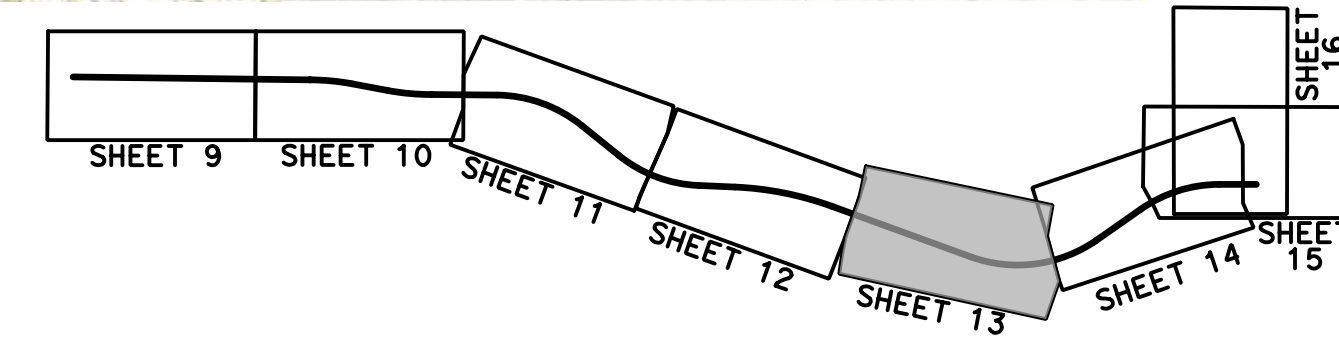


**LEGEND**

- - - - TEMPORARY IMPACT LIMITS
- - - - PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL
- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



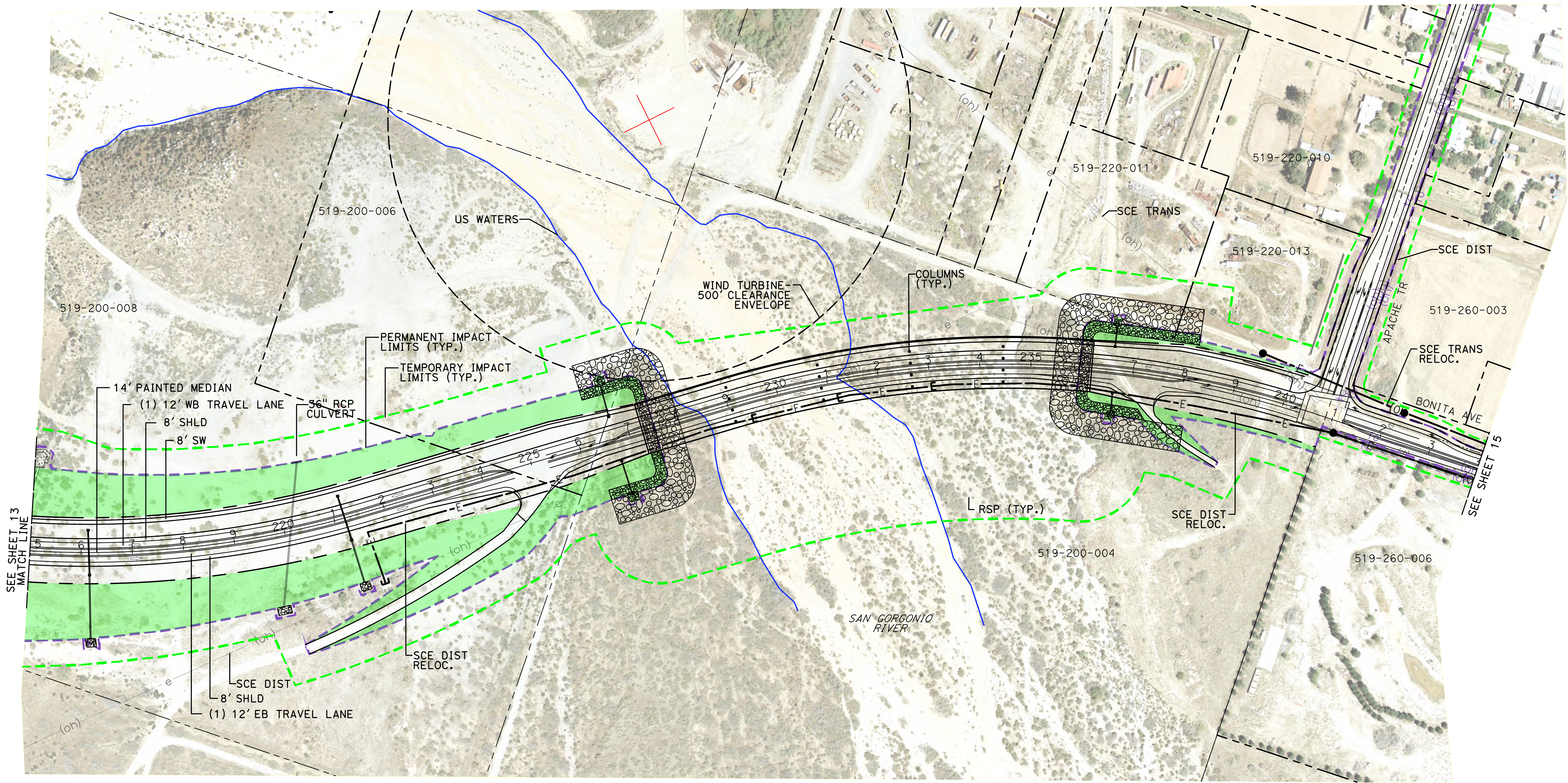
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 13 OF 24  
NOVEMBER 7, 2018**





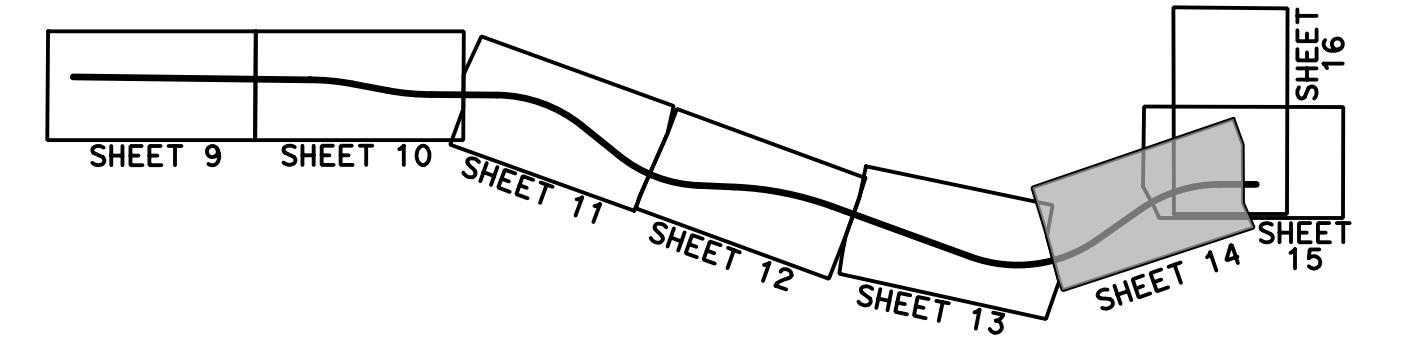


**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL
- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
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**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

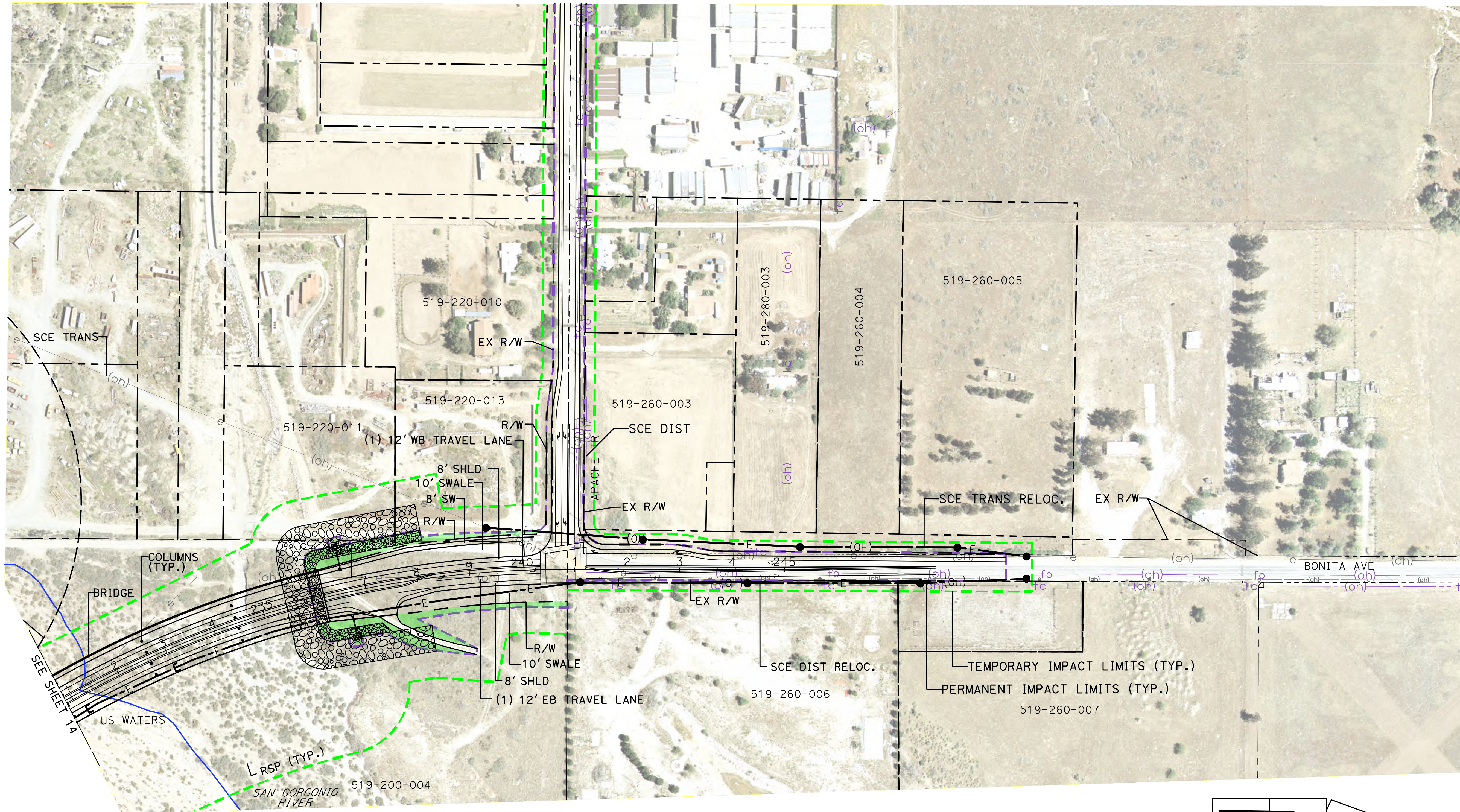
**SHEET 14 OF 24  
NOVEMBER 7, 2018**

SCALE: 1" = 100'





ENV. FOOTPRINT ENCOMPASSES  
EXISTING STREET R/W UP TO  
UPRR R/W



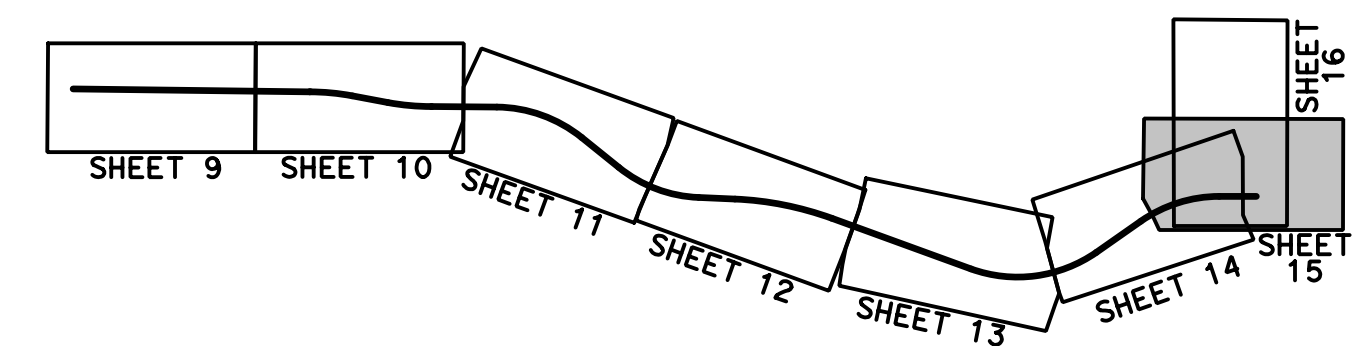
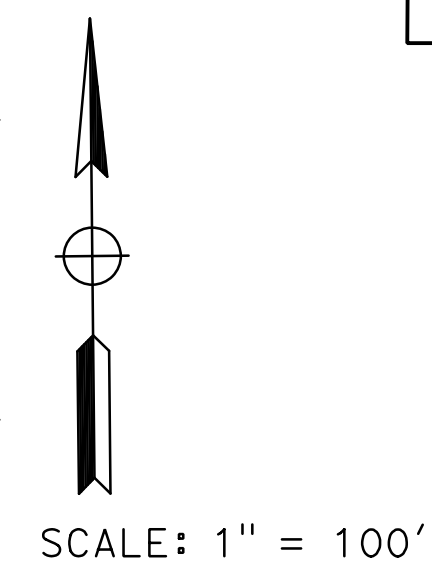
**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL

- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC

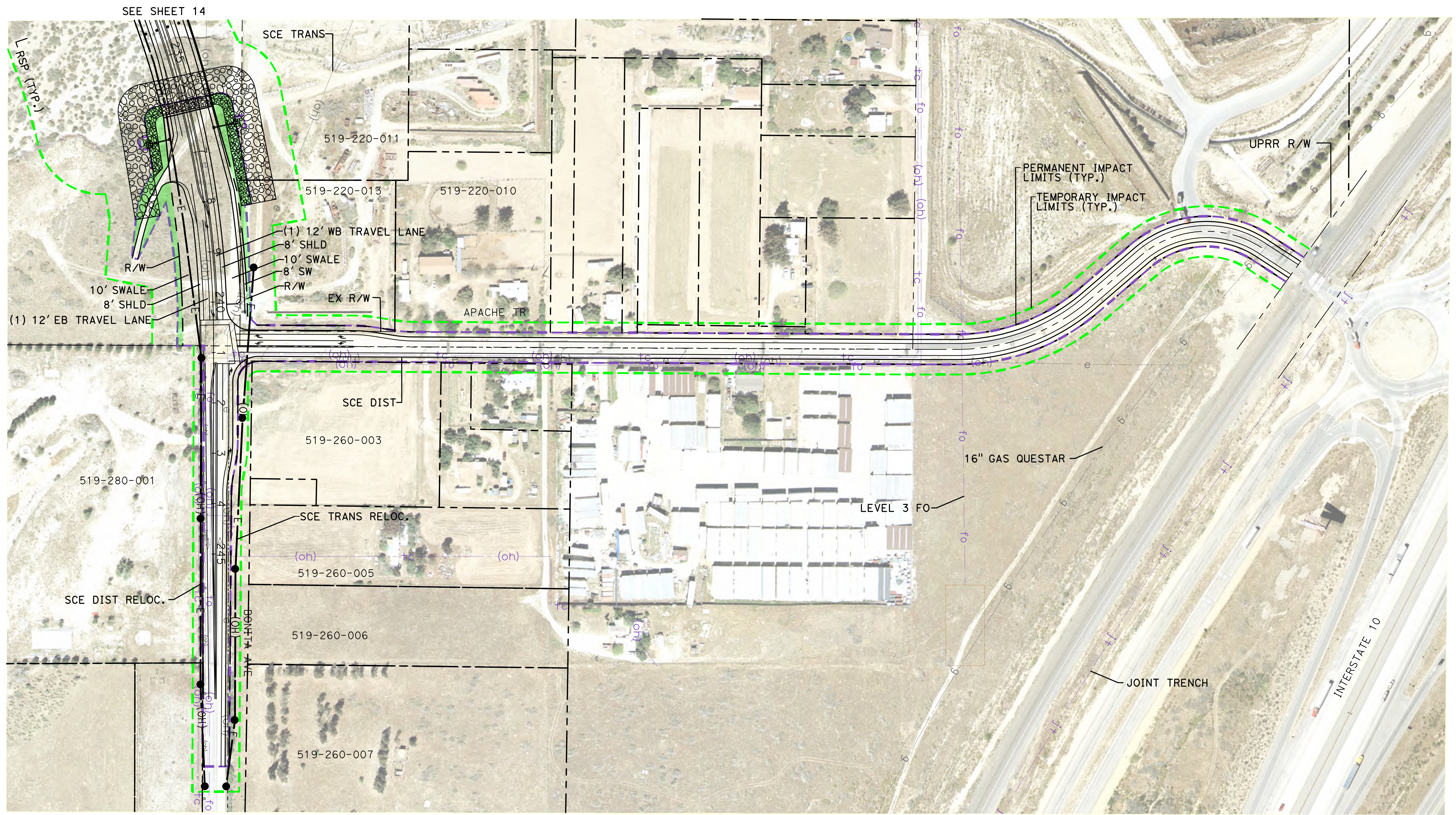


**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 15 OF 24  
NOVEMBER 7, 2018**





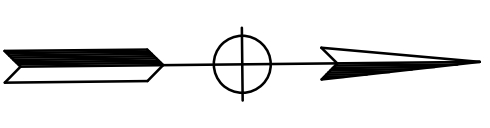
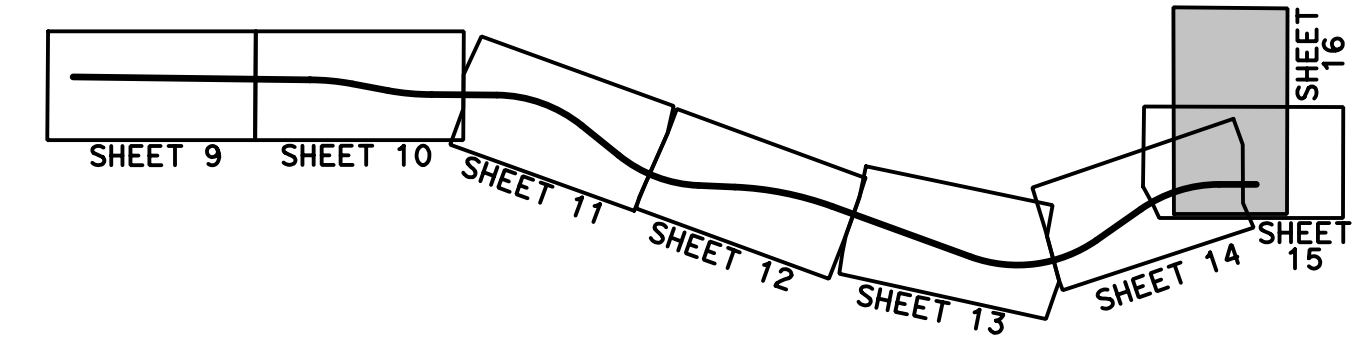


**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL
- BELOW GROUND ROCK SLOPE PROTECTION
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**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



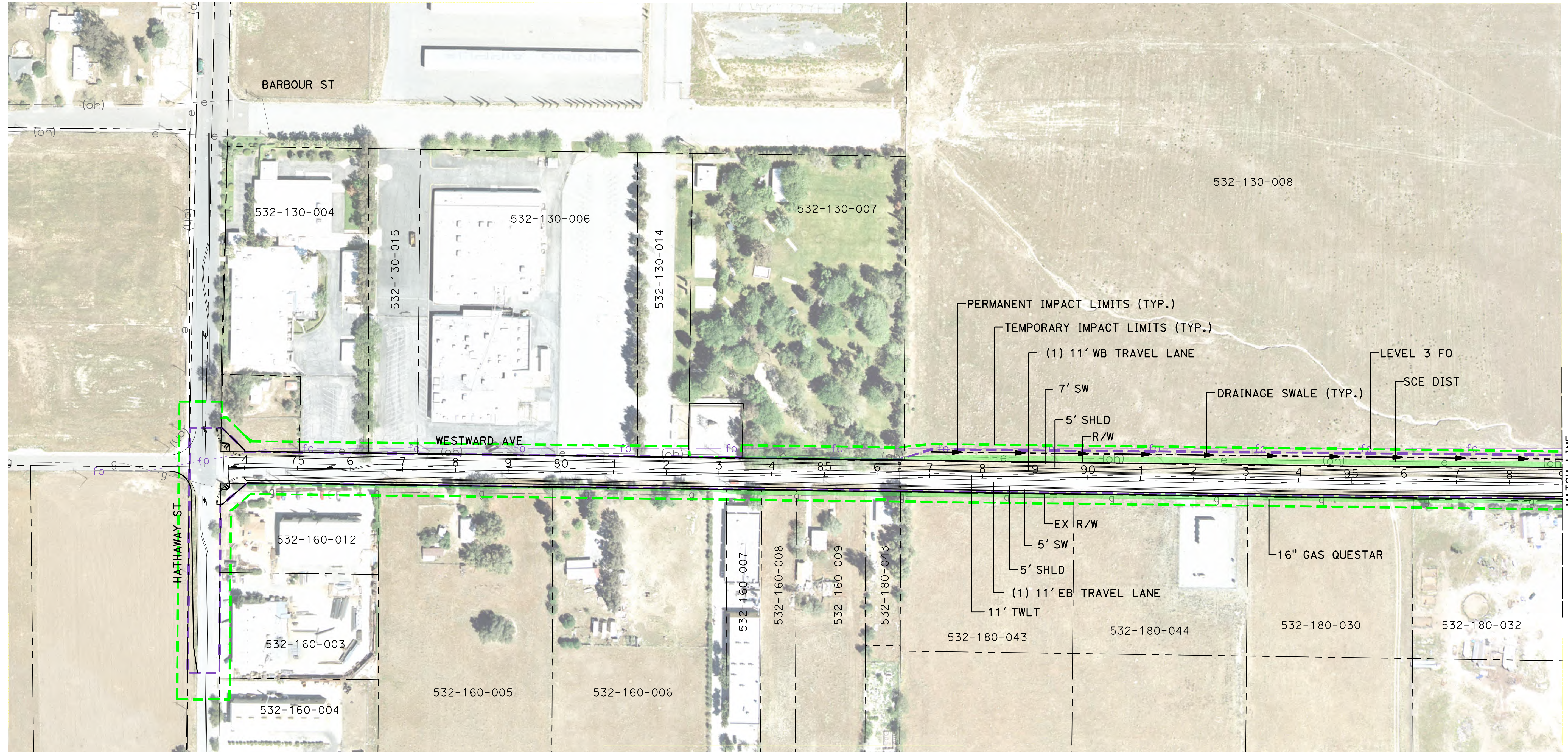
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 16 OF 24  
NOVEMBER 7, 2018**







MATCH LINE  
SEE SHEET 18

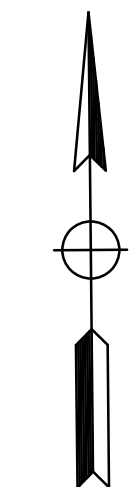
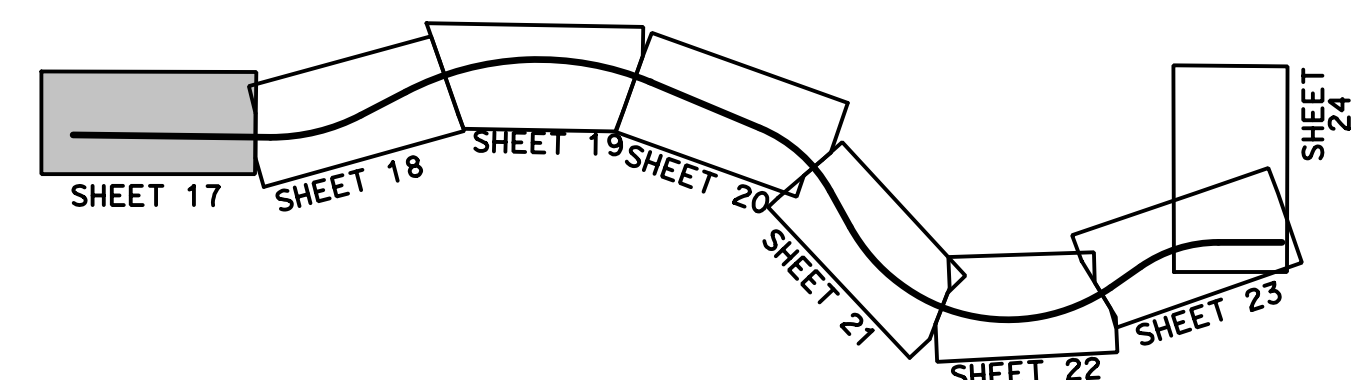
**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL

- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



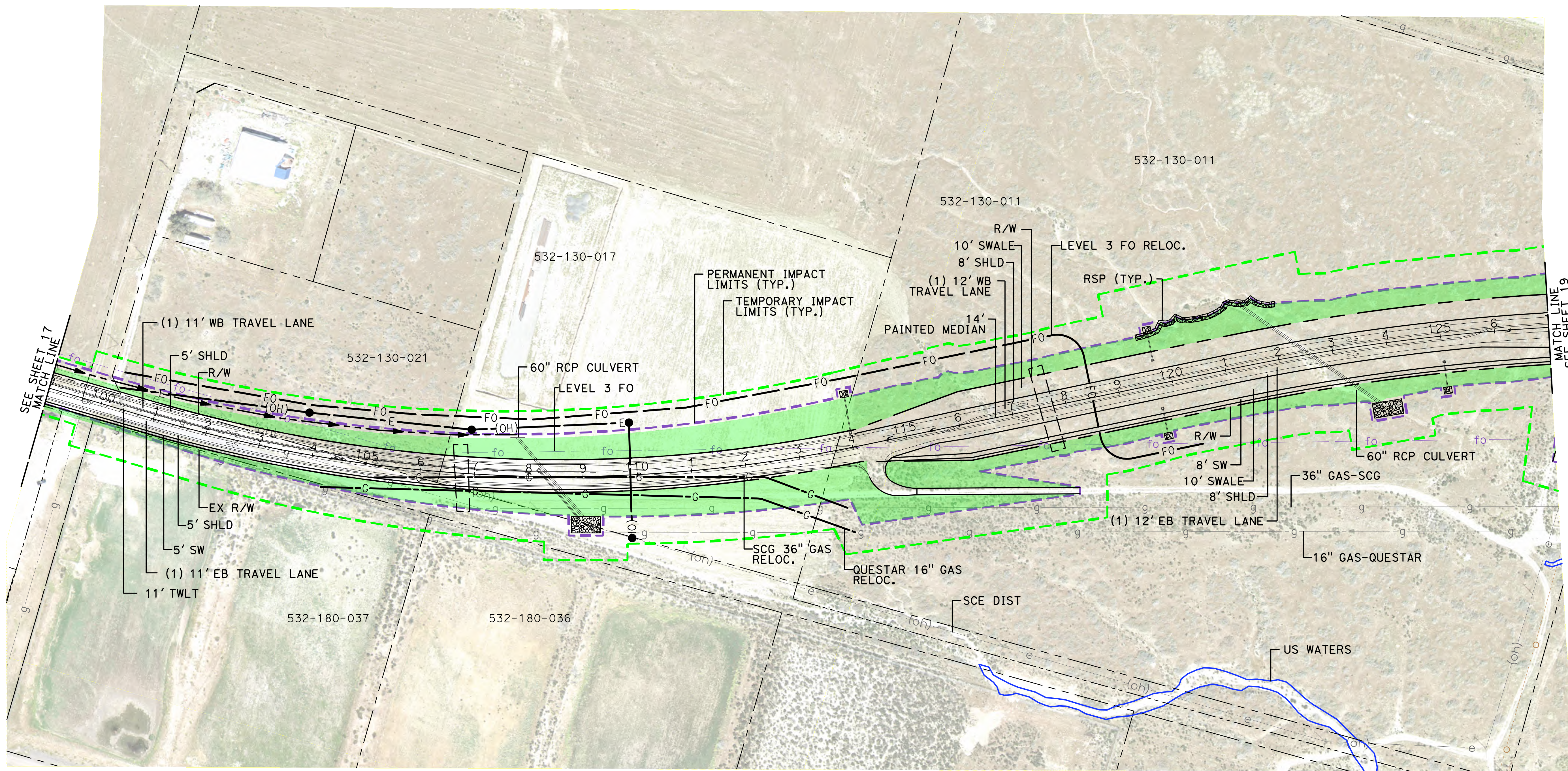
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 17 OF 24  
NOVEMBER 7, 2018**





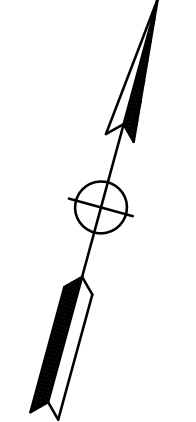
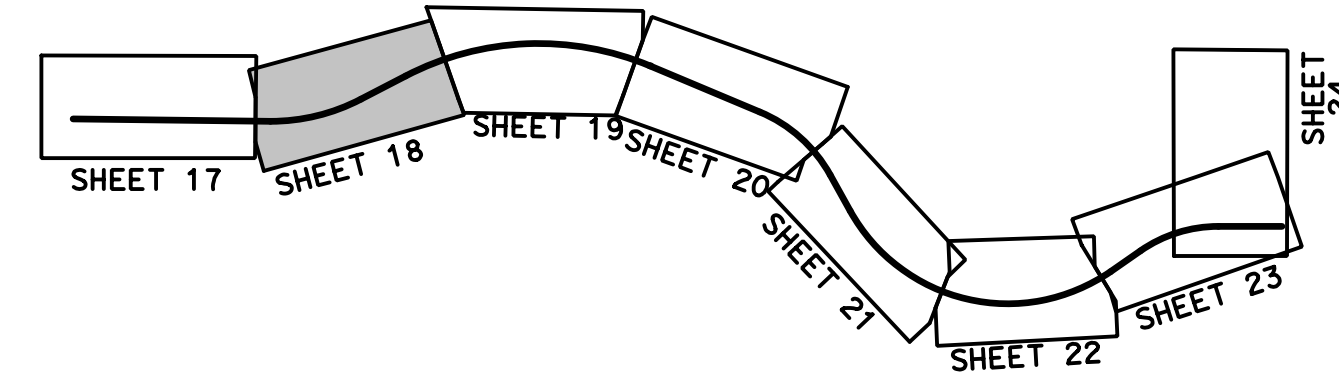


**LEGEND**

- |  |                         |  |   |
|--|-------------------------|--|---|
|  | TEMPORARY IMPACT LIMITS |  | BELOW GROUND ROCK SLOPE PROTECTION          |
|  | PERMANENT IMPACT LIMITS |  | ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION |
|  | EX R/W/PARCEL LINES     |  | WILDLIFE CROSSING                           |
|  | PROP R/W                |  |   |
|  | DRAINAGE SWALE          |  |   |
|  | CUT                     |  |   |
|  | FILL                    |  |   |

**ABBREVIATIONS**

- |        |              |      |                            |      |                           |
|--------|--------------|------|----------------------------|------|---------------------------|
| RELOC. | RELOCATION   | SCG  | SOUTHERN CALIFORNIA GAS    | RET  | RETAINING                 |
| DIST   | DISTRIBUTION | RSP  | ROCK SLOPE PROTECTION      | EX   | EXISTING                  |
| TRANS  | TRANSMISSION | SCE  | SOUTHERN CALIFORNIA EDISON | PROP | PROPOSED                  |
| SHLD   | SHOULDER     | R/W  | RIGHT-OF-WAY               | fo   | EXISTING FIBER OPTIC      |
| TYP.   | TYPICAL      | TWLT | TWO-WAY LEFT-TURN          | tc   | EXISTING TELECOM          |
| WB     | WESTBOUND    | RCB  | REINFORCED CONCRETE BOX    | oh   | EXISTING OVERHEAD UTILITY |
| EB     | EASTBOUND    | RCP  | REINFORCED CONCRETE PIPE   | g    | EXISTING GAS              |
| SW     | SIDEWALK     | UPRR | UNION PACIFIC RAILROAD     | e    | EXISTING ELECTRIC         |



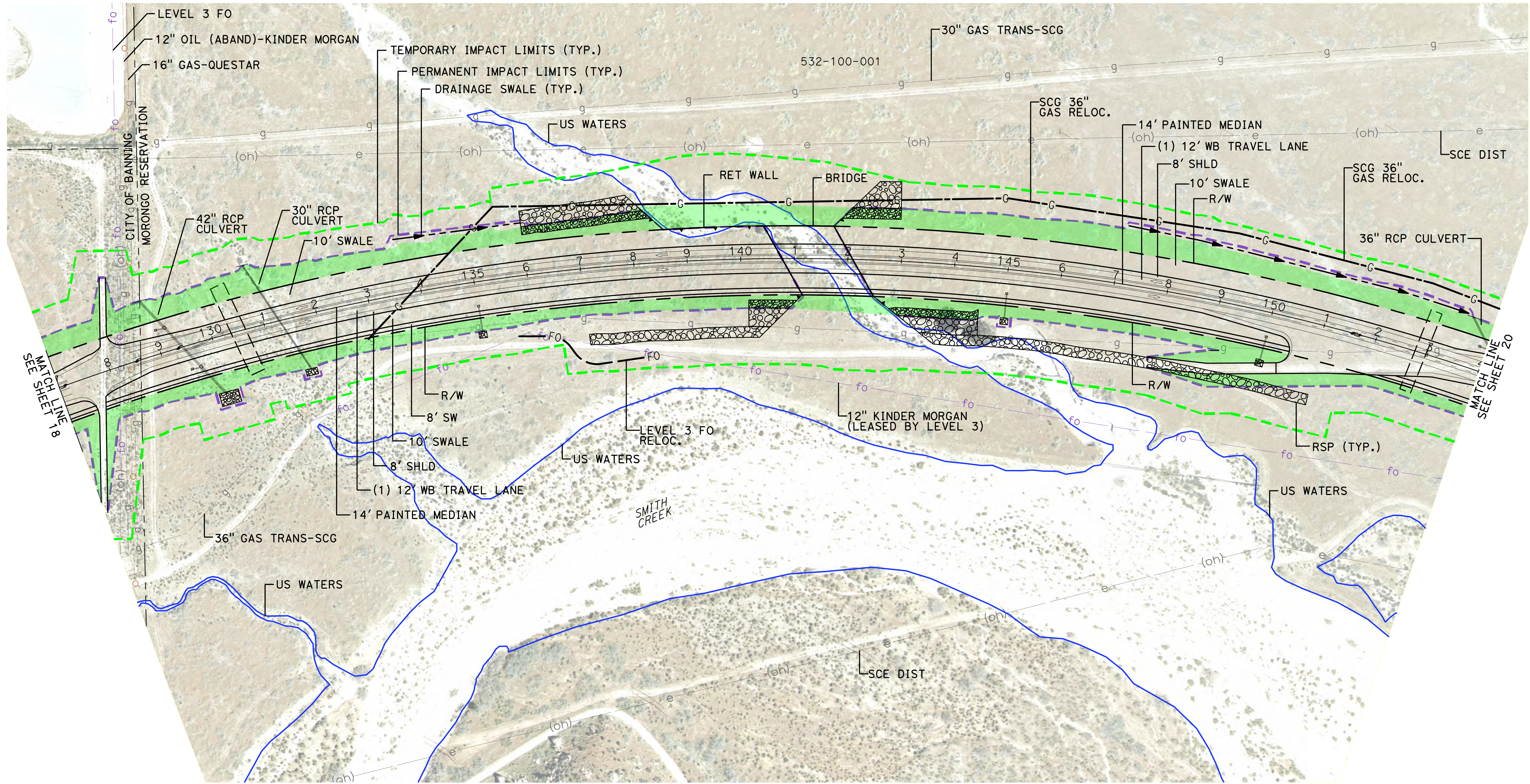
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 18 OF 24  
NOVEMBER 7, 2018**







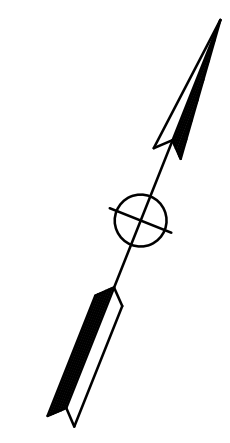
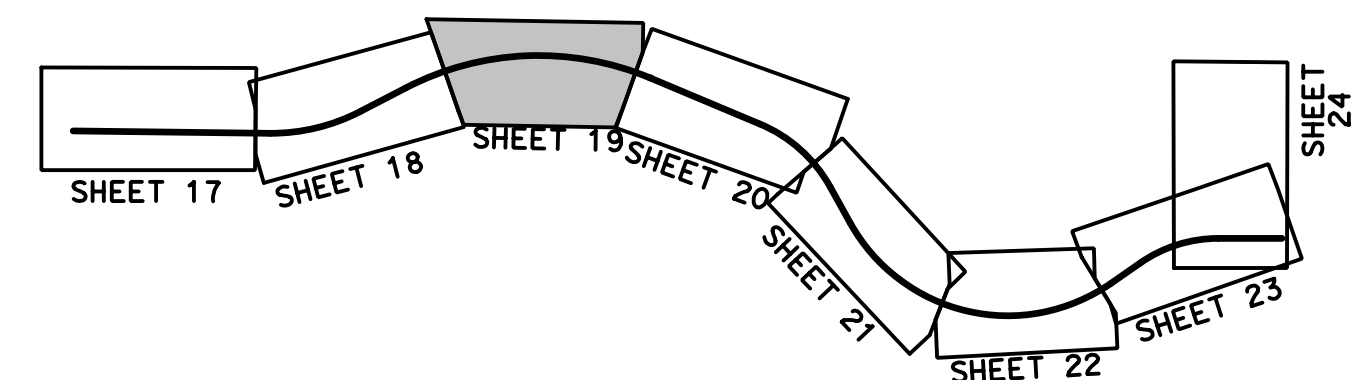
**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL

- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



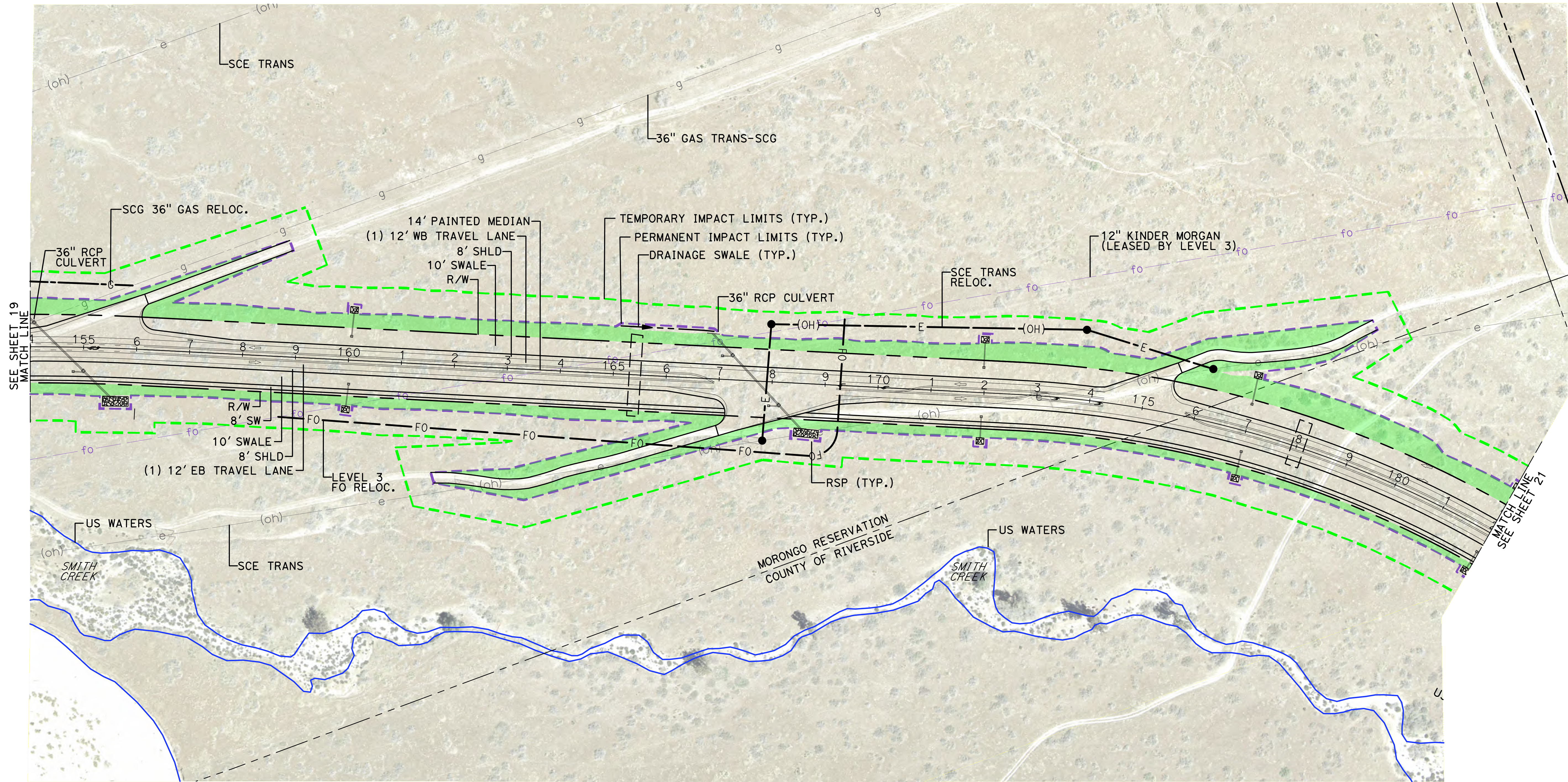
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 19 OF 24  
NOVEMBER 7, 2018**





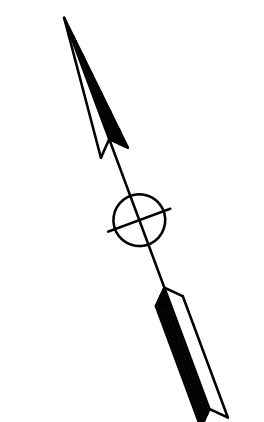
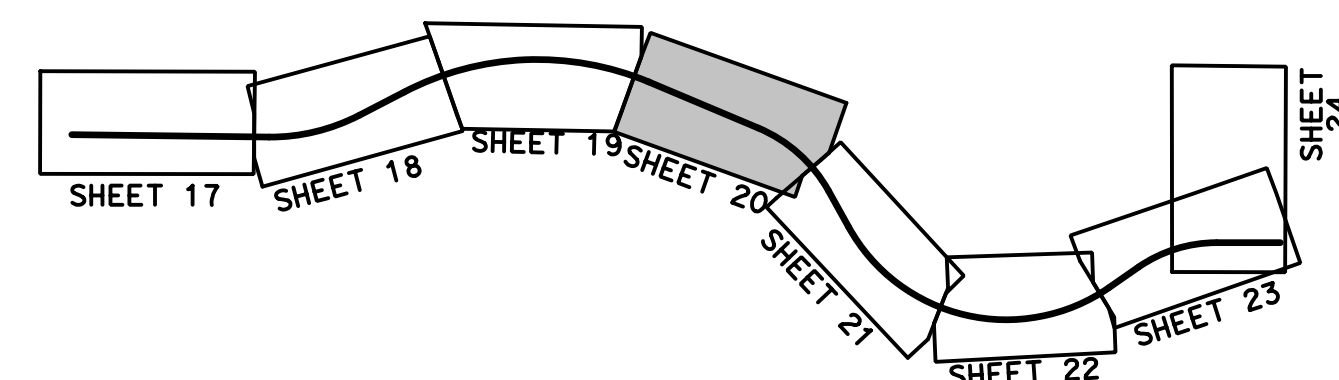


**LEGEND**

	TEMPORARY IMPACT LIMITS		BELOW GROUND ROCK SLOPE PROTECTION
	PERMANENT IMPACT LIMITS		ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
	EX R/W/PARCEL LINES		WILDLIFE CROSSING
	PROP R/W		
	DRAINAGE SWALE		
	CUT		
	FILL		

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



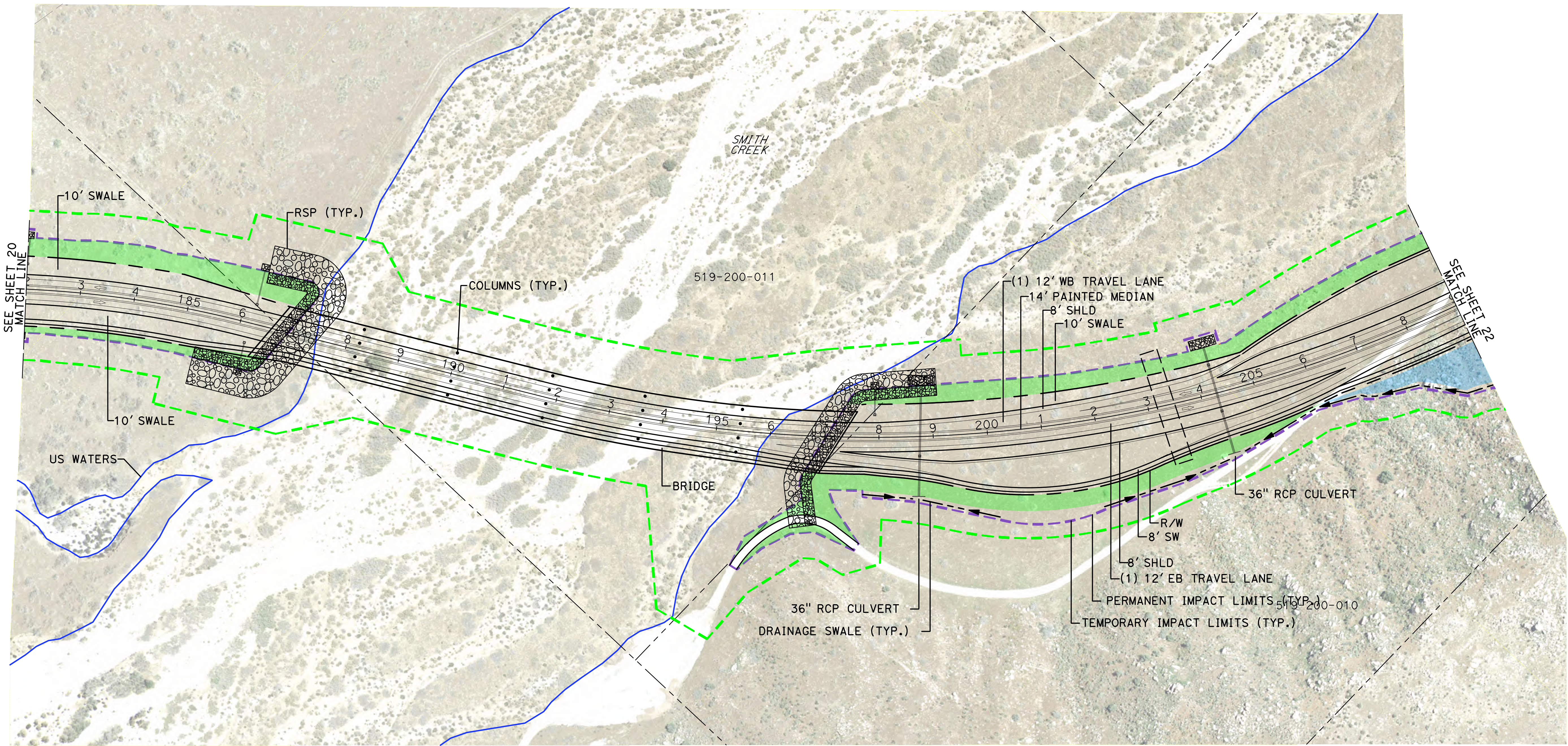
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 20 OF 24  
NOVEMBER 7, 2018**







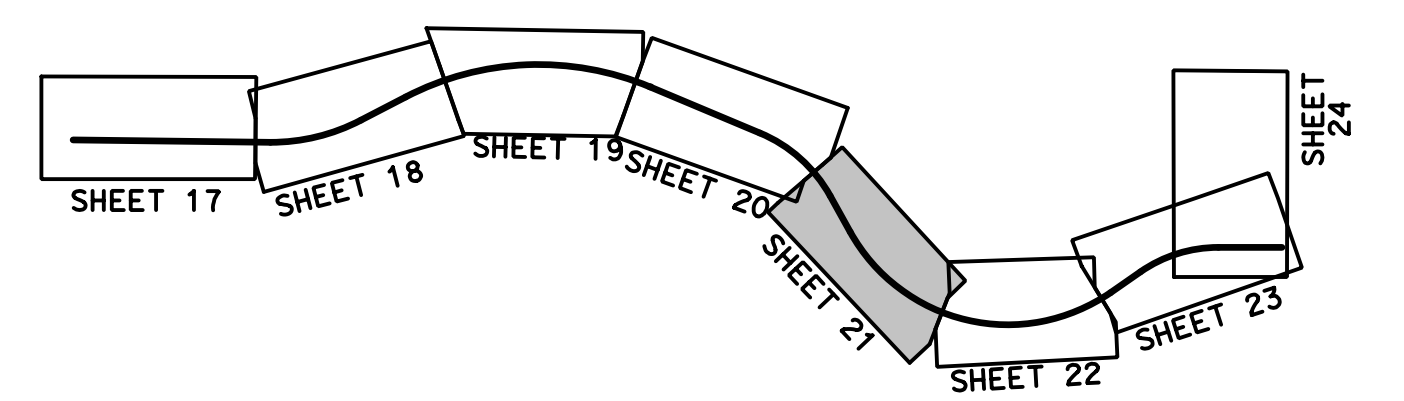
**LEGEND**

	TEMPORARY IMPACT LIMITS
	PERMANENT IMPACT LIMITS
	EX R/W/PARCEL LINES
	PROP R/W
	DRAINAGE SWALE
	CUT
	FILL

	BELOW GROUND ROCK SLOPE PROTECTION
	ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
	WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
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TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



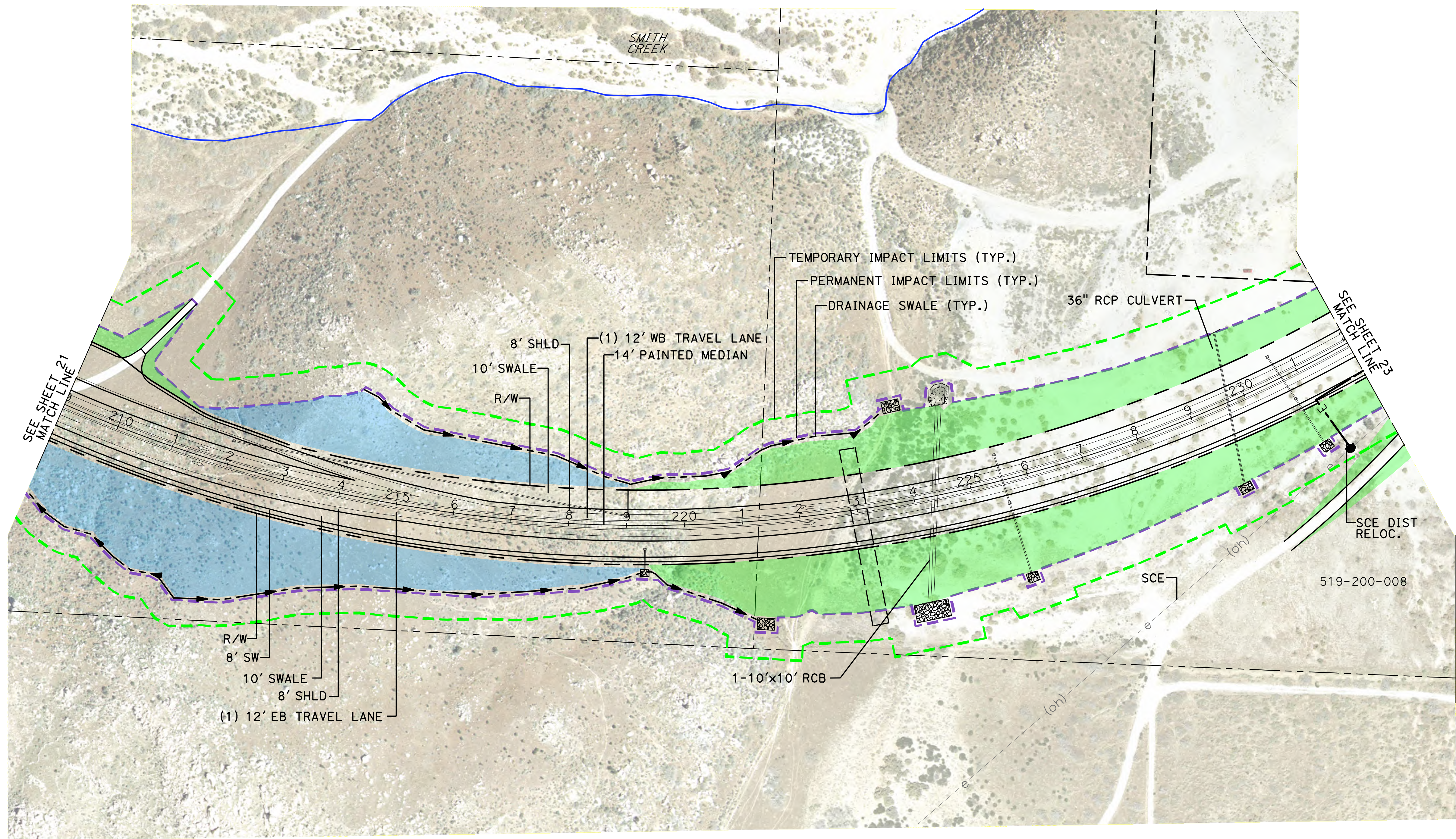
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 21 OF 24  
NOVEMBER 7, 2018**







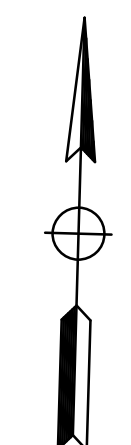
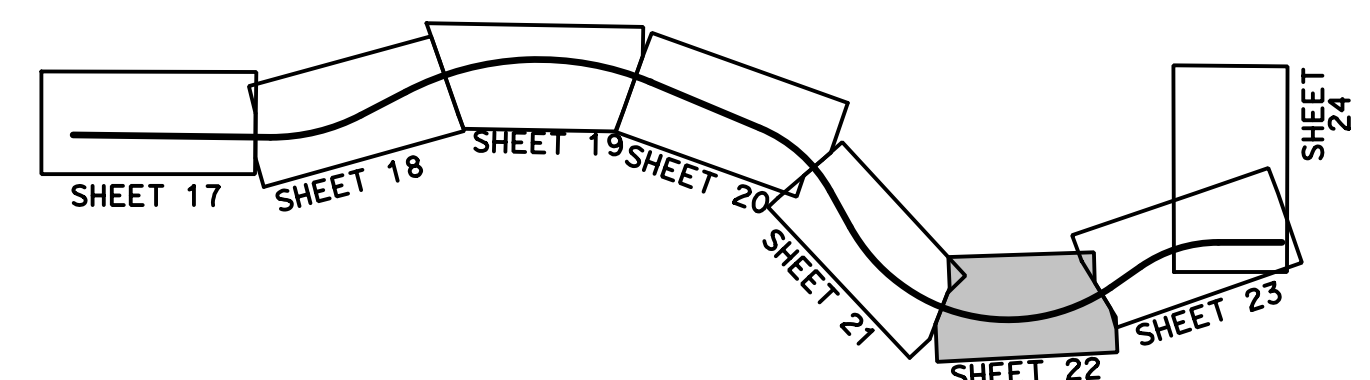
**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL

- BELOW GROUND ROCK SLOPE PROTECTION
- ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION
- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



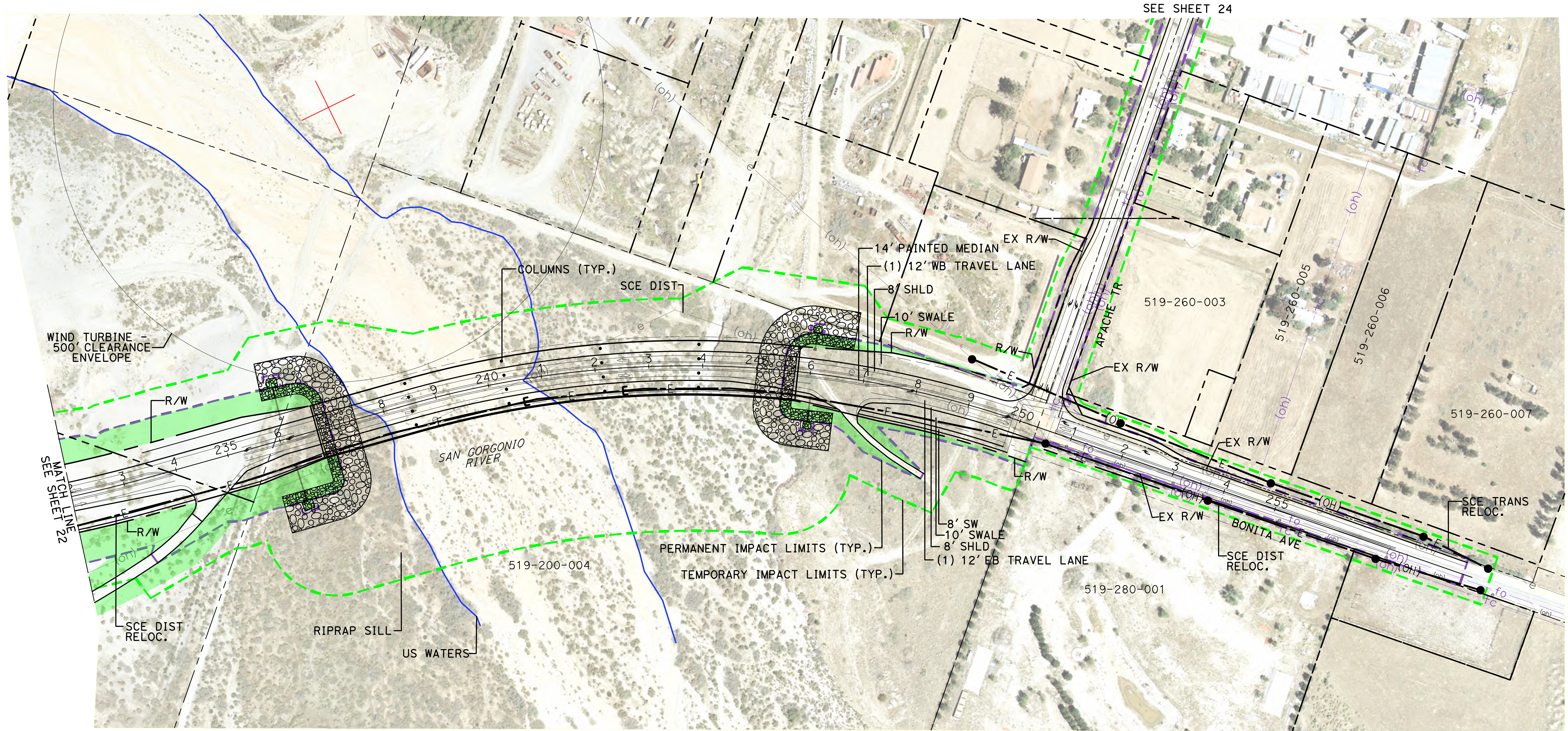
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 22 OF 24  
NOVEMBER 7, 2018**





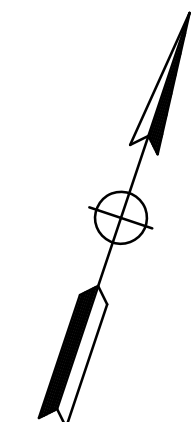
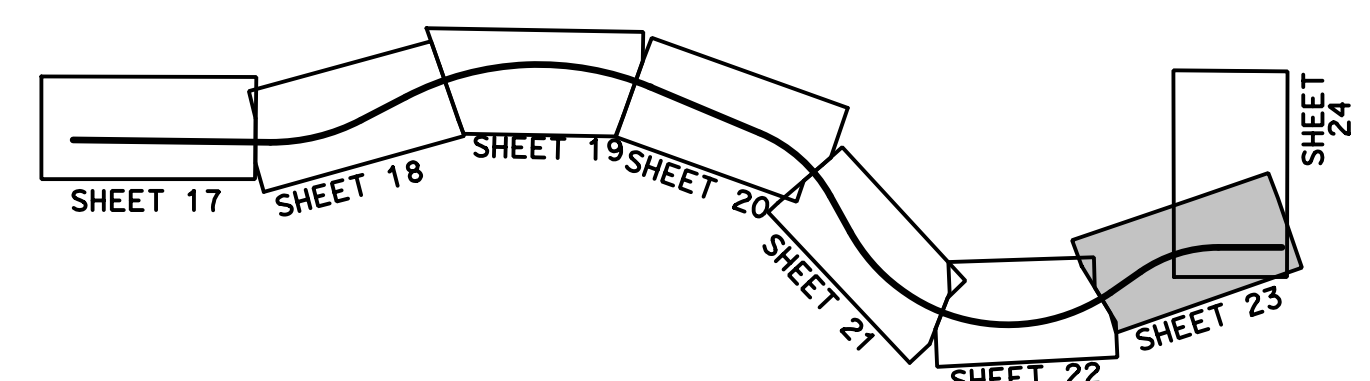


**LEGEND**

- |  |                         |  |   |
|--|-------------------------|--|---|
|  | TEMPORARY IMPACT LIMITS |  | BELOW GROUND ROCK SLOPE PROTECTION          |
|  | PERMANENT IMPACT LIMITS |  | ABOVE GROUND (BURIED) ROCK SLOPE PROTECTION |
|  | EX R/W/PARCEL LINES     |  | WILDLIFE CROSSING                           |
|  | PROP R/W                |  |   |
|  | DRAINAGE SWALE          |  |   |
|  | CUT                     |  |   |
|  | FILL                    |  |   |

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



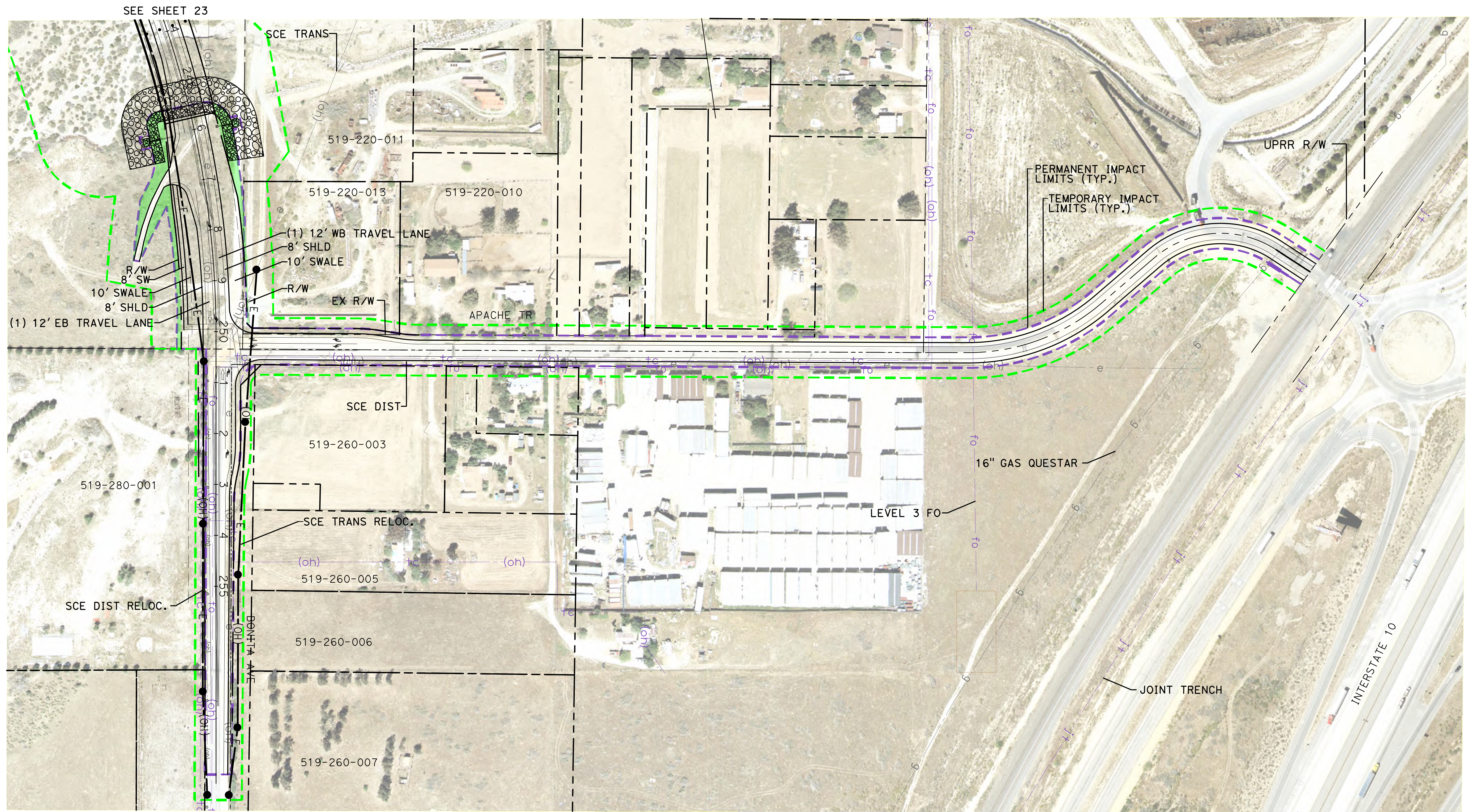
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**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 23 OF 24  
NOVEMBER 7, 2018**





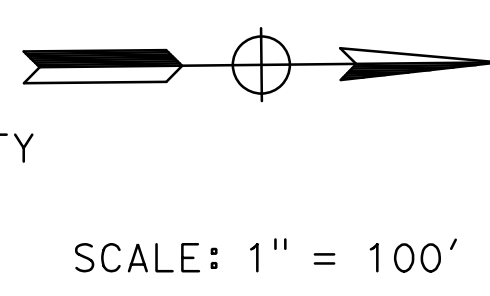
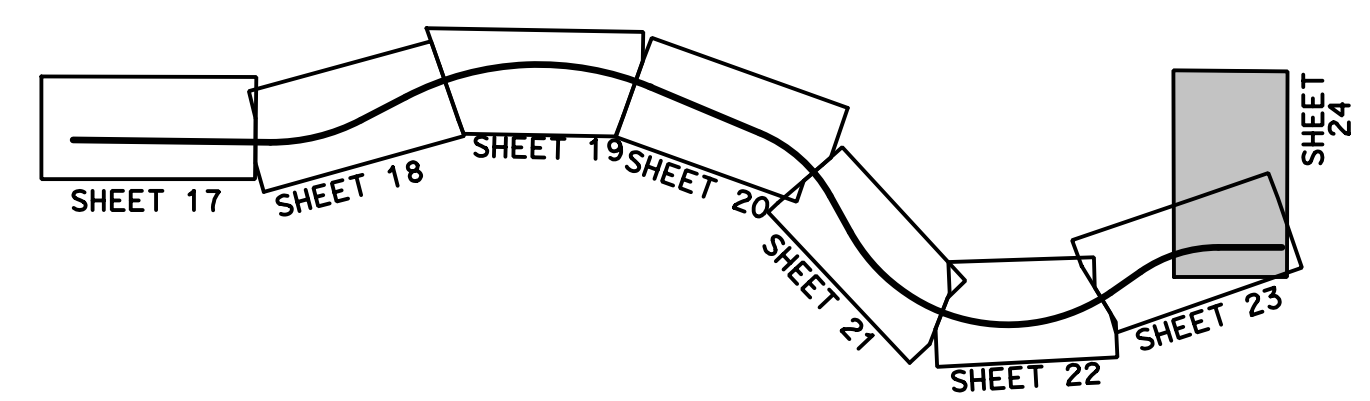


**LEGEND**

- TEMPORARY IMPACT LIMITS
- PERMANENT IMPACT LIMITS
- EX R/W/PARCEL LINES
- PROP R/W
- DRAINAGE SWALE
- CUT
- FILL
- BELOW GROUND ROCK SLOPE PROTECTION
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- WILDLIFE CROSSING

**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS	RET	RETAINING
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION	EX	EXISTING
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON	PROP	PROPOSED
SHLD	SHOULDER	R/W	RIGHT-OF-WAY	fo	EXISTING FIBER OPTIC
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN	tc	EXISTING TELECOM
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX	oh	EXISTING OVERHEAD UTILITY
EB	EASTBOUND	RCP	REINFORCED CONCRETE PIPE	g	EXISTING GAS
SW	SIDEWALK	UPRR	UNION PACIFIC RAILROAD	e	EXISTING ELECTRIC



**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 12**

**SHEET 24 OF 24  
NOVEMBER 7, 2018**





# **Appendix G** Noise Model

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## Future Year (2038) Average Daily Traffic Volume Summary

	Name	Limits	Existing Classification	2038 No Build	2038 Build	Change in Volume	Change in Noise Level
1	Bypass Road	Hathaway Street to Bonita Avenue	4-LN Arterial	N/A	17,900	N/A	N/A
2	Bonita Avenue	Morongo Trail to Magnolia Street	4-LN Major Hwy	3,374	19,192	15,818	7.5
3		Magnolia Street to Orange Street	4-LN Major Hwy	2,666	17,211	14,545	8.1
4		Orange Street to Broadway Street	4-LN Major Hwy	14,175	17,600	3,425	0.9
5		Broadway Street to Almond Street	4-LN Major Hwy	10,760	11,058	298	0.1
6	Main Street	Morongo Trail to Orange Street	4-LN Major Hwy	4,464	4,435	-29	0.0
7		Orange Street to Broadway Street	4-LN Major Hwy	4,820	4,605	-215	-0.2
8		east of Broadway Street	4-LN Major Hwy	8,739	14,459	5,720	2.2
9	Seminole Drive	Malki Rd to Morongo Trail	4-LN Major Hwy	21,694	16,154	-5,540	-1.3
10		Morongo Trail to Orange Street	4-LN Major Hwy	26,035	23,781	-2,254	-0.4
11		Orange Street to Main Street	4-LN Major Hwy	24,317	25,781	1,464	0.3
12	Morongo Trail	Seminole Drive to Main Street	4-LN Major Hwy	11,068	10,836	-232	-0.1
13	Apache Trail	Main Street to Bonita Avenue	4-LN Major Hwy	5,104	5,910	806	0.6
14	Broadway Street	Main Street to Bonita Avenue	4-LN Major Hwy	12,118	16,978	4,860	1.5
15		Bonita Avenue to Carmen Avenue	4-LN Major Hwy	4,573	4,557	-16	0.0
16	Malki Road	south of Morongo Road	4-LN Secondary	15,019	10,071	-4,948	-1.7
17	Westward Avenue	Sunset Avenue to 22nd Street	2-LN Collector	6,565	9,185	2,620	1.5
18		22nd Street to 8th Street	2-LN Collector	7,082	10,497	3,415	1.7
19		8th Street to San Gorgonio Avenue	2-LN Collector	6,895	11,779	4,884	2.3
20	Charles Street	San Gorgonio Avenue to Hargrave Street	2-LN Local	2,873	4,572	1,699	2.0
21		Hargrave Street to Hathaway Street	2-LN Local	3,980	8,187	4,207	3.1
22	Wesley Street	San Gorgonio Avenue to Hargrave Street	2-LN Collector	1,339	3,843	2,504	4.6
23		Hargrave Street to Hathaway Street	2-LN Collector	49	691	642	11.5
24	Barbour Street	San Gorgonio Avenue to Hargrave Street	2-LN Collector	1,849	3,380	1,531	2.6
25		Hargrave Street to Hathaway Street	2-LN Collector	302	3,895	3,593	11.1
26	Lincoln Street	Sunset Avenue to 22nd Street	4-LN Major Hwy	22,045	23,964	1,919	0.4
27		22nd Street to 8th Street	4-LN Major Hwy	19,465	21,155	1,690	0.4
28		8th Street to San Gorgonio Avenue	4-LN Major Hwy	16,090	19,944	3,854	0.9
29		San Gorgonio Avenue to Hargrave Street	4-LN Major Hwy	17,710	22,569	4,859	1.1
30		Hargrave Street to Hathaway Street	4-LN Major Hwy	2,884	12,037	9,153	6.2
31	Ramsey Street	west of Sunset Avenue	4-LN Major Hwy	22,568	22,527	-41	0.0
32		Sunset Avenue to 22nd Street	4-LN Major Hwy	18,379	17,964	-415	-0.1
33		22nd Street to 16th Street	4-LN Major Hwy	18,696	18,251	-445	-0.1
34		16th Street to 8th Street	4-LN Major Hwy	15,260	15,207	-53	0.0
35		8th Street to 4th Street	4-LN Major Hwy	14,146	12,874	-1,272	-0.4
36		4th Street to San Gorgonio Avenue	4-LN Major Hwy	13,148	11,947	-1,201	-0.4
37		Hargrave Street to Hathaway Street	4-LN Major Hwy	21,118	18,309	-2,809	-0.6
38		east of Hathaway Street	4-LN Major Hwy	20,026	17,383	-2,643	-0.6
39	Hathaway Street	Lincoln Street to Barbour Street	4-LN Secondary	2,884	12,037	9,153	6.2
40		Barbour Street to Bypass Road	4-LN Secondary	1,872	15,217	13,345	9.1
41		Bypass Road to Charles Street	4-LN Secondary	395	5,161	4,766	11.2
42		Charles Street to Wesley Street	4-LN Secondary	3,785	3,187	-598	-0.7
43	Hargrave Street	north of Ramsey Street	4-LN Secondary	8,675	10,329	1,654	0.8
44		Ramsey Street to Lincoln Street	4-LN Secondary	23,392	15,220	-8,172	-1.9
45		Lincoln Street to Barbour Street	4-LN Secondary	8,763	9,432	669	0.3
46		south of Barbour Street	4-LN Secondary	9,094	9,143	49	0.0
47		Charles Street to Wesley Street	4-LN Secondary	1,527	3,519	1,992	3.6
48	San Gorgonio Avenue	north of Ramsey Street	4-LN Secondary	5,154	4,937	-217	-0.2
49		Ramsey Street to Lincoln Street	4-LN Secondary	5,000	5,095	95	0.1
50		Lincoln Street to Barbour Street	4-LN Major Hwy	10,002	11,403	1,401	0.6
51		Barbour Street to Westward Avenue	4-LN Major Hwy	11,061	13,190	2,129	0.8
52		Westward Avenue to Charles Street	4-LN Major Hwy	10,416	8,399	-2,017	-0.9
53		Charles Street to Wesley Street	4-LN Major Hwy	10,084	8,478	-1,606	-0.8
54	SR-243	south of Wesley Street	2-LN Arterial	9,168	9,191	23	0.0
55	8th Street	north of Ramsey Street	4-LN Secondary	4,333	4,381	48	0.0
56		Ramsey Street to I-10 WB Ramps	4-LN Major Hwy	10,666	12,026	1,360	0.5
57		I-10 EB Ramps to Lincoln Street	4-LN Major Hwy	12,866	11,824	-1,042	-0.4
58		Lincoln Street to Westward Avenue	4-LN Major Hwy	6,915	5,364	-1,551	-1.1
59	22nd Street	north of Ramsey Street	2-LN Collector	2,262	2,303	41	0.1
60		Ramsey Street to I-10 WB Ramps	4-LN Major Hwy	9,902	10,080	178	0.1
61		I-10 EB Ramps to Lincoln Street	4-LN Major Hwy	6,189	6,209	20	0.0
62		Lincoln Street to Westward Avenue	3-LN Collector (2 SB, 1 NB)	6,189	6,209	20	0.0

### Future Year (2038) Average Daily Traffic Volume Summary

	Name	Limits	Existing Classification	2038 No Build	2038 Build	Change in Volume	Change in Noise Level
63	Sunset Avenue	north of Ramsey Street	4-LN Major Hwy	17,322	17,124	-198	0.0
64		Ramsey Street to I-10 WB Ramps	4-LN Major Hwy	23,620	24,705	1,085	0.2
65		I-10 EB Ramps to Lincoln Street	4-LN Secondary	9,689	12,754	3,065	1.2
66		Lincoln Street to Westward Avenue	4-LN Secondary	7,183	7,035	-148	-0.1

Source: Table 5-2 of the Traffic Operational Analysis Revised Final Report (April 2015)

TABLE Year 2038 No Project-01  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Lincoln Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 2900      SPEED (MPH): 55      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
58.9	118.2	250.5	537.6

TABLE Year 2038 No Project-02  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Barbour Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 310      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.62

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0



TABLE Year 2038 No Project-03  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Charles Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 4000      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 12      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	99.4	212.8

TABLE Year 2038 No Project-04  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Hathaway Street between Lincoln Street and Barbour Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 2900      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	57.2	114.3	241.9

TABLE Year 2038 No Project-05  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Hathaway Street between Barbour Street and Bypass Road

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 1900      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	87.7	183.2

TABLE Year 2038 No Project-06  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Hathaway Street between Bypass Road and Charles Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 400      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	68.6

TABLE Year 2038 No Project-07  
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017  
 ROADWAY SEGMENT: Bypass Road between Hathaway Street and Bonita Avenue  
 NOTES: - Year 2038 No Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 0      SPEED (MPH): 60      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	----	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 28.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Year 2038 No Project-08  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Bonita Avenue between Morongo Trail and Magnolia Street

NOTES: - Year 2038 No Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 3400      SPEED (MPH): 55      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
64.4	130.9	278.3	597.6



TABLE Year 2038 No Project-09  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017  
ROADWAY SEGMENT: Bonita Avenue - Magnolia Street and Orange Street  
NOTES: - Year 2038 No Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 2700      SPEED (MPH): 55      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
56.6	112.9	238.9	512.7

TABLE Year 2038 With Project-01  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Lincoln Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 12100      SPEED (MPH): 55      GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.48

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
141.3	301.0	646.6	1392.1

TABLE Year 2038 With Project-02  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Barbour Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 3900      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 6      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.62

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.2	209.1

TABLE Year 2038 With Project-03  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Charles Street between Hargrave Street and Hathaway Street

NOTES: - Year 2038 With Project

---

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 8200      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 12      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.27

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	74.8	159.6	343.0

TABLE Year 2038 With Project-04  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017  
ROADWAY SEGMENT: Hathaway Street between Lincoln Street and Barbour Street  
NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 12100      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
66.9	136.6	290.6	624.3

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TABLE Year 2038 With Project-05  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017  
ROADWAY SEGMENT: Hathaway Street between Barbour Street and Bypass Road  
NOTES: - Year 2038 With Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 15300      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.27

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
76.8	159.0	339.5	729.8



TABLE Year 2038 With Project-06  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Hathaway Street between Bypass Road and Charles Street

NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 5200      SPEED (MPH): 50      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	73.60	13.60	10.22
M-TRUCKS	0.90	0.04	0.90
H-TRUCKS	0.35	0.04	0.35

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	80.3	166.7	356.1

TABLE Year 2038 With Project-07  
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017  
 ROADWAY SEGMENT: Bypass Road between Hathaway Street and Bonita Avenue  
 NOTES: - Year 2038 With Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 17900      SPEED (MPH): 60      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
202.8	434.4	934.6	2012.5

TABLE Year 2038 With Project-08  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Bonita Avenue between Morongo Trail and Magnolia Street

NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 19200      SPEED (MPH): 55      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
191.0	408.8	879.4	1893.7

TABLE Year 2038 With Project-09  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 04/25/2017

ROADWAY SEGMENT: Bonita Avenue - Magnolia Street and Orange Street

NOTES: - Year 2038 With Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 17300      SPEED (MPH): 55      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	69.50	12.90	9.60
M-TRUCKS	1.44	0.06	1.50
H-TRUCKS	2.40	0.10	2.50

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

---

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 76.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
178.4	381.5	820.5	1766.7

**Appendix H** Federal Transportation  
Improvement Program/  
Regional Transportation Plan  
(FTIP/RTP)

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INNOVATING FOR A BETTER TOMORROW



# FINAL 2019 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

## PROJECT LISTING VOLUME III OF III - PART A

FY 2018/19 - 2023/24  
September 2018



## 2019 Federal Transportation Improvement Program

Riverside County  
Local Highway  
Including Amendment 1-5  
(In \$000's)

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment	
RIV181009	Riverside	SCAB		3NL04	NCN50						L	EXEMPT - 93.126	0	
Description: IN WESTERN RIV CO, CITY OF PERRIS – PERRIS VALLEY STORM DRAIN CHANNEL TR PH 2: CONSTRUCT NEW 3.1-MILE MULTI-USE TRAIL EXTENSION PARALLEL TO THE PVSD, LOCATED SOUTH FROM NUEVO RD WITH A BRIDGE CROSSING THE METZ CHANNEL AND AT-GRADE CROSSING AT SAN JACINTO AVE, AN UNDERPASS BELOW THE I-215 LEADING TO THE SO PERRIS METROLINK STATION AT CASE RD. (ATP 3-AUG-STATE) TC UTILIZATION IN FY18, FY19, FY21.														
		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020		2020/2021	2021/2022	2022/2023	2023/2024	Total
AGENCY		6	3	191	200	3	6			191				200
ACTIVE TRANSPORTATION PROGRAM		524	237	2,243	3,004	237	524			2,243				3,004
RIV181009 Total		530	240	2,434	3,204	240	530			2,434				3,204

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment	
RIV140815	Riverside	SSAB		REG0703	NCRH1						L	EXEMPT - 93.126	3	
Description: IN EASTERN RIVERSIDE CO FOR CITY OF RANCHO MIRAGE-CONSTRUCT FREE RT ,PORKCHOP ISLAND & CURB & GUTTER; RELOCATE SIGNAL POLE; REPLACE SIGNAL LOOP; REMOVE & RELOCATE CONCRETE PAVEMENT, SPANDREL, CROSS GUTTER, HANDICAP RAMP & BUS TURNOUT; & INSTALL 13,218 L.F. OF 4FT. SAND FENCING ALONG RAMON RD FROM LOS ALAMOS RD TO BOB HOPE DR & ALONG DINAH SHORE DR N/S FROM BOB HOPE DR TO KEY LARGO AVE (PM 2.5 BEN 3.341KG/DAY)														
		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020		2020/2021	2021/2022	2022/2023	2023/2024	Total
CMAQ		204	31	621	856	204		652						856
CITY FUNDS		26	4	80	110	26		84						110
RIV140815 Total		230	35	701	966	230		736						966

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment	
RIV011236	Riverside	SCAB		RIV011236	CAX67						L	NON-EXEMPT	0	
Description: IN RIV COUNTY & MURRIETA - EXTEND/CONSTRUCT CLINTON KEITH ROAD (6 LANES ULTIMATE WIDENING FOR APPROX 4.3 MILES) INCLUDING CONSTRUCTION OF 2 BRIDGES FROM WHITEWOOD RD/MEADOWLARK LN TO WINCHESTER ROAD (SR79) - PROJECT TO BE COMPLETED IN PHASES.														
		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020		2020/2021	2021/2022	2022/2023	2023/2024	Total
COUNTY		11,580	12,242	61,585	85,407	65,099	4,138			720		15,450		85,407
RIV CO SALES TAX				16,286	16,286	16,286								16,286
RIV011236 Total		11,580	12,242	77,871	101,693	81,385	4,138			720		15,450		101,693

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment	
RIV031202	Riverside	SCAB		RIV031202	CAX67						L	NON-EXEMPT	0	
Description: I-10 BYPASS SOUTH (FORMERLY RAMSEY ST. EXT.): CONSTRUCT TWO LANES OF AN ULTIMATE 4-LANE ROADWAY TO PROVIDE A BY-PASS/NETWORK FACILITY FOR THE I-10, APPROX. 1/2 MILE S/O I-10 BETWEEN THE EASTERN END OF THE CITY OF BANNING AND APACHE TRAIL IN CABAZON. OTHER IMPROVEMENTS INCLUDE THE CONSTRUCTION OF BRIDGE CROSSINGS AT SMITH CREEK AND SAN GORGONIO RIVER.														
		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020		2020/2021	2021/2022	2022/2023	2023/2024	Total
2016 EARMARK REPURPOSING COUNTY		1,938			1,938		1,938							1,938
WESTERN RIV TUMF		4,664	8,925	80,000	93,589	1,894	11,695			80,000				93,589
RIV CO SALES TAX		2,548			2,548	2,548								2,548
RIV CO SALES TAX		150			150	150								150
RIV031202 Total		9,300	8,925	80,000	98,225	4,592	13,633			80,000				98,225

# TRANSPORTATION PROJECT LIST SYSTEM

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS



APPENDIX  
ADOPTED | APRIL 2016

TABLE 1 FTIP Projects - Continued

County	System	FTIP ID	Route #	Description	Project Cost (\$1,000's)
RIVERSIDE	LOCAL HIGHWAY	RIV140815	0	IN EASTERN RIVERSIDE CO FOR CITY OF RANCHO MIRAGE-CONSTRUCT FREE RT ,PORKCHOP ISLAND & CURB & GUTTER;RELOCATE SIGNAL POLE;REPLACE SIGNAL LOOP;REMOVE & RELOCATE CONCRETE PAVEMENT, SPANDREL, CROSS GUTTER, HANDICAP RAMP & BUS TURNOUT; & INSTALL 15,418 L.F. OF 4FT. SAND FENCING ALONG RAMON RD FROM LOS ALAMOS RD TO BOB HOPE DR & ALONG DINAH SHORE DR N/S FROM BOB HOPE DR TO MIRIAM WY (PM 2.5 BEN 3.341KG/DAY)	\$966
RIVERSIDE	LOCAL HIGHWAY	RIV011236	0	IN RIV COUNTY & MURRIETA - EXTEND/CONSTRUCT CLINTON KEITH ROAD (3 LANES TOTAL - APPROX 3.4 MILES) WITH 2 BRIDGES FROM ANTELOPE ROAD TO WINCHESTER ROAD (SR79)	\$57,940
RIVERSIDE	LOCAL HIGHWAY	RIV031202	0	I-10 BYPASS SOUTH (FORMERLY RAMSEY ST. EXT.): CONSTRUCT TWO LANES OF ROADWAY TO PROVIDE A BY-PASS/NETWORK FACILITY FOR THE I-10, APPROX. 1/2 MILE S/O I-10 BETWEEN THE EASTERN END OF THE CITY OF BANNING AND APACHE TRAIL IN CABAZON. OTHER IMPROVEMENTS INCLUDE THE CONSTRUCTION OF BRIDGE CROSSINGS AT SMITH CREEK AND SAN GORGONIO RIVER.	\$21,021
RIVERSIDE	LOCAL HIGHWAY	RIV060123	0	IN NORTHWEST RIVERSIDE COUNTY ON CLAY ST FROM APPROX 100" SW OF GENERAL DR TO APPROX 500" N/O LINARES AVE: REPLACE EXISTING 4-LANE (2 LNS IN EACH DIRECTION) AT GRADE R/R X-ING WITH A 4-LN (2 LNS IN EACH DIRECTION - NON-CAPACITY) UNDERCROSSING (UPRR).	\$30,806
RIVERSIDE	LOCAL HIGHWAY	RIV070702	0	NEAR SR60 AND BEAUMONT W/O JCT SR60/I-10: CONSTRUCT NEW 4 LANE (2 LNS EACH DIR) POTRERO BLVD FROM SR 60 SOUTH & EAST TO SR79 (PA&ED/ PRE-DESIGN)	\$800
RIVERSIDE	LOCAL HIGHWAY	RIV071278	0	IN NORTHWEST RIVERSIDE COUNTY ON MAGNOLIA AVE: REPLACE EXISTING 4 LANE (2 LNS IN EA. DIR) R/R X-ING WITH A 4-LN (2 LNS IN EA DIR - NON-CAPACITY) O.C. GRADE SEPARATION ON MAGNOLIA AVE BTWN BUCHANAN AVE. (ON THE EAST) AND LINCOLN STREET (ON THE WEST).	\$51,632
RIVERSIDE	LOCAL HIGHWAY	RIV071285	0	IN THE SOUTHEAST COACHELLA VALLEY IN EASTERN RIVERSIDE COUNTY, JUST SOUTH OF THE CITY OF COACHELLA ON AVE. 56 (AIRPORT BLVD) - FROM POLK ST TO THE WEST TO ORANGE ST. TO THE EAST OF THE R/R X-ING: REPLACE EXISTING 2 LN (1 LN IN EA DIR) AT GRADE R/R X-ING WITH A 2 LN OC (1 LN IN EA DIR - NON-CAPACITY) ACROSS THE UPRR TRACKS.	\$27,740
RIVERSIDE	LOCAL HIGHWAY	RIV090903	0	IN RIVERSIDE COUNTY ON CAJALCO RD - CAJALCO RD. WIDENING FROM 2 TO 4 THRU LNS (2 IN EA DIR) FROM TEMESCAL CANYON RD. TO HARVILL AVE AND FROM 4 TO 6 LANES FROM HARVILL AVE TO I-215, INCLUDING TURN POCKETS AND A BRIDGE RECONSTRUCTION OVER A WATER CROSSING (RTP IDS: 3A04WT137 AND 3A04WT138) (PA&ED ONLY) (\$803 IN FY 09/10 AND \$344.01 IN FY 16/17 OF TC USED FOR STPL MATCH IN PA&ED).	\$173,185
RIVERSIDE	LOCAL HIGHWAY	RIV11003	0	IN WESTERN RIVERSIDE COUNTY IN THE CITY OF JURUPA VALLEY - MARKET STREET BRIDGE REPLACEMENT: REPLACE THE EXISTING TWO LANE (ONE LANE IN EACH DIRECTION) MARKET STREET BRIDGE OVER THE SANTA ANA RIVER, 0.4 MILES NORTHWEST OF SR60 WITH A FOUR LANE (TWO LANES IN EACH DIRECTION) BRIDGE. BRIDGE NO. 56C0024	\$40,900
RIVERSIDE	LOCAL HIGHWAY	RIV121203	0	IN EASTERN RIVERSIDE COUNTY IN THE COACHELLA VALLEY - ON AVE 56/AIRPORT DR, REPLACE 2 LANE BRIDGE WITH A 4 LANE BRIDGE OVER WHITEWATER RIVER .21 MILES E/O HWY 111 (BRIDGE NO.56C0020).	\$15,755
RIVERSIDE	LOCAL HIGHWAY	RIV121204	0	IN WESTERN RIVERSIDE COUNTY IN THE CITY OF NORCO - ON HAMNER AVE OVER SANTA ANA RIVER .5 MILES N/O OF SIXTH STREET, REPLACE 2 LANE BRIDGE WITH A 6 LANE BRIDGE (BRIDGE NO.56C0446).	\$56,339
RIVERSIDE	LOCAL HIGHWAY	RIV140401	0	IN WESTERN RIVERSIDE COUNTY NEAR THE CITY OF MENIFEE - ON NUEVO ROAD, REHABILITATE AND WIDEN EXISTING 2 LANE BRIDGE TO A 4 LANE BRIDGE OVER SAN JACINTO RIVER 1.2 MILES W/O LAKEVIEW AVENUE. (BRIDGE NO. 56C0004).	\$7,040
RIVERSIDE	LOCAL HIGHWAY	RIV140838	0	IN WESTERN RIVERSIDE CO. FOR THE COUNTY OF RIVERSIDE IN MEAD VALLEY-CLARK ST S/W & INTERSECTION SAFETY IMPROVEMENTS: ON EASTSIDE OF CLARK ST B/W RIDER ST AND CAJALCO RD, CONSTRUCT APPROX. 2,000 L.F. OF CONCRETE SIDEWALK, CURB & GUTTER, PAVEMENT IMPROVEMENTS, NEW CURB RAMPS MEETING LATEST ADA REQS, DRIVEWAY APPROACHES, SIGNS, MARKINGS, & OTHER INCIDENTAL ITEMS TO IMPROVE PEDESTRIAN SAFETY.	\$2,290
RIVERSIDE	LOCAL HIGHWAY	RIV140839	0	IN EASTERN RIVERSIDE CO. FOR THE COUNTY OF RIVERSIDE NEAR DHS-AVENIDA RAMBLA S/W SAFETY IMPROVEMENTS: ON AVENIDA RAMBLA B/W BUBBLING WELLS ELEM SCHOOL AND CAMINO AVENTURA AND NORTHSIDE OF CAMINO CAMPESINO B/W AVENIDA RAMBLA AND BUBBLING WELLS RD, CONSTRUCT APPROX. 3,200 L.F. OF SIDEWALK, CURB & GUTTER IMPROVEMENTS, CURB RAMPS, DRIVEWAY APPROACHES, SIGNS, MARKINGS, & OTHER INCIDENTAL ITEMS.	\$356
RIVERSIDE	LOCAL HIGHWAY	RIV140840	0	IN EASTERN RIVERSIDE CO. FOR THE COUNTY OF RIVERSIDE IN MECCA-GRAPEFRUIT BLVD/4TH ST PED & RDWY SAFETY IMPROVEMENTS: ON W/S OF GRAPEFRUIT BLVD B/W 4TH ST & 3,000 FT SOUTH OF 66TH AVE, CONSTRUCT APPROX. 3,500 L.F. OF ASPHALT CONCRETE WALKWAY & 250 L.F. OF CONCRETE S/W, CURB & GUTTER, ADA CURB UPGRADES & WIDENING, TRAFFIC SIGNAL IMPROVEMENTS.	\$2,300
RIVERSIDE	LOCAL HIGHWAY	RIV140846	0	IN WESTERN RIVERSIDE COUNTY FOR THE COUNTY OF RIVERSIDE IN NUEVO-LAKEVIEW AVE S/W SAFETY IMPROVEMENTS: ON LAKEVIEW AVE B/W 10TH ST AND 100-FT NORTH OF 11TH ST, INSTALL 2,600 L.F. OF CONCRETE SIDEWALK, CURB AND GUTTER, PAVEMENT IMPROVEMENTS, ADA COMPLIANT CURB RAMPS, DRIVEWAY APPROACHES, SIGNS AND MARKINGS.	\$878



TABLE 2 Financially-Constrained RTP/SCS Projects - Continued

System	Lead Agency	RTP ID	Route #	Route Name	From	To	Description	Completion Year	Project Cost (\$1,000's)
County: Riverside									
LOCAL HIGHWAY	RIVERSIDE COUNTY	RIV010205C	0	SCOTT RD	EL CENTRO	SR-79 (WINCHESTER RD)	IN RIVERSIDE COUNTY NEAR MURRIETA RECONSTRUCT AND WIDEN SCOTT ROAD FROM 2 TO 6 LANES BETWEEN EL CENTRO AND SR79 (WINCHESTER RD)	2030	\$26,511
LOCAL HIGHWAY	RIVERSIDE COUNTY	RIV011236	0	CLINTON KEITH RD.	ANTELOPE RD.	WINCHESTER RD.	IN RIV COUNTY & MURRIETA - EXTEND/CONSTRUCT CLINTON KEITH ROAD (3 LANES TOTAL - APPROX 3.4 MILES) WITH 2 BRIDGES FROM ANTELOPE ROAD TO WINCHESTER ROAD (SR79)	2016	\$57,940
LOCAL HIGHWAY	RIVERSIDE COUNTY	RIV031202	0				I-10 BYPASS SOUTH (FORMERLY RAMSEY ST. EXT.): CONSTRUCT TWO LANES OF ROADWAY TO PROVIDE A BY-PASS/NETWORK FACILITY FOR THE I-10, APPROX. 1/2 MILE S/O I-10 BETWEEN THE EASTERN END OF THE CITY OF BANNING AND APACHE TRAIL IN CABAZON. OTHER IMPROVEMENTS INCLUDE THE CONSTRUCTION OF BRIDGE CROSSINGS AT SMITH CREEK AND SAN GORGONIO RIVER.	2019	\$21,021
LOCAL HIGHWAY	RIVERSIDE COUNTY	RIV060123	0	CLAY ST.	100	500	IN NORTHWEST RIVERSIDE COUNTY ON CLAY ST FROM APPROX 100" SW OF GENERAL DR TO APPROX 500" N/O LINARES AVE: REPLACE EXISTING 4-LANE (2 LNS IN EACH DIRECTION) AT GRADE R/R X-ING WITH A 4-LN (2 LNS IN EACH DIRECTION - NON-CAPACITY) UNDERCROSSING (UPRR).	2016	\$30,806
LOCAL HIGHWAY	RIVERSIDE COUNTY	RIV071285	0	AVE. 56 (AIRPORT BLVD)	POLK ST. (TO THE WEST)	ORANGE ST. (TO THE EAST)	IN THE SOUTHEAST COACHELLA VALLEY IN EASTERN RIVERSIDE COUNTY, JUST SOUTH OF THE CITY OF COACHELLA ON AVE. 56 (AIRPORT BLVD) - FROM POLK ST TO THE WEST TO ORANGE ST. TO THE EAST OF THE R/R X-ING: REPLACE EXISTING 2 LN (1 LN IN EA DIR) AT GRADE R/R X-ING	2015	\$27,740
LOCAL HIGHWAY	RIVERSIDE COUNTY	3G0705	0				IN EASTERN RIVERSIDE CO. IN THE COACHELLA VALLEY - 66TH AVE GRADE SEPARATION: CONSTRUCT A TWO-LN (1-LN IN EA DIR) 66TH AVE ELEVATED STRUCTURE OVER THE UPRR, HAMMOND RD., AND SH-111, FROM WESTERLY OF LINCOLN ST TO JOHNSON ST ON THE EAST IN THE COMMUNITY OF MECCA. ADD. IMPROVEMENTS WILL BE CONSTRUCTED TO TIE BACK INTO THE EXISTING ALIGNMENT.	2018	\$25,250



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**California Division**

August 19, 2020

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Sacramento, CA 95814  
(916) 498-5001  
(916) 498-5008 (FAX)

In Reply, Refer To:  
HDA-CA

John Bulinski, Director  
California Department of Transportation  
District 8  
464 W. 4th Street  
San Bernardino, CA 92401

Attention, Sean Yeung

SUBJECT: Project Level Conformity Determination for the I-10 Banning to Cabazon Bypass Project (MPO ID RIV031202)

Dear Mr. Bulinski:

On July 24, 2020, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the I-10 Banning to Cabazon Bypass Project. The project is in an area that is designated Non-Attainment or Maintenance for Ozone, Carbon Monoxide (CO) and Particulate Matter (PM10, PM 2.5).

The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The project is included in the Southern California Association of Governments' (SCAG) current Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), as amended. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 CFR 93.116 and 93.123, the localized PM2.5 and PM10 analyses are included in the documentation. The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the I-10 Banning to Cabazon Bypass Project conforms with the State Implementation Plan (SIP) in accordance with 40 CFR Part 93.

If you have any questions pertaining to this conformity finding, please contact Joseph Vaughn at (916) 498-5346 or by email at [Joseph.Vaughn@dot.gov](mailto:Joseph.Vaughn@dot.gov).

Sincerely,

Tashia J. Clemons  
Director, Planning and Environment



# Appendix I    References

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# **Appendix J** Notice of Preparation

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## Riverside County Transportation Department Notice of Preparation

To:

From: Mary Zambon  
Riverside County Transportation Department  
3525 14<sup>th</sup> St.  
Riverside CA 92501

### Subject: Notice of Preparation of a Draft Environmental Impact Report

The Riverside County Transportation Department will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Please send your response to Ms. Mary Zambon at the address shown above. We will need the name for a contact person in your agency.

Project Title I-10 Bypass from Banning to Cabazon

Project Applicant Riverside County Transportation Department

Date

11/12/13

Signature

Mary Zambon

Title

Senior Transportation Planner

Telephone

(951) 955-6759



**INITIAL STUDY**

**I-10 BYPASS: BANNING TO CABAZON**

1. Project title	I-10 Bypass Banning to Cabazon
2. Lead agency name and address	Riverside County Transportation Department 3525 14 <sup>th</sup> St. Riverside CA 92501
3. Contact person and Phone number	Mary Zambon (951) 955-6759
4. Project location	Within Unincorporated County of Riverside, the City of Banning, and (some alternatives) the Morongo Indian Reservation
5. Project sponsor's name and address	Riverside County Transportation Department 3525 14 <sup>th</sup> St. Riverside CA 92501
6. General plan designation	Varies
7. Zoning	Varies
8. Description of project	Construct new two-lane roadway from the intersection of Westward Avenue and Hathaway Street in Banning to the intersection of Apache Trail and Bonita Avenue in Cabazon (unincorporated Riverside County) per the project description that follows.
9. Surrounding land uses and setting	Industrial, open space/cattle grazing, streambed, sand and gravel quarry.
10. Other public agencies whose approval is required (e.g., permits financing approval)	US Army Corp of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, Federal Highway Administration, Morongo Band of Mission Indians, Bureau of Indian Affairs, California Department of Transportation, Regional Water Quality Control Board, California Department of Fish and Wildlife, Western Riverside County Regional Conservation Agency, Coachella Valley Conservation Agency

## Project Description

### Introduction

The County of Riverside proposes to construct a new two-lane roadway with a striped median, shoulders, and a pedestrian path extending approximately 2.6 miles (mi) between the intersection of Hathaway Street and Westward Avenue in the City of Banning (Banning) and the intersection of Bonita Avenue and Apache Trail in the community of Cabazon in unincorporated Riverside County. Figure 1 shows both the regional location and project limits. Three build alternative alignments are under consideration. Two of the alternatives cross portions of the Morongo Indian Reservation. When combined with existing roadways, the new roadway would provide a new route parallel to I-10 between the I-10 Hargrave Avenue interchange in Banning and the Morongo Parkway (Apache Trail) Interchange in Cabazon. Local traffic and bicycle travel between these two interchanges must now use the freeway to make portions of this connection, and there is no current provision for pedestrians.

### Need and Purpose

#### Project Need Summary:

Banning and Cabazon are approximately three miles apart, and I-10 is the only public road connecting the two communities. There are no local roadways connecting the local communities except the freeway itself. Without a route parallel to I-10, there is no local alternate route for freeway traffic whenever the freeway is closed due to emergencies resulting in extreme traffic congestion. In recent years, I-10 has been closed several times between Cabazon and Banning due to accidents, police activity, hazardous spills or construction. The closest available detour routes force I-10 motorists to travel north to Victorville or south to Hemet or Idyllwild. Backups in excess of ten hours have resulted

The lack of local connection also forces local traffic to use the regional freeway system and congested freeway interchanges for local trips, and it adversely affects emergency access. Residents in portions of Cabazon south of the UPRR face a related problem: Any exit from their community requires crossing the UPRR at-grade crossing, where they can face lengthy delays caused by long, slow-moving trains. In addition, bicyclists must use the freeway to get from one community to the other, and pedestrians have no connection at all. Finally, the County, City and Tribal General Plans anticipate future growth in the area.

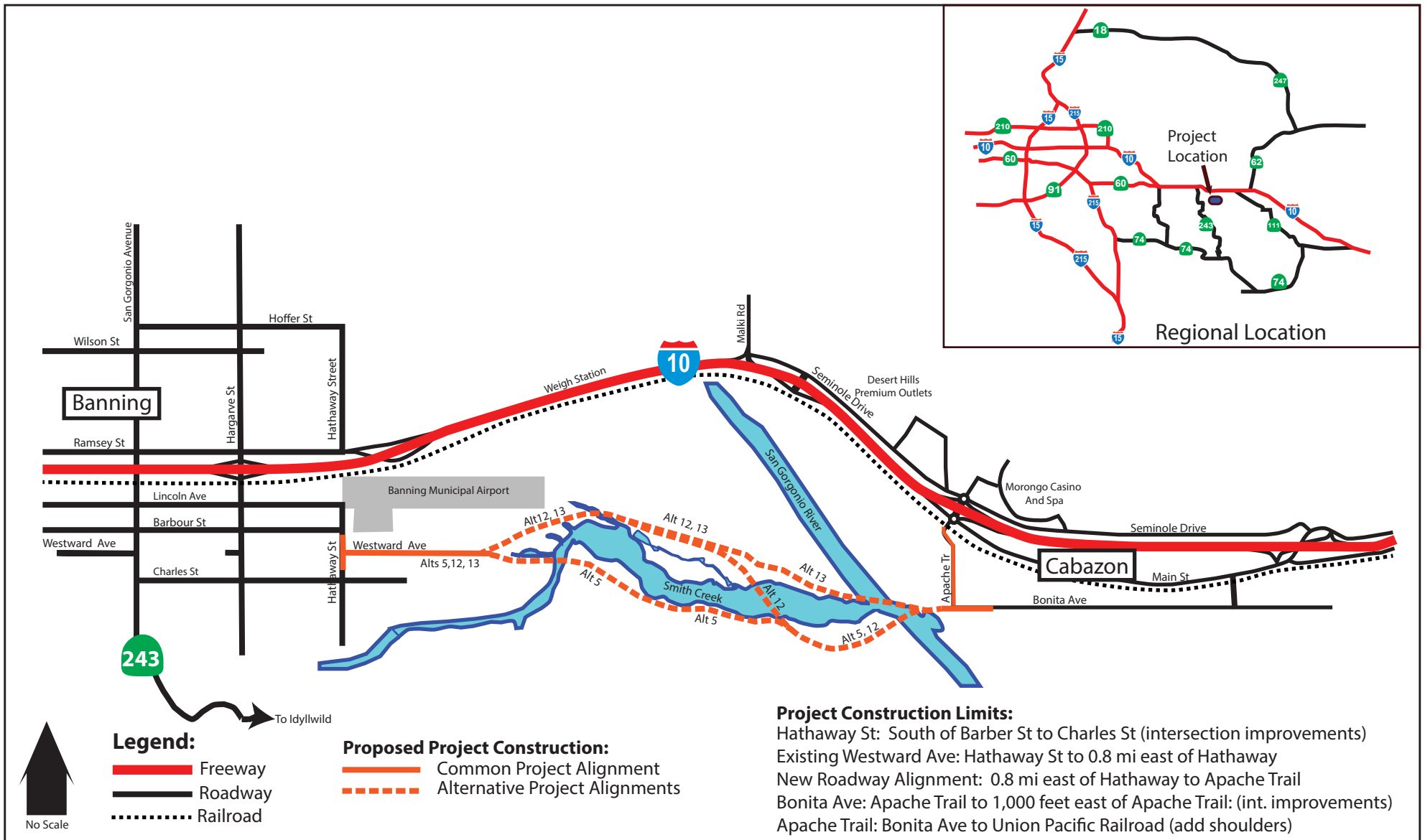
#### Project Purpose Summary:

The purpose of the proposed project is to construct a new roadway connecting Banning and Cabazon to address the needs identified above, including the following:

- Provide an emergency bypass to Interstate 10 between Banning and Cabazon
- Provide for local traffic between Banning and Cabazon that does the following:
  - Does not require use of the freeway
  - Improves general and emergency access for residents of Cabazon, particularly those residents living south of the railroad tracks
  - Provides for bicycle and pedestrian access between the two communities



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**Project Construction Limits:**

- Hathaway St: South of Barber St to Charles St (intersection improvements)
- Existing Westward Ave: Hathaway St to 0.8 mi east of Hathaway
- New Roadway Alignment: 0.8 mi east of Hathaway to Apache Trail
- Bonita Ave: Apache Trail to 1,000 feet east of Apache Trail: (int. improvements)
- Apache Trail: Bonita Ave to Union Pacific Railroad (add shoulders)

Figure 1  
*I-10 Bypass: Banning to Cabazon*  
**Project Location/Project Limits**

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## **Project Background**

### **Federal and State Lead Agencies**

The California Department of Transportation (Caltrans) is the federal lead agency for the proposed project under the National Environmental Policy Act (NEPA) and is proposing to prepare a federal Environmental Assessment (EA) of the project. The County of Riverside is the State lead agency under the California Environmental Quality Act (CEQA) and is proposing to prepare an Environmental Impact Report (EIR) for the Project. Caltrans and the County are proposing to combine the EA and the EIR into a single document for public review, reliant on a single set of environmental technical studies. Caltrans recently approved a Preliminary Environmental Study (PES) for the project that identified the proposed alternatives to be considered and the technical studies to be conducted. Approval of the PES launches the formal federal EA process, and, correspondingly the County is now issuing this Notice of Preparation (NOP) to formally start the State EIR process.

### **Stakeholder Agencies**

In addition to the County and Caltrans, the Project Development Team has coordinated with other local agencies with a stake hold in the proposed project including the City of Banning, the Morongo Tribe of Mission Indians, the California Highway Patrol, and local emergency responders. These agencies have provided substantial input to the project development process to date.

### **Previous Public Review**

To facilitate early public input, the County conducted a preliminary public information meeting on November 15, 2012 at Banning High School. Questions raised by members of public addressed the development of alternatives, right-of-way (ROW), impacts to downtown Banning, and impacts to environmental resources, bicycle and pedestrian access and local circulation. These questions were addressed in the development of the Alternatives Screening Analysis and will be further addressed in the EIR.

## **Alternatives Roadway Alignments**

### **Alignment Development and Screening**

During the alternatives development process, the County staff met frequently with the Stakeholder Agencies listed above to compile information and understand constraints. The County also met with representatives of key environmental resource agencies with jurisdiction over the project including the Western Riverside Regional Conservation Authority, the Coachella Valley Conservation Commission, the US Fish and Wildlife Service, the US Army Corps of Engineers, and the California Department of Fish and Wildlife. County representatives met with local citizen groups including the Friends of the Desert Mountains, West Desert Municipal Advisory Council, and the San Gorgonio Municipal Advisory Council, held an early public input meeting in November 2012, where they met with private property owners adjacent to the project. The input from the public, agencies and groups helped the County to develop the alternatives considered.

During this process, the County considered and developed 13 separate potential alignments for the roadway. These alignments are described in detail in the Alternatives Screening Analysis: I-10 Bypass from Banning to Cabazon (March 2013). The 13 Alternatives originally considered are shown in Figure 2.



The Screening Analysis evaluated the feasibility of each alternative (could it be reasonably built?), whether it met the Project's purpose and need criteria listed above, and the alternative's performance on key environmental factors including the following:

- Potential impacts to State and federal waters (Smith Creek, San Gorgonio River and their tributaries)
- Potential impacts to State and federal threatened and endangered species
- Potential impacts to Tribal Lands
- Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan and the Coachella Valley Multiple Species Habitat Conservation Plan
- Consistency with the Riverside County General Plan, the City of Banning General Plan, and the Morongo General Plan
- Other potential impacts such as visual impacts.

Each of the potential alternatives was assessed against the above criteria. Based upon this assessment, Alternatives 1, 2, 3, 4, 6, 7, 8, 9, 10 and 11 were removed from further consideration for reasons described in the Alternatives Screening Analysis cited above. Alternatives 5, 12 and 13 were recommended for further consideration in the environmental document as shown in Figure 3.

### **Common Elements of all the Build Alternatives**

The proposed I-10 Bypass would use existing roadways to connect to I-10 at the western and eastern ends of the project to reach the new roadway section; these connections are the same for all alternatives. Between the western and eastern connections, the proposed project would construct a new roadway between the Westward/Hathaway intersection in Banning and the Bonita Avenue/Apache Trail intersection in Cabazon, with three alternative alignments under consideration as described below. Note: In addition to I-10 Bypass traffic, the proposed project would also support local trips between Banning and Cabazon that do not need to use the freeway.

**West End Connections to I-10.** The western end of the proposed I-10 bypass starts at the I-10/Hargrave Avenue interchange, extends southerly along existing Hargrave to Lincoln Avenue then easterly along Lincoln to Hathaway Street, then southerly along Hathaway to its intersection with Westward Avenue, where the new roadway would begin. No improvements are proposed along Hargrave; proposed improvements along Lincoln would be limited to signing (and potentially striping). Proposed improvements to Hathaway would include new signing and striping, and Hathaway would be widened at the Westward intersection to provide a northbound right-turn lane and a southbound left-turn lane.



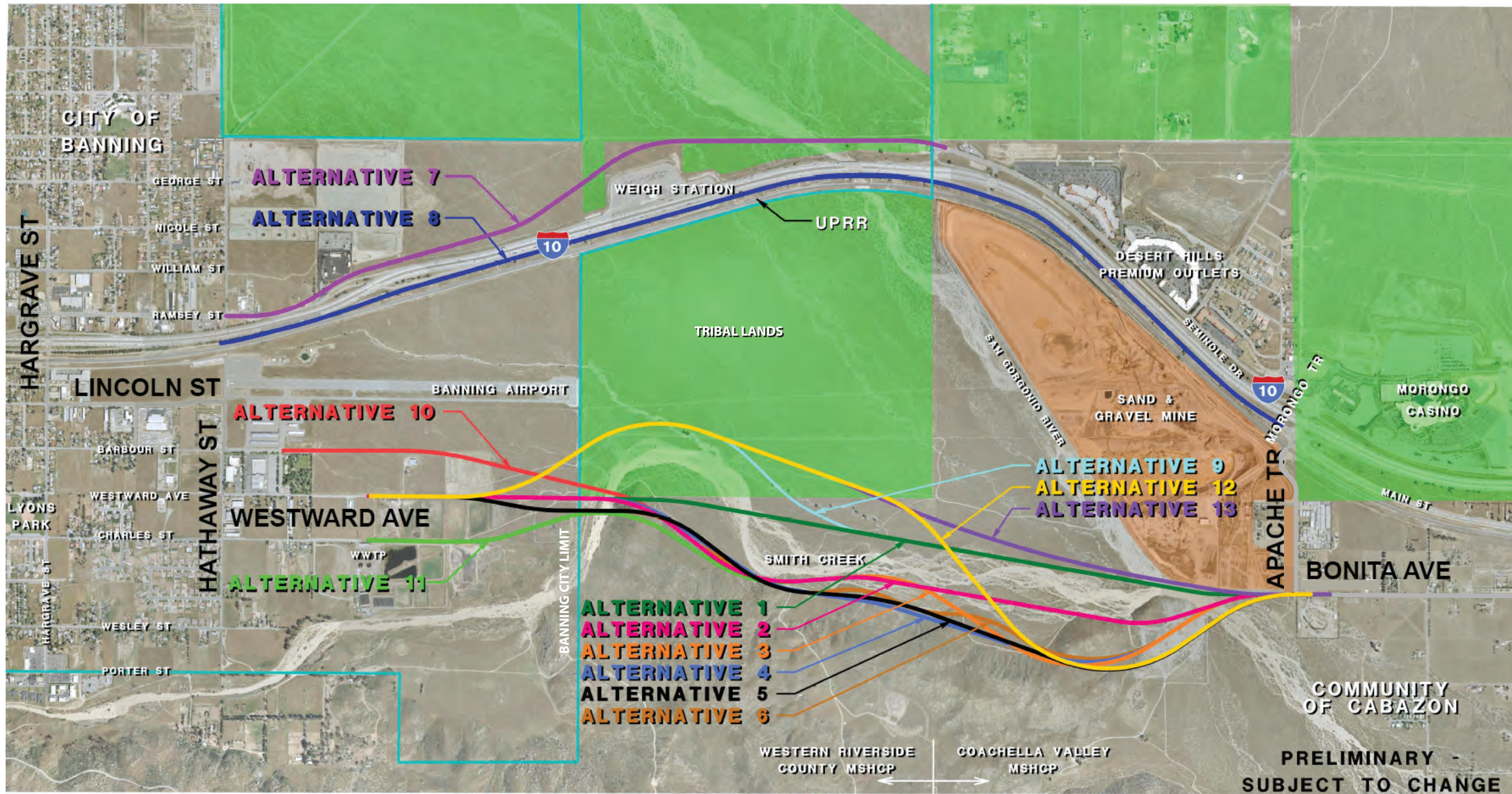


Figure 2

*I-10 Bypass: Banning to Cabazon*

**Original Alternatives Considered**



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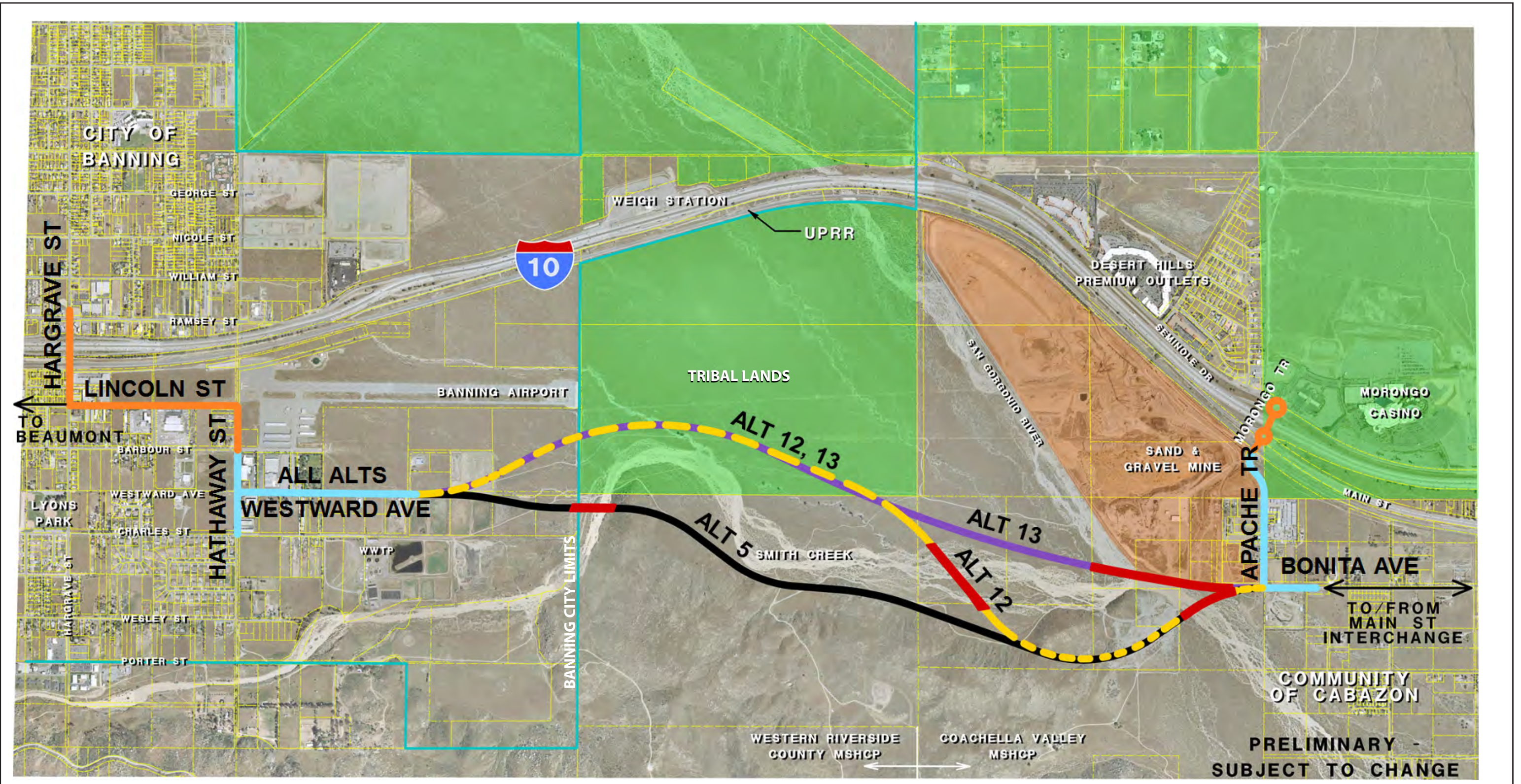


Figure 3

*I-10 Bypass: Banning to Cabazon*

**Preliminary Alternatives for EIR**

**LEGEND**

	<b>ALL ALTERNATIVES</b>		<b>CITY LIMITS</b>
	<b>NO CHANGES PROPOSED</b>		<b>INDIAN TRIBAL LAND</b>
	<b>BRIDGES</b>		

**N.T.S**

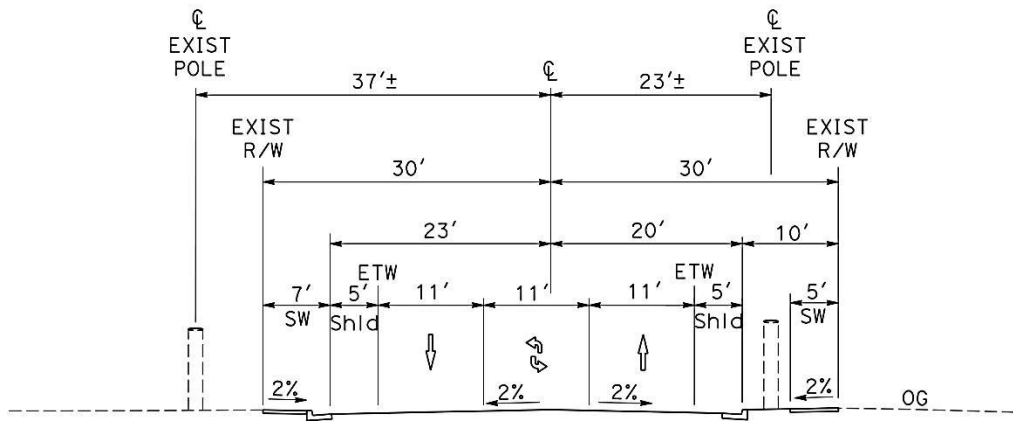
Source: Kimley Horn Associates (11/09/13)



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**East End Connections to I-10.** Proposed project improvements at the east end include widening Apache Trail from Bonita Avenue to the Union Pacific Railroad (UPRR) crossing to provide 8-foot (ft) shoulders usable as bicycle lanes in each direction. The proposed project will also reconstruct the intersection of Apache Trail and Bonita Avenue in Cabazon to become a “T” intersection, with the new roadway becoming the westbound extension of Bonita. The proposed project includes intersection improvements to provide turning lanes at the Apache/Bonita intersection. The east end connection to I-10 would utilize either the existing Morongo Parkway interchange-roundabouts with the I-10 ramps, or travel easterly along Bonita to Broadway, north on Broadway to Main Street, and then east on Main Street to access I-10 at the Main Street Interchange

**New Roadway Cross Section East of Hathaway:** The proposed roadway section, extending east of the Hathaway intersection for approximately 0.8 miles east, will utilize a reduced cross-section to stay within the existing Westward Avenue ROW and to avoid relocation of the power poles that line both sides of the street. The proposed roadway section is shown in Figure 4 and includes two 11 ft travel lanes, an 11 ft striped median, two 5 ft shoulders usable by bicyclists, and sidewalks on both sides of the road.



**Figure 4 Typical Cross Sections Hathaway St to 0.8 mi east of Hathaway**

## Unique Features of the Proposed Alternatives/Alignments

The three recommended alternatives vary in alignment between Hathaway Street and the east end of the proposed bridge over the San Gorgonio River; these alignments were shown in Figure 3.

## **Alternative 5**

As shown in Figure 3, Alternative 5 follows the existing alignment of Westward Avenue for approximately 0.8 mi then proceeds easterly to the Banning City limit and crosses Smith Creek on a new bridge approximately 1.1 mi east of Hathaway. This alternative then extends easterly parallel to the south side of Smith Creek to a new bridge over the San Gorgonio River south of its confluence with Smith Creek. From a point approximately 0.8 mi east of Hathaway to Apache Trail, the proposed new roadway segment would generally provide one 12 ft travel lane in each direction, plus a 14 ft median, two 8ft shoulders, and on the north side, an 8 foot pedestrian pathway as shown in Figure 5.

## **Alternative 12**

As shown in Figure 3, Alternative 12 follows the existing alignment of Westward Avenue for approximately 0.8 mi (same as Alternative 5) then bends northerly out of the Banning City limit and into Tribal Lands, staying north of Smith Creek to the eastern end of the Tribal Lands approximately 2.1 mi east of Hathaway. At that point, Alternative 12 crosses Smith Creek on a new bridge and follows the alignment of Alternative 5 south of Smith Creek to a new bridge over the San Gorgonio River south of its confluence with Smith Creek. From a point approximately 0.8 mi east of Hathaway to Apache Trail, the proposed new roadway segment would generally provide one 12 ft travel lane in each direction, plus a 14 ft median, and two 8ft shoulders, and on the south side, an 8 foot pedestrian path as shown in Figure 5.

## **Alternative 13**

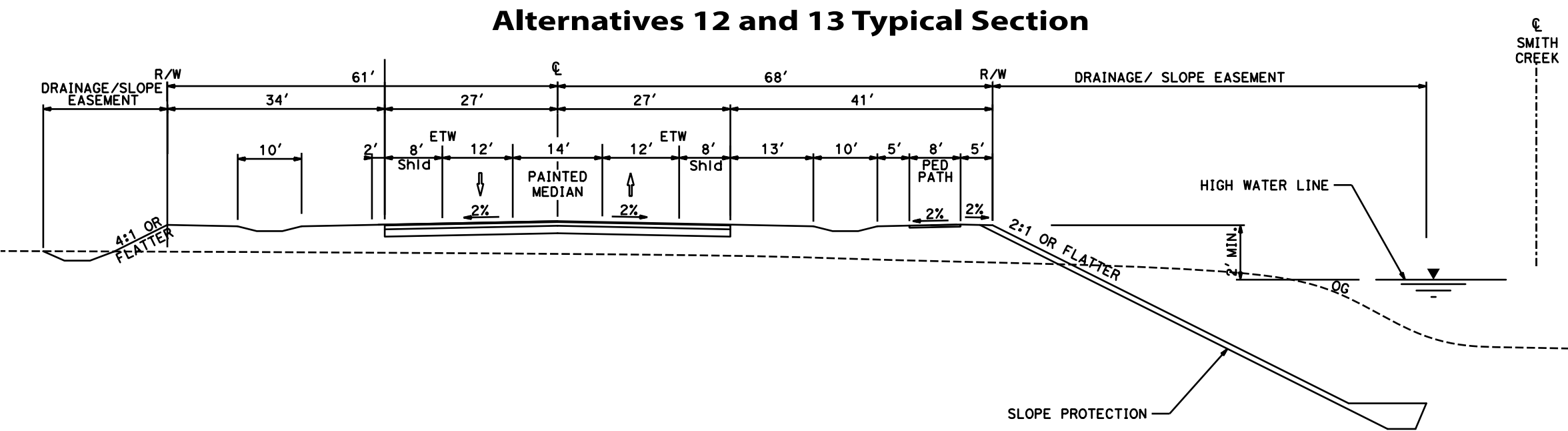
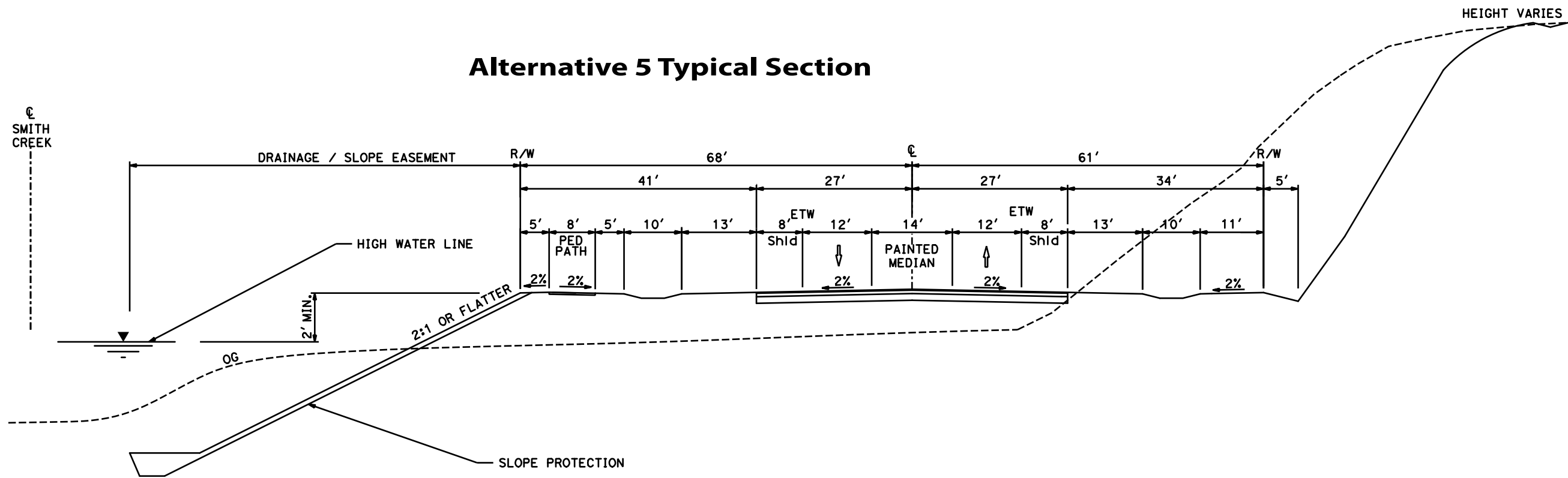
As shown in Figure 3, Alternative 13 follows the Alternative 12 alignment, staying north of Smith Creek to a point approximately 2.1 mi east of Hathaway. Alternative 13 then diverges from Alternative 12, staying north of Smith Creek to a new bridge over the San Gorgonio River just north of the Smith Creek confluence, as shown in Figure 2. The proposed new roadway segment would have the same cross section as Alternative 12, as shown in Figure 5.

## **Other Project Elements**

- The proposed project includes measures necessary to establish a stable bank where the roadway is adjacent to Smith Creek and the San Gorgonio River.
- The proposed project includes space for CHP truck enforcement areas.

## **No Build Alternative**

The environmental analysis will also include the “No Build” Alternative in which no new roadway is constructed and no additional improvements are made.



Both Views Facing East

Figure 5  
*I-10 Bypass: Banning to Cabazon*  
**Alternative Typical Sections**  
 (From Approximately 0.8 mi east of Hathaway to Apache Trail)

Source: Kimley-Horn and Associates, Inc.



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## **Project Approvals Required.**

The proposed project will require the following permits, approvals and reviews:

- Approval of ROW easement from the Morongo Tribe for Alternatives 12 and 13 only (requires Bureau of Indian Affairs approval)
- State and federal approvals for impacts to waters along the Smith Creek and San Gorgonio River
- Amendment of the Riverside County General Plan Circulation Element to show the proposed roadway (CEQA document only)
- Review of the project by the Western Riverside Regional Conservation Authority
- Review of the project by the Coachella Valley Conservation Commission

**Environmental Factors Potentially Affected:**

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact") as indicated by the checklist on the following pages.

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

**Determination:**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" 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.
- 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required

  
\_\_\_\_\_  
Signature

November 8, 2013  
\_\_\_\_\_  
Date

Mary Zambon

I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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**I. AESTHETICS -- Would the project:**

- a) *Have a substantial adverse effect on a scenic vista?*

**Potentially significant impact.** There are no scenic vistas within the project corridor according to the Riverside County general plan. However, there are views of the northern foothills of the San Jacinto Mountains from the area surrounding the project and from I-10. Depending on the alternative, the project may require grading into portions of the initial edge of the foothills. Such grading could be visible from viewpoints surrounding the project. Potential impacts will be examined in the EIR; including “before-and-after” visual simulations and a Visual Impact Assessment (VIA) will be prepared.

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

**Potentially significant impact.** SR-243 (the Banning to Idyllwild Highway) is a designated scenic highway located approximately 1.5 miles west of the proposed new roadway construction. The impacts to scenic resources as seen from the scenic highway and other key viewpoints will be assessed in the VIA and summarized in the EIR, including “before-and-after” visual simulations.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less than significant impact with mitigation.** The study corridor is a flat desert plain in the north, the Smith Creek floodplain in the middle, the rolling foothills of the San Jacinto Mountains in the south, and the San Gorgonio River in the east. Urbanized uses characterize portions of the desert plain including industrial buildings in the City of Banning in the west, Banning Airport in the center west, and a sand and gravel pit near the east end of the project. Depending on the alternative, the project may require grading into portions of the initial edge of the foothills. Such grading could modify the existing visual character surrounding the project. Potential impacts will be examined in the EIR, including “before-and-after” visual simulations.

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

**Less than significant impact with mitigation.** The proposed project would not include street lighting except as needed for safety at selected intersections. Lighting placement at the selected intersections will be designed to reduce the potential for stray light and glare. Headlights and glare from automobiles will be assessed in the EIR.

The project is located approximately 45 miles from the Mount Palomar Observatory in San Diego County. As such, Riverside County Ordinance #655 applies, which restricts night lighting to protect the “Dark Sky” for the observatory, so there will be no significant impacts due to substantially increased lighting.

**II. AGRICULTURE AND FORESTRY 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 to forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.



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**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?*

**Less than significant impact.** According to the California Department of Conservation, California Important Farmland Finder (accessed October 29, 2013), there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the immediate project corridor. Some land near the eastern end the project is designated farmland of local importance, which has primarily been used for cattle grazing. General Plan policies encourage protection of farmland and agricultural resources. This will be further assessed in the EIR.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No impact.** There are no parcels under Williamson Act contract within the project corridor according to the Riverside County Williamson Act Lands 2008/2009 map prepared by the California Department of Conservation Division of Land Resource Protection.

- c) *Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**No Impact.** There is no zoned forest land in the vicinity of the project.

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

**No Impact.** There is no identified forest land in the vicinity of the project.

- 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?*

**Less than significant impacts.** As noted above, according to the California Department of Conservation, California Important Farmland Finder (accessed October 29, 2013), there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the immediate project corridor. Some land near the eastern end of the project corridor has been identified as farmland of local importance, primarily used for cattle grazing. General Plan policies encourage protection of agricultural resources. As noted above, there is no forest land in the vicinity of the proposed project.

**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?*

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**Less than significant impact with mitigation.** An Air Quality Assessment will be prepared for the project and summarized in the EIR. The Assessment will address emissions of criteria pollutants that may result from the proposed project, which would provide for more direct routing of local travel between Banning and Cabazon and would also provide an improved circulation route for bicyclists between the two cities, who must now utilize the freeway. In addition the project will provide for a pedestrian path between the two communities.

The I-10 Bypass project is located within the Riverside County portion of the South Coast Air Basin (SCAB), which is currently designated as a non-attainment area for national standards for PM<sub>10</sub>,<sup>1</sup> PM<sub>2.5</sub> and Ozone. SCAQMD has developed an Air Quality Management Plan (AQMP) to demonstrate the steps required to bring the area into compliance with National Ambient Air Quality Standards (NAAQS). The 2012 AQMP forecast, the Basin will comply with the PM<sub>2.5</sub> standard by 2014 and Ozone standards by 2023. Specific control measures outlined in the plan have been designated to control air emissions. The plan incorporates a detailed listing of proposed transportation improvements (Federal Transportation Improvement Plan [FTIP]); the FTIP improvements have been modeled; this modeling demonstrates consistency with the AQMP. The proposed I-10 Bypass project is listed in the 2013 Federal Transportation Improvement Plan; therefore, the operation of the project has been included in the AQMP modeling, which demonstrates eventual compliance with the NAAQS including standards for ozone, and PM<sub>2.5</sub>.

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

**Less than Significant Impact with Mitigation.** The Air Quality Assessment will evaluate whether operational emissions of the proposed project will increase local levels of PM<sub>10</sub> and PM<sub>2.5</sub> to levels in excess of standards or will contribute substantially to an existing or projected violation of air quality standard. Because the project is part of a conforming FTIP, no violations of such standards are anticipated during the operational phase of the project.

Construction of the I-10 Bypass project will result in construction-related emissions. The AQMP has identified control measures that may be implemented to reduce construction particulate emissions to the extent feasible, such as Best Available Control Measures (BACM) for construction activities for earth-moving construction activities, disturbed surfaces, and mandatory use of track-out control devices. The EIR will incorporate feasible mitigation measures to reduce construction related emissions.

The Riverside County portion of the SCAB is currently designated as being in attainment for CO. As shown in the project's traffic study, the I-10 Bypass will improve traffic flow through the project area. Localized CO hot-spots are therefore not anticipated to occur but will be analyzed in the EIR.

- 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)?*

**Less than significant impact with mitigation.** Operation of the proposed project would not result in a considerable cumulative net increase in ozone precursor pollutants because overall vehicle miles traveled would either remain unchanged or be slightly reduced. Vehicular traffic movement during operation of the project is not anticipated to generate a net increase in criteria pollutant emissions because the project should improve local traffic flow through the area. These emissions will be discussed in the EIR.

<sup>1</sup> The Area is currently meeting PM<sub>10</sub> standards

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Construction activities will generate CO, NOx, and particulate matter pollutant emissions; however, these temporary increases will be reduced due to the use of BACMs. Construction emissions will be addressed in the EIR and mitigation measures applied.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less than significant impact.** Sensitive receptors may be affected by shifting traffic patterns. There are three single-family dwellings adjacent to the project along existing Westward Avenue, where traffic volumes will increase with the proposed project; these sensitive receptors will be evaluated in the EIR for exceedance of CO and other pollutants. Based upon the traffic volumes forecast for the roadway, no exceedance is anticipated.

- e) *Create objectionable odors affecting a substantial number of people?*

**Less than significant impact.** Odors will result from paving operations during construction of the proposed project, which would be less than significant due to the short term of project construction. Also, the project does not involve heavy industrial uses or animal husbandry that could create objectionable odors.

**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?*

**Less than significant impact with mitigation.** Preliminary surveys of biological resources have been conducted, and the results will be compiled in the Natural Environmental Study (NES) and summarized in the EIR. Based upon these surveys, the project is not anticipated to impact any federally listed endangered or threatened species directly. Western portions of the project are located within the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP), and the proposed project is a covered activity under the MSHCP and will fulfill the Plans' requirements. Surveys have found a population of Los Angeles pocket mouse (LAPM), identified as a sensitive species in the WRMSHCP, within the biological study area (BSA); impacts to this species vary by alternative and will be reported in the NES and EIR along with recommended mitigation measures.

The eastern portion of the project is located within the Cabazon Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), is a covered activity under the MSHCP, and will fulfill the Plans' requirements. The primary applicable CVMSHCP requirement is that any project protect sand flows in the San Gorgonio River; two federally endangered species located downstream in the Whitewater River are dependent on such sand flows. Project impacts on such sand flows will be assessed (because the proposed roadway would bridge the San Gorgonio River and Smith Creek, impacts to sand flows are anticipated to be minimized) and mitigation measures identified to maintain sand flows.

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

**Less than significant impact with mitigation.** Riparian/Riverine requirements of Section 6.1.2 of the WRMSHCP will be complied with. The proposed project has the potential to affect the jurisdictional Waters of the United States and the State of California located along Smith Creek, the San Gorgonio River and their tributaries in areas where

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the proposed project crosses existing streambeds. A preliminary jurisdictional delineation of waters of the U. S. and State has been completed and alternative project alignments selected to minimize impacts to such waters. Impacts to waters will be reported in the NES and summarized in the EIR along with recommended mitigation measures.

- 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?*
- 

**Less than significant impact with mitigation.** No riparian habitat or wetlands have been identified in the biological study area. However, the proposed project has the potential to impact Waters of the United States (protected under Section 404) and Waters of the State of California. A preliminary jurisdictional delineation of waters of the U. S. and State has been completed; alternative project alignments were selected to minimize impacts to such waters. Impacts to waters will trigger Clean Water Act Sections 401 and 404, and will be reported in the NES and summarized in the EIR along with recommended mitigation measures.

- 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?*
- 

**Less than significant impact with mitigation.** The WRMSHCP identifies a potential wildlife corridor along the San Gorgonio River. The proposed project includes bridges over the major water courses to minimize impacts to wildlife movement. The EIR will evaluate the potential for the proposed project to affect wildlife connectivity, as required, and identify any necessary mitigation measures.

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

**No Impact.** No such ordinances have been identified.

- 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?*
- 

**Less than significant impact with mitigation.** Portions of the project are located with the WRMSHCP. The proposed project will be evaluated for consistency with the WRMSHCP. Consistency is addressed through compliance with applicable WRMSHCP requirements such as additional surveys, riparian/riverine policies, urban/wildlands interface, and wildlife crossings to be constructed as applicable. The proposed project will also be subject to joint project review by the Western Riverside Regional Conservation Authority and the Wildlife Agencies. Mitigation measures will be identified if necessary to demonstrate consistency.

Portions of the project are located with the CVMSHCP, specifically within the Cabazon Conservation Area. The proposed project will be evaluated for consistency with the CVMSHCP, which is addressed through compliance with applicable requirements of the Cabazon Conservation Area, including preservation of fluvial sand transport. The proposed project will also be subject to Joint Project Review by the Coachella Valley Conservation Authority and the Wildlife Agencies. Mitigation Measures will be identified if necessary to demonstrate consistency.



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**V. CULTURAL RESOURCES -- Would the project:**

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**Less than significant impact with mitigation.** A cultural resources records search performed at the Eastern Information Center identified 39 cultural resources within a half-mile radius of the proposed project. These include prehistoric archaeological sites and buildings more than 50 years old. A cultural resources survey of the project Area of Potential Effects (APE) will be performed to identify all cultural resources within the APE. Results of the survey will be incorporated into the Historic Property Survey Report (HPSR), which will be summarized in the EIR. If cultural resources are identified that may be impacted by the project, archival research and/or a testing program will be implemented to determine whether any of these cultural resources qualify as historical resources as defined in §15064.5 of CEQA. If they do, mitigation measures will be identified that will reduce project impacts to a less than significant level. Measures could include avoidance through project redesign or implementation of a detailed recording and/or data recovery program.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less than significant impact with mitigation.** An Archaeological Survey Report (ASR) will identify any archaeological sites within the APE. If archaeological sites are encountered, a testing program will be carried out to determine whether any of these sites qualifies as a historical resource or a unique archaeological resource as defined in §15064.5. If any do so, appropriate mitigation measures will be identified to reduce project impacts to a less than significant level. These measures could include avoidance through project redesign or a detailed data recovery program.

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less than significant impact with mitigation.** The project site spans areas mapped as low sensitivity for paleontological resources, based upon the Riverside County General Plan Paleontological Sensitivity Map (Open Space Element, page OS-41). The map identifies the sensitivity of lands within Riverside County in relation to the potential for finding paleontological resources. Pleistocene land mammal fossils have been recovered within Riverside County in areas of low sensitivity. This scenario, and the location of portions of the project area within areas of undetermined sensitivity, suggests that there is a potential for encountering Pleistocene fossil land mammal remains. If such resources are identified, a Paleontological Investigation Report (PIR) will be prepared and impacts will be analyzed in the EIR.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less than significant impact.** There are no known cemeteries or buried human remains within the project area. Nonetheless, the unanticipated discovery of unknown human remains is a possibility. The EIR will address this issue by requiring the following mitigation measure:

If human remains are discovered at any point in the implementation process and they prove to be prehistoric, the Riverside County Transportation Department will either avoid the impact by redesign of the project (if feasible) or work with the Native American Heritage Commission to identify and engage the most likely descendent and develop an agreement for treating or repatriating the remains with appropriate dignity along with any associated grave goods, to reduce impacts to a less than significant level.

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Implementation of the project would require ground-disturbing activities. The potential for these activities to affect unidentified human remains will be analyzed in the EIR.

**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 checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** There are no known surface-rupturing faults or faults delineated within the most recent Alquist-Priolo Earthquake Fault Zoning Map issued for the proposed project area south of I-10; several fault zones associated with the San Andreas fault are located north of I-10, while the proposed project is south of I-10. A Geotechnical Analysis will be prepared and summarized in the EIR. Any applicable mitigation measures will be incorporated.

- ii) *Strong seismic ground shaking?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** Structures, cuts, and embankments will be designed to be stable under seismic shaking through incorporation of the latest seismic design standards.

- iii) *Seismic-related ground failure, including liquefaction?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** Data regarding the potential for ground failure, including liquefaction, will be presented in the EIR. If localized areas with potentially liquefiable soils are present (generally in alluvial areas adjacent to stream channels), they will be identified in the geotechnical investigation, and appropriate design standards will be recommended if necessary. Incorporation of appropriate design standards will reduce potential impacts below a level of significance.

- iv) *Landslides?*
- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
|  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** Existing landslide potential will be assessed in the EIR. The potential for landslides in the new cut slopes created by Alternatives 5 and 12 will be described in the EIR. If unstable slopes or potential landslides are present, they will be identified in the geotechnical investigation, summarized in the EIR, and appropriate design standards and mitigation measures will be incorporated.

- b) *Result in substantial soil erosion or the loss of topsoil?*
- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** The majority of the land in the study area is classified as Urban Land, Grazing Land or Farmland of local importance (although none of the land is actually farmed) by the 2012 California Department of Conservation *California Important Farmland Finder*. While there is no Prime Farmland or Farmland of Statewide Importance located in the proposed project vicinity, there are a few pockets of Farmland of Local Importance located near the eastern end of the project corridor. Appropriate design standards for drainage and erosion control measures will be recommended in the Geotechnical Analysis and incorporated in the design to limit impacts on sensitive soils and potential farmlands.

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- 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?*
- 

**Less than significant impact.** Potentially unstable areas, if present, will be identified in the EIR, and appropriate design standards will be recommended based on the Geotechnical Analysis.

- 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?*
- 

**Less than significant impact.** Expansive soils are generally not life-threatening. If present, potential impacts to roadways or structures will be identified in the EIR and appropriate design standards will be recommended.

- 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?*
- 

**No Impact.** Septic tanks and wastewater disposal systems are not part of the project, so none would be affected by the project.

**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?*
- 

**Less than significant impact.** Construction of the proposed project has the potential to contribute directly or indirectly to greenhouse gas (GHG) emissions by increasing vehicle miles traveled. Based upon the traffic study, no substantial changes in vehicle miles travelled is anticipated to result from the project. This issue will be further addressed in the EIR, as contribution to increases in GHG is expected to be minimal, and all feasible and appropriate measures recommended will be evaluated in the EIR.

- b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?*
- 

**Less than significant impact.** The proposed project does not conflict with the County's Air Quality Element and implementation of objectives outlined in AB32. Project alternatives are not anticipated to impede State, County, or City GHG reduction goals. This issue will be further addressed in the EIR.

**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?*
- 

**Less than significant impact.** The project itself would not transport, use, or dispose of hazardous materials other than construction materials. The future road project could be used for the transport of hazardous materials, subject to existing motor vehicle restrictions and requirements.

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- 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"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Less than significant impact.** See Item VIII.a, above

- 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"/> |
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**No Impact.** There are no existing schools in the proposed project vicinity.

- 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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**Less than significant impact with mitigation.** An Initial Site Assessment (ISA) was conducted by Geocon, Inc. (2013) to determine the likely presence of hazardous materials. A preliminary result indicates the presence of several high-pressure natural gas lines in the study area, and notes two identified hazardous waste sites near the proposed alignments. This issue will be further addressed in the EIR.

- 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

**Less than significant impact with mitigation.** The project is located within two miles of Banning Municipal Airport, so FAA design standards will control the height of the roadbed and any structures associated with construction of the proposed project. The preliminary project designs meet FAA criteria; such design standards will be incorporated into the final design plans.

- 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"/> |
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**No impact.** There are no known private airstrips in the vicinity.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*
- |                          |                                     |                          |                          |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

**Less than significant impact with mitigation.** When completed, the project will have a beneficial effect during certain emergency conditions:

- i) During conditions when the adjacent section of I-10 is closed, the project will provide an emergency relief route for traffic on I-10. During recent such closures, the backups on I-10 extended as long as ten hours, creating emergency conditions for motorists with medical conditions that were trapped in the backup.



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- ii) During conditions where lengthy trains are stopped on the tracks, or moving slowly and blocking the existing at-grade crossings at Apache Trail and Broadway, residents of Cabazon south of the railroad tracks are effectively trapped in their neighborhoods; emergency vehicles cannot reach them. The proposed project will provide an alternate route for emergency services from Cabazon to Banning that would not require an at-grade railroad crossing.

The project will be designed to meet Riverside County Fire Department requirements for emergency access; however, access could be impaired during the construction phase (generally, to businesses and residences along existing Westward Avenue). Accordingly, the project will coordinate with local fire, police and hospitals to ensure that access to emergency routes during the construction phase of the project are adequately maintained.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**Less than significant impact.** Proposed alignments (Alt 5 and 12) that enter the foothills also enter a high wildfire susceptibility zone. However, the project would not expose people or structures to a significant risk of loss, injury, or death involving wild land fires as 1) the project does not propose any new urbanized land uses, and 2) consistent with the practices of the Riverside County Fire Department, the roadway would be closed if a wild land fire occurred adjacent to the route and threatened motorists. However, the roadway could be used by fire trucks for fighting any such fire and depending on the exact location of the fire, the proposed project could aid in the evacuation of the area, particularly with the evacuation of Cabazon. Future projects in the area would be developed in accordance with the Fire Hazards section of the County of Riverside General Plan Safety Element. The proposed project would provide improved emergency access in the project area.

**IX. HYDROLOGY AND WATER QUALITY Would the project:**

- a) *Violate any water quality standards or waste discharge requirements?*

**Less than significant impact.** The proposed project will comply with NPDES requirements. A Water Quality Assessment Report will be prepared. Because the land disturbance will be greater than one acre, per NPDES Phase II requirements, the proposed project will need to comply with the County’s Storm Water Management Plan (SWMP) incorporating temporary and permanent BMPs, and a Storm Water Pollution Prevention Program (SWPPP) to address long-term and short-term construction water quality impacts.

- 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)?*

**Less than significant impact.** The proposed project is expected to require minor excavation for roadside drainage ditches and culvert extensions, with little dewatering anticipated. The project will increase the amount of impervious paved surfaces; however, the project is not expected to deplete groundwater supplies substantially, interfere with groundwater recharge, or create either a net deficit in aquifer volume or a lowering of groundwater table level.

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- 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?*

**Less than significant with mitigation.** A Hydrology Report and Preliminary Drainage Report will be prepared. The proposed project would maintain the existing drainage patterns. The proposed project would bridge Smith Creek and the San Gorgonio River. Culverts would be installed at all existing smaller stream crossings in order to maintain existing drainage patterns. Erosion control measures and necessary best management practices (BMPs) will be applied at the stream crossings and at cut/fill embankments to prevent erosion and siltation. This will be further addressed in the EIR.

- 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?*

**Less than significant with mitigation.** The proposed project would maintain existing drainage patterns. The proposed project alternatives add between 22 and 24 acres of new pavement. This additional pavement has the potential to increase local runoff from the pre-project conditions directly near the roadway. However, this increase is considered insignificant when compared to the large 100-year flow rates in Smith Creek and the San Gorgonio River. The small increase in roadway runoff will drain into Smith Creek and the San Gorgonio River, and will be conveyed downstream before the peak off-site flow in the major tributaries of Smith Creek and the San Gorgonio River reach the project. Therefore, the small increase will have no adverse effect on potential flooding effects downstream. On-site drainage facilities will be incorporated to intercept and convey design runoff. The Drainage Report will analyze this issue and the results will be incorporated into the EIR.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

**Less than significant with mitigation.** The proposed project would include storm water systems with the capacity to convey the design runoff. See response to IX.a.

- f) *Otherwise substantially degrade water quality?*

**Less than significant with mitigation.** BMPs will be constructed to treat increased polluted runoff that could be generated by the roadway improvements. See response to IX(a). With proper application of BMPs, the proposed project would not substantially degrade water quality.

- 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?*

**No impact.** The proposed project does not include construction of housing.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

<b>I-10 Bypass: Banning to Cabazon Initial Study Environmental Checklist</b>	<b>Potentially Significant Impact</b>	<b>Less than Significant Impact with Mitigation</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**Less than significant with mitigation.** A Location Hydraulic Study and Floodplain Evaluation Report will be prepared. In general, the proposed project would bridge over Smith Creek, the San Gorgonio River, and other major drainages. Any construction within the special flood hazard area (SFHA) is subject to federal floodplain management requirements. When adding cross-culverts, proper openings are necessary so that the proposed project will not impede or redirect flood flows. The issue will be assessed in the EIR, and mitigation measures identified.

- 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?*

**Less than significant with mitigation.** The proposed project would cross existing stream beds and their tributaries. A Hydraulic Analysis will be prepared and incorporated into the EIR. Proper designs such as improved transition structures upstream and downstream of the culverts, placement of erosion protection, or upsizing cross-culverts, would be incorporated to minimize significant risks involving flooding.

- j) *Inundation by seiche, tsunami, or mudflow?*

**Less than significant impact.** Because the project area is located nearly 100 miles inland from the Pacific Ocean, the proposed project would not be inundated by seiche or tsunami. The EIR will further evaluate mudflow during construction in hilly terrain.

**X. LAND USE AND PLANNING - Would the project:**

- a) *Physically divide an established community?*

**No Impact.** The project proposes improvements outside of existing residential communities.

- 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?*

**Less than significant impact.** The project is consistent with the Riverside County General Plan other than its circulation element. The project components include amending the circulation element to add the roadway, thereby correcting the inconsistency. The project is consistent with the with the City of Banning General Plan, and the entire proposed project corridor is within the Mt. Palomar Mountain Nighttime Lighting Policy area, which necessitates unique nighttime lighting standards in order to limit light leakage and spillage that may obstruct or hinder the view of the nighttime sky. A more detailed study of local plans and policies will be prepared and reported in the EIR.

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

**Less than significant with mitigation.** The western part of the proposed project is located within the WRMSHCP planning area. The WRMSHCP has the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The eastern part of the project is located in the CVMSHCP which has similar objectives. The EIR will assess the project's consistency with both plans.

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**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?*

**Less than significant with mitigation.** See Item XI.b, below.

- 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?*

**Less than significant impact.** According to the County of Riverside General Plan Multipurpose Open Space Element, the project area is located in a MRZ-3 zone, which designates land where available geologic information indicates that mineral deposits (regionally important) are likely to exist but the significance of the deposit is undetermined. A sand and gravel mine proposed for expansion is located in the eastern end of the project area. Impacts to mineral resources will be assessed in the EIR.

**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?*

**Less than significant impact with mitigation.** Depending on predicted future traffic volumes and proximity of sensitive receptors, traffic noise levels may exceed local criteria applicable to roadway noise impact for the three existing residences along Westward. A noise study will be conducted to assess operational traffic noise levels and their effects on sensitive receptors, and to recommend suitable noise abatement techniques, if feasible. The feasibility of mitigation will be assessed in the EIR.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less than significant impact with mitigation.** Less than significant impact is expected to result from groundborne vibration or groundborne noise associated with the operation of the proposed project. Groundborne noise and vibration impacts generated as a result of project construction are anticipated to be less than significant despite the use of jackhammers, vibratory compaction rollers, and other earth-moving construction equipment. Such impacts would be temporary and intermittent. No long-term exposure to excessive groundborne vibration or groundborne noise levels is anticipated; however, this topic will be addressed further in the EIR.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less than significant impact with mitigation.** Please see Item XII. a) above.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Potentially significant impact.** An increase in noise levels associated with project construction activities is expected to occur but would be temporary and intermittent. Increases in noise levels during operation of the project, above existing noise levels, will be assessed in the EIR. Construction noise will be addressed in the EIR.



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- 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?*
- 

**Less than significant impact.** The proposed project is located near the Banning Municipal Airport. The Riverside County Airport Land Use Commission adopted a Comprehensive Land Use Plan Banning Municipal Airport in 1993; this plan includes noise level projections for the airport and environs. No habitable structures are proposed as a part of the project. None of the project alternatives is located within the airports' "Future" 65CNEL, which would be considered an excessive noise zone. As such, the proposed project is not expected to expose people to excessive airport noise.

- 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?*
- 

**No impact.** The project is not in the vicinity of a private airstrip, and no habitable structures are proposed, so it would not expose people residing or working in the project area to excessive noise.

**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)?*
- 

**Less than significant impact:** The proposed project is a roadway project that will not directly create new population growth. The EIR will assess the proposed project's ability to induce additional growth indirectly. The analysis will assess the existing development constraints for each of the parcels within the general area of the proposed project based on existing general plans and zoning, existing roadway access, railroad access, physical and natural resource constraints such as water courses, utility service, and economics (demand for development). The generalized effects of potential development on resources of concern will be assessed in the EIR. The effects of existing resource preservation programs such as the WRMSHCP and CVMSHCP will be discussed.

- b) *Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?*
- 

**No Impact.** The proposed project will not displace any existing housing units, so it will not necessitate construction of replacement housing elsewhere

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*
- 

**No Impact.** The proposed project will not displace any existing residents.

**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 public services:*

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*Fire protection?*

**No Impact.** The project would not require construction of new fire protection facilities. The proposed project would provide a roadway connection between Banning and Cabazon other than I-10, which will expand access and improve response times during emergencies along this section of the Interstate and for surrounding areas when I-10 is backed up. This issue will be discussed in the EIR.

*Police protection?*

**No Impact:** The proposed project would provide a roadway connection between Banning and Cabazon other than I-10, which will expand access and improve response times during emergency along this section of the Interstate and for surrounding areas when I-10 is backed up. The Desert Hills (Banning) weigh station is located in the I-10 segment parallel to the bypass, and is operated by the California Highway Patrol (CHP). To preclude trucks from using the bypass to avoid the weigh station, truck enforcement turnouts will be provided in both directions to allow the CHP to enforce the weigh station restrictions. This issue will be discussed in the EIR.

*Schools?*

**No Impact:** The proposed project will not affect schools.

*Parks?*

**No Impact:** The proposed project will not affect parks.

*Other public facilities?*

**No Impact:** No other impacts to public facilities have been identified.

**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?*

**No Impact.** There are no existing local or regional parks along the proposed alignment.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**No impact.** The project does not include construction or expansion of recreation facilities. However, the proposed project would include shoulders usable as bicycle lanes, which may increase recreational opportunities for bicyclists.

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**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?*

The “applicable plan, ordinance or policy” is the Riverside County Congestion Management Plan, which establishes levels or service standards for roadway links and intersections. Please see discussion in item b) below. The project is consistent with adopted County plans relevant to bicycle facilities and pedestrian paths. This topic will be further addressed in the EIR.

- 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?*

**Less than significant impact.** The Traffic Study prepared for the project indicates that all study area intersections will operate at levels of service consistent with the Riverside County Congestion Management Plan. This will be addressed in the EIR.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?*

**No impact.** The project would not involve air traffic.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Less than significant impact.** The project will be designed to meet applicable County road design standards.

- e) *Result in inadequate emergency access?*

**Less than significant impact with mitigation.** Upon completion, the project will improve emergency access. The County will coordinate with emergency service providers to address emergency access during construction.

- 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?*

**No impact.** The project will support alternative transportation modes by providing a safer route for bicycles and pedestrians between Banning and Cabazon.

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**XVII. UTILITIES AND SERVICE SYSTEMS –**

Would the project:

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

See item XVII. b.

- 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?*

**No impact.** The proposed project would not generate or cause generation of wastewater. No new water or wastewater treatment facilities or expansion of existing facilities would be required.

- 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?*

**Less than significant impact with mitigation.** The project alternatives add between 22 and 24 acres of new pavement. This additional pavement has the potential to increase local runoff from the pre-project conditions directly near the roadway. However this increase is considered insignificant when compared to the large 100-year flow rates in Smith Creek and the San Gorgonio River. The small increase in roadway runoff will drain into Smith Creek and the San Gorgonio River and be conveyed downstream before the peak off-site flow in the major tributaries of Smith Creek and the San Gorgonio River reach the project. The small increase will therefore have no adverse effect on potential flooding effects downstream, and no additional drainage facilities are needed. This issue will be addressed in the Drainage Report and summarized in the EIR.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**No impact.** See item XVII.e.

- 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?*

**No impact.** The proposed project would involve road construction. No new water supply or waste treatment capacity would be required.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

**Less than significant impact.** Operation of the facility is not anticipated to generate ongoing solid waste. Construction and demolition activities for the proposed project would generate solid waste, the majority of which would be a product of demolition. In compliance with AB 939, Riverside County has developed a Countywide



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Integrated Waste Management Plan, which includes a demolition waste recycling program to reduce the amount of waste to be disposed of in landfills. Solid waste that remains after recycling would be disposed of in appropriate landfills within the region. The closest County waste facility is the Lamb Canyon Landfill located on SR-79 south of Beaumont. According to Riverside County staff, the county's entire waste disposal system has a minimum of 15 years of disposal capacity as required by state law.

- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

**Less than significant impact.** The project would comply with federal, state and local statutes related to solid waste.

**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?*

**Less than significant impact with mitigation.** The proposed project is not expected to interfere substantially with the movement of any know native resident or migratory fish or wildlife species; this issue will be assessed in the EIR. The proposed project must comply with the WRMSHCP and the CVMSHCP. Additionally, the project site spans areas mapped as low sensitivity for paleontological resources according the Riverside County General Plan. Pleistocene land mammal fossils have been recovered within Riverside County in areas of low sensitivity. This suggests that there is a potential for encountering Pleistocene fossil land mammal remains. A more detailed analysis of impacts to biological and cultural resources will be conducted for the EIR.

- 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)?*

**Less than significant impact with mitigation.** The EIR will contain a detailed evaluation of cumulative effects. The project is being designed consistent with planned growth identified in the Riverside County General Plan, the Banning General Plan, and the Morongo General Plan. The cumulative impacts analysis will also address any additional projects currently proposed that require a general plan amendment.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Potentially significant impact.** The potential for the project to cause substantial adverse effects on human beings, such as through visual impacts or increased noise levels, will be further evaluated in the EIR.

# **Appendix K** Energy Analysis Memorandum

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## MEMORANDUM

**DATE:** December 13, 2017

**To:** Aaron P. Burton, Senior Environmental Planner, California Department of Transportation, District 8

**FROM:** Zhe Chen, Air Quality Specialist

**SUBJECT:** I-10 Bypass Project Energy Analysis

This Energy Analysis memorandum has been prepared to evaluate the potential energy impacts associated with the proposed Interstate 10 (I-10) Bypass Project (project) in the City of Banning (Banning) and the unincorporated community of Cabazon (Cabazon), Riverside County (County), California. This memorandum provides a project-specific Energy Analysis by examining the temporary indirect energy impact and permanent direct energy impact of the proposed project.

### PROJECT DESCRIPTION

The County proposes to construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in Banning to the intersection of Bonita Avenue and Apache Trail in Cabazon. The two-lane roadway would include a striped median, shoulders usable by bicyclists, and a pedestrian walkway. The roadway would be constructed consistent with a future widening to four lanes when needed. Two alternative alignments, Alternative 5 and Alternative 12, are under consideration.

When combined with existing roadways connecting to I-10, the new route would provide a new road parallel to I-10 between the I-10 Hargrave Street interchange in Banning, via Hargrave Street, Lincoln Street and Hathaway Street to Westward Avenue, and the Morongo Parkway (Apache Trail) interchange in Cabazon. Vehicular, bicycle, and pedestrian traffic between these two interchanges must now use the I-10 to travel between Banning and Cabazon.

The proposed project is located in the City of Banning and the unincorporated community of Cabazon in Riverside County. A portion of Alternative 12 traverses Morongo Band of Mission Indians Tribal Lands.

### METHODOLOGY

This Energy Analysis is based on the methodology described in detail in the Caltrans Standard Environmental Reference (SER), Volume 1, Chapter 13 – Energy (updated January 20, 2015). A



quantitative and qualitative energy analysis was conducted which discusses the direct and indirect energy conservation potential of the project. The project is not considered a “Major Project” requiring a more detailed energy analysis because the project is not likely to have substantial impacts on energy consumption.

The Energy Analysis addresses two elements: direct and indirect energy consumption. Direct energy use is the energy consumed in the actual propulsion of a vehicle using the facility. It can be measured in terms of the thermal value of the fuel, the cost of the fuel, or the quantity of electricity used in an engine or motor. Direct energy use factors are:

- **Traffic-Related.** Year of study, volume of traffic, speed, distance, composition of vehicle types, characteristics of traffic flow, cold-start effects and idling; and
- **Facility-Related.** Grades, curvature, pavement condition, stops (signs, signals, etc.) and altitude.

Indirect energy is defined as all the remaining energy consumed to run a transportation system, including construction energy, maintenance energy, and any substantial changes to energy consumption related to project-induced land use changes and mode shifts, and any substantial changes in energy associated with vehicle operation, manufacturing, or maintenance due to increased automobile use. Indirect energy use factors are:

- **Vehicle manufacture.** Materials and quantities, manufacture energy, useful life and salvage energy;
- **Vehicle maintenance.** Routine wear and replacement, road-related wear, operation of repair facilities, and fuel distribution;
- **Facility construction.** Excavation, backfill, dredging, structures, surface/pavements, signs, lights, heating, ventilation, and air conditioning (HVAC), landscaping, material transport, useful lives; or date/constant dollar cost, location, type of construction, and useful lives;
- **Facility operation/maintenance.** Age of facility, equipment needed, surface/pavement type and cost;
- **Peripheral effects.** Change in land use with time, change in fuel source with time, change in local energy need with time, future power plant sites, and location of energy-related natural resources.

Because the project is a transportation improvement, the Study Area for potential energy impacts is the *Traffic Operational Analysis Revised Final Report* (April 2015)<sup>1</sup> Study Area, which includes portions of the City of Banning (Banning), the community of Cabazon, the Morongo Band of Mission Indians Tribal Lands, and unincorporated Riverside County lands along I-10 between the Sunset

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<sup>1</sup> Kimley-Horn and Associates, Inc., 2015. *Traffic Operational Analysis, Revised Final Report, I-10 Bypass Preliminary Engineering and Environmental Services*, April.

Avenue/I-10 Interchange on the west (Banning) and the Main Street/I-10 Interchange on the east (Cabazon).

## ENVIRONMENTAL CONSEQUENCES

### Temporary Indirect Impacts

Temporary indirect energy impacts would result from the construction of the project. Construction energy impacts involve the one-time, non-recoverable energy costs associated with construction of roads and structures. Construction of the project would require the use of off-road construction equipment, as well as water trucks, and on-road vehicles for soil hauling and worker commuting.

As discussed in the *Air Quality Analysis* (September 2014)<sup>1</sup>, the project construction would last approximately 24 months and would include four phases. Each piece of construction equipment would operate 8 hours per working day. The equipment list for each phase, number of equipment, horsepower, and load factor assumptions are shown in Table A.

**Table A: Construction Equipment Assumptions**

Construction Phase	Construction Equipment	Number of Equipment	Horsepower	Load Factor
Grubbing/Land Clearing	Crawler Tractors	1	208	0.43
	Excavators	1	163	0.38
	Signal Boards	7	6	0.82
Grading/Excavation	Crawler Tractors	1	208	0.43
	Excavators	3	163	0.38
	Graders	1	175	0.41
	Rollers	2	81	0.38
	Rubber Tired Loaders	1	200	0.36
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	78	0.48
	Generator Sets	1	84	0.74
	Graders	1	175	0.41
	Plate Compactors	1	8	0.43
	Pumps	1	84	0.74
	Rough Terrain Forklifts	1	100	0.4
	Scrapers	2	362	0.48
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37
Paving	Pavers	1	126	0.42
	Paving Equipment	1	131	0.36
	Rollers	3	81	0.38
	Signal Boards	7	6	0.82
	Tractors/Loaders/Backhoes	2	98	0.37

Source: Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0

<sup>1</sup> LSA Associates, Inc. 2014. *I-10 Bypass Project: Banning to Cabazon Air Quality Analysis*, September.

All construction equipment was assumed to be powered by diesel, and the fuel consumption was calculated based on the equation:

$$\text{Fuel Consumption} = \text{Horsepower} * \text{Load Factor} * \text{Specific Fuel Consumption}$$

where the specific fuel consumption was assumed as 0.22 kilogram per kilowatt hour for diesel engine (February 2016)<sup>1</sup>. Table B shows the daily fuel and energy consumption of each construction phase.

**Table B: Construction Off-Road Fuel and Energy Consumption**

Construction Phase	Fuel Consumption (gallon/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	74.24	10.20
Grading/Excavation	373.58	51.35
Drainage/Utilities/Subgrade	292.23	40.17
Paving	119.61	16.44

Source: Compiled by LSA Associates, Inc. (December 2017)

The on-road vehicle trips, including soil hauling, worker commuting, and water trucks would also consume fuel. It was assumed that light duty trucks would be used for worker commuting, while soil hauling and water trucks would be heavy-heavy duty diesel trucks. Table C shows the daily vehicle miles traveled (VMT), fuel consumption, and energy consumption for each phase.

**Table C: Construction On-Road VMT, Fuel, and Energy Consumption**

Construction Phase	Soil Hauling VMT (miles /day)	Worker Commute VMT (miles/day)	Water Truck VMT (miles/day)	Diesel Consumption (gallon/day)	Gasoline Consumption (gallon/day)	Energy Consumption (MMBtu/day)
Grubbing/Land Clearing	0	480	40	6.29	22.38	3.56
Grading/Excavation	4,020	960	40	638.57	44.75	93.16
Drainage/Utilities /Sub-Grade	0	880	40	6.29	41.02	5.81
Paving	0	720	40	6.29	33.56	4.91

Notes: VMT = Vehicle Miles Traveled

Source: Sacramento Metropolitan Air Quality Management District, Road Construction Emissions Model, Version 8.1.0

Compiled by LSA Associates, Inc. (December 2017)

As shown in Table B and C, the total of construction related off-road and on-road peak daily energy consumption would be approximately 145 MMBtu (51.35 MMBtu + 93.16 MMBtu = 144.51 MMBtu) per day and would occur during the grading/excavation phase. Compared to energy consumption without the project construction, the project would have a substantial increase to temporary indirect energy consumption in the Study Area. However, this level of energy consumption would be

<sup>1</sup> Mario Klanfar, Tomislav Korman, Trpimir Kujundžić, 2016. *Fuel Consumption and Engine Load Factors of Equipment in Quarrying of Crushed Stone*. February.

negligible at the regional level, and would only last for a short period of time during project construction. Therefore, the impact would be less than significant.

### **Permanent Direct Impacts**

Local energy demand for transportation projects typically is dominated by vehicle fuel usage. Energy consumption is mainly based on the annual VMT. As stated in the Project Description, a primary purpose of the project is to provide an alternative to I-10 for local traffic in the Study Area in addition to providing an alternate route between Banning and Cabazon in the event of a closure on I-10. Currently, local traffic has no alternative to using I-10 between Banning and Cabazon, but I-10 provides an indirect route between the two communities. The construction of the proposed bypass roadway would provide for a more direct path between the two communities, allowing much of the local traffic currently using I-10 for these short trips to use the shorter bypass roadway instead. This additional route is anticipated to reduce overall VMT in this area by reducing out of direction travel for local vehicle trips. Moreover, the project would provide a safe route for bicyclists and pedestrians, which encourages the use of these modes of transportation, and thus reduces VMT.

In addition to VMT, traffic operating conditions in the Study Area also influence fuel consumption rates. Without the capacity improvements resulting from the project, congested traffic conditions would be more prevalent throughout the Study Area. Those conditions would contribute to a higher energy consumption rate because vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on congested roads. In addition, in the event of a closure along I-10 or major delays affecting the freeway, the project would reduce the need for circuitous detours through Idyllwild or City of Victorville when I-10 is closed, as well as reducing the amount of idling and slow speed travel behind any closure, which would improve traffic operating conditions.

Therefore, by reducing VMT and improving traffic operating conditions in the Study Area, the project would decrease local and regional energy consumption and would thus compensate for energy consumption associated with construction of the project. No significant impact would occur.

### **Consistency with Energy Conservation Plans**

The California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the Consumer Power and Conservation Financing Authority (CPA) approved the final State of California Energy Action Plan in 2003<sup>1</sup>. The Plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are achieved and provided through policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, an updated Energy Action Plan was adopted by the CEC and the CPUC to reflect policy changes and actions after 2003.

The State's energy policies have been substantially influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. The CEC's Integrated Energy Policy Report (IEPR) advances policies that would enable the State to meet its energy needs in a carbon-

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<sup>1</sup> CEC, CPUC, CPA, 2003. *State of California Energy Action Plan*, May.



constrained world. That report also provides a comprehensive set of recommended actions to achieve these policies.

Rather than produce a new Energy Action Plan, the CEC and the CPUC have prepared instead the Energy Action Plan – 2008 Update<sup>1</sup>, which examines the State’s ongoing actions in the context of global climate change. The update was prepared using the information and analysis prepared for the 2007 IEPR as well as recent CPUC decisions.

As discussed above, while the temporary indirect energy impacts of constructing the project are substantial at a local level, the total indirect energy impacts would be negligible at the regional and statewide level. The project would not conflict with these California energy conservation plans because the California energy conservation planning actions are conducted at a regional level and the total project impact to regional energy supplies would be minor.

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<sup>1</sup> CEC, CPUC, 2008. *Energy Action Plan – 2008 Update*, February.

## **Appendix L** Responses to Comments

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All comment letters are provided in this Appendix, followed by responses after each letter. Each substantive comment or issue is numbered, as is the response which considers/addresses each issue, so the reader can easily review the corresponding response.

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## **L.1 Comments from Federal Agencies**





U.S. Fish and Wildlife Service  
 Palm Springs Fish and Wildlife Office  
 777 East Tahquitz Canyon Way, Suite 208  
 Palm Springs, California 92262  
 760-322-2070  
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California Department of Fish and Wildlife  
 Inland Deserts Region  
 3602 Inland Empire Blvd., Suite C-220  
 Ontario, California 91764  
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In Reply Refer To:  
 FWS/CDFW-WRIV/ERIV-18B0125-19CPA0291

September 25, 2019  
*Sent by email*

Ms. Mary Zambon  
 Senior Transportation Planner  
 Riverside County Transportation Department  
 3525 14th Street, Riverside, CA 92501

Subject: Comments on Recirculated Draft Environmental Impact Report/Environmental Assessment for the I-10 Bypass Project: Banning to Cabazon, Riverside County, California  
 SCH# 2013111039

Dear Ms. Zambon:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (CDFW), hereafter referred to as the Wildlife Agencies, have reviewed the Recirculated Draft Environmental Impact Report/Environmental Assessment (RDEIR) for the Interstate 10 (I-10) Bypass Project (Project), received August 12, 2019. The Wildlife Agencies provided comments on the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) on April 30, 2018. The RDEIR was recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. The RDEIR also includes additional information in response to comments received through April 30, 2018 on wildlife corridors (Section 2.15), and potential impacts at stream crossings (Section 2.16).

The Wildlife Agencies' April 30, 2018 letter expressed concerns related to the proposed Project's impacts on: wildlife movement; whether the Project will affect the completion of the Special Area Linkage and connectivity between the San Bernardino and San Jacinto Mountain ranges; impacts to sand transport, including fluvial and aeolian, and corresponding affects to downstream conservation areas; impacts to hydrological features and the resources they support; impacts to covered species and resources related to both the Western Riverside County and Coachella Valley Multiple Species Habitat Conservation Plans, including Riversidean Alluvial Fan Sage Scrub (RAFSS) habitat, Los Angeles pocket mouse, desert tortoise, and other sensitive species with the Project area; potential impacts to species-status species; appropriate offsets to address Project-related impacts; and cumulative impacts.

The Wildlife Agencies appreciate that some of the concerns raised in our April 30, 2018 letter were addressed in the RDEIR, however the Wildlife Agencies remain concerned and we request the revision and recirculation of the CEQA to address the following:

1. Adequacy of the analysis, including cumulative impacts, and the identification of appropriate and enforceable mitigation measures for the Project's Impacts on wildlife movement.

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- 2. Adequacy of the analysis, including cumulative impacts, and the identification of appropriate and enforceable mitigation measures for the Project’s Impacts on the Special Linkage Area.
- 3. Adequacy of the analysis, including cumulative impacts, and the identification of appropriate and enforceable mitigation measures for the Project’s Impacts on sand transport, including fluvial and aeolian, and corresponding effects to downstream, conservation areas

F-1-2

F-1-3

The primary concern and mandate of the Service is the protection of fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). CDFW is a trustee agency under the California Environmental Quality Act (CEQA) and is responsible for ensuring appropriate conservation of fish and wildlife resources including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act, and administers the Natural Community Conservation Planning Program (NCCP).

F-1-4

On June 22, 2004, the Service issued a section 10(a)(1)(B) permit for the Western Riverside County Multiple Species Habitat Conservation Plan (WR-MSHCP). On October 1, 2008, the Service issued a section 10(a)(1)(B) permit for the Coachella Valley MSHCP (CV-MSHCP), collectively referred to as the MSHCPs. CDFW also issued Natural Community Conservation Plan Approval and Take Authorization for the MSHCPs as per Section 2800 *et seq.*, of the California Fish and Game Code. The MSHCPs established conservation programs to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permits. The Wildlife Agencies provide the following comments on the RDEIR and associated technical appendices, as they relate to consistency with the MSHCPs, the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The proposed Project is located in the San Gorgonio Pass area of Southern California. The road alignment traverses areas within the jurisdiction of the County of Riverside, the City of Banning, and the Morongo Band of Mission Indians (depending on the alternative). There is currently no local roadway connecting the communities of Cabazon and Banning; vehicles must use the I-10 Freeway. The lack of local roadway contributes to congestion on I-10 (delays of more than 10 hours have been reported in recent years) when I-10 is closed between Banning and Cabazon because of emergencies. The proposed project would provide an alternate traffic route when I-10 closes for emergencies, as well as provide local circulation for vehicles, bicyclists, and pedestrians. The California Department of Transportation (Caltrans) and the Riverside County Transportation Department (County) propose to construct a new two-lane road from approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the unincorporated community of Cabazon, California. Caltrans is the lead agency for environmental review under NEPA. The County is the lead



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agency under the CEQA. The new roadway and bridges would traverse undeveloped land south of I-10.

Two alternative alignments (#5 and #12) are under consideration along with a No Action/No Project Alternative. Proposed roadway elements common to Alternatives 5 and 12 include: one 12-foot lane in each direction, a 14-foot painted median, 8-foot paved shoulders, an 8-foot wide multi-use path, drainage ditches/swales approximately 10 to 20 feet wide parallel to the roadway with inlets, cross culverts under the roadway ranging in size from approximately 36 inches in diameter to a 10 x 10 foot box and inlet protection and/or debris settling basins at the upstream end of cross culverts. The debris basins will range in size from approximately 15 feet to 100 feet in diameter. Both Alternatives include a bridge over San Gorgonio River (900 feet long by 102 feet wide) designed to accommodate existing flows, provide a wildlife crossing, preserve sand transport, and provide for the proposed San Gorgonio River trail. Alternative #5 includes a bridge of 650 feet long by 101 feet wide and Alternative #12 includes a bridge of 1,100 feet long by 101 feet wide over Smith Creek Both Smith Creek bridge alternatives are designed to accommodate existing flood flows, wildlife movement, a potential equestrian trail, and sand transport. The ultimate buildout is expected to occur in 20 years and will consist of a four-lane road with the 129-foot right of way. The RDEIR identifies that Alternative #12 is the Locally Preferred Alternative because it would (RDEIR, page S-11) “result in fewer environmental impacts to biological resources, cultural resources, and visual/aesthetic resources.”

### **Comments and Recommendations**

The Project alignment is within the Plan Areas of both MSHCPs and both Caltrans and the County are permittees and signatory to the Implementing Agreements. The road design and construction are therefore subject to the respective provisions and policies of each plan. Permittees must demonstrate that proposed actions are consistent with both Plans and their associated Implementing Agreements.

The Wildlife Agencies’ comments and recommendations on the RDEIR include:

#### **Wildlife Movement**

The Project is located within the Pass Area Special Linkage Area of the WR-MSHCP. This area between Banning and Cabazon is one of the few stretches of the Banning/Cabazon pass that affords wildlife movement and connectivity between the San Bernardino Mountains and the San Jacinto Mountains. Though bisected by I-10, culverts and bridges situated along the Banning/Cabazon Pass do provide opportunity for wildlife movement. Per the Section 3.3.10 of the WR-MSHCP:

*Special Linkage Area: This Special Linkage Area will contribute to assembly of a portion of the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. Tribal coordination regarding American Indian Lands will be necessary in this area. The San Gorgonio River/San Bernardino-San Jacinto Mountains*

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*Linkage includes locations within and outside the MSHCP Plan Area. Features of the entire linkage area are described in Missing Linkages: Restoring Connectivity to the California Landscape (Penrod et al. 2001). A copy of this report is attached as Exhibit 24 to Comment Letter D in Volume V of the MSHCP. Local Permittees will apply the following rebuttable presumption of significance, taken from Appendix G to the 1998 State CEQA Guidelines, in CEQA review of proposed public and private projects within this Special Linkage Area and apply mitigation measures as appropriate: "Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?" Draft and Final CEQA documentation prepared by Local Permittees for projects within this Special Linkage Area will be forwarded to the RCA for informational purposes to provide for MSHCP coordination regarding this area.*

The Wildlife Agencies' April 30, 2018 comment letter recommended that to minimize impacts to wildlife movement through the linkage area, the Project be designed to facilitate wildlife movement via construction of multiple, appropriately sized wildlife crossings installed at intervals consistent with connectivity standards for roads in the WR-MSHCP. Table 2.15.1 of the RDEIR describes the crossing types, size, openness ratio, and suitability rationale for each of the proposed bridge and storm drain crossings within the proposed Project area (the Wildlife Agencies appreciate that the openness ratios in the RDEIR were recalculated using meters).

According to Table 2.15.1, the proposed Project crossings of Smith Creek, San Gorgonio River, and an unnamed tributary to Smith Creek will be "bridged roadways" providing for "high-quality connectivity of habitats" at each respective location for each build alternative. The storm drain crossings proposed at all other Project locations (a total of ten crossings for Alternative 12, and seven for Alternative 5) will consist of either reinforced concrete pipe (RCP) or reinforced concrete box (RCB) crossings. The RDEIR concedes that these RCB/RCPs were not "specifically designed for wildlife," and will require (page 2.8-8) "maintenance and monitoring after storm events," involving the "removal of silt and debris," however Table 2.15.1 does identify that these features will "provide connectivity for small-to-medium-sized animals." In addition to these features, Figure 2.15-2 identifies an additional eight dedicated wildlife crossings for each alternative, specifically included "to maintain wildlife connectivity for the WR-MSHCP Special Linkage and SCW Linkage Design" (RDEIR, page 2.15-17). The RDEIR states that these wildlife crossings will have an openness ratio of 0.4, but that "specific dimensions will be developed during final engineering design for the project" (RDEIR, page 2.15-12).

The Wildlife Agencies appreciate that the DEIR was revised to include additional wildlife crossings, but without identification of a minimal level of design for these proposed features, and an assessment of the efficacy of the proposed designs for wildlife movement, the Wildlife Agencies are concerned that the County's conclusion that these structures are adequate to sufficiently reduce the Project's effects on wildlife movement to less than significant with mitigation may be premature. The Wildlife Agencies are also concerned that by delaying the

F-1-5



design of these features to final engineering design, and the inclusion of the following statements in the RDEIR: “Effects to the Special Linkage Area under the Build Alternatives will be minimized, mitigated, or avoided through compliance with the WR-MSHCP requirements. Therefore, through compliance with the WR-MSHCP, there will be no adverse effects to this Special Linkage Area” (page 2.15-21) the County may be deferring development of appropriate and enforcement mitigation to later actions (e.g., completion of project consistency requirements through the WR-MSHCP and CV-MSHCP), after public review. Please note that CEQA Guidelines §15126.4, subdivision (a)(1)(8) states formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrietta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777).

F-1-5

The Wildlife Agencies are also extremely concerned that though the RDEIR identifies that Alternative 12, the Locally Preferred Alternative, “would bisect approximately 30 acres of contiguous desert scrub habitat within the WR-MSHCP Special Linkage Area,” “connectivity would be maintained by the large bridge spans” (RDEIR, page 2.15-11). The RDEIR concludes that because (page 2-15.11) “neither build alternative would block” the east/west and north/south movement of wildlife species, the Project “would maintain regional wildlife movement in the BSA.” The Wildlife Agencies were unable to locate the assessment referenced in the Natural Environment Study (Caltrans, 2015, p. ii) that supports the statement “An assessment of potential wildlife corridors in the BSA found that the project will have no substantial effects to wildlife movement” or an assessment that supports the aforementioned statement in the RDEIR that the Project “would maintain regional wildlife movement in the BSA.” The Wildlife Agencies request distribution of the analyses that were completed to support these conclusions.

F-1-6

As identified in the Wildlife Agencies’ April 30, 2018 comment letter, conservation of lands within the Special Linkage Area is needed to secure the function of the movement corridor. However, despite identifying that Alternative 12, will bisect approximately 30 acres of contiguous habitat within the WR-MSHCP Special Linkage Area, the RDEIR does not include an assessment of how completion of the proposed Project will fragment existing habitat and/or become a barrier to conserving or otherwise securing land for wildlife movement. In evaluating wildlife connectivity, both the NES and RDEIR indicate the use of the openness ratio to account for movement. The Wildlife Agencies agree that the openness of passageways can play a role in the movement of species through under crossings in culverts in a fragmented landscape, but this calculation is just one metric, and the analyses completed by the County should not be limited to a calculation of openness ratio. As previously identified by the Wildlife Agencies in our April 30, 2018 comment letter, to adequately assess the potential effects of this proposed Project, the County should complete a broader wildlife connectivity analysis in a revised and recirculated CEQA document that includes the following:

F-1-7

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|---|---------------|
| <p>1. Existing and anticipated/proposed development within the greater floodplain of Smith Creek, the San Geronio River, and the interspersed drainages following Project implementation, and how this may, or may not, affect species and the habitats upon which they depend. For example, Figure 2.1-6 of the RDEIR identifies the presence of a Community Development Overlay accessible via exit ramps included in the design for both build alternatives. However, the Wildlife Agencies were unable to locate an analysis of the potential effects to species and habitats from the Project’s provision of accessibility to this Community Development Overlay area;</p>   | <p>F-1-8</p>  |
| <p>2. Area of existing contiguous habitat within the Special Linkage Area and the effects of the bisection of this habitat following Project implementation. Despite identifying that Alternative 12 would bisect approximately 30 acres of contiguous habitat, the RDEIR concludes, without the provision of accompanying analyses that the Project would be consistent with the WR-MSHCP. The Project has not provided sufficient analyses to evaluate if it will substantially interfere “with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors” (p. 3-246 of the WR-MSHCP);</p>  | <p>F-1-9</p>  |
| <p>3. Amount of existing artificial lighting, and what is proposed as part of this Project. Mitigation Measure WC-1 Noise and Lighting of the RDEIR states that “Permanent lighting will only be provided at the wildlife corridors if absolutely necessary for safety. If permanent lighting is implemented, recessed lighting and/or glare shields would be used to prevent light from shining into the wildlife corridor habitat.” The RDEIR does not include a discussion of the color or lumens of light proposed to be used, or the potential impacts of lighting on wildlife. Further, given that the roadway is also proposed to provide pedestrian and bicycle accessibility, the Wildlife Agencies are concerned that lighting may be installed along the entire Project length, and not be limited to only “wildlife corridors if absolutely necessary”;</p> | <p>F-1-10</p> |
| <p>4. Baseline sound levels in the undeveloped habitat and how levels will change from existing. The Wildlife Agencies were unable to locate an analysis of baseline noise within the proposed Project area, or how noise levels may change from existing. The statement in the RDEIR (page 2.15-17) that “it is presumed baseline noise associated with eight lanes of traffic associated with I-10 would likely be greater than the noise generated from the proposed two-lane road” does not constitute an appropriate analysis and does not provide an assessment the potential noise impacts of the Project on wildlife;</p>   | <p>F-1-11</p> |
| <p>5. Potential for illegal dumping and how this will be addressed by Caltrans and the County in a timely manner to minimize attracting wildlife to the facility and with associated increase in potential animal mortality;</p>  | <p>F-1-12</p> |
| <p>6. Potential for increased animal mortality and how this will be addressed;</p>  | <p>F-1-13</p> |
| <p>7. Table G within the NES identifies the two crossings as “greatly support[ing] regional wildlife movement.” Please identify how implementation of the proposed Project is biologically equivalent or superior to a No Action alternative;</p>   | <p>F-1-14</p> |
| <p>8. Section 4.3.5.2 of the NES indicates wildlife movement “will not be affected due to high openness ratios.” Please identify how bisecting habitat and constraining movement to a series of bridges/culverts will achieve no effect. This section also states, “Implementation of the avoidance and minimization measures identified above would at a minimum sustain wildlife movement...in the long term.” Section 4.3.5.2 does not reference any</p>   | <p>F-1-15</p> |



specific set of avoidance and minimization measures, with the exception of non-native species treatment, and the measures address only construction related effects. The Wildlife Agencies have concerns regarding the efficacy of these measures and whether they will in fact provide long term benefits;



F-1-15

- 9. Please note, any crossing identified for wildlife movement, is not to include any human usage (equestrian/hiking/etc.). The WR-MSHCP requires that “New trails and facilities will avoid using wildlife crossing points.” (p.7-52 of the WR-MSHCP). The RDEIR identifies the potential for providing equestrian trails under Smith Creek. The analyses should identify how trail use from equestrian and other trail users will be addressed to avoid impacts to wildlife movement and should identify a crossing for equestrian and other users that is separate from the crossing identified for wildlife movement;

F-1-16

- 10. Please include a discussion of design elements for each of the proposed wildlife crossings to accommodate movement for the mountain lion, mule deer, badger, Pacific kangaroo rat, large-eared woodrat, Merriam’s kangaroo rat, coast horned lizard, rock wren, tarantula hawk, and green hairstreak butterfly. As previously mentioned, development of a specific suite of minimum design criteria (aside from only openness ratio) should not be deferred to after public review;

F-1-17

- 11. The Wildlife Agencies appreciate that the Mitigation Measure WC-3 Wildlife Corridor Fencing identifies that fencing will be installed along the entire length of the Project, on both sides of the roadway. As previously stated in the Wildlife Agencies April 30, 2018 comment letter, fencing should follow the guidelines identified in Section 7.3.5 of the WR-MSHCP. WC-3 states that “fencing will be similar to the existing fence along the I-10.” The Wildlife Agencies are unfamiliar with the appropriateness or efficacy of the referenced I-10 fence for facilitating wildlife movement by directing animals towards wildlife crossings and preventing access to the roadway, and the RDEIR does not provide an analysis to determine these factors.; and

F-1-18

- 12. To ensure animals inhabiting the floodplain have sufficient refugia during storm events, please describe how all facilities are designed to have adequate setbacks from hydrological features to ensure upland refugia are also preserved.

F-1-19

As previously articulated in our April 30, 2018 comment letter, we recommend that the Project be designed to facilitate wildlife movement via the construction of multiple, appropriately sized wildlife crossings installed at intervals consistent with connectivity standards for roads in the WR-MSHCP. The Wildlife Agencies also strongly recommend that the wildlife crossings constitute span structures requiring little to no maintenance, in lieu of other structures that may become clogged with sediment/debris. We appreciate the inclusion of Mitigation Measure WC-4 Wildlife Crossing Design in the RDEIR. However, as minimum criteria for the wildlife crossings, other than the openness ratio, are not identified in WC-4 and therefore made a condition of the RDEIR, the Wildlife Agencies are concerned that the County and Caltrans are deferring the development of specific and enforceable criteria to a later time, after public review. Without the inclusion of a specific and enforceable suite of criteria and an accompanying analysis supporting the efficacy of the design, the Wildlife Agencies are concerned that the Project’s effects on wildlife movement may be significant. Furthermore, because the specific design elements have not been reviewed and found consistent with the MSHCPs, the County and Caltrans’ determination of consistency with the WR-MSHCP and CV-MSHCP is unsupported.

F-1-20



As identified by the Wildlife Agencies in our April 30, 2018 comment letter, within the special study *Missing Linkages, Restoring Connectivity to the California Landscape* (Penrod et al. 2001), improvements to the I-10 were identified as a Level 4 threat to this linkage (on a scale of 1-5 (severe threat)). As such, every effort should be made to minimize impacts to the linkage from this Project.

## Sand Transport

### *RDEIR Lacks an Effects Analysis for impacts to the CV-MSHCP Conservation Strategy*

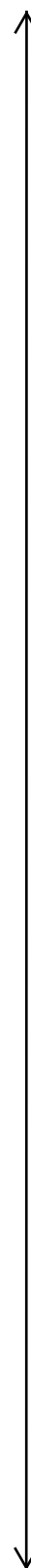
The Project proposes to install a 3.3-mile stretch of roadway in the San Gorgonio River Watershed and across both the San Gorgonio River and Smith Creek floodplains. These waterways are tributaries to the Whitewater River and part of the greater Salton Sea basin. Within the watershed, the San Gorgonio River and its tributaries provide the primary sand source to downstream areas, a crucial component of the habitat for multiple species covered under the CV-MSHCP. In fact, the sand source for the CV-MSHCP's sand habitats is the mountains surrounding the San Gorgonio Valley and the northern Coachella Valley. During most years and months, sand is transported downstream ("down valley") by aeolian (wind) processes. However, in rare years of prolonged heavy rainfall, flash floods move large volumes of sand down the tributaries, the rivers, and the two floodplains. This fluvial transport of sediment down the San Gorgonio and upper Whitewater Rivers is the principal source of sand replenishment for the sand field and sand dune habitats in the CV-MSHCP. Sand deposited on the San Gorgonio floodplain and the upper Whitewater River floodplain (on the valley floors) is subsequently transported down the Coachella Valley by aeolian processes which distribute the sand to the various dunes and sand sheets, including those located in the CV-MSHCP Conservation Areas located in the central and southern parts of the Coachella Valley (USGS 2002).

One of the most important ecological goals of the CV-MSHCP is to:

“Protect the fluvial sand transport Essential Ecological Process in the Cabazon, Long Canyon, and West Deception Conservation Areas to ensure no net reduction in fluvial sand transport in these areas ... water-borne sediments and floodwaters shall not be artificially retained onsite. Concentration of flows and increase in flow velocity offsite shall be minimized to avoid downstream erosion and scour. Alternatively, a flood control structure for the area that is designed to ensure no net reduction of sediment transport from the sand source area to the [natural / historic] sand deposition area where aeolian sand transport processes are active may be used to achieve the Conservation Objective of fluvial sand transport.” (CV-MSHCP Section 4.2.2.2.4).

This goal is reiterated in the NCCP portion of the CV-MSHCP, wherein the state program highlights the following goal for natural communities:

F-1-20





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“Conserve the sand source/transport systems to ensure sustainability of the sand dunes and sand fields. Maintain and enhance aeolian (wind-blown) and fluvial (water-borne) sand transport systems and existing hydrological regimes.” (CV-MSHCP, Section 10.2).

F-1-20

The portion of the Project area that lies within the CV-MSHCP is within the Cabazon Conservation Area, and the water and sediment flows from the creeks on the Project site are a key source for downstream areas within the CV-MSHCP: The Cabazon Conservation Area overlaps the Essential Ecological Process Area mapped by the CV-MSHCP as essential to maintaining the fluvial sand transport ecological process (CV-MSHCP, Figure 4-6d) which maintains the CV-MHCP’s seven sand habitats (and their dependent plant and wildlife species).

CV-MSHCP special-status species are restricted to seven habitats within the HCP including active desert dunes, ephemeral sand fields, and stabilized sand fields. These protected habitats have been in decline due to a combination of habitat fragmentation and the decrease in sand supply due to development projects upstream impeding the delivery of sand by floodwaters and wind. The CV-MSHCP seeks to provide for the survival of the following sand-specialist species: Coachella Valley fringe-toed lizard (*Uma inornata*), Flat-tailed horned lizard (*Phrynosoma mcallii*), Giant sand-treader cricket (*Macrobaenetes valgum*), Coachella Valley Jerusalem cricket (*Stenopelmatus calhuilaensis*), Coachella Valley round-tailed ground squirrel, (*Spermophilus tereticaudus*) [now known as the Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*)], and Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*).

The NES states, “An assessment of sand transport through the area found that the Project would not affect sand transport.” As previously discussed by the Wildlife Agencies in our April 30, 2018 comment letter, the only document we could identify that addressed sand transport was the one page letter from Kimley-Horn (Appendix B, NES) “I-10 Bypass Sediment Transport Letter” dated May 14, 2014. This letter identified the design features of the bridges to maintain sediment supply and transport in Smith Creek and the San Gorgonio River. Our April 30, 2018 comment letter requested that if additional information or a technical report to support this statement was available, it should be included as an Appendix to the recirculated DEIR. However, the Wildlife Agencies have been unable to locate such information in the RDEIR.

F-1-21

The Wildlife Agencies, did however observe that the RDEIR (page 2.15-22) references the use of a HEC-RAS hydraulic model in support of identification of the “100-year storm flow” and assurance that the Build Alternatives would result in “no net reduction in sediment transport from sand source areas to the downstream sand deposition areas.” Given that HEC-RAS is a fixed boundary model, the Wildlife Agencies argue that HEC-RAS has limited applicability in identifying the 100-year storm flow width, and therefore cannot be relied on to verify that “the four bridges associated with the two Build Alternatives would span the full width of the 100-year storm flow” (page 2.15-22). Though the model has the potential to provide context for incoming and outgoing sediment loads, HEC-RAS is a one-dimensional

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steady-state model, which allows water to flow in only one flow-path in the downstream direction at a set discharge. Given that Smith Creek and the San Gorgonio River are braided systems and water is rarely confined to a single channel the Wildlife Agencies recommend the use of a two-dimensional hydrodynamic and sediment transport model to accurately assess the potential effects of the proposed Project on fluvial sediment transport. Further, the Wildlife Agencies are confused as to the applicability of HEC-RAS to model aeolian sediment transport.



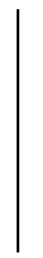
F-1-22

We reiterate our previous request for the inclusion and distribution for public review of a fluyial and aeolian sediment transport model in the CEQA document for this Project. Please note that the inclusion of such a sediment transport model is necessary to satisfy CEQA Guidelines section 15125(d) which requires a discussion of inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. Without the inclusion of such a study, and the circulation of this document for public review, the Wildlife Agencies are unable to complete a thorough review of the proposed project and its consistency with the CV-MSHCP or provide meaningful comment on proposed mitigation measures.



F-1-23

As previously requested in our April 30, 2018 comment letter, the Wildlife Agencies request that the fluvial and aeolian sediment transport study describe the existing conditions and model the post-project sediment transport from and through the Project site and into the CV-MSHCP’s Fluvial Sand Transport Essential Ecological Process Area. We reiterate that the sediment transport model be submitted for review prior to issuance of a revised and recirculated CEQA document. The Wildlife Agencies request a copy of the study if it is currently available.



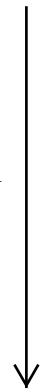
F-1-24

As previously identified in our April 30, 2018, comment letter, the study should address the entire project alignment and analyze how the proposed Project would affect the long-term ability of the San Gorgonio River and its tributaries to provide essential ecological processes in the Cabazon Fluvial Sand Transport Area, and the delivery of sand to the CV-MSHCP sand deposition areas in the Cabazon Conservation Area, Snow Creek/Windy Point Conservation Area, and Whitewater Floodplain Conservation Area. The study should employ the methods used by the 2002 USGS study that estimated sand transport changes to the Whitewater Floodplain Conservation Area and the Willow Hole – Edom Conservation Area.



F-1-25

If the proposed Project’s sediment transport study finds that the portions of the Project outside the CV-MSHCP may reduce the volume of sand delivered to the CV-MSHCP, then this would constitute an adverse effect to the CV-MSHCP’s conservation strategy and the sand-specialist species dependent upon it. As discussed above, CEQA Guidelines section 15125(d) requires that the effects from proposed projects be assessed for inconsistencies with applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. If the proposed Project may reduce the volume of sand delivered to the CV-MSHCP, the Project would need to either develop engineering solutions to maintain the current levels of flood-borne sand transport to the CV-MSHCP, or, develop a detailed, site-specific mitigation plan to ensure the permanent replacement of lost sand to the



F-1-26

CV-MSHCP by artificial means. We recommend that the Project applicant seek the input of the Coachella Valley Conservation Commission (CVCC) regarding the potential adverse impacts of the Project to the CV-MSHCP’s covered species and natural communities. Additional information regarding the CV-MSHCP is available on the internet at: <http://www.CV-MSHCP.org>.

F-1-26

The NES states: “According to the CV-MSHCP, construction of permitted new projects in fluvial sand transport areas will be conducted in a manner that maintains the current capacity for fluvial sand transport along 4,496 acres of the San Gorgonio River and its tributaries, along with portions of the San Bernardino Mountains and the San Jacinto Mountains. New permit conditions will require that natural flows onto parcels in the fluvial sand transport areas shall be conveyed offsite in the natural pre-disturbance direction of flow. This ensures that development on the property shall not impede waterborne sand transport across the parcel from its natural direction of flow. The Project will affect 0.01 acre of Fluvial Sand Transport within the Cabazon Conservation Area, Fluvial Sand Transport area.” We are unclear what is meant by new permit conditions, since Project implementation should be governed by the existing MSHCPs’ permits. The RDEIR does not provide enough information or context for the Wildlife Agencies to evaluate or understand the importance of the identified 0.01-acres of affects to fluvial sand transport.

F-1-27

### Hydrology

The Wildlife Agencies request additional information regarding how the following features affect sand transport.

1. Drainage ditches/swales approximately 10 to 20 feet wide running parallel to the roadway with inlets.
2. Cross culverts under the roadway range in size from approximately 36 inches in diameter to a 10x10 foot box.
3. Inlet protection and/or debris settling basins at the upstream end of cross culverts. These will range in size from approximately 15 to 100 feet in diameter (or similar length/width combination).
4. Water quality basins within the designated roadway right-of-way to encourage infiltration. These will run linear and parallel to the roadway, ranging in width from approximately 10 to 75 feet.

F-1-28

During review of the RDEIR we were unable to locate information on the analyses that were completed to facilitate design selection for these facilities. We are concerned these features may capture sediment/sand that would normally travel downstream via wind or water. For example, the RDEIR identifies that sediment removal from culverts may be needed. We request that the revised and recirculated CEQA identify the analyses performed to support the conclusions in the NES to better understand how these features will interact with sediment transport downstream. If these features require maintenance the revised and recirculated CEQA should provide information on the long-term maintenance regime and where and how or if captured sediment materials will be moved. To reduce the need for maintenance, the Wildlife Agencies recommended any features transporting water under the facility be sized to minimize the need for

F-1-29

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maintenance, provide self-cleaning/scouring, and to enhance wildlife movement.

↑ F-1-29

The Federal Highway Administration (FHWA) recommends infrastructure accommodate a 200-year flow because of changes in flow from increased storm intensity and duration from climate change, however review of the RDEIR identifies that infrastructure associated with this Project is likely sized to accommodate a HEC-RAS-modeled 100-year interval event. The Wildlife Agencies recommend that the Project's water conveyance features (culverts, bridges, etc.) be designed to accommodate a 200-year flow event to accommodate predicted changes in flow intensity and timing. A timely example of the need for the accommodation of a 200-year flow was provided in the Project area on February 14, 2019. This storm event was identified as a 200-year interval event.

F-1-30

### Special-Status Species

CEQA's mandatory findings of significance (CEQA Guidelines section 15065) state that a Project will have a significant effect on the environment if it would substantially reduce the numbers or range of a rare, threatened, or endangered species. This includes species that meet the definition of "rare," "threatened," or "endangered" in CEQA Guidelines section 15380(b), regardless of whether they are formally listed as such under State or Federal law. These species are commonly referred to as "special-status species." The DEIR lists 25 non-listed special-status animals species that (a) have a moderate or greater potential to occur, or are known to occur, within the Project area, and (b) are not covered by the MSHCP. The DEIR states that from the literature search, the following plant species were identified to have a potential to occur within the BSA: Chaparral sand-verbena (*Abronia villosa* var. *aurita*), Yucaipa onion (*Allium marvinii*), Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*), Plummer's mariposa lily (*Calochortus plummerae*), Parry's Spineflower (*Chorizanthe parryi* var. *parryi*), White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), Many-stemmed dudleya (*Dudleya multicaulis*), Spiny-hair blazing star (*Mentzelia tricuspis*), Slender woolly heads (*Nemacaulis denudate* var. *gracilis*), Desert beardtongue (*Penstemon pseudospectabilis* ssp. *pseudospectabilis*).

The NES identifies 18 animal species of concern with low to high potential to occur on the project site. These include Rosy boa (*Charina trivirgata*), coast horned lizard (*Phrynosoma Blainvillii* (*coronatum*)), Pallid bat (*Antrozus pallidus*), Western yellow bag (*Lasiurus xanthinus*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), American badger (*Taxidea taxus*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). The NES identifies three non-listed special-status animal species present within the BSA: golden eagle, loggerhead shrike, and Los Angeles pocket mouse (p.2.17-1 of DEIR).

The DEIR states that other special status species that could be present have a low probability to occur on-site, due to the marginal, disturbed nature of the existing habitat conditions within the BSA. The mapped vegetation identified the following main vegetation communities on the project site: 101.20 acres of disturbed/ruderal, 96.99 acres of coastal sage scrub (CSS), 146.92 acres of RAFSS, 288.60 acres of disturbed *Acacia greggii* shrubland alliance, 33.73 acres of disturbed *Eriogonum fasciculatum* shrubland alliance, and 21.03 acres of *Chilopsis linearis*



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woodland alliance. The site contains two large rivers and numerous smaller ephemeral drainages. The vegetation communities and washes along the Project alignment appear to be habitat for special-status species. The NES does not provide sufficient information to demonstrate that there is no habitat available on the site to support special-status species. Further, because no focused plant, reptile, or bat surveys were conducted for these special-status species on the Project site, it should be assumed that these species are present until species-specific surveys demonstrate otherwise. The Wildlife Agencies request that the revised and recirculated CEQA document include a thorough and detailed analysis of the potential Project impacts to the above-mentioned species, as well as feasible and enforceable avoidance, minimization, and/or mitigation measures to reduce the potential impacts to them to a level that is less than significant if they are found to be present.

F-1-31

### *Burrowing Owls*

Burrowing owl surveys were conducted in 2012 and 2013 according to “Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan” (Riverside County Environmental Programs Department, March 2006). The burrowing owl survey report states that the entire 600-acre study area is potentially suitable habitat for the burrowing owl (Appendix E, NES). However, focused burrowing owl surveys were only conducted on 88.2 acres. Additional information is needed on how suitable burrowing owl habitat was identified for the focused surveys. The MSHCP Burrowing Owl Survey Instructions specify “Surveys should be conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys will not be accepted if they are conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 degrees Fahrenheit.” Some of the surveys were reported with final temperatures exceeding 90 degrees Fahrenheit (Table A, Appendix E, NES). In addition, for the focused burrow surveys “the location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates.” The 2012 Burrowing Owl Survey report states, “Although no burrowing owl sign was observed during the burrow surveys, burrowing owl surveys were conducted on portions of the site with concentrations of rodent burrows or refugia that may be utilized by the burrowing owl.” As previously requested by the Wildlife Agencies in our April 30, 2018 comment letter, please provide a map of the concentrations of rodent burrows and of all potential owl burrows. Also, we request to be notified immediately if one or more burrowing owls are found on-site and that no passive or active relocation shall be undertaken without first coordinating with the Wildlife Agencies.

F-1-32

### *Golden Eagle*

The Wildlife Agencies appreciate that the RDEIR includes an expanded discussion and assessment of potential Project effects on golden eagles and correctly identifies that the Project area is in a foraging area and flight path for golden eagles nesting in the San Jacinto Mountains. The Wildlife Agencies are disappointed that despite identifying impacts to golden eagle foraging habitat the RDEIR does not include a discussion of the extreme sensitivity of golden eagles to human disturbance (e.g., golden eagles are known to abandon territories with new human

F-1-33

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development or recreational use from hiking or off-road vehicles), nor does it include specific and enforceable avoidance, minimization, and/or mitigation measures to address impacts to golden eagles. The Wildlife Agencies find that the RDEIR's statement that the ongoing disturbance resulting from the construction and operation of the proposed Project "is not likely to be any greater than the disturbance created by the existing urban development in the areas of Banning and Cabazon, the sand mining operation, and the east-to-west flight path associated with the nearby Banning Municipal Airport" (page 2.18-7) provides insufficient analysis and justification to conclude that the Project should not include specific and enforceable avoidance, minimization, and/or mitigation measures to address impacts to golden eagles.

F-1-33

### **CDFW Comments on Lake and Streambed Alteration**

The NES prepared for the Project states that CDFW does not have a definition for wetlands and then proceeds to develop a definition for wetlands. This definition is not the definition used by CDFW, and has no application to CDFW's Lake and Streambed Alteration Program or Fish and Game Code section 1600 *et seq.* CDFW recommends that the County cite Fish and Game Code section 1600 *et seq.* when describing CDFW's regulatory authority, which is inclusive of any river, stream, and lake. Fish and Game Code section 1600 *et seq.* applies to activities causing substantial alteration to any river, stream, or lake, including episodic and ephemeral streams, desert washes, and watercourses with subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

F-1-34

Based on review of the mapped "Impacts to Potential Jurisdictional Waters of the U.S./State" it appears that a number of the on-site streams were not delineated at all or if delineated may not be delineated correctly for Alternatives 5 and 12 (Figures 11 and 12 in the NES). Early consultation with CDFW is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. CDFW recommends that the County consult with CDFW on the delineation of potential impacts to onsite and offsite features and then revise the potential impact assessment to include all streams with the potential to be altered by Project activities, including areas of stream that do not have a visible Ordinary High Water Mark and/or that convey subsurface flow. All areas subject to impact/alteration due to Project activities should be mapped. CDFW recommends that the revised and recirculated CEQA include these requested updates/clarifications.

F-1-35

### **Western Riverside MSHCP Riparian/Riverine DBESP**

As acknowledged by the Project's RDEIR, the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) document is required for unavoidable Project impacts to riparian and riverine resources as defined by the WR-MSHCP. To ensure consistency with the policies and procedures of the WR-MSHCP, we recommend that the final, Wildlife Agency-approved DBESP be included as an appendix to the final EIR, thereby demonstrating that the proposed Project is biologically equivalent or superior to avoidance of the riverine resources.

F-1-36

**Coachella Valley MSHCP Implementation and Permittee Obligations**

As a Permittees to the CV-MSHCP, the County and Caltrans should have assessed the Project for compatibility with the achievement of goals of the CV-MSHCP, as outlined in Section 7.5 of the CV-MSHCP Implementing Agreement. The Review of Development Proposals in Conservation Areas of the CV-MSHCP states: “As set forth in section 4.3 of the CV-MSHCP, Development in Conservation Areas will be limited to uses that are compatible with the Conservation Objectives for the specific Conservation Area. Discretionary Projects in Conservation Areas, other than second units on parcels with an existing residence, shall be required to assess the project’s ability to meet the Conservation Objectives in the Conservation Area. Additionally, the Permittees will participate in the Joint Project Review Process set forth in section 6.6.1.1 of the CV-MSHCP.”

F-1-37

The Implementing Agreement for the CV-MSHCP defines "Discretionary Project" as “a proposed project requiring discretionary action by a Permittee, as that term is used in CEQA and defined in state CEQA Guidelines section 15357, including issuance of a grading permit for County projects.” The CV-MSHCP section 6.6.1.1 requires a Joint Project Review process for “all projects under the Local Permittees’ jurisdiction in a Conservation Area that would result in disturbance to Habitat, natural communities, Biological Corridors, or Essential Ecological Processes”. The Project described in the RDEIR is a discretionary Project requiring discretionary action from the County and Caltrans and, if implemented, would result in disturbance to Habitat, natural communities, and Biological Corridors in the Cabazon Conservation Area. The Implementing Agreement and CV-MSHCP require an assessment of the Project’s ability to meet Conservation Objectives and the County and Caltrans’ participation in the Joint Project Review process. Completion of the Joint Project Review process for the Project is required by the CV-MSHCP prior to Project approval by the County and Caltrans and will inform the environmental consequences of the Project. The Wildlife Agencies recommend that the County and Caltrans complete the Joint Project Review process as soon as possible, as it is required by CVCC to be completed prior to adoption of the final EIR (FEIR). Completion of the Joint Project Review process for the Project would ensure that the Project is consistent with the CV-MSHCP and will facilitate the identification of specific location(s) of suitable conservation lands; describe minimum standards to assess the suitability of the proposed conservation lands; describe how the lands will meet mitigation standards/requirements; and detail the proposed timing of acquisition and conservation in relation to permitting of specific projects contemplated following adoption Project.

F-1-38

F-1-39

**Conclusions and Further Coordination**

The proposed Project has the potential to significantly affect wildlife connectivity in the Special Linkage Area and potential, as yet unquantified, impacts to sand transport downstream. Given the concerns raised in this letter we recommend the completion of additional analyses, and the development and incorporation of specific and enforceable mitigation measures to reduce project impacts prior to the recirculation of the revised CEQA document for public review.

F-1-40

We appreciate the opportunity to comment on the RDEIR and look forward to your response. We look forward to continuing to work with Caltrans and the County on this Project. If you

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have any questions regarding these comments or would like to schedule a meeting, please contact John M. Taylor of the Service at 760-322-2070, extension 418, or Joanna Gibson of CDFW at 909-987-7449.

Sincerely,

A handwritten signature in blue ink that reads "Heather A. Peet" with a small "for" written below it.

for  
Scott Sobiech  
Acting Field Supervisor  
U.S. Fish and Wildlife Service

Scott Wilson  
Environmental Program Manager  
Inland Deserts Region

cc:  
Charles Landry, Regional Conservation Authority  
Tom Kirk, Coachella Valley Conservation Commission  
State Clearinghouse



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### Literature Cited

[Caltrans] California Department of Transportation. 2015. I-10 Bypass Project: Banning to Cabazon - Natural Environment Study. District 8, RIV031202, FPN DEMO03L 5956 (210). April 2015

Penrod, K, R Hunter, and M Marrisfield. 2001. Missing Linkages: restoring connectivity to the California landscape. California Wilderness Coalition, The Nature Conservancy, US Geological Survey, Center for Reproduction of Endangered Species, and California State Parks.

South Coast Wildlands. 2008 South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. <http://www.scwildlands.org/reports/SCMLRegionalReport.pdf>

**L.1.1 F-1 – U.S. Fish and Wildlife Service (USFWS) & California Department of Fish and Wildlife (CDFW)**

***F-1-1***

Cumulative impacts and appropriate and enforceable mitigation measures for the Project's impacts on wildlife movements have been addressed thoroughly and adequately within the Recirculated Draft Environmental Impact Report/ Environmental Assessment (EIR/EA). Specifically, Section 2.15.3.2, Wildlife Corridors, discusses avoidance and minimization Measures WC-1 through WC-4, which address wildlife movement within the two primary corridors, Smith Creek and the San Geronio River.

CEQA Guidelines Section 15088.5 addresses the reasons and requirements for recirculation of an EIR prior to certification. Based on the content of the Final EIR, including revisions made to the Recirculated Draft EIR in response to comments received during public review of the Draft EIR and responses to comments received during public review of the Recirculated Draft EIR, no new information has been added to the Final EIR that would require recirculation of the EIR. In support of this determination:

1. There have been no changes to the Project Description and setting since the circulation and recirculation of the Draft EIR;
2. There are no new significant environmental impacts disclosed in the Final EIR;
3. There is no substantial increase in the severity of an environmental impact that would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
4. No new alternative or mitigation measure considerably different from those previously analyzed that would clearly lessen the environmental impact of the Project has been identified that the Project proponent has failed to adopt; and
5. The Draft EIR was not so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Based on the information above, the County of Riverside (County) has determined that recirculation of the Draft EIR is not required.

**F-1-2**

Please refer to Response to Comment F-1-1. Additionally, as discussed in Section 2.15.2.5, Habitat Conservation Plans, effects to the Special Linkage Area will be minimized, mitigated, or avoided through compliance with the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP). Therefore, through compliance with the WRMSHCP, there will be no adverse effects to the Special Linkage Area.

**F-1-3**

The Project has been designed to span the San Gorgonio River and Smith Creek without obstructing or impeding fluvial sand transport or river functionality that contribute sand to downstream aeolian sand and biological processes at the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area. The avoidance of impeding sand transport has been discussed with the Coachella Valley Association of Governments (CVAG) on February 6, 2013, June 4, 2018, and May 22, 2019, and CVAG has determined that the Project would be consistent with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020 during the Joint Project Review process. The Project is not expected to adversely affect sand transport because the Project would not impede flows within Smith Creek and the San Gorgonio River, and there are no structures between the sand source and these water bodies that would contribute to cumulative effects of sand transport. Responses to Comments F-1-21 through F-1-30, IP-3-4, IP-3-6, and IP-3a-4 provide additional discussion regarding sand transport. Section 2.15.2.5, in Section 2.15, Natural Communities, of the Recirculated Draft EIR/EA, also includes discussion regarding the CVMSHCP.

Cumulative impacts, and the identification of appropriate and enforceable mitigation measures for the Project's impacts on sand transport, including fluvial and aeolian, and corresponding effects to downstream conservation areas are addressed in Responses to Comments F-1-21 through F-1-30, IP-3-4, IP-3-6, and IP-3a-4.

**F-1-4**

This comment describes the responsibilities of the USFWS and CDFW and does not raise a specific comment on the Draft EIR/EA.

**F-1-5**

The Project is located in the WRMSHCP Special Linkage Area, recognizing the area as a wildlife movement area. This Special Linkage Area is not located within a WRMSHCP Criteria Cell, which would otherwise trigger a number of wildlife movement requirements including land conservation, fencing, and wildlife crossing dimensions. Since the Project is not within a WRMSHCP Criteria Cell, there are no requirements for the conservation of lands at this location. However, the I-10 Bypass Project provides three bridges with wildlife crossings for Alternative 12 (Preferred Alternative) and two bridges with wildlife crossings for Alternative 5 that exceed the recommendations by the U.S. Department of Transportation's (USDOT) March 2011 *Wildlife Crossing Structure Handbook, Design and Evaluation in North America* (Wildlife Crossings Structure Handbook), the Caltrans' 2009 *Wildlife Crossings Guidance Manual* (Wildlife Crossings Guidance Manual) and the WRMSHCP recommendations for facilitating wildlife movement by small-, medium-, and large-size wildlife species. The dimensions for these bridges are provided in Table 2.15.1, Bridge and Storm Drain Crossing Suitability. The bridges would facilitate movement by large, medium, and small-sized wildlife species. Many of the storm drain culverts were designed to transport stormwater runoff and sediment necessary to comply with CVMSHCP requirements for the Cabazon Conservation Area policy and do not meet the lengths and openness factors to facilitate wildlife movement. As discussed in Section 2.15.3.2, in Section 2.15, Natural Communities, avoidance and minimization Measure WC-4 would add an additional eight wildlife crossings to facilitate small-to-medium-size wildlife species that would be designed consistent with the USDOT's 2011 Wildlife Crossings Structure Handbook, the Caltrans' 2009 Wildlife Crossings Guidance Manual, and the WRMSHCP recommendations. As a result of these wildlife movement design features, the Project would not disrupt wildlife movement and has exceeded the WRMSHCP and CVMSHCP requirements as well as the recommendations in the South Coast Wildlands' 2008 *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion* report, including, facilitate wildlife movement through the construction of a wide variety of crossing structures across the Project, maintain sand transport, and conserve Smith Creek by spanning the floodplain.

Regarding the portion of the comment on inappropriate deferral of mitigation, other relevant factors need to be considered in the cited case law by the commenter on the issue of deferral. For example, the designs of the future wildlife crossings do not depend on any future "essential" studies as discussed in the cases provided in the comment letter, nor do they require the lead agency to "formulate management plans



developed in consultation with State and Federal wildlife agencies after Project approval” as discussed in the *San Joaquin Raptor* case.

The leading case allowing an exception to the general rule against deferring mitigation is the *Sacramento Old City Association v. City Council* (1991) 229 Cal.App.3d 1011 [the court held an agency may defer committing to specific mitigation measures when it approves a project if the measures that will be considered are described and performance criteria are identified]. A lead agency may rely on future studies to devise specific design criteria of a mitigation measure when the results of later studies are used to tailor mitigation measures to fit on-the-ground environmental conditions. See Continuing Education of the Bar’s (CEB) *Practice Under the California Environmental Quality Act*, Kostka and Zischke, Section 14.12, citing *City of Hayward v. Board of Trustees of Cal. State Univ.* (2015) 242 Cal.App.4th 833, 855; *Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 524; and *City of Maywood v. Los Angeles Unified School District* (2012) 208 Cal.App.4th 362, 411.

As discussed above, the crossings, while not required as part of either MSHCP (for Western Riverside County or Coachella Valley) will exceed the recommendations by the USDOT’s 2011 Wildlife Crossings Structure Handbook, the Caltrans’ 2009 Wildlife Crossings Guidance Manual, and the WRMSHCP’s recommendations for facilitating wildlife movement by small-, medium-, and large-size wildlife species, providing more than sufficient data and detail to support the environmental document’s impact determinations.

**F-1-6**

The referenced assessment is provided in Section 4.3.5.1 in the Natural Environment Study (NES) (LSA Associates, Inc., April 2015) and as revised by the April 8, 2019, NES Errata (LSA Associates, Inc., April 2019).

**F-1-7**

The Project is located within the WRMSHCP Special Linkage Area but **not** within a WRMSHCP Criteria Cell that would require the conservation of land. Providing conservation lands within the WRMSHCP Special Linkage Area is outside of the scope of this Project. The WRMSHCP requires tribal coordination regarding American Indian Lands. The wildlife crossings incorporated into the I-10 Bypass Project design are consistent with the USDOT’s 2011 Wildlife Crossings Structure Handbook, the Caltrans’ 2009 Wildlife Crossings Guidance Manual, and the

WRMSHCP recommendations and would not substantially interfere with movement of native species. The number, frequency, and openness factors (10 crossings for Alternative 5 and 11 crossings for Alternative 12 [Preferred Alternative]) would maintain wildlife connectivity/movement for a diverse range of species to cross the Project area including small-to-medium-sized wildlife species throughout the Project area and large wildlife species at the bridges. Crossing opportunities through the Special Linkage Area identified in the WRMSHCP and by the South Coast Wildlands linkage design across I-10 are much more limited, specifically at San Geronio River and at an unnamed tributary to Smith Creek.

The analysis provided in the Recirculated Draft EIR/EA is consistent with the WRMSHCP Special Linkage Area requirements. Please refer to the analysis included in Section 2.15.2.4. In addition, the Project only affects a limited portion of the Special Linkage Area, and completing a broader wildlife connectivity analysis is beyond the scope of the impacts of this Project. The Project has also been designed to maintain fluvial sand transport consistent with the CVMSHCP. The Project is a covered activity under both the WRMSHCP and the CVMSHCP and would comply with all respective requirements.

**F-1-8**

The purpose for the I-10 Bypass Project is to provide an alternative route between Banning and Cabazon in the event of a closure on I-10, provide a safe route for bicyclists and pedestrians, improve transportation facilities as identified in the 2015 Riverside County General Plan, and improve transportation facilities connecting Banning and Cabazon consistent with the 2016–2040 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2019 Federal Transportation Improvement Program (FTIP). Figure 2.1-6, in Section 2.1, Land Use, of the Recirculated Draft EIR/EA, shows a Community Development Overlay area within the area of the two proposed alternatives. The comment references the “design for both build alternatives”; concept plans are included in Appendix F of the Recirculated Draft EIR/EA. The concept plans show access to existing utility easements and are not exit ramps as noted in the comment. Future development projects within the Community Development Overlay would be required to prepare environmental documentation and analyses to evaluate and mitigate their environmental impacts, including impacts on species and habitats. As stated in Section 2.2.3.2 on page 2.2-10, “[Planned] Projects would be required to comply with the applicable State and federal regulations and policies, including Habitat Conservation Plans, to protect resources of concern. Future projects,

including the Build Alternatives, would be required to avoid, minimize, or mitigate adverse effects in accordance with regulatory requirements.” The Recirculated Draft EIR/EA includes analysis of growth-induced indirect impacts in Section 2.2, Growth, and impacts created by planned projects would be addressed as part of their respective environmental documentation and permitting processes.

**F-1-9**

Alternative 12 (Preferred Alternative) would bisect approximately 30 acres of contiguous desert scrub habitat within the WRMSHCP Special Linkage Area; however, connectivity is maintained by three wildlife crossings connecting each side of the Project. The wildlife crossings include one bridge crossing (8 ft [2.4 meters] H x 133 ft [40.5 meters] W x 101 ft [30.8 meters] L) suitable for large animals and two wildlife crossings designed for small- to medium-sized animals. The crossings would be designed consistent with the USDOT’s 2011 Wildlife Crossings Structure Handbook, the Caltrans’ 2009 Wildlife Crossings Guidance Manual, and the WRMSHCP recommendations. The County has agreed to consult with the Wildlife Agencies regarding the design of the wildlife crossings during the final design. Please see Response to Comment F-1-5 that documents the guidance and criteria with which the wildlife crossings are designed to comply. Based on compliance with the wildlife crossing guidance and criteria referenced in Response to Comment F-1-5, the wildlife crossings are large enough to not interfere with wildlife movement between bisected habitat, as shown in Table 2.15.1, Bridge and Storm Drain Crossing Suitability, of the Recirculated Draft EIR/EA, as shown below.

**Table 2.15.1 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Build Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
Smith Creek	Bridged Roadway	5	35'(10.7 m) H x 663'(202.1m)W x 101'(30.8m)L	70.21	High. The tall and wide span of the proposed bridges allows for high-quality connectivity of habitats within Smith Creek. The proposed bridge structures will maintain this connectivity.
	Bridged Roadway	12 (Preferred Alternative)	10'(3.0m)H x 1,072'(326.7m)W x 101'(30.8m)L	31.82	
San Gorgonio River	Bridged Roadway	5 and 12 (Preferred Alternative)	12'(3.7m)H x 893'(272.2m)W x 101'(30.8m)L	32.70	High. The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the San Gorgonio River. The proposed bridge structures will maintain this connectivity.

**Table 2.15.1 Bridge and Storm Drain Crossing Suitability**

<b>Crossing ID</b>	<b>Proposed Crossing Type</b>	<b>Build Alternative</b>	<b>Size of Proposed Crossing</b>	<b>Openness Ratio of Proposed Crossing</b>	<b>Suitability Rationale</b>
Unnamed Smith Creek Tributary	Bridged Roadway	12 (Preferred Alternative)	8'(2.4m)H x 133'(40.5m)W x 101'(30.8m)L	3.16	High. The tall and wide span of the proposed bridge allows for high-quality connectivity of habitats within the Smith Creek Tributary. The proposed bridge structures will maintain this connectivity.
A	RCP	12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 185'(56.4m)L	0.04	The culvert would provide connectivity for small-to-medium-sized animals.
B	RCP	12 (Preferred Alternative)	60"(1.5m)H x 60"(1.5m)W x 325'(99.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
C	RCP	12 (Preferred Alternative)	42"(1.1m)H x 42"(1.1m)W x 230'(70.1m)L	0.02	The culvert would provide connectivity for small-to-medium-sized animals.
D	RCP	12 (Preferred Alternative)	30"(0.8m)H x 30"(0.8m)W x 225'(68.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
E	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 260'(79.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
F	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 245'(74.7m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
G	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 204'(62.2m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
H	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 202'(61.6m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
I	RCB	12 (Preferred Alternative)	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
J	RCP	12 (Preferred Alternative)	36"(0.9m)H x 36"(0.9m)W x 275'(83.8m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
K	RCP	5	54"(1.4m)H x 54"(1.4m)W x 265'(30.8m)L	0.06	The culvert would provide connectivity for small-to-medium-sized animals.
L	RCP	5	36"(0.9m)H x 36"(0.9m)W x 215'(80.8m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
M	RCP	5	60"(1.5m)H x 60"(1.5m)W x 205'(65.5m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.
N	RCP	5	36"(0.9m)H x 36"(0.9m)W x 145'(65.5m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.
O	RCP	5	54"(1.4m)H x 54"(1.4m)W x 210'(64.0m)L	0.03	The culvert would provide connectivity for small-to-medium-sized animals.



**Table 2.15.1 Bridge and Storm Drain Crossing Suitability**

Crossing ID	Proposed Crossing Type	Build Alternative	Size of Proposed Crossing	Openness Ratio of Proposed Crossing	Suitability Rationale
P	RCB	5	10'(3.0m)H x 10'(3.0m)W x 350'(106.7m)L	0.08	The culvert would provide connectivity for small-to-medium-sized animals.
Q	RCP	5	36"(0.9m)H x 36"(0.9m)W x 285'(86.9m)L	0.01	The culvert would provide connectivity for small-to-medium-sized animals.

Source: *Natural Environment Study* (April 2015, Errata December 2017; Errata April 2019; Errata March 2020).

Note: The proposed dimensions are based on the Build Alternative with the greatest potential effect (e.g., longest culvert extension).

H = height  
L = length  
W = width

RCB = reinforced concrete box  
RCP = reinforced concrete pipe

**F-1-10**

Lighting will only be used at bridge locations for safety requirements and would be directed away from adjacent habitat areas. The remainder of the wildlife crossings would not have any lighting associated with them.

The color and lumens of any necessary safety lighting will be determined in final design in compliance with avoidance and minimization Measure WC-1, if this lighting is needed. As indicated in the Recirculated Draft EIR/EA, any necessary lighting would not spill over into the wildlife corridor area.

**F-1-11**

Additional clarifying text has been added to Section 2.15.2.4 in the Final EIR/EA (see paragraph below) to describe the existing ambient noise levels and the increase in traffic noise for receptors located near the proposed roadway. In addition, receptors located further from the proposed roadway were provided to show that traffic noise levels would remain the same as the existing ambient noise level with the Project.

“Ambient noise can deter wildlife movement. Baseline noise sources consist of distant traffic on I-10, Apache Trail, Bonita Avenue, and Hathaway Street, nearby sand and gravel operations, the UPRR, and nearby aircraft. Traffic noise levels near the proposed two-lane road are shown in Tables 2.14.4 and 2.14.5 and could deter wildlife from entering areas immediately adjacent to the roadway. For example, Table 2.14.4 shows that traffic noise levels would increase by 10 dBA from a noise level of 48 dBA  $L_{eq}$  at Receptor R6, which is close to the proposed roadway under Alternative 5. In addition, Table 2.14.5

shows that traffic noise levels would increase by 15 dBA from a noise level of 48 dBA  $L_{eq}$  at Receptor R27, which is close to the proposed roadway under Alternative 12 (Preferred Alternative). However, as shown in Tables 2.14.4 and 2.14.5, 2038 traffic noise levels would remain the same as existing traffic noise levels in areas further from the proposed two-lane road because traffic noise on I-10 dominates the noise environment in the Project area. For example, Tables 2.14.4 and 2.14.5 shows that traffic noise levels would remain the same without and with the Project under Alternative 5 at Receptors R5 and under Alternative 12 (Preferred Alternative) at Receptor R20, which are located further from the proposed roadway than receptors R6 and R27 discussed above.”

**F-1-12**

The I-10 Bypass would be a County facility and, therefore, the potential for illegal dumping would be addressed by routine County Sheriff patrols as is done for all County roads.

**F-1-13**

While there is the potential for an increase in animal mortality, avoidance and minimization Measures WC-3 and WC-4 would reduce the potential for mortality. The availability of two or three (depending on the alternative) large wildlife crossings and small- and medium-size wildlife crossings at frequent intervals across the Project area would facilitate wildlife movement underneath the I-10 Bypass. In addition, fencing will be used to deter small-to-medium-sized wildlife species from crossing over the I-10 Bypass roadway and would thereby reduce the potential for wildlife mortality from vehicle collision. Avoidance and minimization Measure WC-3 includes a fencing plan that would be prepared during final design and would provide for fencing to be installed along the entire length of the Project area on both sides of the roadway. The wildlife fence is not intended to exclude all animals, but would exclude most of the species that are known to commonly use the San Geronio River Linkage branch and guide animals toward the wildlife crossings and bridges. Avoidance and minimization Measure WC-4 provides for wildlife crossings that will be designed for small-to-medium-sized wildlife species consistent with the USDOT’s 2011 Wildlife Crossings Structure Handbook, the Caltrans’ 2009 Wildlife Crossings Guidance Manual, and the WRMSHCP recommendations. Native grasses, forbs, and shrubs that are included in the *Chilopsis linearis* woodland, *Acacia greggii* shrubland, coastal sage scrub, and riversidean alluvial fan sage scrub will be planted on slopes at

bridges and culverts to provide cover for wildlife and to encourage the use of the wildlife crossings.

**F-1-14**

This Project is considered a covered activity by both the WRMSHCP and the CVMSHCP. The Project has identified 10 wildlife crossings for Alternative 5 and 11 wildlife crossings for Alternative 12 (Preferred Alternative). Figure 11 in the NES identifies all of the wildlife crossing structures, including frequent structures that would facilitate movement for small- to medium-sized species and less frequent bridge structures that would facilitate large species movement. These crossings would provide unrestricted crossing opportunities across the Project area and would comply with the Special Linkage requirements in the WRMSHCP. The WRMSHCP and CVMSHCP do not plan for the long-term conservation of land at this location. Biologically equivalent or superior is not a standard required by the WRMSHCP for Special Linkages.

**F-1-15**

The focal species identified in the *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod et al. 2005), are small-to-medium-sized wildlife species based on the modeled least-cost corridor for American badger (*Taxidea taxus*). The number, frequency, and openness factors (9 crossings for Alternative 5 and 13 crossings for Alternative 12 [Preferred Alternative]) would maintain wildlife connectivity/movement across the Project for a diverse range of species to cross the Project including small-to-medium-sized wildlife species throughout the Project area and large wildlife species at the bridges. Crossing opportunities through the Special Linkage Area identified in the WRMSHCP and by South Coast Wildlands linkage design across I-10 are much more limited, specifically at San Gorgonio River and at an unnamed tributary to Smith Creek. The primary wildlife crossings are large bridge structures that would facilitate wildlife movement with high openness ratios, as shown in Table 2.15.1 from the Recirculated Draft EIR/EA (see Table 2.15.1 included in Response to Comment F-1-9). In addition, please refer to Responses to Comments F-1-5 and F-1-9, which discuss the applicable standards with which the wildlife crossings would comply.

**F-1-16**

This Project does not provide any trails. The reference to an equestrian trail within Smith Creek is stated as “potential” since it is included in the County Pass Area Plan. The Project seeks to provide adequate vertical clearance under the bridges in the

event that an equestrian trail was approved as a separate project in the future. Planned projects, including the I-10 Bypass Project, and future planned projects that include equestrian trails would be required to comply with the applicable State and federal environmental regulations and policies, including compliance with Habitat Conservation Plans, to protect resources of concern.

#### **F-1-17**

The proposed bridges can accommodate movement by all of the species listed in this comment. The bridge spans range from 663 ft to 893 ft for Alternative 5 and from 133 ft to 1,072 ft for Alternative 12 (Preferred Alternative) with heights ranging between 8 ft and 35 ft, depending on the bridge and the alternative, which is more than enough to facilitate wildlife movement including movement of the species mentioned in Comment F-1-17. In addition, more frequent medium-sized wildlife crossings would facilitate additional opportunities for movement by small-to-medium-sized wildlife species. CEQA does not require an EIR to analyze each specific design requirement tied to each and every individual species that may utilize the crossing.

#### **F-1-18**

The fencing described in Section 7.5.2 of the WRMSHCP is oriented to large wildlife species such as mountain lion and is required in crossings in Criteria Cells. This Project is not within a Criteria Cell; therefore, compliance with the fencing guidelines in Section 7.5.2 of the WRMSHCP is not required. Fencing will be designed for tortoise and small mammals consistent with the Caltrans' 2009 Wildlife Crossings Guidance Manual.

#### **4.2.4 Fencing**

Fencing is often used in conjunction with other crossing structures to exclude animals from portions of roadways where their crossing is not desired and to direct or "funnel" animals toward a desired crossing location such as a pipe, culvert, or underpass (Figures 21, 24). Exclusion fences have been used for diverse groups including amphibians, reptiles, deer, and elk (Aresco 2005, Gibbs 1998; Figure 23). Exclusion fences may, in some cases, act to trap wildlife within the right-of-way (Clevenger and Kociolek 2006).



*Figure 23: Desert Tortoise barrier fence (William Boarman photo)*

Website: [http://dap3.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://dap3.dot.ca.gov/hq/env/bio/wildlife_crossings/)



**F-1-19**

The WRMSHCP describes the use of refugia for resting in the 18 proposed linkages for the dispersal of juvenile mountain lions and bobcats using rock piles, brush piles, windfalls, hollow snags, and hollow trees. The Project is not located in the 18 proposed linkages identified in the WRMSHCP; therefore, the refugia as described in the WRMSHCP are not an applicable requirement. As shown in Figure 6 of the NES, the I-10 Bypass Project has been designed with native upland habitat adjacent to the Project that would be sufficient to provide refugia to move into during storm events. Specifically, if creeks are flowing, wildlife can take refuge in the adjacent upland habitat that is not flooded.

The proposed facility is typically at least several hundred feet from the existing drainages of Smith Creek and the San Gorgonio River providing ample refuge areas along the creek and the river for wildlife during storm events. In one location, the Alternative 12 (Preferred Alternative) alignment is between 100–200 ft from Smith Creek for a distance of approximately 100–200 ft along the creek. In two locations, the Alternative 5 alignment is directly adjacent to Smith Creek for a distance of approximately 200 ft and 700 ft. Wildlife refuge areas exist on each side of the creek where the facility is close or directly adjacent to the drainage. In addition, the Project includes wildlife crossings that improve access to adjacent refuge areas during storm events in both areas along Alternative 5 where the Alternative 5 alignment is directly adjacent to Smith Creek.

**F-1-20**

The Project is not located in a WRMSHCP Criteria Cell; therefore, the WRMSHCP Guidelines for Construction of Wildlife Crossings (Section 7.5.2) are not applicable. In addition, the Project is not located within an identified CVMSHCP corridor linkage; consequently, specific CVMSHCP requirements for the wildlife corridor are not applicable. The nearest CVMSHCP corridor/linkage is located at Fornat Wash, 3.8 miles east of the Project. The Project exceeds the requirements for wildlife movement in non-designated areas. The Project has been designed to include 10 wildlife crossings for Alternative 5 and 11 wildlife crossings for The Project, including large bridge spans that facilitate wildlife movement. Additional wildlife culvert crossings, not required by the WRMSHCP, will be installed at 0.3-mile intervals to facilitate wildlife movement. The number and spacing of wildlife crossings and wildlife fencing described in avoidance and minimization Measures WC-3 and WC-4 exceed the requirements described in the WRMSHCP and CVMSHCP. The wildlife crossings would be constructed consistent with the

USDOT's 2011 Wildlife Crossings Structure Handbook, the Caltrans' 2009 Wildlife Crossings Guidance Manual, and Section 7.5.1 of the WRMSHCP (Guidelines for Construction of Wildlife Crossings) for Small Mammal, Reptile, and Amphibian Wildlife. Please also refer to Response to Comments F-1-5 and F-1-9.

**F-1-21**

A sand transport technical study is not required by either the CVMSHCP or the WRMSHCP. However, sand transport is a component of the CVMSHCP, which encompasses the eastern portion of the Project area where bridges are included to span the wash areas allowing the natural sand bottom to remain and continue sand transport. Additionally, the hillside adjacent to the proposed alternatives just west of the San Gorgonio River is designated as a sand source in the MSHCP. The proposed alternatives are not anticipated to impede sand movement in this area because the alternatives are located south of this designated sand source, and there are no proposed obstructions between the sand source and the directly adjacent drainages of Smith Creek and the San Gorgonio River. As part of the Joint Project Review process, the CVCC reviewed the Drainage Report for the Preferred Alternative and confirmed the Project's consistency with the CVMSHCP on June 11, 2020.

**F-1-22**

The proposed bridge lengths were preliminarily determined to span the design year storm event by using a one-dimensional steady-state model. In the final design phase when more accurate terrain information is obtained and design details are developed, a two-dimensional hydraulic model will be used to determine flow paths along Smith Creek and the San Gorgonio River in the areas of the Preferred Alternative. This tool will be used in conjunction with historic flow paths to verify bridge spans and the specific location of bridge abutments to avoid flow paths during the design storm event.

The CVMSHCP highlights the importance of maintaining fluvial sand transport in the Cabazon Conservation Area to support the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area. Below are a summary of the applicable measures outlined for the Cabazon Conservation Area in the CVMSHCP implementation:

1. In the fluvial sand transport areas, the Permittees will require that natural flows onto a parcel on which Development is proposed shall be conveyed offsite in the natural pre-disturbance direction of flow, and will require that Development on

the property shall not impede water-borne sand transport across the parcel in its natural direction of flow. In addition, water-borne sediments and floodwaters shall not be artificially retained on site. Concentration of flows and increase in flow velocity offsite shall be minimized to the maximum extent Feasible to avoid downstream erosion and scour. Alternatively, a flood control structure for the area that is designed to ensure no reduction in sediment transport from the sand source area to the sand deposition area where aeolian sand transport processes are active may be used to achieve the Conservation Objective of fluvial sand transport.

2. Specifically applicable to Fornat Wash which is located 3.8 miles downstream of the Project.
3. Comply with applicable avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5.
  - a. Section 4.4 Required Avoidance, Minimization, and Mitigation Measures Activities will be conducted in a manner to maintain the fluvial sand transport capacity of the system.
  - b. Section 4.5 Land Use Adjacency Guidelines, Drainage: Incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.
4. Specifically applicable to new development in Essential bighorn sheep Habitat.
5. CVCC and the applicable Local Permittee will coordinate with the Western Riverside County MSHCP Regional Conservation Authority to ensure that fluvial sand transport along the San Gorgonio River west of the Cabazon Conservation Area and functionality of the San Gorgonio River as a Biological Corridor are maintained.
6. Specifically applicable to Fornat Wash which is 3.8 miles to the east of the Project.

7. CVCC to coordinate with WRMSHCP Regional Conservation Authority to ensure fluvial sand transport along the San Gorgonio River and functionality of the Biological Corridor are maintained.

**F-1-23**

The Project has been designed to cross the San Gorgonio River and Smith Creek so as to not obstruct or impede the fluvial sand transport Essential Ecological Process or river functionality in the Cabazon Conservation Area that would contribute sand to downstream aeolian sand and biological processes at the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area. The bridges span the natural sand bottom to allow the fluvial process to continue the downstream sand transport. Additionally, the proposed alternatives would not create any impediments to sand movement from the hillside sand source identified in the CVMSHCP located west of the San Gorgonio River and would flow into portions of Smith Creek and the San Gorgonio River. The Project would avoid impacting fluvial sand transport areas by incorporating several design features to maintain the fluvial sand transport within both the San Gorgonio River and Smith Creek. The design features described in the I-10 Bypass Sediment Transport Letter in Appendix B of the NES are as follows:

- Setting the bridge abutments outside of the U.S. Army Corps of Engineers (USACE) jurisdictional Active Floodplain within the San Gorgonio River: placing the abutments behind the limits of the USACE Active Floodplain maintains a clear opening through the bridge within the Active Floodplain and therefore maintains the fluvial sand transport under the proposed San Gorgonio River Bridge.
- The proposed bridge columns are round concrete columns 6 feet in diameter that support a 196-foot span across the San Gorgonio River. The large spacing (bridge pier spacing is 150 to 200 ft apart center to center) and relatively small diameter of the columns minimizes the obstructions in the channel that could impede sand transport. The round columns' shape allows water and sand to be transported efficiently downstream.
- The bridge soffits (undersurface of the bridge superstructure) are set above the 100-year water surface elevation, so there is no obstruction to flow from the soffits. The Hydrologic Engineering Centers River Analysis System (HEC-RAS) modeling for the San Gorgonio River calculated a proposed 100-year velocity of 17.6 feet per second at the bridge. The high velocities in the channel are a result of the channel steepness, which also helps maintain a continuous supply of



sediment during large storm events. These high velocities will not be affected by the introduction of the bridge columns.

The I-10 Bypass Project is a covered activity under the CVMSHCP, is implementing the requirements of the CVMSHCP, and there are no inconsistencies between the Project and the applicable general plans, regional plans, Habitat Conservation Plans and Natural Communities Conservation Plans. The avoidance of impeding sand transport has been discussed with CVAG on February 6, 2013, June 4, 2018, and May 22, 2019, and CVAG has determined that the Project would be consistent with the CVMSHCP. The CVMSHCP consistency determination was formalized during the Joint Project Review process after The Project was selected as the alternative for construction. As part of the Joint Project Review process, the CVCC reviewed the Drainage Report for the Preferred Alternative and confirmed its consistency with the CVMSHCP on June 11, 2020. The CVCC has not required the development of a sand transport model at this stage of the Project design and the level of analysis is commensurate with the level of impacts anticipated. The Project would maintain sediment transport, which is necessary for sustaining downstream resources as described in the Riverside County General Plan. The Project is consistent with the policies provided in the County General Plan and the County Pass Area Plan.

**F-1-24**

The County, a permittee under the CVMSHCP, recognizes the importance of not disrupting the CVMSHCP's fluvial sand transport Essential Ecological Process area and is working with CVCC to ensure all measures determined necessary through the Joint Project Review process are incorporated. As described in Response to Comment F-1-23, the CVMSHCP does not require the preparation of a sand transport model, and the County has designed the Project to provide full span bridges, and therefore, has determined the Project design features that avoid and minimize effects to sand transport do not warrant the creation of a sand transport model.

**F-1-25**

As described in Response to Comment F-1-23, the CVCC has not required the development of a sand transport model and the level of analysis is commensurate with the level of impacts anticipated. The avoidance of impeding sand transport has been discussed with CVAG on February 6, 2013, June 4, 2018, and May 22, 2019, and CVAG has determined that the Project would be consistent with the CVMSHCP. The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency

determination was formalized on June 11, 2020 during the Joint Project Review process.

**F-1-26**

The Project does not impede fluvial sand transport from entering Smith Creek or the San Gorgonio River. The Project has been reviewed for consistencies with the Riverside County General Plan, The County Pass Area Plan, WRMSHCP, and CVMSHCP and is consistent with each of these plans. CVCC found the Project to be consistent with the CVMSHCP. The Project is not expected to adversely affect sand transport because the Project would not impede flows within Smith Creek and the San Gorgonio River and there are no structures between the sand source and these water bodies that would contribute to cumulative effects of sand transport. Therefore, the Project is not expected to reduce the volume of sand delivered to the CVMSHCP and was confirmed by CVCC on (June 11, 2020) during the Joint Project Review process. Initial discussions with CVCC indicated the Project would be in compliance with the CVMSHCP. Compliance with the CVMSHCP was confirmed during the Joint Project Review process after the Preferred Alternative (Alternative 12) was identified by the Project Development Team (PDT). As part of the Joint Project Review process, the CVCC reviewed the Drainage Report for the Preferred Alternative and confirmed the Project's consistency with the CVMSHCP on June 11, 2020.

The commentator's statements regarding exactly what State CEQA Guidelines Section 15125(d) requires are inaccurate. Section 15125(d) requires the lead agency to discuss any inconsistencies between the Project and the applicable regional plans, including habitat conservation plans. The EIR/EA does that (see Section 2.15, Natural Communities, 2.15.2, Affected Environment). Furthermore, the CVCC, the agency specifically charged with implementing the CVMSHCP, has determined the Project to be consistent with the MSHCP. The lead agency has provided the required analysis and studies and has determined the Project, as a covered activity, is also consistent with the Habitat Conservation Plan. The commentator's comment that utilizes Section 15125(d) as a justification to complete additional models and studies beyond what has already been completed in an attempt to thwart the CVCC's consistency determination is misplaced and is not required pursuant to CEQA.

**F-1-27**

The new "permit conditions" are referring to any conditions related to fluvial sand transport that may result from the CVMSHCP Joint Project Review process. The reference to the 0.01 acre of fluvial sand transport within the Cabazon Conservation

Area, fluvial sand transport area, is referring to the columns that would be used to support the bridges that cross Smith Creek and San Gorgonio River.

**F-1-28**

The on-site drainage features referred to in this comment are part of the overall drainage system to intercept and convey flows away from the roadway through a series of swales, ditches, cross culverts, storm drain inlets, and pipes. More details regarding how the system will be designed are provided in the responses to items 1 through 4 below and a more detailed discussion of the on-site system is provided in the Drainage Report for the I-10 Bypass – Banning to Cabazon and the I-10 Bypass Project Water Quality Assessment Report. Alternative 5 and The Project both avoid impacts to the adjacent hillside sand source and would not interfere with the deposition of sand into the adjacent Smith Creek and San Gorgonio River.

Below is an explanation of how the following features listed in item numbers 1 through 4 in Response to Comment F-1-28 would affect sand transport:

1. Drainage ditches/swales approximately 10 to 20 feet wide running parallel to the roadway with inlets. The graded ditches/swales will be designed shallow to avoid collecting wind-borne sand. Sand that does collect in these systems will naturally flow through the inlets and cross culverts that will be designed with self-cleaning velocities to be self-scouring and ensure any sand that enters the drainage system will flow through the system. This design will allow sediment to contribute fluvial sand transport in the Essential Ecological Process or river functionality in the Cabazon Conservation Area that contributes sand to downstream aeolian sand and biological processes at the Snow Creek/Windy Point Conservation Area and the Whitewater Floodplain Conservation Area.
2. Cross culverts under the roadway range in size from approximately 36 inches in diameter to a 10x10-foot box culvert. Cross culverts will be designed with self-cleaning velocities to be self-scouring and ensure that any sand that enters the drainage system will flow through the system. This design will maintain sediment transport as noted in item number 1 above.
3. Inlet protection and/or debris settling basins at the upstream end of cross culverts. These will range in size from approximately 15 to 100 feet in diameter (or similar length/width combination). Debris basins will be located at the base of steeper canyons and designed to catch larger rock and materials that could block cross culverts. The systems will be designed to let smaller materials, including sand to

pass through. This design will maintain sediment transport as noted in item number 1 above.

4. Water quality basins within the designated roadway right-of-way to encourage infiltration. These will run linear and parallel to the roadway, ranging in width from approximately 10 to 75 feet: Water quality basins will also be designed shallow and be located in areas that are less prone to wind-borne sand. Areas less prone to wind-borne sand are located to the west of the San Gorgonio River near and within the WRMSHCP.

As stated in Appendix E, List of Technical Studies, in the Recirculated Draft EIR/EA, the technical studies used to prepare the Draft EIR/EA (including the Drainage Report and the Water Quality Assessment Report) are available for review at the Riverside County Transportation Department, 3525 14<sup>th</sup> Street, Riverside, California 92501, during regular business hours.

**F-1-29**

Response to Comment F-1-28 discusses how the drainage system will be designed to be self-scouring to ensure any sand that enters the drainage system will flow through the system and promote sand transport. There is one cross culvert located just south of the sand source identified in the CVMSHCP (just west of the San Gorgonio River) that is preliminarily identified to be a 10-foot box section culvert. Text has been added to Section 2.15.2.5 of the Final EIR/EA to indicate that this culvert will be designed to maintain self-cleaning velocities that will promote sand transport in this direction. In general, the storm drains would not be relied upon to convey wildlife due to their length and openness factors. Additional wildlife crossings have been added to the design that would be constructed consistent with the USDOT's Wildlife Crossings Structure Handbook, the Caltrans' Wildlife Crossings Guidance Manual, and the WRMSHCP recommendations. The location and frequency of the wildlife crossings are provided on Figure 2.15-2 of the Final EIR/EA. The Project design features that avoid and minimize effects to sand transport are described in the I-10 Bypass Sediment Transport Letter in Appendix B of the NES.

**F-1-30**

The bridges fall within the jurisdiction of the County of Riverside. As such, they must meet adopted standards by Riverside County Flood Control and Water Conservation District. These standards require the bridge design to withstand the 100-year storm



event. The design of the bridge foundations will consider a larger “check flood event” estimated to represent the 200-year to 500-year storm event.

**F-1-31**

Table D in the NES also discloses the probability of regional species of concern to occur on site based upon the quality of existing habitat, including: chaparral sand-verbena (*Abronia villosa* var. *aurita*) – low probability, Yucaipa onion (*Allium marvinii*) - absent, Jaeger’s milk-vetch (*Astragalus pachypus* var. *jaegeri*) – moderate probability, Plummer’s mariposa lily (*Calochortus plummerae*) – low probability, Parry’s spineflower (*Chorizanthe parryi* var. *parryi*) – low probability, white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) – high probability, many-stemmed dudleya (*Dudleya multicaulis*) – low probability, spiny-hair blazing star (*Mentzelia tricuspis*) – low probability, slender woolly heads (*Nemacaulis denudate* var. *gracilis*) – low probability, desert beardtongue (*Penstemon pseudospectabilis* ssp. *pseudospectabilis*) – low probability, rosy boa (*Charina trivirgata*) – low probability, coast horned lizard (*Phrynosoma Blainvillii* (*coronatum*)) – low probability, pallid bat (*Antrozous pallidus*) – low probability, Western yellow bat (*Lasiurus xanthinus*) – low probability, Dulzura pocket mouse (*Chaetodipus californicus femoralis*) – low probability, golden eagle (*Aquila chrysaetos*) - present, loggerhead shrike (*Lanius ludovicianus*) – present, American badger (*Taxidea taxus*) – low probability, and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) - present. As described in the NES, due to the existing disturbances (heavy grazing) to the native habitat and proximity to surrounding development, the habitat quality is marginal and the Project would not have substantial effects on these species. With the exception of bats, there are no specific survey requirements as part of the MSHCP for the species mentioned. The BSA does not contain bat roosting habitat that would merit bat surveys. Due to the marginal habitat quality within the BSA, the Project impact on special-status species would not be significant under CEQA.

**F-1-32**

The 2012 burrowing owl survey assessed the entire 600-acre study area and no burrows or sign were found. As described in Section 4.3.2.1, Survey Results of the NES, the 2013 burrowing owl survey area (88.2 acres) supplemented the original 600- acre area once additional project area was defined, primarily the redesign of the Project alignment. Burrowing owl surveys were conducted consistent with MSHCP requirements. The burrowing owl surveys were conducted by six biologists over eight mornings in 2012 and by three biologists over five mornings in 2013. No burrowing owls were observed during either year of survey. Additional details of the focused

burrowing owl surveys can be found in Burrowing Owl Focused Survey Reports, included in Appendix E of the NES. Avoidance and minimization Measure BIO-1 requires that a pre-construction survey for burrowing owl be conducted consistent with the MSHCP.

**F-1-33**

There is no golden eagle nesting habitat within the BSA; however, a number of golden eagles nests have been documented in the San Jacinto Mountains with flight paths near the BSA [Wildlife Research Institute, Inc. (WRI) 2012] and golden eagles have been known to forage in the Project vicinity. A discussion has been added to Section 2.18.2.2 of the Final EIR/EA describing extreme sensitivity of golden eagles to human disturbance (e.g., disturbance as a result of new human development or recreational use from hiking or off-road vehicles). This Project does not include the development of recreational uses such as hiking or off-road vehicles. Additionally, the Project construction footprint and duration will be kept to the minimum required necessary to construct the Project in order to minimize disturbance to golden eagles. Based on these considerations, the Project would not substantially affect the population or reduce the amount of forage in the area for golden eagle. In addition, wildlife movement will be facilitated across the Project through a number of wildlife crossings, described in avoidance and minimization Measure WC-4. Wildlife fencing, as described in avoidance and minimization Measure WC-3, will be installed to minimize vehicle roadkill of wildlife that would potentially attract golden eagle to the roadway increasing opportunities for vehicle/eagle collision and mortality. As with other roads in the area, golden eagles are likely to habituate to the presence, operation, and daily vehicle traffic of the I-10 Bypass roadway.

**F-1-34**

The Errata for the NES has been prepared to clarify the specific resources regulated by CDFW under California Fish and Game Code 1600 et seq. Any references to wetlands that could occur within CDFW jurisdiction will be removed from the document.

**F-1-35**

The County met with Charles Land of CDFW on site on June 12, 2018, to review CDFW resources. During that site visit, waters of the State were reviewed, and no additional resources were identified as shown on Figure 3 of the NES.

**F-1-36**

The Determination of Biological Equivalent or Superior Preservation (DBESP), included as an appendix in the Final EIR/EA, was reviewed and the RCA and the Wildlife Agencies concurred that the DBESP addressed Sections 6.1.2 and 6.3.2 of the WRMSHCP on October 1, 2020. As described in the DBESP, the BSA contains riparian/riverine areas and falls within a WRMSHCP Mammal Species Survey Area for Los Angeles pocket mouse. Compensatory mitigation for impacts to jurisdictional waters and other beneficial floodplain values will be mitigated at a 3:1 ratio for permanent impacts and at a 1:1 for temporary impacts. The Project design will conserve occupied Los Angeles pocket mouse habitat at a 1:1 ratio.

**F-1-37**

The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019. Subsequently on June 11, 2020, the Coachella Valley-Joint Project Review confirmed the Project is consistent with the CVMSHCP.

The Project is within the Cabazon Conservation Area. Below is a summary of the applicable measures outlined for the Cabazon Conservation Area in the CVMSHCP and how the Project complies with the applicable measures:

1. In the fluvial sand transport areas, the County will be required to maintain natural flows and be conveyed offsite in the natural pre-disturbance direction of flow, and not impede water-borne sand transport across the parcel in its natural direction of flow. The Project maintains flow direction and does not impede sand or water from flowing across the property in the pre-project direction. In addition, the Project does not artificially retain water-borne sediments and floodwaters onsite. Concentration of flows and increase in flow velocity offsite are minimized to the extent feasible thereby avoiding downstream erosion and scour. The Project does not contain any flood control structure that would reduce sediment transport from the sand source area to the sand deposition area where aeolian sand transport processes are active.
2. This measure is specifically applicable to the Fornat Wash culvert under I-10 which is located 3.8 miles east of the Project and this culvert would not be affected by the Project.
3. This measure requires projects outside of the fluvial sand transport Essential Ecological Process area to comply with avoidance, minimization, and mitigation

- measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5. A small portion of the Project under the CVMSHCP falls outside of the fluvial sand transport Essential Ecological Process area.
- a. **Section 4.4, Required Avoidance, Minimization, and Mitigation Measures:** The Project has been designed to maintain the fluvial sand transport capacity of the system.
  - b. **Section 4.5, Land Use Adjacency Guidelines, Drainage:** The Project has been designed to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way, compared to existing conditions. The stormwater systems was designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.
4. This measure is specifically applicable to new development in Essential bighorn sheep Habitat, which is located 3.2 miles southeast of the BSA.
  5. This measure requires the CVCC and the applicable local permittee to coordinate with the Western Riverside County MSHCP Regional Conservation Authority within one year of the issuance of the CVMSHCP 10(a) permits to ensure that fluvial sand transport along the San Gorgonio River west of the Cabazon Conservation Area and functionality of the San Gorgonio River as a Biological Corridor are maintained. The Project does not affect this coordination.

**F-1-38**

On June 11, 2020, the Project was determined to be consistent with the CVMSHCP through the Coachella Valley-Joint Project Review process. The Project is within the Cabazon Conservation Area. Below are a summary of the applicable measures outlined for the Cabazon Conservation Area in the CVMSHCP and how the Project complies with the applicable measure:

1. In the fluvial sand transport areas, the County will be required to maintain natural flows and be conveyed offsite in the natural pre-disturbance direction of flow, and not impede water-borne sand transport across the parcel in its natural direction of flow. The Project maintains flow direction and does not impede sand or water from flowing across the property in the pre-project direction. In addition, the Project does not artificially retain water-borne sediments and floodwaters onsite.



Concentration of flows and increase in flow velocity offsite are minimized to the extent feasible thereby avoiding downstream erosion and scour. The Project does not contain any flood control structure that would reduce sediment transport from the sand source area to the sand deposition area where aeolian sand transport processes are active.

2. This measure is specifically applicable to the Fornat Wash culvert under I-10 which is located 3.8 miles east of the Project and this culvert would not be affected by the Project.
3. This measure requires projects outside of the fluvial sand transport Essential Ecological Process area to comply with avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5. A small portion of the Project under the CVMSHCP falls outside of the fluvial sand transport Essential Ecological Process area.
  - a. **Section 4.4, Required Avoidance, Minimization, and Mitigation Measures:** The Project has been designed to maintain the fluvial sand transport capacity of the system.
  - b. **Section 4.5, Land Use Adjacency Guidelines, Drainage:** The Project has been designed to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way, compared to existing conditions. The stormwater systems was designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.
4. This measure is specifically applicable to new development in Essential bighorn sheep Habitat, which is located 3.2 miles southeast of the BSA.
5. This measure requires the CVCC and the applicable local permittee to coordinate with the Western Riverside County MSHCP Regional Conservation Authority within one year of the issuance of the CVMSHCP 10(a) permits to ensure that fluvial sand transport along the San Gorgonio River west of the Cabazon Conservation Area and functionality of the San Gorgonio River as a Biological Corridor are maintained. The Project does not affect this coordination.

**F-1-39**

On December 17, 2019, the PDT selected Alternative 12 as the Preferred Alternative for construction. Subsequently on June 11, 2020, the Coachella Valley-Joint Project Review confirmed the Project is consistent with the CVMSHCP.

**F-1-40**

These concerns regarding wildlife movement are addressed in Responses to Comments F-1-5 through F-1-20 and regarding sand transport in Responses to Comments F-1-21 through F-1-30. Response to Comment F-1-1 addresses the reasons why recirculation of the Recirculated Draft EIR is not required.

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## **L.2 Comments from Regional Agencies**



JASON E. UHLEY  
General Manager-Chief Engineer



1995 MARKET STREET  
RIVERSIDE, CA 92501  
951.955.1200  
FAX 951.788.9965  
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT

September 23, 2019

Ms. Mary Zambon  
Riverside County  
Transportation Department  
3525 14<sup>th</sup> Street  
Riverside, CA 92501

Dear Ms. Zambon:

Re: I-10 Bypass: Banning to Cabazon Project

The Riverside County Flood Control and Water Conservation District (District) has reviewed and commented on the material located in the Draft Environmental Impact Report (DEIR) and associated hydraulic documents for the I-10 Bypass: Banning to Cabazon Project. The applicant proposed to construct a freeway bypass between Cabazon and Banning, located within unincorporated Riverside County and the city of Banning. Below are comments determined by the Floodplain Management (FPM) Section at the District:

1. Portions of the proposed project are located within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, including a floodway, as shown on the FEMA Flood Insurance Rate Maps. Grading plans and improvements constructed in a 100-year floodplain are reviewed by the local land use agency and submitted to FEMA for review when necessary. For this project, the City of Banning and the County of Riverside are the local communities participating in the National Flood Insurance Program and are responsible for regulating the FEMA floodplains. Page 2.8-9 of the DEIR under the section titled "Agency Coordination" indicates that "Coordination with FEMA for impacts to the 100-year floodplain is not required..." Since the proposed bypass structure changes the water surface elevation (WSE) within a FEMA Zone A and intersects a Zone AE with a floodway, and the development is greater than 5 acres (44 CFR 60.3(b)(3)), the applicant will likely be required to submit a Letter of Map Revision to FEMA for review. R-1-1
2. The FPM Section has reviewed the Draft Location Hydraulic Study pertaining to Alternatives 5 and 12 of the proposed I-10 Bypass. Inconsistencies in the cross-section geometry as well as HEC-RAS calculations show significant increases in WSE, including in FEMA Zone A. Please revise the geometry and HEC-RAS models in the final hydraulic report to ensure accurate depiction of the WSE and associated 100-year floodplain. R-1-2

Any questions regarding the above matter may be directed to Manik Sethi at 951.955.9323 or me at 951.955.1265.

Very truly yours,

KYLE W. GALLUP  
Engineering Project Manger

MS:mcv  
P8\227417

**L.2.1 R-1 – Riverside County Flood Control and Water Conservation District**

**R-1-1**

Language regarding coordination with the Federal Emergency Management Agency (FEMA) has been updated in the Final Environmental Impact Report/Environmental Assessment (EIR/EA). A potential Letter of Map Revision will be addressed in the Final Design Plans, Specifications, and Estimates (PS&E) Phase.

**R-1-2**

This will be addressed in the Final Drainage Study as indicated.

The cross-section geometry and the U.S. Army Corps of Engineers' Hydrologic Engineering Center River Analysis System (HEC-RAS) calculations will be reviewed for inconsistencies and will be updated accordingly to ensure water surface elevation is not increased significantly within FEMA Zone A. Final calculations will be presented in the Final Drainage Report for the I-10 Bypass – Banning to Cabazon.

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### **L.3 Comments from Local Agencies**





September 25, 2019

Mary Zambon  
 Environmental Project Manager  
 Riverside County Transportation Department  
 325 14<sup>th</sup> St.  
 Riverside, CA 92501

To Whom It May Concern,

I'm in favor of the I 10 bypass road from Cabazon to Banning. This will greatly mitigate issues in regards to emergency response times and student transportation issues.

L-1-1

Sincerely,

Name: Alejandro Cassadas  
 Address: 1236 N Almond way Banning CA, 92220  
 Phone Number: (951) 885-5207  
 Email Address: alex.cassadas@hotmail.com

**L.3.1 L-1 – Alejandro Cassadas**

**L-1-1**

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.



September 25, 2019

Mary Zambon  
Environmental Project Manager  
Riverside County Transportation Department  
325 14<sup>th</sup> St.  
Riverside, CA 92501

To Whom It May Concern,

I'm in favor of the I 10 bypass road from Cabazon to Banning. This will greatly mitigate issues in regards to emergency response times and student transportation issues.

L-2-1

Sincerely,

Name: Alfredo Andrade  
Address: 2692 W Williams St Apt. 1  
Phone Number: 760-296-9318  
Email Address: aandrade@banning.k12.ca.us

**L.3.2 L-2 – Alfredo Andrade**

**L-2-1**

The commenter's support for the I-10 Bypass Project improvements to emergency response times is acknowledged.





# City of Banning

## Public Works Department

September 24, 2019

Mary Zambon, Environmental Project Manager  
 Riverside County Transportation Department  
 3525 14<sup>th</sup> Street  
 Riverside, CA 92501

**Re: Recirculated Draft Environmental Impact Report/Draft Environmental Assessment for the I-10 Bypass: Banning to Cabazon Project**

Ms. Zambon,

The City of Banning appreciates the opportunity to review the *Recirculated Draft Environmental Impact Report/Draft Environmental Assessment for the I-10 Bypass: Banning to Cabazon Project* (the "Project"). The Project proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning (the "City"), east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The Project includes bridges over Smith Creek and the San Gorgonio River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. It is our understanding that the Project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.

The City has reviewed the abovementioned document and provides the following comments:

### **City of Banning Circulation Element**

Figure 2.1-4 on Page 2.1-19 titled "City of Banning Existing General Plan Street System" does not reflect the City's current circulation element. General Plan Amendment 16-2501 was approved on February 14, 2017 and revised the circulation element. See attached updated General Plan Street System. Most of the changes included as part of the update revolved around the Pardee – Atwell (previously known as Butterfield Specific Plan) development.

L-3-1

Please also note that Figure 2.1-4 shows an interchange at Highland Home Road and the I-10. This interchange was removed in 2013 (GPA 13-2501).

L-3-2

### **Alternatives/Banning Municipal Airport**

The Project is considering two Alternatives (5 and 12) which both terminate at the intersection of Westward Avenue and Hathaway Street. Per the City's General Plan, Westward Avenue is identified as a Collector Highway with an ultimate right-of-way width designation of 66 feet and curb to curb width of 44 feet with 2 lanes of traffic and parking on each side. Hathaway Street is designated as a Secondary

Highway with an ultimate right-of-way width of 88 feet and curb to curb width of 64 feet with four travel lanes and parking lanes on each side.

Westward Avenue is a feasible terminus in the City for the Project, although we would like to note that the City feels that a more beneficial alignment would be to connect either of the two alternatives to Lincoln Street at Hathaway Street which is designated as a Major Highway with an ultimate right-of-way width of 110 feet, a curb to curb width of 86 feet and 4 lanes of travel. Understandably so, an alternative which connects directly to Lincoln Street is not feasible due to the location of the Banning Municipal Airport (the "BMA") and we would not suggest to burden the Project with the closure of the BMA.

L-3-3

With that said, on April 25, 2017 the City Council approved Resolution 2017-44, "Resolution of the City Council of the City of Banning, California, declaring that it shall be a goal of the City of Banning to close the Banning Municipal Airport, as soon as legally permitted." City staff have been directed to aggressively pursue closure of the airport so we are in the process of working with our lobbyists and Congressional Representatives to accomplish this policy directive. The timing for said closure is unknown at this time.

L-3-4

The City strongly feels that if the BMA closure were to occur, the best alignment would be one which connects to Lincoln Street rather than Westward Avenue.

L-3-5

A connection to Lincoln Street would address several of the concerns brought up by the public and City Council members regarding traffic impacts to the surround residential areas within the City and adjacent to the Project. Additionally, a connection to Lincoln Street would better represent the City's current General Plan Street System and complement the City's buildout scenario.

L-3-6

**Water well (NP-1)**

The City of Banning currently owns an unequipped water well (NP-1) on APN 532-180-035. The City plans on improving this site including the installation of pump equipment, motor, water mains, concrete pad and wall enclosure within the next 12 months. The proposed alignment for Alternative 5 goes directly over the NP-1 site. If Alternative 5 is selected, the I-10 Bypass Project would have to abandon NP-1 and rebuild it outside of the Project limits.

L-3-7

Again, thank you for the opportunity to review and provide comments on the Project documents. Please contact me if you have any questions.

Sincerely,

Art Vela, P.E.  
Director of Public Works/City Engineer

Encl.

General Plan Street System updated on 2/14/17  
Sheet 10 of 24, Alternative 5

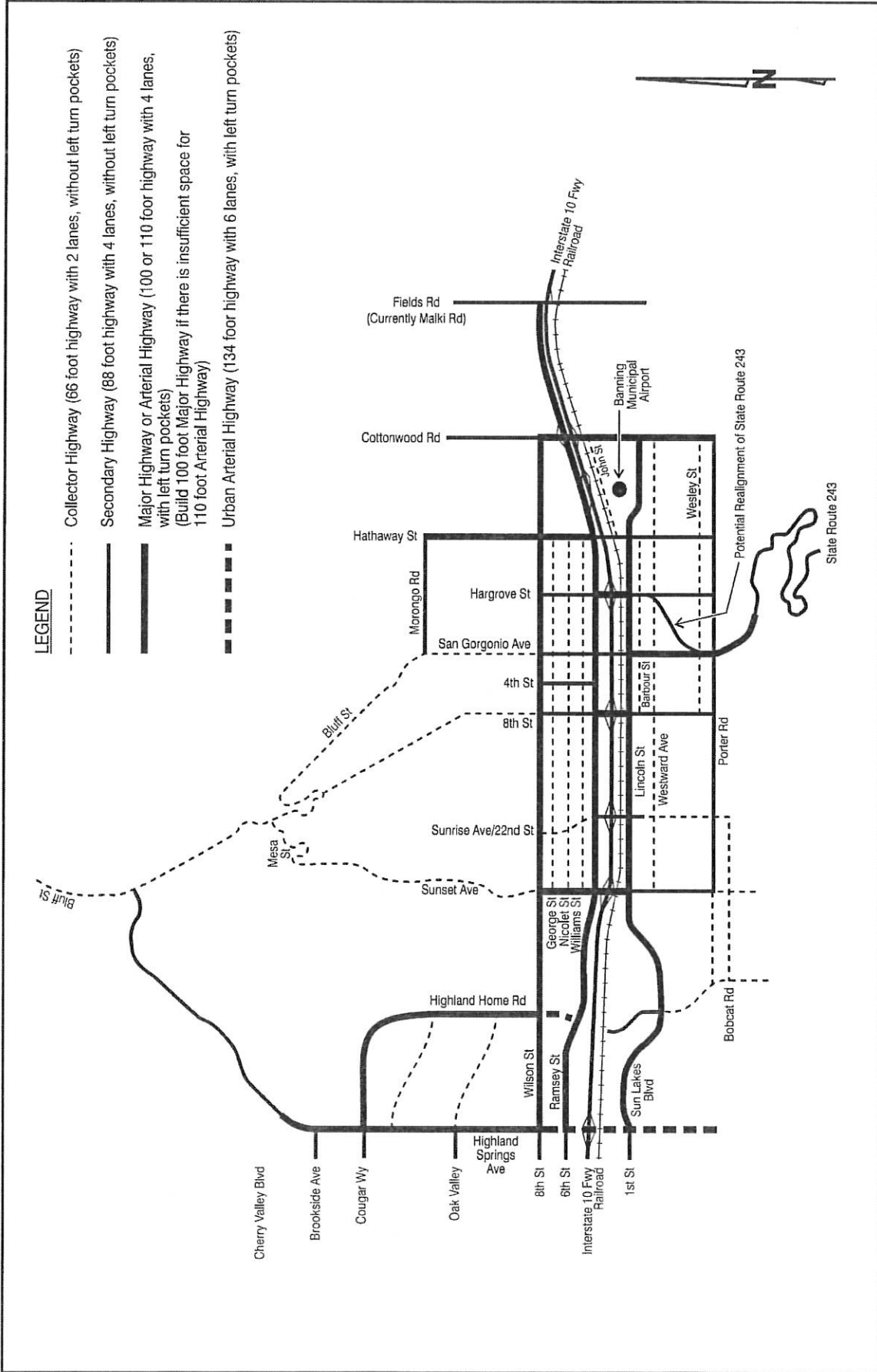
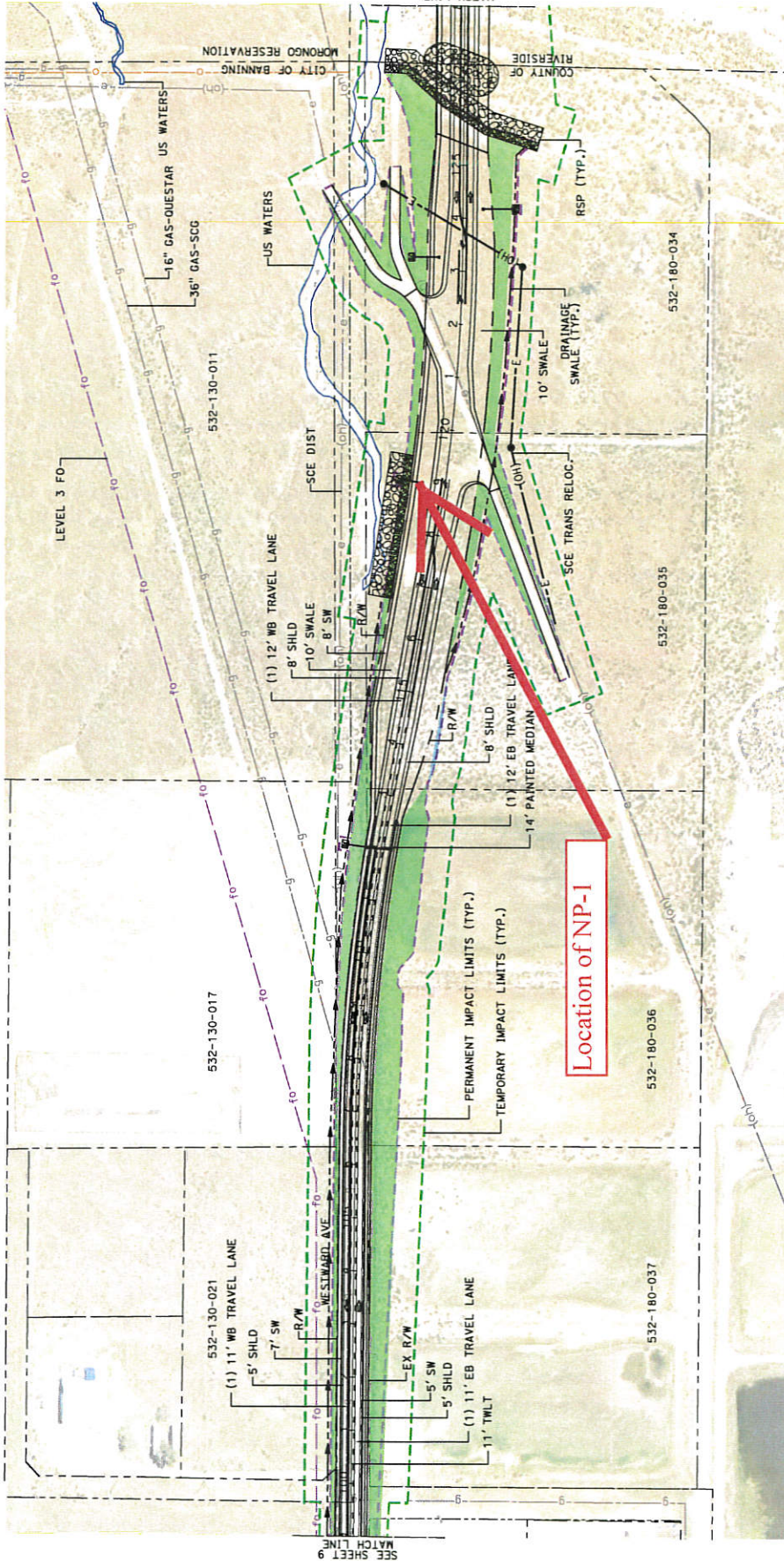


Exhibit  
III-6



**Banning General Plan  
Proposed General Plan Street System**





SHEET 9

SHEET 10

SHEET 11

SHEET 12

SHEET 13

SHEET 14

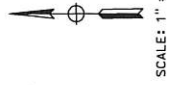
SHEET 15

**I-10 BYPASS PROJECT  
CONCEPTUAL ALTERNATIVE 5**

**SHEET 10 OF 24**

**DECEMBER 12, 2017**

**Kimley-Horn**



**ABBREVIATIONS**

RELOC.	RELOCATION	SCG	SOUTHERN CALIFORNIA GAS
DIST	DISTRIBUTION	RSP	ROCK SLOPE PROTECTION
TRANS	TRANSMISSION	SCE	SOUTHERN CALIFORNIA EDISON
SHLD	SHOULDER	R/W	RIGHT-OF-WAY
TYP.	TYPICAL	TWLT	TWO-WAY LEFT-TURN
WB	WESTBOUND	RCB	REINFORCED CONCRETE BOX
EB	EASTBOUND	UPRR	UNION PACIFIC RAILROAD
SW	SIDEWALK		

**LEGEND**

[Symbol]	TEMPORARY IMPACT LIMITS
[Symbol]	PERMANENT IMPACT LIMITS
[Symbol]	EX R/W/PARCEL LINES
[Symbol]	PROP R/W
[Symbol]	DRAINAGE SWALE
[Symbol]	CUT
[Symbol]	FILL

**ABBREVIATIONS**

RET	RETAINING
EX	EXISTING
PROP	PROPOSED
FO	EXISTING FIBER OPTIC
TC	EXISTING TELECOM
OH	EXISTING OVERHEAD UTILITY
G	EXISTING GAS
E	EXISTING ELECTRIC



### **L.3.3 L-3 – Banning Public Works Department**

#### **L-3-1**

Figure 2.1-4 was revised to incorporate information from General Plan Amendment 16-2501, approved February 14, 2017.

#### **L-3-2**

Figure 2.1-4 was revised to remove the interchange at Highland Home Road.

#### **L-3-3**

The City of Banning's preference for the I-10 Bypass to connect to Lincoln Street rather than to Western Avenue is noted. This connection is not part of the I-10 Bypass Project due to the location of the Banning Municipal Airport at the east terminus of Lincoln Street. However, this connection could be considered in the future as a separate project that modifies the connection at the west end of the I-10 Bypass to connect to Lincoln Street, should the City decide to move forward with a plan to close the Banning Municipal Airport.

#### **L-3-4**

The City's goal to close the Banning Municipal Airport is acknowledged.

#### **L-3-5**

Please see Response to Comment L-3-3.

#### **L-3-6**

Please see Response to Comment L-3-3.

#### **L-3-7**

The need to relocate Water Well NP-1 under Alternative 5 is acknowledged.



September 25, 2019

Mary Zambon  
Environmental Project Manager  
Riverside County Transportation Department  
325 14<sup>th</sup> St.  
Riverside, CA 92501

To Whom It May Concern,

I'm in favor of the I 10 bypass road from Cabazon to Banning. This will greatly mitigate issues in regards to emergency response times and student transportation issues.

L-4-1

Sincerely,

A handwritten signature in blue ink, appearing to read "Carrie Shock", is written over a horizontal line.

Name: Carrie Shock  
Address: PO Box 413 - Home 504163 Irene St Cabazon, CA 92230  
Phone Number: 951-8077531  
Email Address: carrieannshock@gmail.com

**L.3.4 L-4 – Carrie Shock**

**L-4-1**

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.

**From:** [Zambon, Mary](#)  
**To:** [Adrian, Darren](#); [Abby Annicchiarico](#); [King Thomas](#)  
**Cc:** [Marcinek, John](#)  
**Subject:** FW: Access to Cabazon Elementary School  
**Date:** Thursday, September 26, 2019 6:51:21 AM  
**Attachments:** ~WRD000.jpg

See below.

**From:** Esthela Mejia Castro [mailto:emcastro@banning.k12.ca.us]  
**Sent:** Wednesday, September 25, 2019 4:20 PM  
**To:** Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Subject:** Access to Cabazon Elementary School

**CAUTION:** This email originated externally from the **Riverside County** email system.  
**DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

My name is Esthela Castro, and I am the Clerk at Cabazon Elementary School. It was brought to my attention that there was a possibility that there might be a project in the works for an access road that would connect the City of Banning to Cabazon area. I am in favor of this access road as it provides access to the necessities that our school and community need. When there are incidents on the Interstate is shut down, and there is no way out in the event of a medical emergency. Banning is the closest hospital and in a medical emergency, time is of the essence! Currently, when we have congestion, there are not many other options for anyone to get to the closest services needed. Thank you for your consideration with this project and keeping the families of the Cabazon community in mind.

L-5-1

Sincerely,



**Esthela Castro**

Bilingual Clerk | Cabazon Elementary School

**P:** [951-922-0252](tel:951-922-0252) Ext: 310020

**E:** [emcastro@banning.k12.ca.us](mailto:emcastro@banning.k12.ca.us)

[cabazon.banning.k12.ca.us](http://cabazon.banning.k12.ca.us)

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[County of Riverside California](#)



**L.3.5 L-5 – Esthela Castro**

***L-5-1***

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.



September 25, 2019

Mary Zambon  
 Environmental Project Manager  
 Riverside County Transportation Department  
 325 14<sup>th</sup> St.  
 Riverside, CA 92501

To Whom It May Concern,

I'm in favor of the I 10 bypass road from Cabazon to Banning. This will greatly mitigate issues in regards to emergency response times and student transportation issues.

L-6-1

Sincerely,

*Matt Veldivica*

Name: Matt Veldivica  
 Address: 1694 W. Dodder Drive  
 Phone Number: (951) 368-7803  
 Email Address: mveldivica@banning.k12.ca.us

**L.3.6 L-6 – Matt Valdivia**

***L-6-1***

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.



# CABAZON

ELEMENTARY SCHOOL

L-7

September 25, 2019

Mary Zambon

ENVIRONMENTAL PROJECT MANAGER  
RIVERSIDE COUNTY TRANSPORTATION DEPT.  
3525 14<sup>TH</sup> STREET | RIVERSIDE, CA 92501

Hi Ms. Mary Zambon,

My name is Patricia Ford, I live in Banning and I work at Cabazon Elementary School as the principal's secretary. It was brought to my attention that there is a possibility that there might be a project in the works for an access road that would connect the City of Banning to Cabazon area. I am very much in favor of this access road as it provides access to the necessities that our school and community. When there are incidents on the Interstate is shuts us down, there is no way out in the event of a medical emergency. Banning is the closest hospital and in a medical emergency, time is of the essence! Currently, when we have congestion, there are not many other options for anyone to get to the closest services needed. Thank you for your consideration with this project and keeping the families of the Cabazon community in mind.

L-7-1

SINCERELY,

PATRICIA FORD



**L.3.7 L-7 – Patricia Ford**

**L-7-1**

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.



September 25, 2019

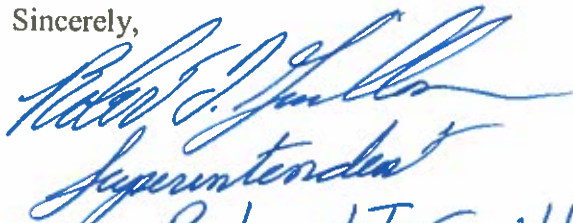
Mary Zambon  
Environmental Project Manager  
Riverside County Transportation Department  
325 14<sup>th</sup> St.  
Riverside, CA 92501

To Whom It May Concern,

I'm in favor of the I 10 bypass road from Cabazon to Banning. This will greatly mitigate issues in regards to emergency response times and student transportation issues.

L-8-1

Sincerely,

A handwritten signature in blue ink that reads "Robert T. Guillen" and "Superintendent" below it.

Name: Robert T. Guillen  
Address: 161 W Williams St., Banning  
Phone Number 951.922.2706  
Email Address: rguillen@banning.k12.ca.us

**L.3.8 L-8 – Robert Guillen**

***L-8-1***

The commenter's support for the I-10 Bypass Project and improvements to emergency response times is acknowledged.

**From:** [Zambon, Mary](#)  
**To:** [Adrian, Darren](#); [Abby Annicchiarico](#); [King Thomas](#)  
**Cc:** [Marcinek, John](#)  
**Subject:** FW: Cabazon/ Banning Connection Road Project  
**Date:** Thursday, September 26, 2019 7:03:08 AM

---

See below.

-----Original Message-----

From: Sherrie Porter [<mailto:scp1916@yahoo.com>]  
Sent: Wednesday, September 25, 2019 5:21 PM  
To: Zambon, Mary <[MZAMBON@RIVCO.ORG](mailto:MZAMBON@RIVCO.ORG)>  
Subject: Cabazon/ Banning Connection Road Project

CAUTION: This email originated externally from the Riverside County email system. DO NOT click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Zambon,

My name is Sherrie Porter. I am a Kindergarten teacher at Cabazon Elementary School. I am excited to hear there is a project in consideration to build a road connecting Cabazon and Banning on the south side of the 10 freeway. I am in favor of a project to help provide a road for the residents and employees coming from the south side. It especially would be useful for emergency vehicles to be able to access this area or leave this area to assist major freeway accidents or wildfires.

I would love to talk with you more about this project. Please let me know if there is anything else I can do to support the advancement of this connection road.

Thank you,

Sherrie Porter

Cabazon Elementary School

Cell number: (909)498-6852

Sent from my iPhone

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County of Riverside California <<http://www.countyofriverside.us/>>

L-9-1



**L.3.9 L-9 – Sherrie Porter**

**L-9-1**

The commenter's support for the I-10 Bypass Project and improvements to access for emergency vehicle access during major freeway accidents or wildfires is acknowledged.

## **L.4 Comments from Interested Parties**

**From:** [Zambon, Mary](#)  
**To:** [King Thomas](#); [Abby Annicchiarico](#); [Darren Adrian](#); [Marcinek, John](#)  
**Subject:** Fwd: I-10 Bypass: Banning to Cabazon - Recirculated DEIR/DEA  
**Date:** Thursday, August 15, 2019 1:45:23 PM

---

See comment from Endangered Habitats League.

Mary

Sent from my iPhone

Begin forwarded message:

**From:** Dan Silver <[dsilverla@me.com](mailto:dsilverla@me.com)>  
**Date:** August 15, 2019 at 9:47:11 AM PDT  
**To:** Mary Zambon <[mzambon@rctlma.org](mailto:mzambon@rctlma.org)>  
**Cc:** Karin Cleary Rose <[Karin\\_Cleary-Rose@fws.gov](mailto:Karin_Cleary-Rose@fws.gov)>, Heather Pert <[Heather.Pert@wildlife.ca.gov](mailto:Heather.Pert@wildlife.ca.gov)>, "Scott@Wildlife Wilson" <[Scott.Wilson@wildlife.ca.gov](mailto:Scott.Wilson@wildlife.ca.gov)>  
**Subject: I-10 Bypass: Banning to Cabazon - Recirculated DEIR/DEA**

**CAUTION:** This email originated externally from the **Riverside County** email system.  
**DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

August 16, 2019

Transportation Department  
 County of Riverside  
 3525 14th St.  
 Riverside CA 92501

**RE: I-10 Bypass: Banning to Cabazon - Recirculated DEIR/DEA**

Dear Ms Zambon:

The Endangered Habitats League has the following comments:

We urge adoption of a feasible alternative with the least impacts to species, natural communities, and wildlife movement, along with full mitigation of unavoidable impacts. This may be the locally preferred alternative newly described in the document. In any case, we urge early consultation with state and federal wildlife agencies and with the Regional Conservation Authority and Coachella Valley Association of Governments, regarding MSHCP compliance and other biological issues.

IP-1-1

IP-1-2

Thank you for considering our views and please retain EHL on all mailing distribution lists for the project, including CEQA documents and public hearings.

Sincerely,  
 Dan

Dan Silver, Executive Director  
Endangered Habitats League  
8424 Santa Monica Blvd., Suite A 592  
Los Angeles, CA 90069-4267

213-804-2750

[dsilverla@me.com](mailto:dsilverla@me.com)

[www.ehleague.org](http://www.ehleague.org)

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**[County of Riverside California](#)**



**L.4.1 IP-1 – Dan Silver**

***IP-1-1***

The Locally Preferred Alternative (Alternative 12) in the Recirculated Draft EIR/EA, and the alternative selected by the Project Development Team (PDT) and the Riverside County Transportation Department (RCTD) for construction, has less impacts on natural communities such as coastal sage scrub, Riversidean alluvial fan sage scrub vegetation alliances, Los Angeles pocket mouse habitat, and potential coastal California gnatcatcher habitat, as well as waters of the U.S. and waters of the State than Alternative 5 as shown in Table S.4, Summary of Impacts of Alternatives, in the Executive Summary of the Recirculated Draft EIR/EA. Impacts to wildlife movement across the Project are similar, with both alternatives maintaining a number of crossing opportunities for small, medium, and large-size wildlife species.

***IP-1-2***

The County has consulted with the State and federal wildlife agencies, and the U.S. Army Corps of Engineers (USACE), as well as with the Western Riverside County Regional Conservation Authority (RCA) and the Coachella Valley Conservation Commission (CVCC) regarding compliance with biological issues and the Multiple Species Habitat Conservation Plan (MSHCP). These meetings included coordination with the U.S. Fish and Wildlife Service (USFWS) and CDFW on December 17, 2012, September 19, 2013, November 16, 2017, June 12, 2018, June 21, 2018, and October 17, 2019; coordination with CDFW on November 16, 2017, June 12, 2018, June 21, 2018, and October 17, 2019; coordination with USACE on October 1, 2013; coordination with RCA on November 3, 2011; April 23, 2013; September 19, 2013; November 16, 2017; June 21, 2018, October 8, 2019, and October 17, 2019; and coordination with CVAG on February 6, 2013, June 4, 2018, and May 22, 2019.

Mary Zambon  
 Environmental Project Manager  
 Riverside County Transportation Dept.  
*Via Email: MZAMBON@rivco.org*

Re: **Citizen Comment Concerning Emergency I-10 Bypass**

Dear Mary,

If the 10 freeway shuts down for any length of time, the East-West Corridor, as it is called, will be paralyzed. Desperate people will be driving through the Wash or they will be trying to drive through the Reservation. **Alternate Bypass Plan #12** is a boon for the Morongo Nation. They already have ingress and egress from the Reservation, and now the County is willing to construct another exit plan, a bypass of the freeway, in case of emergency. It is my understanding that the Morongo people have been extremely helpful during emergencies in getting Cabazonians out of harm's way.

IP-2-1

I also recognize the extensive planning between Riverside County and the Morongo Nation. I do not begrudge such an endeavor and appreciate the years of work that have gone into the planning of a Bypass, including agreements by the various entities to come up with \$66 million dollars projected for costs.

IP-2-2

But Bypass Plan #12 completely ignores the obvious -- the people south of the Freeway and the RR tracks. More than half the population of Cabazon lives south of the Freeway.

The following is my own personal experience once when I was trapped at Apache Trail and the RR tracks.

It was last Summer on the day of a job fair at Robertson's. I found myself at the RR track watching trains go by, sitting behind a huge silver tanker with the word FLAMMABLE painted across its back, and in my rear-view mirror I can see this guy smoking a cigarette in the cab of his truck with the window open. Behind him are all manner of job applicants in their trucks with us neighbors tucked in between. It is 108 degrees and on the radio I'm hearing that one of the raging fires in California began as a mechanical failure, a small explosion whipped by the wind. **Fire will come to Cabazon again, it is inevitable.**

In the event of an emergency, **Alternate ByPass Plan #5 presents the only effective way to respond to people who are trapped south of the freeway.** Much like the citizens of Idyllwild did who escaped certain catastrophe during their last fire, we need to be able to evacuate to Banning and we must also be accessible to help from the firefighters and their equipment, from the first responders, and from emergency medical help.

IP-2-3

We are all hoping to begin the work soon.

Sincerely,

*Jill*

Jill Goldstein-Ho'o

49655 Carmen Ave.  
Cabazon, CA 92230  
Tel:951-318-9991

Mailing address:

P. O. Box 159  
Banning, CA 92220

Email: [wordplay.byjill@gmail.com](mailto:wordplay.byjill@gmail.com)

cc: GailWesson @ Cabazon-Whitewater 411

**L.4.2 IP-2 – Jill Goldstein**

***IP-2-1***

The commenter's support for The Project and improvements to safety during an emergency in Cabazon is acknowledged.

***IP-2-2***

As shown on Figure 1.1-2 in the Recirculated Draft EIR/EA, Alternative 5 and The Project both serve the community of Cabazon south of I-10. A component of the Project's Purpose and Need is to provide a connection between Banning and Cabazon, and both Alternative 5 and Alternative 12 (Preferred Alternative) provide that connection. Both alternatives have the same termini and, therefore, would function similarly in the event of an emergency. Improvements to railroad facilities, such as grade-separated railroad crossings, are not part of the I-10 Bypass Project.

***IP-2-3***

See Response to Comment IP-2-2.





Submitted via email

September 25, 2019

Attention: Mary Zambon  
 Senior Transportation Planner  
 Riverside County Transportation Department  
 3525 14th Street, Riverside, CA 92501  
[Aaron.Burton@dot.ca.gov](mailto:Aaron.Burton@dot.ca.gov)  
[MZAMBON@RIVCO.ORG](mailto:MZAMBON@RIVCO.ORG)  
[jmarcine@rivco.org](mailto:jmarcine@rivco.org)

Re: I-10 Bypass Recirculated DEIR comments

Dear Ms. Zambon:

These comments are submitted on behalf of the San Geronio Chapter of the Sierra Club and the Center for Biological Diversity (“the Center”) regarding the Recirculated Draft Environmental Impact Report/Environmental Assessment (“RDEIR/EA”) for the I-10 Bypass: Banning to Cabazon. The proposed Project is anticipated to build a road that may cause significant environmental impacts and will degrade the currently existing ecosystem on the Project site. For the reasons detailed below, we urge that the following issues be re-evaluated and that substantial revisions be made to the RDEIR to better analyze, avoid, minimize or mitigate the Project’s potentially significant environmental impacts and be included in a revised EIR for public review. We incorporate all our prior comments on the Project by reference.

IP-3-1

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has 1.6 million members and supporters throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, wildlife connectivity, open space, air and water quality, and overall quality of life for people in Riverside County.

The Sierra Club is a national nonprofit organization of over 732,000 members dedicated to exploring, enjoying, and protecting the wild places of the

earth; to practicing and promoting the responsible use of the earth’s ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. Over 193,500 Sierra Club members reside in California. The San Gorgonio Chapter of the Sierra Club focuses on issues within the inland empire, including San Bernardino County.

**I. RDEIR/EA Piecemeals a Small Part of a Larger Project**

CEQA prohibits “piecemealing.” Piecemealing is the process of dividing a large project into smaller individual subprojects in order to avoid consideration of the project’s impacts as a whole. *Banker’s Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*, 139 Cal.App.4th 249, 281 (2006). The Supreme Court laid out the piecemealing test in *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal.3d 376, 396 (1988), holding that “an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.”

In our 2013 scoping comments and our 2018 DEIR comments we brought to the attention of the County that it must not piecemeal the environmental analysis by looking only at the Banning to Cabazon portion, when the intent is clearly to continue this new road in subsequent phases all the way to Whitewater Canyon Road, or at least to Haugen-Lehman.<sup>1</sup> By failing to analyze the reasonably foreseeable consequences of the Project as a connecting road, this approach amounts to piecemealing the much larger project. Thus it is improper to perform a separate CEQA/NEPA for each section of the larger contemplated project for many reasons, including because it results in a truncated alternatives analysis. We encouraged the County to prepare a programmatic EIR for the whole project to begin with, then this proposed project as well as the subsequent phases could tier off the PEIR with more detailed analysis. However, the County failed to do so.

IP-3-2

**II. Wildlife Connectivity is Key**

As discussed in our scoping comments, the overriding concern with the above project is its impacts to one of the most critical wildlife movement corridors in California according to the South Coast Missing Linkages Project: <http://www.scwildlands.org/reports/SCMLRegionalReport.pdf>

As acknowledged in the RDEIR/EA the currently proposed phase of the I-10 bypass (Banning to Cabazon) crosses the San Gorgonio River and Smith Creek, which are both part of an identified key wildlife linkage by SC Wildlands between the San

IP-3-3

<sup>1</sup> <http://rcprojects.org/wp-content/uploads/2013/03/Low-Res-I-10-EAP-Public.pdf>

Bernardino and San Jacinto Mountains<sup>2</sup>. This linkage is also called out in *California Essential Habitat Connectivity Project: A Strategy for Preserving a Connected California*<sup>3</sup>, a study prepared for CalTrans and California Department of Fish and Wildlife, as an “Essential Connectivity Area.” In fact, this is the only extant linkage in the vicinity that is not fragmented. While the RDEIR recognizes these reports, it still fails to fully incorporate all of the necessary implementation measures to help assure wildlife connectivity is maintained (see comments below).

IP-3-3

**III. Compliance with Multiple Species Habitat Conservation Plans**

The Project is within the Cabazon Conservation Area of the Coachella Valley MSHCP (CVMSHCP). The proposed project area is also identified as a wildlife movement corridor in the Western Riverside Multiple Species HCP (WRMSHCP) contiguous with wildlife movement corridors in the CVMSHCP. The RDEIR states that the proposed alternatives to bridge the rivers is intended to “minimize” impacts, but the goal under CEQA is first to avoid impacts, then secondarily to minimize impacts. The County should endeavor to avoid impacts on wildlife corridors identified by the SC Wildlands, as well as the WRMSHCP and the CVMSHCP and therefore should have included alternatives that would avoid these areas in the RDEIR/EA, but did not.

IP-3-4

The CVMSHCP Implementing Agreement (IA) Section 7.5 confirms that this road Project - which does not appear to be a Covered Activity listed in Table 7-9 of the CVMSHCP – would be subject to the Joint Project Review (JPR) process requirement as it is a “Discretionary Project.” As defined in the IA: "Discretionary Project" means a proposed project requiring discretionary action by a Permittee<sup>4</sup>. The purpose of the JPR process is to allow the Coachella Valley Conservation Commission to facilitate and monitor implementation of the CVMSHCP<sup>5</sup>. As stated in Section 7.5 of the CVMSHCP:

IP-3-5

Review of Development Proposals in Conservation Areas. As set forth in Section 4.3

<sup>2</sup> [http://www.scwildlands.org/reports/SCML\\_SanBernardino\\_SanJacinto.pdf](http://www.scwildlands.org/reports/SCML_SanBernardino_SanJacinto.pdf)

<sup>3</sup> Spencer et al 2010 <https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC>

<sup>4</sup> As discretionary action is used in CEQA and defined in state CEQA Guidelines Section 15357, including issuance of a grading permit for County projects.

<sup>5</sup> “To assist the Local Permittees in meeting the Conservation Goals and Objectives and implementing the Required Measures of the Plan, Local Permittees’ Covered Activities identified in Tables 7-1 through 7-12 as having the potential to affect connectivity of habitat within the Conservation Areas shall consult with CVCC at the pre-design stage regarding the size, location, and configuration of wildlife undercrossings. Consultation with CVCC is needed at this early stage to ensure that alternatives are fully evaluated to achieve Conservation Area Conservation Objectives prior to public release of environmental documents prepared pursuant to CEQA..... The application will not be deemed complete by the Permittee prior to completion of the Joint Project Review Process.” (Final Major Amendment to the CVMSHCP – August 2016 at pg. 6-22)  
<http://www.cvmshcp.org/Plan%20Documents/13.%20CVAG%20MSHCP%20Plan%20Section%206.0.pdf>

of the MSHCP, Development in Conservation Areas will be limited to uses that are compatible with the Conservation Objectives for the specific Conservation Area. Discretionary Projects in Conservation Areas, other than second units on parcels with an existing residence, shall be required to assess the project's ability to meet the Conservation Objectives in the Conservation Area. Additionally, the Permittees will participate in the Joint Project Review Process (JPR) as set forth in Section 6.6.1.1 of the MSHCP.

IP-3-5

The approach as described on page S-25 of the RDEIR/EA is to get a JPR after public review of the RDEIR/EA and selection of an alternative for construction, but prior to approval of the FEIR. There is, however, an inherent problem with putting the CEQA/NEPA cart before the JPR horse. The problem is illustrated on page 2.15-21 in the discussion of proposed project impacts on sand transport, as the Cabazon Conservation Area is identified as an Essential Ecological Process area providing sand source and sand transport for the Snow Creek/Windy Point and the Whitewater Floodplain Conservation Areas. The RDEIR/EA discussion concludes that the bridge design precludes any impacts, essentially being pre-decisional relative to the JPR. The County cannot use the RDEIR/EA to make conclusions about the analysis that needs to be undertaken at the outset by the JPR process, which also allows USFWS and CDFW to provide input. The JPR can and would look at the various potential alternatives for analysis under CEQA/NEPA to help inform the County as to potential issues associated with each alternative and potential avoidance and mitigation measures. Thus, the JPR process would inform the CEQA/NEPA process as is intended by the CVMSHCP. The same concern applies to Biological Corridors. More generally, had the JPR been conducted pre-CEQA/NEPA, as required by the CVMSHCP, the RDEIR/EA could explicitly address Project consistency with the Cabazon Conservation Area Conservation Objectives. Without following the required process, the County cannot validly determine whether and to what extent the proposed project is consistent with the HCP.

IP-3-6

IP-3-7

Inconsistencies with applicable habitat conservation plans constitute significant effects under CEQA, and therefore must be disclosed and mitigated. *See Joshua Tree Downtown Business Alliance v. County of San Bernardino*, 1 Cal.App.5th 677, 695 (2016) (an effect may be significant under CEQA if the project is inconsistent with applicable land use policies designed to mitigate environmental effects).

IP-3-8

**IV. The Project Description is Vague and Ambiguous**

The RDEIR/EA fails to provide an adequate project description. "An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-93; *San Joaquin Raptor/Wildlife Reserve Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730.) While an EIR is not designed to freeze a project in the mold of the original proposal, "[o]n the other hand, a curtailed or distorted description of the project may 'stultify the objectives of the reporting process.'" (*Dry Creek Citizens, supra*, 70 Cal.App.4th at 28.); *See also County of Inyo v. City of Los Angeles*, 71

IP-3-9



Cal.App3d 185 (1977) (an enigmatic or unstable project description impedes public input). The RDEIR/EA identifies only a Locally Preferred Alternative (Alternative 12) by the County of Riverside (at S-11). It is unclear if this is the document’s preferred alternative. It also defers the decision to the final EIR. This failure to identify a clear and stable preferred alternative provides the public and decision makers with inadequate information in order to analyze impacts and mitigation measures. This approach also was expressly rejected several years ago in *Washoe Meadows Community v. Department of Parks & Recreation*, 17 Cal.App.5th 277, 288 – 289 (2017). For example, if a deal cannot be struck with the Morongo tribe that would provide an easement on their tribal lands as proposed in Alternative 12, the only alternatives would be the no-action alternative or Alternative 5.

IP-3-9

Additionally, the County acknowledges that there is a forecasted need for four lanes in 20 years (RDEIR at 1-29). Yet the RDEIR/EA defers analysis of this acknowledged need even though the proposed Project would allow portions of the ultimate width needed for 4 lanes to be graded. Four lanes of traffic causing aversive effects as well as direct mortality will significantly impact wildlife. The County must address this impact under CEQA now, instead of impermissibly deferring analysis.

IP-3-10

**V. The RDEIR/EA Fails to Analyze a Reasonable Range of Alternatives as Required by CEQA**

The RDEIR/EA proposes only 2 alternatives and just one of retained alternatives is entirely on non-Tribal land. In view of Tribal Sovereignty issues, the County should retain at least two other viable alternatives to fulfill the intent of CEQA to consider a reasonable range of alternatives including the environmentally superior alternative that would avoid significant impacts. In our scoping and original DEIR comments we advocated the same, and stated it was unclear why the original Alternatives 7 and 8 were dismissed from further analysis. They are valuable alternatives based on the fact that they would avoid many of the impacts associated with Smith Creek and its confluence with San Gorgonio River and the existing wildlife connectivity corridor.

IP-3-11

It still remains unclear why Alternatives 7 and 8 were summarily dismissed (RDEIR/EA 1-67) as failing to meet the purpose and infeasible. The reasons stated are “inconsistent with applicable plans” and “unlikely the necessary right-of-ways could be obtained from the Morongo Band of Mission Indians.” (1-67). But the County does not explain what applicable plans, and why these alternatives would be inconsistent or why it is not equally unlikely the necessary ROWs would be denied for the retained alternative on Tribal land. Moreover, as explained above the County has failed to undertake the required process to determine whether the proposed Project alternatives in the RDEIR/EA are consistent with the HCPs. Thus, the RDEIR/EA provides no basis for a conclusion that the retained alternatives are any more feasible or better meet the purpose of the proposed Project than the rejected alternatives 7 and 8.

IP-3-12

IP-3-13

Rather than presenting an arbitrary conclusion, the County has an obligation under CEQA and NEPA to provide a factual explanation of why Alternatives 7 and 8 were not fully considered. *See Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.*, 42 Cal.3d 929, 935 (1986) (“To facilitate CEQA’s informational role, the EIR must contain facts and analysis, not just the agency’s bare conclusions or opinions.”). In the absence of fully objective reasons to reject these alternatives, applied consistently to all potential alternatives, the DEIR/EA should have fully analyzed Alternatives 7 and 8, as they are likely environmentally preferable.

IP-3-14

Because the RDEIR/EA proposes only two alternatives -- the no-action and Alternative 5 -- it fails to consider a meaningful analysis of reasonable alternatives to the proposed Project in order to lessen or avoid the proposed Project’s significant impacts is in violation of CEQA’s mandates that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code §21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d). A rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate. The RDEIR/EA fails to meet this requirement on two levels: the RDEIR analysis of the alternatives proposed is inadequate and the RDEIR fails to include a reasonable range of alternatives. Instead of providing a reasonable range of alternatives that avoid, minimize and fully mitigate the environmental impacts of the proposed Project, the REIR/EA skews the analysis of the proposed alternatives and leaves out other viable and feasible alternatives. The RDEIR’s limited range of alternatives improperly narrows the alternatives analysis and violates CEQA. *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007). As courts have made clear, “[a] potential alternative should not be excluded from consideration merely because it ‘would impede to some degree the attainment of the project objectives, or would be more costly.’” *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007) (quotations omitted).

IP-3-15

IP-3-16

Although “an EIR need not consider every conceivable alternative to a project, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision decision-making and public participation.” Guidelines § 15126.6(a). Additionally, the “key to the selection of the range of alternatives is to identify alternatives that meet most of the project’s objectives but have a reduced level of environmental impacts.” *Watsonville Pilots Assn. v. City of Watsonville*, 183 Cal. App. 4th 1059, 1089 (2010).

IP-3-17

The RDEIR/EA should also include quantitative and meaningful comparison between the proposed Project’s impacts and proposed alternatives’ likely impacts. Under CEQA, “the public agency bears the burden of affirmatively demonstrating that, notwithstanding a project’s impact on the environment, the agency’s approval of the proposed project followed meaningful consideration of alternatives and mitigation measures.” *Mountain Lion Foundation v. Fish & Game Com.*, 16 Cal. 4th 105, 134 (1997). The RDEIR/EA clearly fails to meet this burden.

IP-3-18

**VI. The Proposed Wildlife Crossing Do Not Follow Scientific Criteria**

The criteria for effective wildlife crossings including underpasses is well documented in the scientific literature, yet the proposals in the RDEIR/EA still fail to safeguard the potential wildlife passage under proposed bridges and through the newly proposed culverts for the following reasons:

- S-8 48’ allows for native trees near bridge crossings. This is objectionable because trees would provide cover for predators and attract humans to these pinch points in the wildlife corridor created by the bridge, discouraging the use by wildlife and increasing risks to wildlife;
- Night lighting - LAPM-5 allows for night lighting at “intersections on each end of the Project and possibly at bridges (if required for safety) (DEIR/EA at 2.17-7), yet night lighting has the potential for a significant impact the wildlife corridors even with shielded and down-lighting. This is particularly concerning because of the proposed locations of the bridges over the large mammal crossings. This could significantly reduce the use of corridors by large mammals, making them ineffective.
- Bridge design that would include separate bridge spans for opposing traffic directions would also encourage wildlife permeability, yet RDEIR/EA fails to consider this and other alternative designs. As noted above, the actual designs of the bridges are not presented in the RDEIR/EA rendering the analysis incomplete.

IP-3-19

**VII. The Proposed Wildlife Undercrossings Still Fail to Meet the Requirements of the WRMSHCP**

The RDEIR/EA recognizes that the proposed project is within a Special Linkage Area under the WRMSHCP, designated to maintain crucial wildlife connectivity between the San Jacinto and San Bernardino Mountain. Therefore, maximum wildlife permeability is in order. Under the WRMSHCP’s “Specific Initial Guidelines for Wildlife Movement Design Considerations within the Criteria Area”<sup>6</sup> requires “Minimally, there should be at least one large mammal crossing every 1.5 kilometers”. For the proposed 3.3 mile (5.3 km) new road, a total of four large mammal crossings need to be incorporated into the design. In order to comply with the WRMSHCP, at minimum, two more large mammal crossings need to be added to the project.

IP-3-20

Under Alternative 12, the RDEIR/EA proposes to slightly increases the “width” of both proposed wildlife underpasses compared to the DEIR at both Smith Creek and the San Gorgonio River. It is unclear if this increase in “width” is an increase in the length of the bridge, where it would create a wider passage for wildlife underneath or if it is wider bridge, in which case it could still provide wildlife movement, but

IP-3-21

<sup>6</sup> <https://rctlma.org/Portals/0/mshcp/volume1/sec7.html>

animals would have a longer traverse under the bridge. Clarification of these features is necessary. While the RDEIR/EA also includes additional information about ten culverts of varying size which could provide movement for smaller animals, it is unclear why the culvert lengths are twice as long as the overpasses' lengths. While it is species dependent, in general, the longer the traverse through a wildlife "tunnel" formed by a culvert, the less likely it is to be used.



IP-3-21

It also appears that the proposed project is not properly considered a covered project under the WRMSHCP. Discussion of improvements to the I-10 corridor in the WRMSHCP are limited to the expansion of the Interstate, and it does not mention a new arterial road.

IP-3-22

The RDEIR/EA also fails to incorporate the most recent guidance from CalTrans' *Wildlife Crossings Guidance Manual*<sup>7</sup>. Key aspects, including collection of baseline information, project impact assessment, avoidance, minimization and compensatory mitigation measures, and other considerations. For example, constructed wildlife crossings may need additional design efforts (Ex. wildlife exclusion fencing) in order to funnel wildlife to the crossing in order to prevent them straying onto the new road. Construction and maintenance of wildlife crossings also impact the environment and these impacts should have been fully addressed in the RDEIR/EA but were not.

IP-3-23

The proposal also does not include any post-construction monitoring of wildlife, to evaluate if the designs are actually effective and ensure changes and additional mitigation can be required if the designs are not effective.

IP-3-24

**VIII. The RDEIR/EA Fails to Adequately Analyze the Project's Growth-Inducing Impacts.**

EIRs are required to provide a detailed discussion regarding the growth-inducing impacts of a project. (Guidelines §§ 21100(b)(5); 21156.) Here, the RDEIR/EA fails to include an adequate discussion of the growth-inducing impacts of adding the proposed highway infrastructure to the area. CEQA and NEPA require detailed analysis of such impacts, particularly for infrastructure projects. *See City of Antioch v. City Council*, 187 Cal.App.3d 1325, 1336 -37 (1986) "[c]onstruction of the roadway and utilities cannot be considered in isolation from the development it presages"); *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council*, 190 Cal.App.4th 1351, 1383 (2010) ("a roadway infrastructure project aimed at reducing regional traffic and related problems might still have growth-inducing impacts with indirect adverse impacts on the environment and might also result in adverse environmental impacts in the immediate vicinity of the project"); *Stanislaus Audubon Society, Inc. v. County of Stanislaus*, 33 Cal.App.4th 144, 152 (1995) (development of a golf course triggers the need to study potential growth-inducing impacts such as residential development even if no such development is currently

IP-3-25

<sup>7</sup> CalTrans (2009)



proposed).

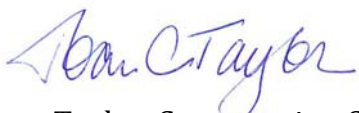
## IX. Conclusion

The agencies cannot make the Finding of No Significant Impact needed to rely on an EA or the findings needed to certify an EIR, for the reasons stated above. The inadequacies in the RDEIR/EA include failure to adequately identify and analyze impacts to wildlife corridors and habitat connectivity; failure to fulfill the requirement of the CVMSHCP for a pre-DEIR JPR; failure to meet standards under the WRMSHCP; failure to adhere to CalTrans guidance and best design practices for proposed mitigation measures;; piecemealing of the project review; and other issues including failure to consider a range of alternatives to avoid significant impacts. Please address these issues that we have identified above in a revised supplemental DEIR/EA.

IP-3-26

Thank you for the opportunity to comment.

Very truly yours,



Joan Taylor, Conservation Chair  
Tahquitz Group of the Sierra Club



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[https://roadeology.ucdavis.edu/files/content/projects/CA\\_Wildlife%20Crossings%20Guidance\\_Manual.pdf](https://roadeology.ucdavis.edu/files/content/projects/CA_Wildlife%20Crossings%20Guidance_Manual.pdf)



# Wildlife Crossings Guidance Manual

California Department of Transportation



## ***Prepared by:***

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Cover photo: William Boarman, U.S.G.S.

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# Preface

An estimated 15-20% of the United States is ecologically impacted by roads, and the many ecological effects of roads have recently been reviewed (Forman and Alexander 1998). Road ecology is an applied science that examines the interactions between roads and ecological systems and seeks both to document and understand the interactions and to reconcile the need for safe and effective transportation systems with the need to conserve the environment.

This Wildlife Crossings Guidance Manual is a literature-based guide on how to identify and assess wildlife crossings and includes a review of best practices. This manual is intended primarily for biologists, but planners and engineers may also find the manual useful. The manual reviews both the scientific and agency literature and uses case studies from within and outside of California to help to guide efforts to evaluate and avoid, minimize, or compensate for wildlife crossing conflicts. The manual also seeks to help Caltrans staff to meet regulatory requirements by integrating regulatory considerations in to the wildlife crossing evaluation process.

This manual is part of a larger Caltrans strategy to 1) catalog sources of information and knowledge about wildlife crossings, 2) generate, accumulate, and disseminate this information, and 3) develop guidelines for best practices and effective strategies to address road/wildlife conflicts.

## *Manual Goals*

- Identify off-the-shelf analyses and best practices from Caltrans projects, literature, experience, and related case-studies.
- Catalog sources of information that can help to avoid, minimize, or mitigate wildlife impacts.
- Provide aid in identifying and assessing effects to wildlife movement.
- Describe a systematic process that fits into the existing project delivery and planning processes.
- Initiate a system that may be used to collect and present Caltrans experiences in addressing wildlife crossing issues.

## *Manual Map*

**Section 1:** [What You Need to Know](#) (pages 1 to 19). A review of what you need to know to identify and assess wildlife crossings, including the regulatory considerations that affect transportation professionals.

**Section 2:** [Baseline Assessment](#) (pages 20 to 47). A review of what is needed to establish pre-construction (or baseline) conditions, including an assessment of wildlife groups, relevant field survey methods, data sources, management considerations, and modeling approaches.



**Section 3: [Project Effect Assessment](#)** (pages 48 to 53). A procedure to enable you to determine whether avoidance, minimization, or compensatory mitigation actions are necessary to facilitate wildlife movement and to meet regulatory requirements and public safety goals.

**Section 4: [Selecting Avoidance, Minimization, or Compensatory Mitigation Measures](#)** (pages 54 to 71). A review of procedures to select the best avoidance, minimization, or compensatory mitigation actions to meet regulatory or public safety requirements, including a review of structures that are most appropriate to facilitate movement by wildlife groups and meet wildlife crossing goals.

**Section 5: [Keeping Informed](#)** (pages 72 to 75). A review of wildlife crossings resources that are continuously updated to provide new strategies and applications, case studies, symposium proceedings, current literature citations, and additional sources of information relevant to transportation professionals.

**Section 6: [Literature Cited](#)** (pages 76 to 85). A listing of the literature and web resources used in the preparation of this document.

# Executive Summary

California's roads interact with wildlife in myriad ways, resulting in both public safety and conservation concerns. The Division of Environmental Analysis hopes that this Wildlife Crossings Guidance Manual will provide valuable guidance to biologists, environmental planners, transportation planners and engineers engaged in efforts to reduce the environmental effects of California's highway infrastructure while improving public safety. The manual describes a procedure to identify wildlife crossing conflicts, choose an effective avoidance, minimization, or compensatory mitigation strategy, and evaluate the results of mitigation actions. Steps in this procedure include:

- identifying wildlife crossing conflicts associated with projects
- determining whether special status species or habitats occur within a project's scope
- collecting data to document the occurrences and movements of wildlife species that may be impacted by a project
- interpreting and evaluating data to assess effects
- choosing the most effective avoidance, minimization, or compensation strategy
- evaluating the effectiveness of the mitigation action

This Executive Summary provides a brief overview of information essential to all engaged in transportation projects, including project managers, planners, engineers, biologists, and maintenance staff.

## ***What Are Wildlife Crossings & Why Do They Matter?***

Wildlife crossings are areas of concentrated animal movement intercepted by roadways. In most cases, effects are seen because animals are inadvertently hit by drivers as they attempt to cross the road surface, leading to mortality of animals (“road-kill”) and safety concerns to the motoring public. In other cases, animals choose to avoid crossing, and the roads present barriers to animal movement, dividing a formerly single population into two or more isolated population segments, causing a range of negative effects. These effects may be less apparent, but are no less significant. Further, environmental regulations compel transportation professionals to reduce or eliminate effects on special status species and habitats. Wildlife crossing considerations are reflected in the California Comprehensive Wildlife Conservation Strategy (California Department of Fish & Game, 2006), which lists wildlife habitat fragmentation as one of the biggest threats to the state’s wildlife and suggests as a solution that “*Wildlife considerations need to be incorporated early in the transportation planning process*”.

## ***Regulatory Considerations***

State and Federal regulations seek to protect wildlife and the habitats upon which it depends, and several of these regulations directly affect transportation professionals. For example, both the California Endangered Species Act (CESA) and Federal Endangered Species Act (ESA) require private and public organizations to limit harm to listed species and to consider and evaluate

cumulative effects; creating barriers to movement or increasing mortality to listed species may be considered harm or add to existing effects, thus mandating avoidance, minimization, or compensation. Although these and similar regulations may not explicitly describe roads or wildlife crossing, the avoidance of harm is explicit in these and similar efforts to protect wildlife species and their habitats.

### *Wildlife Habitat and Connectivity*

Habitat is defined as the part of the environment used by an organism and is essential for providing food, cover, and other requirements for survival. Agriculture, urbanization, and other human-caused effects subdivide habitats into habitat patches, and roads present barriers to many animals, impeding or preventing their movements among habitat patches. When considering wildlife movement, it is essential to consider the availability of habitat patches on both sides, and in some cases within the rights-of-way, of roadways and to attempt to reconnect habitat patches that may have been isolated by highway facilities. Considerations of cumulative effects may be especially relevant here, as effects due to transportation facilities may add to those due urbanization, agricultural development, and water management and directly affect special status species and/or their habitats.

#### *Project Managers, Engineers, & Planners*

SAFETEA-LU Section 6001 mandates that wildlife crossing and similar environmental considerations be taken into account early in the transportation planning process, thereby incorporating these concerns into project plans to enhance public safety while reducing impacts on special status species and reconnecting fragmented habitats. The Section 6001 assessment should be completed during Regional Transportation Plan development and will require good communication between wildlife experts and the Metropolitan Planning Organizations who are tasked with RTP development. Biologists should discuss what is known about wildlife crossing issues with MPOs, Project Managers, Engineers, and Planners as early as possible in the planning process.

### *Field Surveys Confirm Presence of Wildlife*

Wildlife crossing conflicts may be conspicuous, as when animal carcasses confirm mortality or public safety personnel document above-average rates of vehicle-animal collisions, or inconspicuous, as when animals refuse to cross a road bisecting a movement corridor and population segments become isolated. Confirming crossing conflicts requires effective assessment methods employed in a field survey. The methods to detect wildlife are well-developed, but field studies should be conducted by well-qualified individuals. Prior to conducting field work, one must accumulate existing information from agency reports and databases, maintenance personnel, other agency staff, NGO field staff and similar sources.

### *Project Managers, Engineers, & Planners*

Crossing roads is associated with normal daily or seasonal movements for many wildlife species, but for others, roads present physical barriers to movement. Resource agencies and biologists must identify wildlife movement patterns and transportation agency professionals must seek to understand the effects of roadways on these patterns. Public safety is of paramount concern with large-bodied animals on roadways, regulatory considerations compel actions to reduce or eliminate impacts on special status species, and the public may demand actions in regions of especially great animal mortality. Local actions taken to enhance the safe passage of animals help to restore habitat connectivity and benefits populations across a regional landscape.

### *Traffic*

Traffic characteristics (volumes, speeds, and timing) strongly influence wildlife crossings, although the relationships between traffic characteristics and wildlife crossing are complex. The highest volumes of traffic will impede or prevent crossing by many species, and road segments with the highest traffic volumes effectively serve as barriers to animal movement, while lesser volumes may increase rates of collision as animals attempt to cross the roads during intervals when cars are absent. There are daily and seasonal patterns in traffic and in animal movements and these patterns add to the complexity of the traffic/crossing relationship.

## ***Reducing Highway Effects on Wildlife Crossing***

The goal of this manual is to describe a procedure for assessing and responding to road/wildlife conflicts that minimizes the “ecological footprint” of roadways by enhancing wildlife crossing, reconnecting habitat fragments, reducing effects on special status species, and increasing public safety. Actions to reduce crossing conflicts take many forms, including project modification to avoid or minimize anticipated conflicts, modification of driver behavior, and the installation of structures to mitigate for effects.

### *Project Modification*

The best time to consider wildlife crossing issues is during initial project planning. If as part of the project planning stage field assessments identify likely wildlife crossing conflicts, it may be most appropriate to consider modifications to the proposed route or other project modifications to avoid or minimize conflicts.

### *Modifying Driver Behavior*

In many cases, driver safety and wildlife crossing can be enhanced by modifying driver behavior, for example, through public outreach, reduced speed limits, or warning signs.

## *Structures*

Some existing structures provide relatively safe passage for wildlife to cross over or under roads. When spaced and sized appropriately, structures such as culverts, underpasses, overpasses, and viaducts, increase permeability and reconnect habitat fragments. In some cases, it may be possible to modify existing structures to enhance their effectiveness and to make them more “wildlife-friendly.” Fencing is often incorporated into crossing structure designs to prevent animals from entering road rights-of-way and to direct them to crossing structures to allow safe passage. Vegetation and lighting are often incorporated into designs to enhance their effectiveness.

### *Project Managers, Engineers, & Planners*

Wildlife crossings can often be improved by changing driver behavior, installing fencing, modifying existing structures (e.g., culverts), or providing new crossing structures. These methods for reducing effects of existing or proposed infrastructure should be in line with the effects of these facilities on wildlife crossing. The effectiveness of these actions should be monitored as part of the project to determine whether they achieved the desired results as described in the original mitigation and monitoring plan, environmental documentation and permits. Mitigation and monitoring activities should be developed by the biologist in coordination with the PDT. Resources and funding for mitigation activities and monitoring should be incorporated into project budgets - long term maintenance and monitoring of project outcomes are essential components of transportation related crossing avoidance, minimization or compensatory mitigation measures.

## *Maintenance*

Crossing structures require regular maintenance to ensure long-term access and use by the animals they were intended to benefit. Storms may scour and vegetation may occlude culverts and underpasses, rendering them useless for wildlife passage. Maintenance staff should be involved in project planning, implementation, and post-project monitoring to ensure that designs and materials provide long-term benefits with a minimum of maintenance.

## *Post-project Assessments/Adaptive Management*

It is essential to evaluate the effectiveness of actions taken to improve public safety, reduce effects on listed species and enhance wildlife crossing to assess whether these actions were successful and to respond to situations where original actions or designs did not work as anticipated but were subsequently modified and then found to better meet project objectives. Post-project assessments must adhere to reporting requirements and meet performance standards,



should be well documented, and disseminated to feed back into subsequent project planning to help to inform future project delivery processes. Assessments should be added to the case studies on the wildlife crossings website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)) so that all Department as well as other transportation professionals may benefit from a sharing of experiences.

### *Project Managers, Engineers, & Planners*

The effectiveness of mitigation actions should be monitored as part of the project to ensure that the measures taken to avoid, minimize, or mitigate achieve established success criteria as described in the mitigation and monitoring plan, environmental documentation and permits. Mitigation and monitoring activities should be developed by the biologist in coordination with the PDT. Resources and funding for mitigation activities and monitoring should be considered and refined throughout the project delivery process. Long term monitoring, maintenance and post construction activities will require adequate funding.

# 1 What You Need to Know

## *1.1. Introduction*

The purpose of this section is to introduce practitioners to the core experiences and literature that have shaped policy on avoiding and mitigating effects of roads on wildlife species of management and legal importance. Awareness of experiences elsewhere is important to effective analysis and design, and is critical to writing environmental documents that will be persuasive to regulators, politicians, and the interested public. This section is intended to provide an overview of the literature assembled and indexed at the end of the printed manual (and in more detail in the accompanying crossings website – [http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)).

The environmental effect analysis for any substantial highway project should consider potential effects of both the infrastructure itself and resulting changed traffic operations on wildlife and its habitats. These effects include habitat fragmentation, loss of habitat connectivity, effects on designated critical habitats, and direct or indirect effects to threatened and endangered species (Forman and Alexander 1998). Wildlife crossings, in particular, have recently received much attention due to a variety of conservation, regulatory, and public safety concerns (Transportation Research Board 2002). Many organizations, agencies, and academic scientists are addressing concerns for wildlife and habitat connectivity by studying road/wildlife interactions, including the enhancement of crossings, and avoidance or mitigation for impacts to animal movement corridors.

In general, both environmental laws (especially the California Environmental Quality Act or CEQA and the National Environmental Policy Act or NEPA and sometimes ESA or CESA) and agency policy require project planners to avoid significant effects on populations of wildlife species of management concern if possible, and otherwise to minimize the effects and to provide for appropriate mitigation of unavoidable impacts. The CEQA Deskbook (Bass, Herson and Bogdan 2001 – new edition expected soon) provides a useful step by step summary for California projects under CEQA and NEPA. For species listed under either state or federal endangered species laws, the requirements may be more stringent, and may require project components to reduce the likelihood of adversely affecting a listed species, which may include reducing fragmentation or direct mortality effects for a proposed project.

The U.S. Federal Highway Administration report, *Wildlife Habitat Connectivity Across European Highways* (FHWA, 2002), notes that despite a growing literature on highway crossing issues, there has been a gap in practical guidance for transportation agencies. The goal of this manual is to organize and integrate materials from internal agency documents and the technical literature to describe approaches for: 1) evaluating roadways for potential wildlife crossing conflicts; 2) avoiding, minimizing, or compensating (mitigating) for these conflicts; and 3) assessing the effectiveness of mitigation actions.

### **1.1.1 Why Use This Manual**

This manual surveys the wildlife crossing and related literature both to provide a useful guide to this literature as well as to provide specific, experience-based guidance on assessing and responding to wildlife crossing issues. This manual:

- reviews the federal and state statutes important to transportation professionals that are designed to protect and conserve wildlife and its habitats
- describes a process to evaluate known, predicted, or suspected wildlife crossings conflicts
- links wildlife groups to the crossing structures and actions that transportation professionals have utilized to mitigate conflicts with each group
- provides case studies of the mitigation efforts and experiences of others

This guidance manual is intended to outline current best practices and knowledge. Because the science and policy underlying wildlife crossings is advancing rapidly, the manual seeks to provide assistance in keeping informed of new developments by providing links to on-line resources, including the wildlife crossings website associated with this project ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)), that are updated frequently and that will continue to provide additional, current information.

### **1.1.2 Who Should Use this Manual**

The intended primary audience for this manual is Caltrans biologists and other technical staff at the agency. It may also be useful to other transportation experts involved in planning, program management, or maintenance that need to know how roads may affect wildlife and ecological systems in California. However, readers will note that many of the details of project staging and documentation (for example: Figures 2 and 3) and some of the accompanying acronyms may be fairly specific to the steps mandated for Caltrans project delivery.

Transportation planning decisions have both a regulatory and an ecological context, and the manual seeks to integrate both to provide guidance, in the form of a process illustrated schematically in Figure 1, to those with responsibilities for identifying and mitigating wildlife crossing, listed species, habitat connectivity, and public safety conflicts.

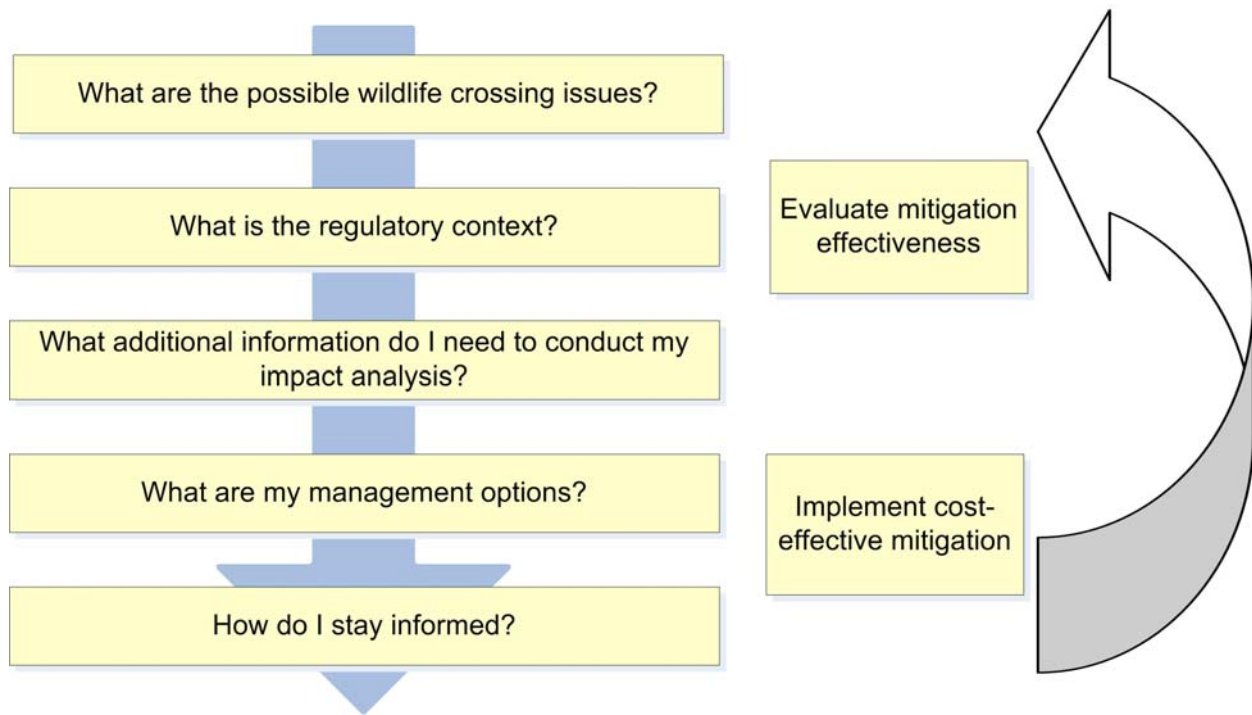


Figure 1: Assessment Flowchart

### 1.1.3 How to Use This Manual

The manual is structured to enable users to identify wildlife crossing needs throughout the planning process including the identification of sources of information on wildlife in a project area, assessment of potential effects associated with transportation facilities, consideration of avoidance, minimization, or compensatory mitigation strategies, a consideration of the relative costs associated with different strategies, and post-project monitoring and adaptive management.

The sequence of steps in this manual includes:

1. what you need to know, including how to identify wildlife crossings
2. how to assess potential effects associated with transportation facilities
3. what factors to consider in suggesting specific avoidance, minimization, and compensatory mitigation strategies, including their costs, and
4. how to monitor and assess the effectiveness of mitigation strategies, including adaptive management responses to deficiencies.

Because regulations affect many wildlife crossing considerations, the manual begins with a review of applicable major state and federal laws. The accompanying website, [http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/), provides other stepwise “views” of the manual sections. You can find “decision trees” on the website and in this manual: the Wildlife Crossings Process Decision Tree (Figure 2) and the Wildlife Crossings Project Decision Tree

(Figure 3) illustrate the Caltrans environmental review process as it relates to wildlife crossing considerations. These decision trees walk the practitioner through a series of steps to assess wildlife crossing in project planning and delivery.

Wherever possible, the manual describes experiences from California, but the wildlife crossings literature is spatially extensive, and most of this literature illustrates examples from outside California, so where California examples are unavailable, the manual describes experiences from elsewhere in the U.S., Canada, and Europe. Caltrans plans to monitor California practices as they are established and tested, and results will be assembled on the manual website and incorporated into future editions of this document.

The manual integrates wildlife considerations with existing Caltrans environmental planning processes to help the user to identify the level of assessment or evaluation that should take place in parallel with other project delivery or engineering milestones (Figures 2 and 3).



# Wildlife Crossing Process Decision Tree

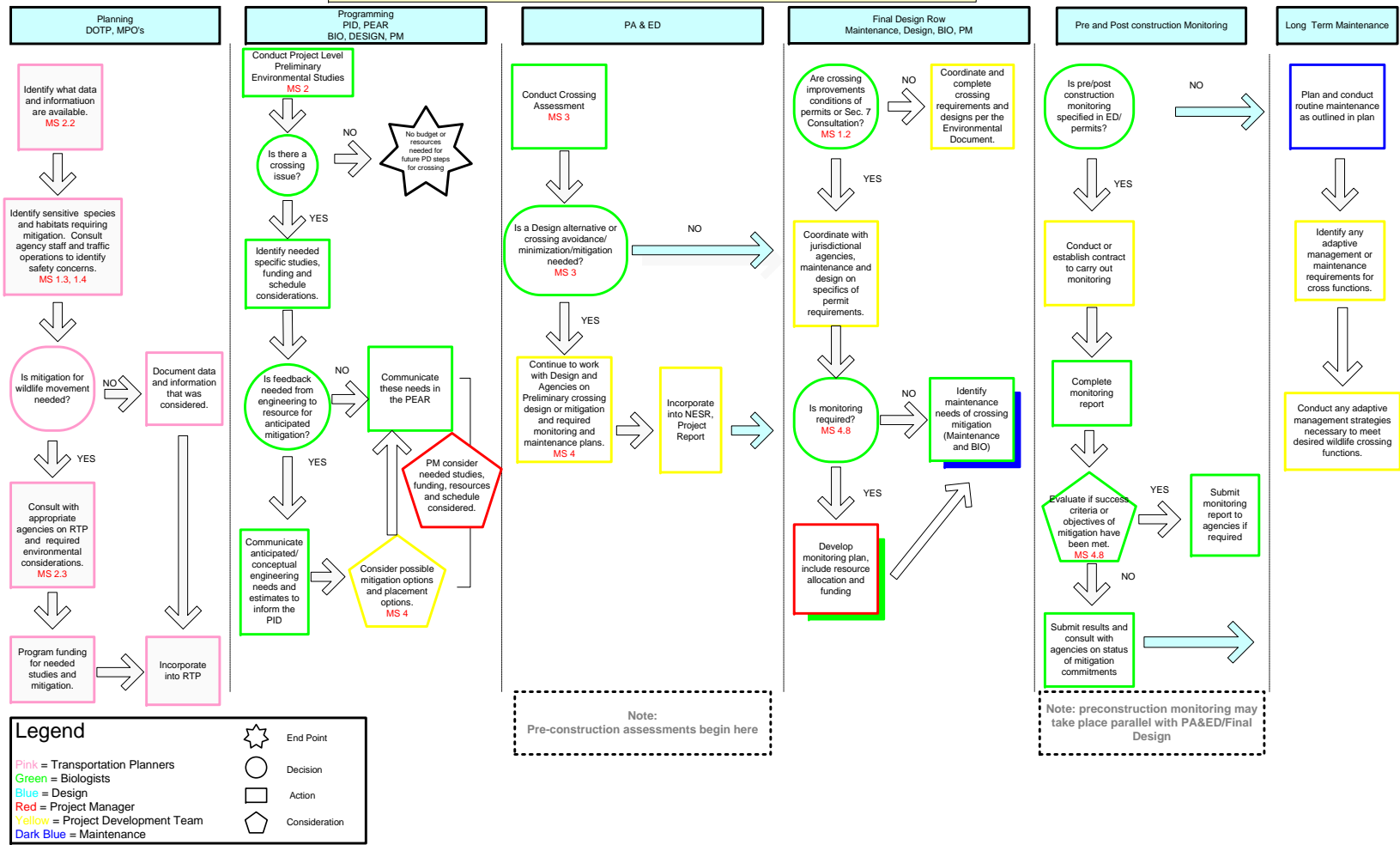


Figure 2: Caltrans Wildlife Crossing Process Decision Tree

Links to relevant sections this manual indicated in red (e.g., MS 2).

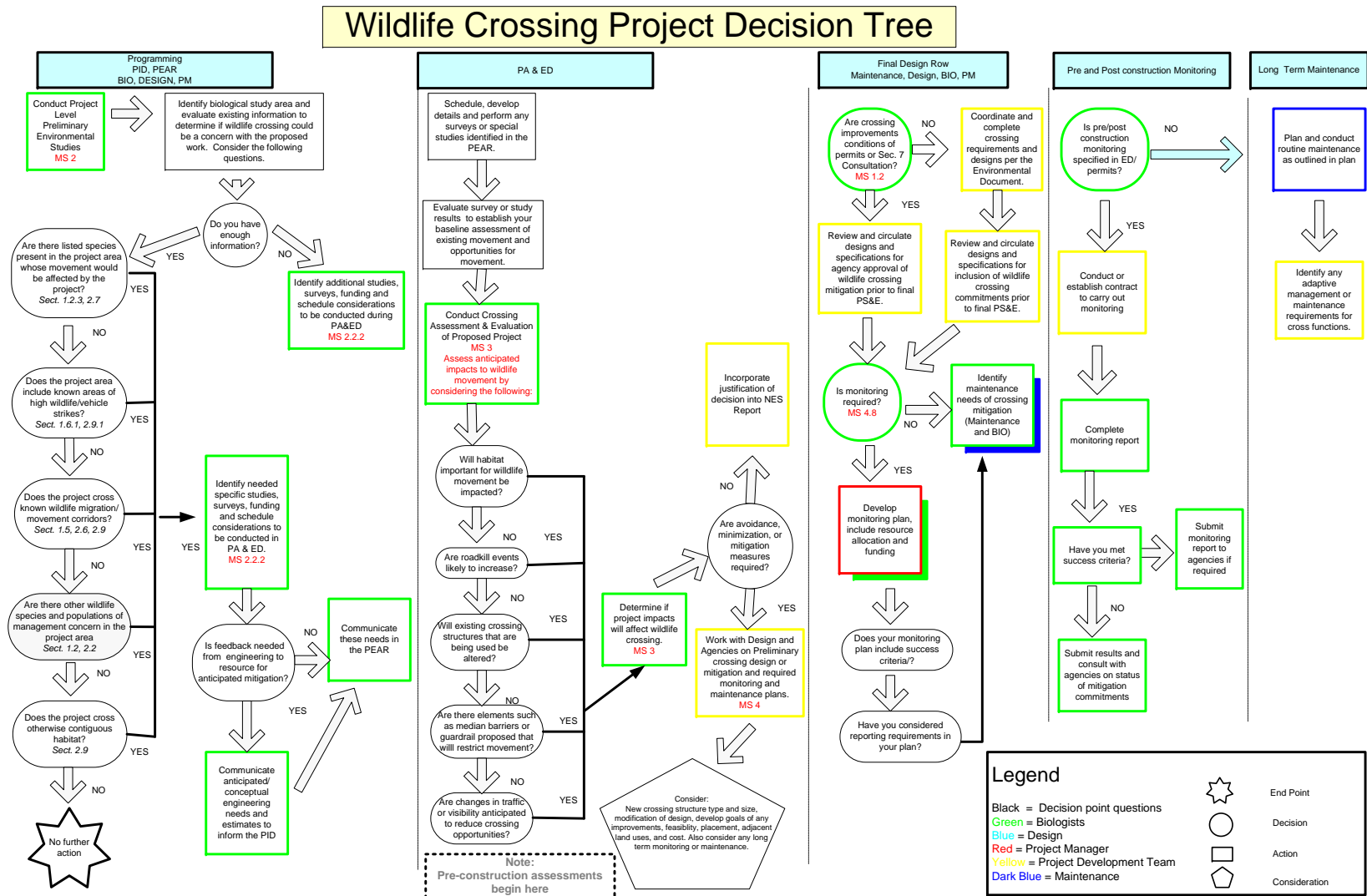


Figure 3: Caltrans Wildlife Crossing Project Decision Tree.

Links to relevant sections of this manual indicated in red (e.g., MS 3).

## ***1.2. Federal and State Wildlife Protection Laws***

Many wildlife crossing assessments, decisions, and actions are motivated by federal and state laws designed to protect wildlife and its habitats; here we review the most important wildlife-related legislation of concern to transportation professionals.

The development of a Project Study Report (PSR) requires a consideration of relevant regulations and statutes. The primary applicable laws are described in the Guidelines for developing a Preliminary Environmental Analysis Report (PEAR), the Guidance for the Preliminary Environmental Studies (PES), and in Volume III of the Environmental Handbook. This information is available in the Standard Environmental Reference (SER), Chapter 14 – Biological Resources, <http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/ch14bio.htm#ch14decisiontree>.

The California Department of Fish and Game, Habitat Conservation Branch website (<http://www.dfg.ca.gov/habcon/index.html>) has much useful information related to state regulations covering species and habitats.

Table 1, adapted from the Transportation Research Board (2002) and California Department of Fish & Game website, accessed March, 2007, presents the major federal and state wildlife laws and regulations and a brief description of how each is related to transportation. Several species of animals and some specific habitats are protected under these regulations. Transportation facilities, proposed maintenance and improvements immediately within or adjacent to sensitive habitat types or movement corridors utilized by special status species are especially affected by regulatory considerations. The frequency and magnitude of these effects depend upon the:

- life-cycle needs of the species of concern
- characteristics of the habitats utilized
- distance from the wildlife movement corridor to the transportation corridor
- level and timing of the use of the corridor in relation to highway operation, and
- characteristics of the transportation facilities themselves (Evink 1990, Transportation Research Board 2002).

A thorough review of federal wildlife legislation affecting transportation is available on the Federal Highway Administration website ([http://www.fhwa.dot.gov/environment/env\\_sum.htm](http://www.fhwa.dot.gov/environment/env_sum.htm)).

### *Federal Wildlife Laws/Regulations*

- National Environmental Policy Act
- Endangered Species Act
- Department of Transportation Act/SAFETEA-LU
- Fish & Wildlife Coordination Act

### *State Wildlife Laws/Regulations*

- California Environmental Quality Act
- California Endangered Species Act
- CDF&G, Fish and Game Code

Table 1: Applicability of major federal and state wildlife regulations to wildlife crossings.

Law	Section	Applicability
<b>Federal</b>		
National Environmental Policy Act (NEPA)		<p><i>Statute:</i> NEPA requires the consideration of environmental factors including wildlife crossing through a systemic interdisciplinary approach before committing to a course of action. The act applies to all Federally funded actions including FHWA actions. Specifically relating to wildlife crossing concerns, section 102 requires that, for every major Federal action, “a detailed statement by the responsible official on—(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.”</p> <p>Included with NEPA is Executive Order 11990 which requires that all Federal actions “avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative”. Specifically section 5(b) requires consideration of “maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources”.</p> <p><i>Applicability:</i> A decrease in connectivity or a potential increase in wildlife vehicle collisions could be considered an adverse environmental effect. In any case where there is an adverse environmental effect, NEPA can be used as justification for mitigation of that action. NEPA specifically focuses on the context and intensity of an effect on the environment.</p> <p>The procedures for implementing NEPA are set forth in Council for Environmental Quality regulations and 23 CFR 771. Coordination with the appropriate federal, state, and local agencies is required.</p> <p>Executive Order 11990 specifically pertains to any projects nearby to wetlands and can be used as justification for wildlife crossing mitigation actions when movement associated with wetland species is impacted.</p>

Law	Section	Applicability
Endangered Species Act (ESA)	7	<p><i>Statute:</i> Section 7 of the Endangered Species Act, <b>16 U.S.C. Section 1536(a)(2)</b>, requires all federal agencies to consult with the National Marine Fisheries Service (NMFS) for marine and anadromous species, or the United States Fish and Wildlife Services (USFWS) for fresh-water fish and wildlife, if they are proposing an "action" that may affect listed species or their designated habitat. Action is defined broadly to include funding, permitting and other regulatory actions. For local governments, any project that requires a federal permit or receives federal funding is subject to Section 7. Transportation projects that may impede movement of listed species or result in their harm are covered under this section. Section 9 of the Act prohibits the take of any federally listed animal species by any person subject to the jurisdiction of the United States. Take is defined as "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm has been further defined to include habitat destruction when it injures or kills a listed species by interfering with essential behavior patterns, such as breeding, feeding, foraging, or resting. "Harass" in this definition means "...an intentional or negligent act or omission that creates the significant likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering" (50 CFR §17.3). Thus, not only are Federally-listed species protected from such activities as hunting and collecting, but they are also protected from actions that damage or destroy their habitat. The term "person" is defined as "an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal government, of any State, municipality, or political subdivision of a state, or any other entity subject to the jurisdiction of the United States."</p> <p><i>Applicability:</i> The ESA pertains to any project that may affect the feeding, breeding, or sheltering of a Federally listed threatened or endangered species. Thus, if a project will impede migration of such a species to its breeding habitat, foraging habitat, or other such activities, then this act can be used as justification for wildlife crossing mitigation actions.</p> <p><i>Other Considerations:</i> Consider if there are wetlands within or adjacent to the planning or project area. Many listed species use wetlands as breeding and feeding sites but migrate daily or seasonally to other habitat types. In a situation such as this, migratory paths and patterns should be included in the assessment of project effects and should be a consideration for any mitigation design.</p>



<p>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)</p>	<p>6001</p>	<p><i>Statute:</i> This Act contains several sections that affect wildlife, including wildlife refuges, reductions in vehicle-wildlife collisions, including the development of a best practices manual, and modifications to existing regulations, especially to Section 101(a)(35) of title 23 USC to “(ii) reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.” Section 6001 also requires early consultations with resource agencies and tribes and consideration of applicable plans (recovery plans, wildlife action plans, etc.) so that input regarding environmental effects occurs early in the planning process.</p> <p><i>Applicability:</i> This statute requires an evaluation of environmental effects at the regional scale so that mitigation costs can be considered and funds established early in the RTP process. Wildlife movement should be evaluated at the regional level in order to develop appropriate mitigation opportunities.</p>
<p>Department of Transportation Act</p>	<p>4(f)</p>	<p><i>Statute:</i> This section of the act states that “[i]t is hereby declared to be policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” These public lands may only be used for a transportation program or project if “(1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”</p> <p><i>Applicability:</i> This Act only relates to the use of the above described public lands. Coordination with the DOI, Department of Agriculture (DOA), Housing and Urban Development (HUD), state, or local agencies having jurisdiction and state historic preservation officer (for historic sites) is required.</p>
<p>Fish and Wildlife Coordination Act</p>	<p>16 U.S.C. §§ 661-667e</p>	<p><i>Statute:</i> This act calls for the conservation, maintenance, and management of wildlife resources for any project that involves impoundment (surface area of 10 acres or more), diversion, channel deepening, or other modification of a stream or other body of water or the transfer of property by federal agencies to state agencies for wildlife conservation purposes. Coordination with the FWS and California Department of Fish &amp; Game is required early in project development.</p> <p><i>Applicability:</i> Any project that includes a modification to a body of water must consult with the FWS and CDFG. A project that would modify a body of water may also have wildlife movement implications associated with it. Coordination may aid in identifying improvements for wildlife movement.</p>

<p>Federal Statute - Economic, social, and environmental effects</p>	<p>23 U.S.C. 109(h), (P.L. 91-605), 23 U.S.C. 128. 23 CFR 771-772</p>	<p><i>Statute:</i> This statute was passed to ensure that possible adverse economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest. It is applicable to the planning and development of proposed projects on any federal-aid highway system for which the FHWA approves the plans, specifications, and cost estimates or has the responsibility for approving a program. Identification of economic, social, and environmental effects; consideration of alternative courses of action; involvement of other agencies and the public; and a systematic interdisciplinary approach are required. The report required by Section 128 may be used as the NEPA compliance document. Appropriate federal, state, and local agencies have jurisdiction.</p> <p><i>Applicability:</i> Consider this legislation during consultation and mitigation planning to support best decisions for use of funding for wildlife crossing mitigation.</p>
<p><b>State</b></p>		
<p>California Environmental Quality Act (CEQA)</p>	<p>15002, 15126</p>	<p><i>Statute:</i> According to Section 15002 of the Act, the basic purposes of CEQA are to: (1) Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects, defined as a substantial adverse change in physical conditions which exist in the area affected by a proposed project are involved. When a public agency undertakes an activity defined by CEQA as a "project" then the agency must comply with CEQA. A project is an activity undertaken by a public agency or a private activity that must receive some discretionary approval (i.e. the agency has the authority to deny the requested permit or approval) from a government agency, which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment. The environmental review required imposes both procedural and substantive requirements. At a minimum, an initial review of the project and its environmental effects must be conducted. Depending on the potential effects, a further, and more substantial, review may be conducted in the form of an environmental impact report (EIR).</p> <p><i>Applicability:</i> Impeding wildlife crossing and fragmenting wildlife habitat would be considered a direct change in the environment. Most proposals for physical development in California are subject to the provisions of CEQA, as are many governmental decisions that do not immediately result in physical development (such as adoption of a general or community plan). Every development project that requires a discretionary governmental approval requires an environmental review pursuant to CEQA. A project may not be approved as submitted if feasible alternatives or mitigation measures are able to substantially lessen the significant environmental effects of the project. CEQA can be used to justify wildlife crossing mitigation when a proposed project would cause a significant effect to wildlife movement. In such a case, mitigation would be required to reduce the project impact to a less than significant level.</p>

California Endangered Species Act (CESA)	2080, 2081	<p><i>Statute:</i> Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines 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 (section 2081). CESA emphasizes early consultation to avoid potential effects to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species populations and their essential habitats. If take of a state-listed species is likely to occur, an EIR (or an equivalent CEQA document) will be prepared. Through permits or memorandums of understanding, the Department of Fish and Game also may authorize individuals, public agencies, universities, zoological gardens, and scientific or educational institutions, to import, export, take, or possess any endangered species, threatened species, or candidate species of plants and animals for scientific, educational, or management purposes. (See Fish and Game Code Section 2081(a), and Scientific Collecting Permits and Memorandums of Understanding for further explanation of the requirements for plants.)</p> <p><i>Applicability:</i> Under CESA, if a project proposes a "take" of a state threatened or endangered species, then the project would create a significant impact that would require mitigation. If the proposed "take" involves or is related to the impairment of a wildlife crossing corridor or basic wildlife movement then under CEQA mitigation would have to be established for this impairment.</p>
California Department of Fish & Game Code	1600	<p><i>Statute:</i> Section 1600 of the CDFG code requires that a Lake or Streambed Alteration Agreement be obtained prior to any activity associated with the modification of a river, stream, or lake that could adversely affect existing fish or wildlife resources.</p> <p><i>Applicability:</i> This statute can justify design modifications of elements of highway infrastructure or to a project to avoid effects to riparian areas which many species use as migration or movement corridors.</p>

Once we consider a project's regulatory context, we can proceed to additional wildlife crossing considerations.

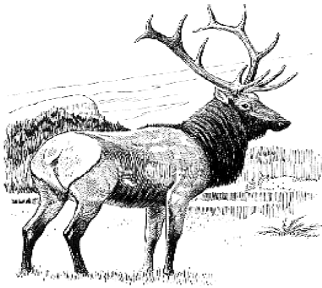
### ***1.3. Wildlife: Functional, Taxonomic, and Special Status Groups***

When assessing wildlife crossings, evaluations of issues and techniques for mitigating impacts depends upon the species present and expected to be impacted by transportation facilities and associated changes in traffic patterns and volumes. Planning for mitigation actions typically involves dividing all possible wildlife species in the project region into "target" or "focal" groups (Beier and Loe 1992) generally based upon a functional (e.g., animal size class) or a regulatory (e.g., special status species) classification. In practice, only terrestrial vertebrates are considered in most of the wildlife crossing literature, as fishes, equally impacted by crossing considerations and subject to their own set of environmental regulations, are treated independently, as a separate category of considerations, and studied by fisheries biologists. Thus, this manual is devoted solely to terrestrial vertebrates, including birds, although many of the crossing issues examined apply to fishes as well. More information on fish passage field

assessment protocols can be found at [http://pd.dot.ca.gov/env/bio/html/fish\\_assessmntplan\\_index.htm](http://pd.dot.ca.gov/env/bio/html/fish_assessmntplan_index.htm). Design guidelines for fish passage can be found at <http://www.dot.ca.gov/hq/oppd/fishPassage/>.

### 1.3.1 Wildlife: Functional Groups

Most transportation professional's group animals into three functional categories based upon body size, as animals of similar body size tend to have similar movement patterns, benefit from the same or similar kinds of crossing enhancements, and present similar types of public safety concerns. Animals are in most studies divided into three functional groups based upon body size: 1) large-bodied animals, including elk, deer, and bears; 2) medium-bodied animals, including coyotes, raccoons, otters, opossums, turkey, and pheasant; and 3) small-bodied animals, a diverse group including rodents, salamanders, toads, frogs, snakes, turtles, and some birds.

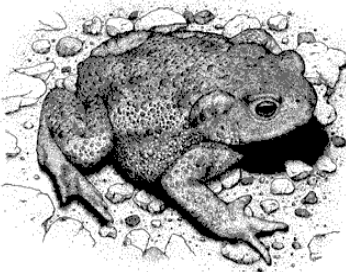


**Large-bodied animals**– include species with large home or dispersal ranges that occur most often in rural areas and require large areas for daily or seasonal movements. Require large crossing structures strategically placed along traditional movement corridors.



**Medium-bodied animals** – includes species that often live in rural areas, but may also occur in agricultural settings. Require areas of moderate size for movement and smaller, more frequently spaced crossings placed between adjacent habitat areas. Often utilize culverts

installed for fish passage and/or drainage.



**Small-bodied animals** – includes species that live in diverse habitats and may exhibit large-scale seasonal movements between adjacent habitat areas (e.g., salamanders moving between upland and aquatic habitats). Often benefit from smallest crossing structures (e.g., culverts and pipes) with associated fencing and climb-proof walls.

### **1.3.2 Wildlife: Taxonomic Groups**

A classification system less often used for wildlife crossing research is that based upon genetic relatedness - taxonomic groups, and the four taxonomic groups recognized are the four vertebrate Classes: amphibians, reptiles, birds, and mammals. In most cases, all members of a single taxonomic group, such as amphibians, will benefit from the same type of mitigation.

Roads are known to effect bird species (e.g., Case 1978, Loos and Kerlinger 1993), and road mortality may seriously affect some special status bird species (e.g., Florida scrub jay, Dreschel et al. 1990, Mumme et al. 2000), but the effects of roads on bird populations have not been intensively studied in California nor in most other regions of the U.S. The effects of roads on bird populations have been much more extensively studied in Europe (see review of bird mortality on European roads by Erritzoe et al. 2003). Thus, this manual may seem to have a taxonomic bias; however, this apparent bias accurately reflects the history of the study of wildlife crossings in the U.S. and the relatively more extensive literature on mammalian crossings.

Similarly, this manual does not treat the crossing needs of fishes, as fish passage is studied and actions implemented by a functionally separate set of Department employees, although in some cases the crossing needs of fishes and terrestrial vertebrates may be similar, and actions intended to benefit fish passage may also benefit terrestrial species.

### **1.3.3 Wildlife: Special Status Species**

In many cases, the focal species or species group is defined by regulation (e.g., NEPA, CEQA, ESA, and CESA). When regulatory considerations are paramount, avoidance, minimization, or compensatory mitigation actions are specifically targeted to benefit the feeding, breeding, and shelter needs of special status species.

The list of special status species changes frequently and users of the manual are advised to use the most current listing, maintained by the California Department of Fish & Game and available at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf>.

For a current listing of California species protected under the U.S. Endangered Species Act, see the U.S. Fish & Wildlife Service Threatened and Endangered Species System, or TESS at: [http://ecos.fws.gov/tess\\_public/StateListing.do?state=CA&status=listed](http://ecos.fws.gov/tess_public/StateListing.do?state=CA&status=listed).



## 1.4. Special Habitats

In addition to special status species, transportation planners must consider, for regulatory as well as ecological reasons, special habitats, especially wetlands and riparian corridors. Many vertebrate species, and all amphibian species, are seasonally dependent upon wetlands, especially for breeding. Many individuals move from upland to wetland locations when rains commence and return to upland locations when rains cease; thus, if highway facilities obstruct animal movements between wetlands and uplands, mitigation measures may be necessary to facilitate movement. Research has shown that there may be a long lag period following road construction adjacent wetlands and reductions in species abundances (Findlay and Houghlahan 1997; Findlay and Bourdages 2000).

The Clean Water Act requires the delineation of wetland boundaries and special consideration of wetland-associated species. The U.S. Fish & Wildlife Service National Wetland Inventory (<http://www.fws.gov/nwi/>) seeks to map all wetlands in the U.S. and provides downloadable files of all wetland maps for analysis and publication in a GIS. NWI should be consulted for baseline data at any site with wetland habitats. NWI maps almost always list all wetlands appearing on the local USGS quad map, and often have been considerably refined beyond that from aerial imagery. However the age and quality of the data vary considerably with location, and small or seasonal wetlands, such as vernal pools, are often missed or mislabeled. Understanding where wetlands are located is essential for understanding movement needs associated with breeding, feeding, migration and shelter of many species. Review of species life cycle needs in relation to wetlands can help in understanding the need for connectivity in your area of concern.

CEQA requires that riparian corridors receive special consideration if a transportation project has potential effects on a riparian zone, and riparian corridors are especially important for wildlife because they provide habitat for many species, are often heavily used by diverse species for movement among habitat patches, and are especially important targets for conservation as riparian corridors have been severely impacted by many types of development (e.g., Warner and Hendrix 1984). At present, there is no good single source of riparian habitat maps for California,

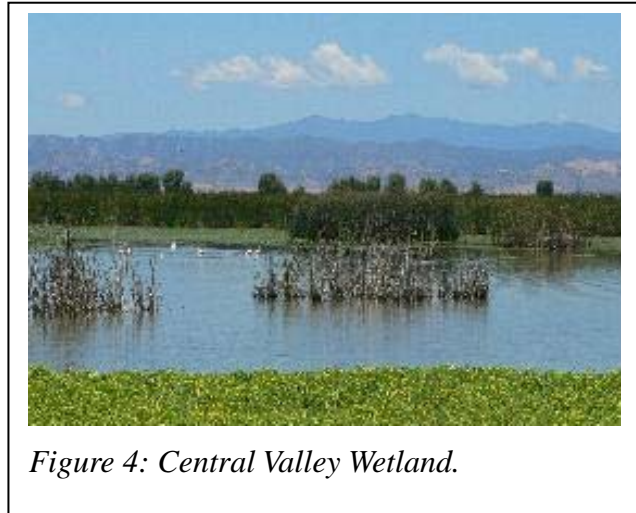


Figure 4: Central Valley Wetland.

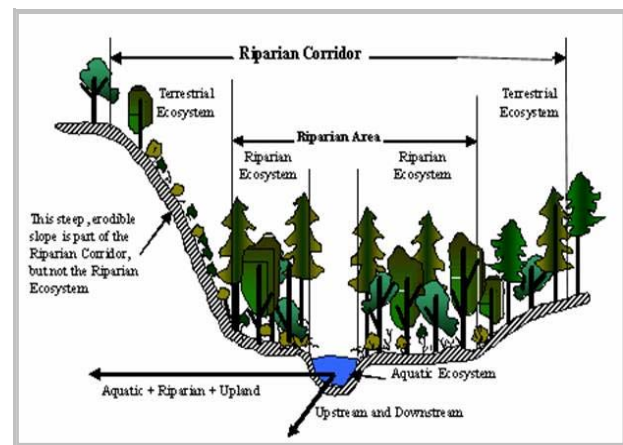


Figure 5: Riparian corridor. Derived from U.S. Forest Service website.

although a composite map is under construction by the Riparian Habitat Joint Venture (<http://www.prbo.org/calpif/htmldocs/rhjb/>) and some of the source data may be viewed through the California Department of Fish & Game's Biogeographic Information and Observation System (BIOS; <http://bios.dfg.ca.gov>). In some areas, riparian zones can be readily identified from available imagery, including the free National Agriculture Imagery Program (NAIP) 1 meter resolution imagery available everywhere in California (see <http://casil.ucdavis.edu>), and Caltrans proprietary 1-foot resolution data within 500-100 m. of state highways. However, delimiting wetlands from aerial imagery may take considerable experience with GIS and related technologies.

## ***1.5. Sources of Species-Level Information***

If you are insufficiently familiar with the species of concern in a project's scope, the following is a summary of resources that provide much useful information. Note that in addition to the resources cited here, for special status species, recovery plans and five-year review documents may be especially helpful.

### **1.5.1 Internet Resources**

- The California Department of Fish & Game web site, <http://www.dfg.ca.gov/>, is the best source of official web-based information on California's wildlife.
- The Biogeographic Information & Observation System (BIOS; <http://bios.dfg.ca.gov/>) provides an on-line map viewer for biological data generated by the Department of Fish and Game (DFG) and its partner organizations and is an excellent tool for a preliminary assessment of species of management concern that may be found within a project assessment area. Most of the datasets may also be downloaded from BIOS or other California Resource Agency websites (e.g., CaSIL – <http://gis.ca.gov>) and further analyzed using Geographic Information Systems (GIS) technologies.
- The California Natural Diversity Database (CNDDDB) is developed and maintained by the Department of Fish & Game and is included in the BIOS system. The CNDDDB contains distribution information, including GIS coverages and maps, for all state and federally listed species in California, plus other "element occurrences" representing species, rare habitats, or other biological elements (for example, bird rookeries) of management importance to Fish & Game. The CNDDDB, available at <http://www.dfg.ca.gov/biogeodata/cnddb/>, contains public as well as restricted information, but Caltrans biologists should have access to the subscription service that provides access to all of the information contained within the CNDDDB. Note that CNDDDB only records actual well-documented observations of the species involved, so that absence of a CNDDDB record at a site may not be used to infer that no species of concern are present.
- The California Wildlife Habitat Relationships system (CWHR; [http://www.dfg.ca.gov/biogeodata/cwhr/wildlife\\_habitats.asp](http://www.dfg.ca.gov/biogeodata/cwhr/wildlife_habitats.asp)) is an information resource for California's wildlife and contains life history, geographic range, habitat relationships, and management information on 692 non-marine species of amphibians, reptiles, birds, and mammals known to have breeding populations in the state. The

CWHR effort has as one component a series of printed guides, called California's Wildlife, that provide biological information for each regularly-occurring amphibian, reptile, mammal and bird in California. These species notes are available as downloadable PDF files from <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.asp>. This web site provides updated versions of the species accounts in the three-volume set "California's Wildlife" edited by Zeiner, et al. (1988-1990) and contains 46 more accounts than the original publications, bringing the total to 692 vertebrate species. The species range maps are also available as GIS data. Note that these maps are created by experts in the biology of each species, and thus represent expert opinion about where the species might be expected to occur, rather than reporting known occurrences (as in CNDDDB). As a result, they should be viewed as predictions, but they may be better predictors than NDDB of local species in areas that have not been well-surveyed (and they cover almost all terrestrial vertebrate species, not just the rare ones). Biologists should be aware that although the CWHR system is used by most state agencies to describe relationships between California's wildlife and land cover types, the CWHR system is not a vegetation classification system *per se*, but rather an expert-based model that provides expected lists of vertebrates based upon knowledge of the land cover class present. The land cover classes in the CWHR are based upon A Guide to Wildlife Habitats of California (Mayer and Laudenslayer, 1988). The formal vegetation classification for California, used by both state and federal agencies, is that described in A Manual of California Vegetation (Sawyer and Keeler-Wolf, 1995). Be aware, however, that other vegetation and land cover classification schemes have been developed; these include the USDA Ecological Subregions of California (<http://www.fs.fed.us/r5/projects/ecoregions/>), the California Native Plant Society's Vegetation Classification, and the USDA's CalVeg Classification (<http://www.fs.fed.us/r5/rsl/projects/classification/>). Links to these are also available from the CWHR website ([http://www.dfg.ca.gov/biogeodata/cwhr/wildlife\\_habitats.asp](http://www.dfg.ca.gov/biogeodata/cwhr/wildlife_habitats.asp)).

- The U.S. Fish & Wildlife Service website (<http://www.fws.gov>) contains a wealth of useful information and is an especially good resource for information on endangered species.
- When California-specific data are scarce, it may be worth looking at national or global datasets to search for data types (for example, museum specimens) that may not have been incorporated into official CDFG or other state government compilations. An excellent compilation of on-line datasets has been assembled by the Taxonomic Data Working Group's Biodiversity Information Projects of the World (see <http://www.tdwg.org/activities/bioinformatics-projects/>)

### 1.5.2 Books

There are many excellent books on California's wildlife; here, we provide citations for only the most widely-used books on specific taxonomic groups:

- For amphibians and reptiles, the standard reference is the Stebbins field guide (Stebbins 1972).

- For birds, any of the several field guides to the U.S. or to the western U.S. would help with field identification, but for additional information, such as geographic range and preferred habitats, the books by Arnold Small (Small 1994) and Weston and Brown (1979) are more useful.
- For mammals, the standard reference is Jameson and Peeters' *Mammals of California* (2004).

Books to consider to aid in identifying effects per NEPA and CEQA include:

- Bass, R.E., A.I. Herson, and K.M. Bogdan. 2001. *The NEPA Book: A step by step guide on how to comply with the NEPA.*
- Remy, M.H., T.A. Thomas, J.G. Moose, and W.F. Manley. 2006. *Guide to CEQA.*
- Bass, R.E., A.I. Herson, and K.M. Bogdan. 1999. *The CEQA Deskbook.*

## ***1.6. Identifying Wildlife Crossings***

The first step in considering wildlife crossing issues is to confirm that a particular place or region is used as a crossing by wildlife. An extensive review of wildlife crossing and related literature shows that rather than a single, standard methodology for determining areas of wildlife crossing, there are several alternative sets of methods that can be used singly or in combination. These methodologies are used in an attempt to define the locations where assessment of highway facility effects are of greatest need to enhance and maintain wildlife movement and/or to reduce vehicle-animal conflicts and improve public safety.

In most cases, wildlife crossings have been identified by:

- repeated observations of animals crossing a small section of roadway
- a section of roadway showing an unusually high rate of vehicle-animal collisions (e.g., Clarke et al. 1998, Caro et al. 2000)
- professional assessments or judgments of qualified biologists (Clevenger et al. 2002) or highway maintenance staff (Case 1978) with experience in an area
- on-the-ground surveys of obvious wildlife corridors (e.g., documentation of game trails, tracks and other evidence indicating areas of concentrated animal movement (Scheick and Jones 1999), although animals may perceive the roadway as a barrier and refuse to cross (e.g., Riley et al. 2006)
- documenting suspected movement corridors with track plates, raked soil, remotely-triggered cameras or similar methods to confirm regions with disproportionately high use and to identify species present (e.g., Ng et al. 2004)

Additional methods which are appropriate for documenting existing crossings and for predicting locations of potential crossings include:

- modeling of actual or potential wildlife corridors based on road occurrences, wildlife habitat, wildlife occurrences, and habitat connectivity (Penrod et al. 2001, Shilling et al. 2002; Shilling and Girvetz, 2007)
- GIS models that rely upon selected landscape attributes and their interactions with highway facilities (Mladenoff et al. 1999, Clevenger et al. 2002) to predict crossing

locations

- a combination of approaches to try to enhance the detection and delineation of highway crossing areas regularly used by wildlife (e.g., Ng et al. 2004)

When crossing issues are documented or expected, it is essential to:

- design a field assessment of the type and nature of crossing issues involved
- identify the species of animals present
- document how the focal species are or may be impacted by a highway facility or proposed facility or facility improvement
- develop a relative assessment of the frequency and timing of the conflict(s)

Each of the federal and state regulations summarized in Table 1 has its own statutory requirements given an expectation of significant effects:

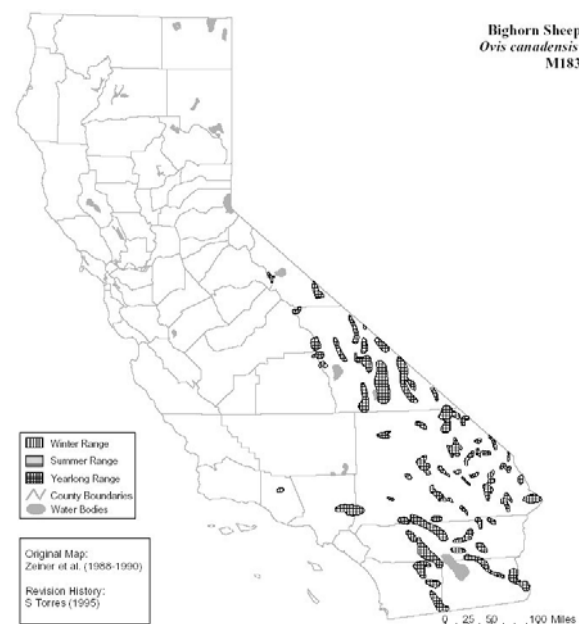
- ➔ CEQA requires findings of significance and documentation of cumulative effects
- ➔ NEPA requires a consideration of environmental context and intensity, with specific consideration of ecologically critical areas and public controversy
- ➔ when listed species may be affected, ESA requires consultations with the U.S. Fish & Wildlife Service to consider a project's potential for jeopardy as well as its effects on critical habitat
- ➔ CESA also requires a consideration of jeopardy and efforts to minimize and fully mitigate for impacts

### 1.6.1 Case Studies: Existing Efforts to Enhance Wildlife Crossing

Caltrans practitioners may learn much from the experiences of others; here are provided some case studies of existing projects in California. Please consult the wildlife crossing web site ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)) for additional case studies and/or to add another case study record.

#### *Existing Efforts in California*

- U.S. 395 Wildlife Undercrossings. Three undercrossings were installed in 1976-1978 under U.S. 395 in northeastern California primarily in response to elevated rates of vehicle-deer collisions during deer spring and fall deer migrations (Figure 21). This project was well documented by Ford (1976).
- Desert bighorn sheep: several on-going Caltrans studies focus on desert bighorn sheep (*Ovis canadensis*)



1 Figure 6: Range of California Bighorn Sheep

Website: [http://dap3.dot.ca.gov/nq/env/bio/wildlife\\_crossings/](http://dap3.dot.ca.gov/nq/env/bio/wildlife_crossings/)



*nelsoni*). Desert bighorns naturally range over approximately 20% of California, in the southeast portion of the state. The range of the desert bighorn includes several isolated mountain populations separated by desert, with movement among habitat patches necessary to ensure population persistence and genetic interchange (Epps et al. 2005).

- Ventura County: Ventura County’s “Designing Road Crossings for Safe Wildlife Passage” is a project of the Ventura County Planning Department and the Donald Bren School of Environmental Science & Management at the University of California, Santa Barbara. The final report of this project provides a comprehensive overview of wildlife crossing issues and mitigation strategies and is available at: [http://www.bren.ucsb.edu/research/documents/corridors\\_final.pdf](http://www.bren.ucsb.edu/research/documents/corridors_final.pdf). This project continues as the county works to adopt these measures as part of its CEQA initial study assessment guidelines. In addition, Caltrans has funded an intensive wildlife corridor assessment of SR 118 (report available as a PDF available at: [http://www.dot.ca.gov/dist07/resources/envdocs/docs/H118css\\_WCA.pdf](http://www.dot.ca.gov/dist07/resources/envdocs/docs/H118css_WCA.pdf)). This work continues as the SR 118 Working Group to address regional wildlife crossing issues along this state highway.

### *Examples of Wildlife Crossing Projects Outside California*

The following websites provide examples of wildlife crossing projects outside of California:

- Wildlife crossing projects in several states are described in Transportation: Protecting Species, Enhancing Ecosystems, available at: <http://www.contextsensitivesolutions.org/content/reading/taking-the/resources/taking-the-high-road/>.
- The National Cooperative Highway Research Program published a report in 2002, NCHRP Synthesis 305: Interaction between Roadways and Wildlife Ecology, available at: [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_305.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_305.pdf).
- Summaries of several projects from Washington State, Maine, Montana, and Slovenia are provided in Carr et al. (2003) Appendix I, page 77 (available at: [http://www.metro-region.org/library\\_docs/trans/wc\\_final.pdf](http://www.metro-region.org/library_docs/trans/wc_final.pdf)).
- The recently-completed (2006) Arizona DOT effort to locate potential linkage zones is an excellent example of a statewide effort to identify, map, and prioritize wildlife corridors ([http://www.azdot.gov/Highways/OES/AZ\\_WildLife\\_Linkages/assessment.asp](http://www.azdot.gov/Highways/OES/AZ_WildLife_Linkages/assessment.asp)). The Arizona effort uses multiple criteria to prioritize mitigation needs and considers the potential effects of all kinds of development on corridors and does not seek to identify specific areas where highway crossing mitigation actions are required. The Arizona study also seeks to integrate an index of threat, with those corridors with highest biological value and greatest threat (e.g., due to proposed development) receiving the highest priority.

## 2 Baseline Assessment

Your baseline assessment will document the current conditions on wildlife passage and critical habitats and take into account the 1) project type, 2) regulations that pertain to species and habitats in the project area (Table 1), and 3) presence of species status species and habitats. Table 2, below, lists some project types and some potential wildlife crossing effects associated with each. You will utilize the sources of information described in Section 1 to review what is known about wildlife in the project area and evaluate and summarize this information to place this project into a regional context and characterize existing conditions.

Table 1: Project types and potential crossing effects.

Project Type	Potential Crossing Effects
New highway	Bisection of existing habitat, interrupted migration/movement patterns, genetic isolation of populations, introduction of possibility for collision
Highway widening	Increased distance to cross, potentially greater traffic volumes
Installation of median barrier	Reduced permeability, greater risk of animal-vehicle collisions, interrupted migration/movement
New off- or on-ramps	Potentially greater traffic volumes in rural areas, added overall facility footprint
Bridge retrofit	May result in reduced or increased opportunities for crossing
Routine maintenance	Clearing vegetation, and other material may affect the attractiveness and use of a particular structure (e.g., road-side, culvert)

### 2.1. Basic Steps to Establish Your Baseline

To fully understand wildlife crossing at the project level, it is important to have a landscape level understanding of wildlife movement in your region. At the project level, establishing your baseline for wildlife movement is essential to aid in your project effect analysis.

When assessing wildlife crossings, Caltrans biologists may follow a process that consists of the following steps:

1. Establish a basic understanding of wildlife movement needs and corridors in your region. As appropriate, provide information and expertise to Regional Transportation Planners. Also this basic understanding can help you in project level analysis.



Figure 7: Bear Crossing

2. Understand regional and project level connectivity and crossing functionality.
3. Establish your baseline for your proposed project region and direct project area:
  - Identify, acquire, and review existing data
  - Evaluate existing information to develop an understanding of wildlife movement in your project area
  - Evaluate the need for field surveys
4. Identify the need for and the goals of additional field surveys:
  - Establish goals of additional field surveys
  - Select sites for field surveys
  - Evaluate and select appropriate survey methods
  - Consider sample sizes, survey intensity, and other elements of data collection
  - Conduct field surveys
  - Evaluate data set
  - Use collaborative approach – involve agencies, NGOs

### **2.1.1 Understanding Landscape-level Connectivity: Bioregional Perspective**

To begin your assessment of a project's potential effects on target species, the project must be placed in a bioregional perspective; a regional perspective is required because:

1. local impacts may affect wildlife species, especially those with large home ranges, on larger spatial scales
2. it is necessary to help to define all of the species and potential wildlife/highway conflicts that may exist, and
3. regulatory considerations (CEQA and NEPA) require the assessment of cumulative effects, including local effects on regional issues such as habitat connectivity, linkages, and wildlife corridors.

It may be useful in bioregional assessments to utilize the 10 bioregions recognized by the California Interagency Natural Areas Coordinating Committee (INACC; <http://ceres.ca.gov/biodiv/Bioregions/INACC.pdf>) as depicted in Figure 8.

Each of California's bioregions, described more fully on the CERES system ([http://ceres.ca.gov/geo\\_area/bioregions/mapindex.html](http://ceres.ca.gov/geo_area/bioregions/mapindex.html)), contains a unique combination of plants and animals and thus a unique set of potential wildlife crossing issues.

Coordination with the Natural Community Conservation Planning group in the California Department of Fish & Game (<http://www.dfg.ca.gov/nccp/index.html>) may be useful, especially at the bioregional scale, as this group works with numerous private and public partners to take a broad-based ecosystem approach to planning for the conservation of California's biodiversity

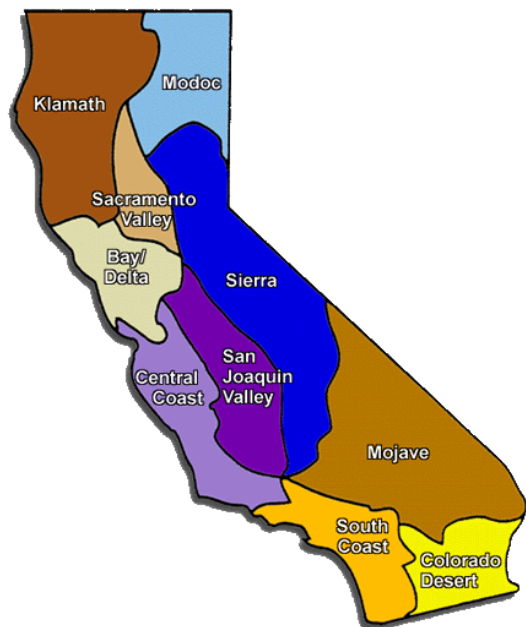
and may enhance communication and knowledge transfer among Caltrans staff and its collaborators.

Environmental planning documents under NEPA and CEQA are required to address not only effects within the project site, but also the environmental setting of the project and its cumulative effects on a landscape basis (in other words, its interaction with other environmental effects in the surrounding areas). Environmental documents are being found deficient in increasing numbers when cumulative effects are not adequately addressed. Consequently, if projects potentially disrupt habitat connectivity, especially for wide-ranging species (deer, elk, mountain lion), it is wise to discuss potential regional effects in the environmental documents.

When evaluating regional wildlife movements, review all available information, including the results of GIS analyses and models that may have been produced by other state or federal agencies, county planners, or NGOs. There have been several large-scale GIS-based assessments of wildlife corridors and/or movements in California, and these should be examined early in the project planning process. To date, the only statewide effort to identify and map wildlife corridors was the Missing Linkages Project following the statewide Missing Linkages workshop held at San Diego Zoo, November, 2000 (<http://www.calwild.org/resources/pubs/linkages/index.htm>).

Examples of bioregional assessments from Southern California include:

- The Puente-Chino Hills Wildlife Corridor. Although not explicitly devoted to wildlife crossings, this project examines many of the issues related to connecting wildlife habitats (primarily mountain lion habitats); see <http://www.habitatauthority.org/pdf/pg1-12v2b.pdf>
- The Coal Canyon Wildlife Corridor. This corridor is critical to the survival of the mountain lion in the Santa Ana Mountains; this project is described at [http://www2.for.nau.edu/research/pb1/Service/coal\\_canyon\\_address.htm](http://www2.for.nau.edu/research/pb1/Service/coal_canyon_address.htm)
- The South Coast Missing Linkages Project. An on-going effort involving many agency and NGO collaborators that identified many potential wildlife corridors throughout coastal Southern California (<http://www.scwildlands.org/>).
- The Conception Coast Project Regional Conservation Guide. This guide provides information, including movement corridors and habitat linkages, on the mountain lion and sensitive species in the Conception Coast region ([http://www.conceptioncoast.org/Conception\\_Coast\\_Project.html](http://www.conceptioncoast.org/Conception_Coast_Project.html))
- Desert Bighorn Sheep. Several investigators have used radio-collars to study fragmentation issues of desert bighorn sheep in the Peninsular Ranges of California (e.g., Rubin et al. 1998, Butierrez-Espeleta et al.



2000)

- The South Coast Wildlands Project. A continuing study in Southern California to identify potential wildlife corridors with a system of ranking by relative threat (<http://www.scwildlands.org>)

Examples of Central and Northern California assessments include:

- A Guide to Wildlands Conservation in the Central Coast Region of California. This study showed places where wildlife corridors were likely to be present and were threatened by highways and other development (Thorne, Cameron, and Jigour 2002; <http://cain.nbii.org/repository/CC.pdf>).
- A Guide to Wildlands Conservation in the Greater Sierra Nevada Bioregion. A combination of habitat models, focal species, and threats to habitat quality was used to indicate core and connectivity areas/corridors (Shilling and Girvetz 2007; Shilling et al. 2002; <http://cain.nbii.org/repository/Sierra.pdf>).
- California Tiger Salamanders. Pyke (2005) looked at the endangered California tiger salamander as a case study for the importance of habitat linkages for population persistence and Barry and Shaffer (1994) looked at the Stanford University population of the species and recommended mitigation measures, since implemented.

Caltrans-sponsored projects in progress are applying similar methods to assess potential wildlife corridors for individual species at the project-to-county scale. These and similar efforts will help practitioners to identify regions with high corridor potential and may be useful on an individual project scale to suggest areas for further investigation. Areas identified as priority wildlife corridors should be assessed to:

1. inventory existing crossing infrastructure to assess whether it is sufficient and effective at connecting wildlife habitats and facilitating crossing
2. identify and prioritize particular crossing points for additional crossing enhancements and mitigation efforts, and
3. identify adjacent land uses to ensure any investments in highway infrastructure match the anticipated land use.

These efforts, and the other studies listed above, suggest useful methodologies that take advantage of existing expertise and which may be adopted by Caltrans as a component of efforts to set wildlife crossing priorities.

### **2.1.2 Understanding Project-level Crossing Issues**

In considering a project's potential effects at the local level, the practitioner seeks to determine what kind of avoidance, minimization or compensatory-mitigation strategy will work best given the project type, habitat, and focal species.

In accordance with the project type and its potential effects, the practitioner must first define the target or focal species by identifying regulatory, management, public safety, and/or public outcry considerations for the species known or suspected to occur in the project area.



## 2.2. Developing Your Baseline for Wildlife Movement

It is important to assess projects for potential wildlife crossing conflicts prior to the construction of infrastructural barriers (Hardy et al. 2003, Van Der Grift and Pouwels 2006; Scheick and Jones 1999). The documentation of pre-construction conditions will provide a project base-line assessment that is unbiased by any construction activity.

Baseline assessments should be conducted for any special status species that may potentially occur within a project's scope as well as species that may present public safety concerns (e.g., deer, elk). Establishing a baseline includes reviewing and documenting existing sources of information that provide insight to wildlife movement as well as possibly generating some field survey data to better define wildlife crossing in your particular project location.

### 2.2.1 Identify, Acquire, and Review Data Sources

The first step in an assessment of a project's potential effects on target species is a review of all existing data sources. Efforts to identify existing information should include:

- consultations with Caltrans biologists, GIS, and maintenance staff
- consultations with other land-management agency biologists and GIS staff, especially to determine whether special status species or critical habitats may be impacted by a project
- consultations with other experts including county planners, NGO, resource conservation district, and local conservation agency field staff
- consultations with sheriff's departments and State Highway Patrol offices as potential sources of road-kill data
- a thorough literature review (Caltrans library, academic libraries, web-based sources such as Google Scholar), including species recovery plans and updates
- a review of California Department of Fish & Game resources (e.g., BIOS, CNDDDB, CWHR)
- a review of the results of predictive modeling in the region, if any
- consultations with biological consultants
- review of old reports from the area (BA, NES, etc.)
- conversations with local landowners, farmers, cooperative extension specialists, fishermen, hunters, etc.

#### *Known Crossing Conflict:*

- Road kills
- Documented roadway barrier effects

#### *Suspected Crossing Conflict:*

- Reported wildlife crossing
- Appropriate habitat/landscape
- Documented signs of occurrence

#### *Predicted Crossing Conflict:*

- Results of GIS analysis
- Professional judgment
- California Wildlife Habitat Relations

- Department of Defense staff, if applicable
- University researchers
- CalFish database

A review of all of these data sources will help to most thoroughly document what is already known about wildlife species and their movements in the project area. This initial review of data sources should be conducted during the PEAR development, and based on this review you should determine whether additional, targeted field surveys and assessments are needed as well as identify any preliminary anticipated needs for wildlife crossing improvements.

### **2.2.2 Identify the Need for Additional Field Surveys and Assessments**

Potential project effects on wildlife crossing should initially be assessed when a highway project is in its early planning stages. When wildlife crossing conflicts have been reported or are suspected or predicted, it may be necessary to conduct field surveys to confirm the presence of, identify, and estimate the abundance of focal species in the project area. It will also be necessary to conduct field surveys in those cases when your review of existing information determines that no wildlife information exists from the project area. Keep in mind that field surveys or assessments must aid in a determination of whether the effects of a project are significant, as a finding of significance is usually what results in the recommendation to incorporate wildlife crossings to reduce effects. A finding of significance may result from an analysis of a project's effects under CEQA and NEPA, and having sufficient data to determine effects relative to populations. Simply documenting whether animals are prevented from crossing or are getting hit while attempting to cross is not usually sufficient to conclude that a project's effects may be significant – there must be evidence of a project's effects on the species population, available habitat connectivity, ability to fulfill life cycle needs, migration, etc.

#### *Establish Intended Outcome or Application of Survey Data*

Once you have established that additional information is needed, it is important to identify what information is needed, why it is needed, and how you will obtain this additional information. In order to choose the right survey strategy, understand what question you are trying to answer. The procedures for analyzing survey data depend upon the detection methods used and the goals of the study. This section reviews the kinds of information one can obtain through field surveys: determining presence/absence, estimating relative or absolute abundance, or identifying use of existing structures or crossing of the existing roadway.

*Presence/Absence.* The minimum amount of information to be obtained through a field survey is whether focal species do or do not occur in the study area. Presence or absence can be determined with all of the methods described in Table 3, below. Be aware, however, that no method of detection works 100% of the time, and that while the detection of an animal confirms its presence, the lack of detection does not confirm its absence (“absence of evidence isn’t evidence of absence”). For example, Hilty and Merenlender (2000) found on their study site in Sonoma County that baited track plates failed to detect mammal species detected by remotely-triggered cameras. The limit of interpretation of such survey data is not that particular species do or do not occur in the study area, but rather that they were or were not detected given the

methods used. Use your knowledge of the focal species habits to conduct your surveys at the time of the year when the species is present and most active (e.g., during migration for ungulates and during breeding movements for amphibians).

*Relative abundance.* A greater amount of information is obtained, and may be required by regulation, when one estimates the relative frequency of occurrence of focal species in a study area. Relative abundance can be estimated from frequency of movement past defined points, for example by periodic counts of tracks (track plates and raked soil) and remotely-triggered camera data (Mace et al. 1996; Drennan et al., 1998; Clevenger and Waltho, 2004). Here, one would report the numbers (and identities) of animals recorded per unit of time. An advantage of obtaining relative abundance data is that one may then compare the estimate of relative abundance of animal species at one site to those of other sites and get a quantitative estimate of among-site differences in relative abundance. Estimates of relative abundance are usually expressed as numbers of observations per unit of time or effort (e.g., number of observations per hour or per number of track plate stations per unit of time) rather than as numbers of animals per unit of area, because these methods do not generate estimates of numbers of animals per unit of area (absolute estimates of abundance). Keep in mind that the abundance of the focal species may change seasonally.

*Absolute abundance.* The greatest amount of information on a focal species in a study area is obtained through an estimate of its absolute abundance (animals per unit area), and such estimates may be required to estimate crossing effects on populations. However, the estimates of absolute abundance require the most intensive field investigations, and may be logistically challenging. When one calculates an estimate of absolute abundance, an estimate of the relative importance of the local population to the regional or global population is possible, as may be required under NEPA and CEQA. In the case of special status species, the most important considerations involve estimates of absolute abundance and comparison of the local abundance to the species as a whole (Craighead et al. 2001, Dodd et al. 2004). For conspicuous animals, direct observations may yield absolute estimates of abundance (e.g., pronghorn in low shrub habitats, salamanders moving to breeding ponds), but for less conspicuous animals, remotely-triggered cameras may provide the best method to estimate absolute abundance, as it is necessary to discriminate among individuals to estimate absolute abundance, and remotely-triggered cameras may provide the most reliable method to identify individuals of a species (Mace et al. 1994). For most vertebrates, mark-recapture methods or tracking of individuals are typically required for population estimates that can withstand technical or legal challenges.

*Mortality Index.* Obtaining an absolute estimate of mortality (expressed as the proportion of the population that dies per year) is difficult for mobile species and often involves intensive field work over an extended period of time. However, for species with a regional population that is restricted to a small area, it may be possible to estimate the rate of annual mortality due to roadkill because the size of the regional population can be estimated. For example, Gibbs and Shriver (2002) found that roadkill may cause regional declines in land and large-bodied pond turtle populations in the eastern and central United States. The same authors (2005) found that rates of mortality of pool-breeding amphibians were strongly positively correlated with traffic volume at their study site in New York. Twitty (1941) and Barry and Shaffer (1994) found that road traffic was a major source of mortality of California tiger salamanders during their seasonal migrations from their upland aestivation sites to their lowland breeding pond on the campus of

Stanford University. Thus, for species with restricted ranges and population sizes (amphibians, some reptiles, small-bodied mammals), and which, coincidentally, are often special status species, it may be possible to estimate absolute rates of mortality.

However, for mobile species such as medium and large-sized mammals and birds, it is more difficult to estimate the size of the population of interest as well as the rate of mortality due roadkill (Romin and Bissoette 1996, Groot Bruinderink and Hazebroek 1996), and thus rates of roadkill are more typically expressed as a mortality index, and the index consists of an estimate of the number of individuals killed per length of road surface per unit of time. Multiple indices derived from several locations can be compared, thus providing a means to evaluate the relative rates of mortality due roadkill, although the underlying factors responsible for differences may not be known (differences in animal abundances, etc.). In many cases, these rates are often expressed in relation to daily or seasonal periods of time, as mortality rates are often highly correlated with traffic volume, and traffic volume, as well as animal movements, fluctuate daily as well as seasonally (Ford 1976, Case 1978, Sullivan et al. 1984).

*Habitat Fragmentation.* If the goal of your field survey is to document habitat fragmentation, you may need more intensive methods to obtain additional information. Habitat fragmentation may result from extreme levels of mortality caused by vehicle-animal collisions (e.g., Lodé 2000, Dodd et al. 2004) and it may be essential to document high levels of road kill through frequent field surveys to demonstrate that the roadway presents a barrier. In other cases, animals may perceive the roadway as a barrier and will not or only rarely attempt to cross. Riley et al. (2006) studied dispersal patterns of bobcats and coyotes across the Ventura Freeway in southern California and utilized radio-tracking and genetic “fingerprinting” to identify individuals. Their study, conducted over 7 years, demonstrated a very low level of crossing and consequent effects on population isolation, including genetic effects. Similar effects on the movements of desert bighorn sheep were demonstrated by Epps et al. (2005) who used radio-collars to show that roads imposed territory and range constraints on animals that were moving among mountain ranges in southeastern California. Similar intensive field methods may be necessary if you suspect road effects on animal migratory movements through your study area (e.g., Ford 1976). Separation of breeding, feeding, and sheltering habitat may also be a concern that you may want to consider as part of your field assessment.

Once you have determined the intended goal(s) of collecting additional information from the field, a wildlife biologist must spend time in the field to document wildlife presence, abundance, and spatial and temporal patterns of movement. Wildlife biologists have employed a variety of techniques to assess wildlife presence and abundance. Scheick and Jones (1999) provide details of their pre-project survey of large and medium-bodied mammals in North Carolina, and their methods are widely applicable to road crossing-related wildlife surveys. These include track-count surveys, ditch crossing surveys, monitoring of trails using remotely-triggered infra-red cameras, and GIS modeling to predict likely movement corridors at landscape scales. Additional methods commonly employed to detect and document animal movements include track plates and raked soil. In some cases, a combination of techniques such as gypsum on raked soil, may provide enhanced detection (Ng et al., 2004). For surveys designed to document movements of mammals, Sanderson (1966) provides a comprehensive overview of both theory and practical application.

There are five main steps to conduct field assessments of wildlife presence and movements:

1. Select survey site(s)
2. Select detection method(s)
3. Collect data
4. Analyze and interpret data
5. Report results

### *Survey Site Selection*

Field surveys should document signs (game trails, etc.) of concentrated animal movement to best define and characterize wildlife crossing issues (e.g., Scheick and Jones 1999). While in the field, one should consider not only the regions defined by road kills and other direct evidence of crossing conflicts, but should also consider the landscape attributes that tend to favor animal movement, including riparian corridors, ravines or ridgelines, habitat edges, and patches of relatively undisturbed habitat, and seek to document barrier effects, i.e. regions where movement corridors are interrupted by highway infrastructure and where habitat connectivity is lost because animals refuse to cross (e.g., Riley et al. 2006).

Many large and medium-sized mammals follow traditional routes across regions of uneven terrain in order to move most efficiently across the landscape. These movements often result in concentrated animal movements across features such as ditches, and these routes may be surveyed to estimate the numbers and species of animals present and may suggest appropriate locations in which to site additional detection devices (e.g., track plates, raked soil, and remotely-triggered cameras). Ditch crossing surveys will not yield an index of abundance unless the substrate within the ditch crossing is refreshed at frequent intervals.

Beier and Loe's (1992) schema, while not specifically written with highway facilities in mind, provides an excellent functional description of wildlife corridors as well as a checklist for evaluating corridors. According to Beier and Loe, the steps to evaluate a wildlife corridor are to:

- identify the habitat areas the corridor is designed to connect
- select several species of interest from the species present in these areas
- evaluate the relevant needs of each selected species
- for each potential corridor, evaluate how the area will accommodate movement by each species of interest
- draw the corridor(s) on a map
- design a monitoring program to confirm animal use

Although not all wildlife movement occurs within corridors, by utilizing such a schema, a biologist may confirm the locations of corridors required to permit movements of species of interest.



The choice of where to survey for wildlife occurrences depends upon the project scope and the information needed to best characterize the habits and habitats of the focal species or species group. Following expert consultations, literature review, and examination of existing data; seek evidence of occurrence in habitats utilized by the focal species along or across the roadway itself as well as in appropriate habitats more distant from the right-of-way: recall the need for a local as well as a bioregional perspective. Regions where animal signs have been documented may then become the foci for more intensive investigation using the methods described below.

Within a survey area, be sure to survey sites with:

- available natural plant cover
- reported animal-vehicle collisions
- previously reported occurrences of focal species
- constrained opportunities for crossing such as a stream crossing in an agricultural area
- existing structures (e.g., culverts) that may be used by wildlife

### *Survey Sample Size*

While selecting a sample size is a complex issue which requires the consideration of many variables, the following is a brief discussion of the most common considerations. For more formal treatments of sample size considerations, please see Sutherland 2006 and Appendix II, Sample Size Equations, in Elzinga et al. 2001, or the U.S.G.S. Patuxent Wildlife Research Center's Managers' Monitoring Manual treatment of sample size calculations at: <http://www.pwrc.usgs.gov/monmanual/cvs/>. As a general rule, the more data you are able to obtain, the better, as chance events play disproportionately larger roles in small samples, and if you were to extrapolate patterns from small sample sizes you increase the risk of erroneously characterizing the wildlife in a study site. Where special status species are involved, it may be useful to refer to peer-reviewed scientific or technical studies as well as published recovery plans to determine: 1) how many sampling events (dates and locations) are needed, 2) what were the most effective methods to document effects to populations, and 3) what statistical tests were employed to determine adequate sample sizes and analyze data.

For rare species, it may be a challenge to obtain sufficient sample sizes to be able to detect effects of regulatory importance (e.g., declines of 5% or lowering net reproductive rates below the replacement rate). In such cases, a formal power analysis (e.g., Cochran 1977, Toft and Shea 1983, Hatch 2003, Peery 2004, Zielinski and Stauffer 1996) can guide biologists and regulators in assessing what sample sizes and effect guidelines are practical.

You may wish to consider collaborating with a nearby academic institution as academic scientists and graduate students with experience in statistics and GIS may help to address study design, data analysis and interpretation, and related questions.

Clevenger and Waltho (2004) provide an excellent example of data analysis and interpretation:

- examined the use of crossing structures in Banff National Park, Alberta, Canada
- predicted the use of structures by 13 independent variables

- compared their observations to their predictions
- concluded that attributes of the crossing structures are most important in determining use, and that landscape variables (distance to cover) was of significance only to carnivores (mountain lions – negative correlation) and ungulates and grizzly bears (positive correlation)

Their study is recommended for its emphasis on good study design as well as for its clear and sophisticated data analysis and interpretation of results.

### **2.2.3 Survey and Detection Methods**

Choosing an appropriate detection method is as important as choosing the right place to conduct the survey. Table 3 lists the most commonly used field assessment methods, the most appropriate target group(s) of animals for each method, and the conditions under which each method is most useful. Note that these methods may be used in concert with one another to help provide more conclusive information on how or where wildlife is moving within a given area. In addition to assessing presence or absence of wildlife, these methods may also be used to derive an index of abundance, which may be necessary in cases where relative frequency of use is more important than presence/absence, as in efforts to derive population-level estimates of a project's potential effects. To derive an index of abundance, devices such as track plates must be maintained and checked for tracks or other sign through time. The index of abundance, then, would be reported as the number of tracks observed per unit of time.

It is desirable to utilize enhanced detection methods such as track plates or raked soil for medium and small-bodied animals, as in many cases other evidence of use (e.g., tracks in native soil, scat) will otherwise be easily missed. To enhance the probability of detection, it is important to establish several survey sites, and if possible and appropriate, you may want to consider using remotely-triggered cameras, as these have been found to more thoroughly and reliably document the occurrences of carnivorous mammals on a study site in Sonoma County (Hilty and Merenlender 2000). Similar comparisons in other locations, with other animals would be extremely useful to inform Caltrans biologists of the best, most reliable methods to use.

Table 2: Field assessment methods and most appropriate animal group(s) for each.

<b>Method</b>	<b>Target Group</b>	<b>When and Where Useful</b>	<b>Intended Results</b>	<b>Comments</b>
Visual (=Field) Observation, including spotlighting at night	All sizes and taxa; spotlighting more effective for medium and large nocturnal animals	All locations and circumstances; spotlighting most effective with nocturnal animals.	Presence, behavior, species identification, highway interface, habitat fragmentation	Most widely used method and is often the least expensive. At night, high-intensity hand-held spotlight often used for nocturnal animals. Enables survey of large area relatively quickly.
Track count surveys	Large & medium mammals	For areas where crossing is likely and substrates are available (e.g., mud, snow).	Presence, species identification, relative abundance	May be appropriate for smaller vertebrates if substrate is able to record tracks; inexpensive.
Track plates	Medium & small-bodied vertebrates	Most useful when crossing occurs in a constrained area (e.g., semi-vegetated under-crossing). Requires inexpensive equipment and can be replicated at several locations across a study site.	Presence, possibly species identification, relative abundance	Wood or metal surfaces upon which gypsum, ash, or other materials are placed to enhance detection of tracks. May use boxes, and be baited or unbaited.

Cover Boards	Amphibians and some reptiles	Most useful for hard-to-detect species that often seek shelter under logs or in the soil.	Presence, species identification, relative abundance	Wooden boards of various sizes that are often painted white on top and deployed at several locations to serve as cover for amphibians and some reptiles. May not be suitable in windy environments.
Raked soil	All terrestrial vertebrates	Same as for track plates with presence of appropriate soil substrate. Also used along highway rights-of-way where crossing is more dispersed.	Presence, species identification, relative abundance	Preparation of soil or provided substrate to enhance detection and/or to record number of tracks per unit of time.
Live trap	Primarily for mammals, all size classes	Useful to capture animals for marking or tagging and subsequent release	Capture individuals for tagging and/or marking to distinguish individuals in the field	Intensive, relatively time-consuming method used primarily for mammals. Traps for small-bodied mammals (e.g., Sherman, Tomahawk) easily carried and typically used in multiples over larger spatial scales (as in trapping transects), but larger traps available and most often used to capture special status species
Pitfall trap	Smallest animals	May be used anywhere that animals may be expected to occur. Inexpensive but requires daily maintenance to release trapped animals.	Presence, species identification, relative abundance, capture for possible marking	Widely used for amphibians, some reptiles, and rodents to capture individuals for positive identification. May provide estimates of relative abundance if deployed in several locations. Often used with drift fences to enhance coverage and capture success.

Hair traps	Medium & large-bodied mammals	Useful for structures that are very constrained (e.g., culvert) and identifying species, populations, and individuals; inexpensive but requires expert knowledge and testing (identification of hair samples) may be expensive.	Presence, species identification	Wide range of potential information – from species identification to material for genetic analysis. May constitute “take” for threatened and endangered species. Must check with DF&G and USF&WS prior to use to determine whether a permit is required.
Remotely-triggered camera	Medium and large-bodied mammals, special status species	Useful for constrained crossings (e.g., bridge under-crossing), for monitoring many species, is expensive, logistically challenging (e.g., theft of equipment).	Presence, species identification, relative abundance, identification of attempted or successful crossing, habitat fragmentation	Excellent documentation of species occurrence; may be combined with other methods. Equipment widely available.
GPS and Radio Tracking (collars / tagging)	Large ranging species or non accessible terrain	Useful for characterizing behavior of individuals at roadways and across landscapes roadways.	Behavior, habitat selection and use, movement patterns, delimit territory and home range boundaries	This method requires more variety of expertise, tracking technology, and mapping capabilities. Very expensive.

### *Visual (= Field) Observations*

The most widely-used method to survey for wildlife, visual or field observations may provide the most information on movements and behavior of diurnal and crepuscular animals, and may be essential to understanding animal use or avoidance of crossing structures, including accessory structures such as one-way gates and escape ramps.



Figure 9: Bear track



## Track-count Surveys

Perhaps the most widely-used method to document areas of concentrated animal movement:

- counts of animal tracks left in the substrate (soil, sand, snow) along game trails and similar landscape features
- most effective for large and medium-sized mammals (elk, deer, coyotes, and raccoons) as these species are relatively predictable in their daily and seasonal movements and utilize existing trails in order to save energy and move efficiently across the landscape
- counting and identifying the tracks in these traditional movement corridors provides information on the numbers and species of animals present (e.g., Smallwood and Fitzhugh 1995) but unless the substrate is maintained through time (i.e. refreshed to best document fresh tracks), track-count surveys will not allow an index of abundance.

## Track Plates

Track plates are surfaces made of wood or metal, open or enclosed within a box, dedicated to detecting the presence of and identifying wildlife, especially medium and smaller-bodied animals, through the enhanced detection of their tracks.

These animals are less likely than

larger, heavier animals to leave useful tracks in dry and compacted substrates. Track plates vary in size depending upon the focal species, from one foot square plates that target the smallest rodents, amphibians, and reptiles, to three feet or larger squares for larger mammals. Where species identification is difficult but essential, as in some special status species (e.g., kangaroo rats, lizards) or where bait must be used to lure animals across the plate (e.g., mustelids), the track plate is enclosed within a box (Figure 10) to concentrate movement (e.g., Hilty and Merenlender, 2000). Baited boxes are especially well-suited for carnivores generally (Hilty and Merenlender, 2000) and mustelids (weasels, fisher, marten, otters, and wolverine) in particular (Bull et al. 1992).

In most cases, the track plate is covered with soft, loose sand or soil to facilitate the leaving of easily identifiable impressions, while in others, the track plate may be covered with gypsum or similar material to aid in species identification (e.g., Ng et al. 2004). As with other methods, if the substrate inside the box is replenished and made smooth at intervals, an index of use (tracks per unit time), providing an index of abundance, may be derived.

The advantages to this method are its low cost and relative portability, while its disadvantages include the potential to fail to detect species that are present (e.g., Hilty and Merenlender, 2000) and relatively frequent maintenance interval if baits are used to lure animals on to the plates and in cases where multiple passes may obscure tracks left by previous individuals.

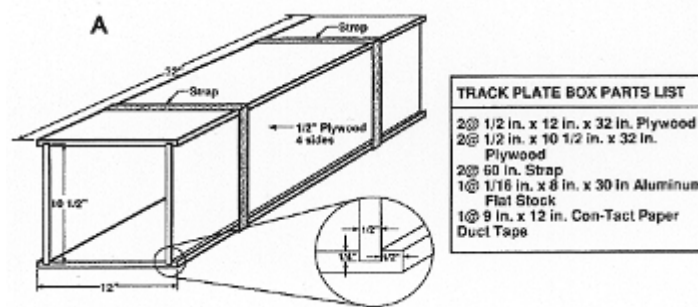


Figure 10: Schematic of a track plate box.

## *Raked Soil*

Conceptually, the use of raked soil is similar to track plates, in that a surface is prepared that will facilitate the leaving of identifiable impressions by animals passing over the raked surface; however, unlike with track plates, the use of raked soil may occur wherever it is most convenient and is not confined to surfaces provided by the biologist. With raked soil, a biologist simply enhances the ability of the substrate (soil or sand) to produce impressions left by animals crossing the substrate. Thus, a biologist selects an area of appropriate substrate (or, in some cases, provides a suitable substrate, as in Figure 11) based upon the presence of existing tracks or an expectation of animal use. This substrate is raked or otherwise prepared to enhance its ability to produce impressions and to aid in estimating the numbers, and to identify, animals that pass per unit time (until the next interval of raking). The advantages of this method are its:



*Figure 11: Installation of raked soil beds adjacent to US-93 in Montana (Montana DOT, 2006).*

- ease of use, as the only piece of equipment is the rake (unless material must initially be provided to create the substrate)
- ability to derive an index of abundance, as the region of raked soil may be checked and prepared at intervals, thus suggesting a rate of use (number of tracks) per unit of time
- ability to detect a wide range of terrestrial vertebrate species, and
- may be widely and repeatedly used, as multiple patches of raked soil may be created and maintained by a single investigator

## *Live Traps*

Live traps come in a variety of sizes, from the smallest Sherman or Tomahawk live traps to medium Havahart traps (Figure 12) to traps large enough to capture bears or elk. Most useful to capture animals for tagging or marking and subsequent release to enable identification of individuals in the field.



Small mammals are typically captured in a “set” of traps, that is, a series of traps set in a line or along some natural feature (e.g., stream bank), whereas medium and large-bodied mammals are more often captured in traps set individually. Traps must be baited with a bait type appropriate to the species of interest, and checked frequently (at least daily) as captured individuals may be easy prey for predators. Food, water, and shelter from the elements may be required.

### *Pitfall Traps*

The pitfall trap consists basically of a glass, plastic or metal container, sunk into the soil so that the mouth is level with the soil surface (Figure 13). Many ground dwelling animals fall into the trap and are unable to escape.

Dry pitfall traps used to collect reptiles, frogs or other amphibians, or rodents are generally jars, tins or drums which are buried in the ground with their lips flush with the ground's surface. The openings are covered by a slightly raised lid or stone, or other object to keep out predators and prevent trapped animals from being overheated (during the day) or drowned (when it rains). Wet pitfall traps contain a solution designed to trap, kill and preserve captured animals. Aqueous solutions used in these traps include alcohol, methylated spirits, trisodium phosphate and picric acid. Pitfall traps are used for sampling animal populations by:

- a. capturing species which are difficult to obtain by other methods
- b. estimating relative abundances and species richness or for catching particular types of animals
- c. determining movement patterns of individual animals.



Figure 13: Pitfall Trap

Derived from  
<http://pecanspiders.tamu.edu/pitfall.htm>

The pitfall trap is a method of estimating relative abundance (e.g., number of animals caught/trap/day) and can produce an index by which several areas can be compared.

To be effective, pitfall traps should be placed along known 'runs', where they are most likely to be encountered by the animals to be trapped, and may be either baited or unbaited. Some use fencing or similar structures to attempt to direct animals into the trap. Pitfall traps must be monitored frequently, as in some cases they may increase the risk of predation for captured animals (e.g., Reading 1989).

### *Hair Traps*

Hair traps are typically baited stations which include a hoop or strand of barbed wire through which animals must pass to access the bait, thereby leaving a sample of hair (Figure 14). The hair sample may be useful in confirming animal presence through examination and may give far greater amounts of information, including gender and individual identification, if analyzed genetically (Woods et al. 1999). Hair traps are not as convenient as are several other methods, require more maintenance, and the hair sample may require considerable expertise to make an accurate identification; therefore, hair traps are typically only used when trying to confirm the presence of special status

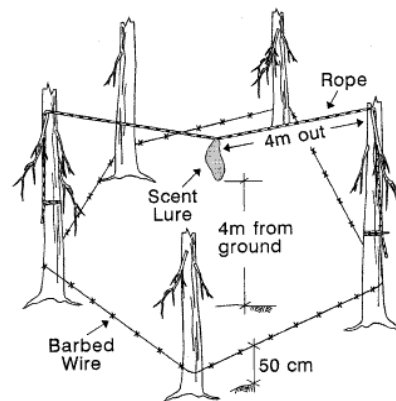


Figure 14: Barbed wire hair trap for bears.

species where other detection methods have failed to provide the desired documentation.

### *Remotely-triggered Cameras*

Remotely-triggered cameras rely on an animal's movement to cause a break in a beam of white or infrared light to take a picture. While either film or digital cameras can be used, digital cameras are more common. The cameras, typically from one to four, are usually deployed to the sides of a potential crossing in areas where crossings occur frequently. The camera placement is determined by the local conditions based upon the crossing location, the species present, and the objectives of the study, and the camera is placed at an oblique angle to the crossing to minimize the chances of detection and to reduce the potential for the camera to deter an animal from entering the crossing. In most cases, it is recommended to shoot three images in a 30 second period, one every 15 seconds, to enhance the probability of obtaining a high-quality image. Remotely-triggered cameras may be used in combination with tracks to verify species presence, behavior, and movement patterns.

Considerations in the use of remotely-triggered cameras include:

- adjust the camera's flash settings to reduce or eliminate red-eye
- confirm the duration of the delay settings (many cameras take photos after a several-second delay, which may be inappropriate for some species)
- consider the requirement of active-infrared cameras to have the beam match the sender and receiver
- make sure that all vegetation has been pruned or removed so that it will not interfere with your images
- be sure to wash your hands before setting the cameras to remove scents that may repel some species
- confirm that cattle or hikers are not using the trail or structure that you're intending to document with your camera array

The use of remotely-triggered cameras is somewhat controversial because their use has both great advantages and great disadvantages. The advantages of remotely-triggered cameras include:

- the images produced provide a permanent record of both the animal (in some cases, both the individual and the species) and of the time when it was present
- may be used to confirm the presence of a special status species, which may be important



*Figure 15: Remotely-triggered Camera.*

for regulatory reasons, in a non-invasive manner

- multiple images may provide an index of the rate of use through time and/or an index of abundance if image quality allows discrimination among individuals
- good for remote locations that cannot be frequently visited as investigators need not return to the site at frequent intervals
- good to document use of crossing structures when other methods are not appropriate

The great disadvantages of remotely-triggered cameras are their cost and need for maintenance: they are frequently vandalized or stolen, may malfunction, and are relatively more costly than are any of the other detection methods (e.g., York et al. 2001, Ng et al. 2004, Sikich and Riley, 2007).

Hilty and Merenlender (2000) provide a comparison of covered track-plates and remotely-triggered cameras deployed in Sonoma County and find that cameras are more effective than are covered track plates at detecting mammalian carnivores. Ng et al. (2004) provide more information on the use of gypsum track plates and remotely-triggered cameras, including vendor information, in assessing wildlife populations. See also York et al. (2001) for more information on remotely-triggered cameras.

Major suppliers of remotely-triggered digital systems include Trailmaster (<http://www.trailmaster.com/>), Reconix (<http://www.reconix.com/>; requires an Internet connection), and the Deer Cam 100 (widely available from on-line vendors), and several models marketed by Bushnell (and available from several on-line vendors) although many investigators fabricate their own (e.g., York et al. 2001).

### *GPS and Radio Collars*

The collection of GPS and radio-collar-based location information is expensive but may be justified in cases of special status species where precise location information is required. This method has been used to study movements of desert bighorn sheep in the Eastern Sierra Nevada (Epps et al. 2005), the San Joaquin kit fox in the San Joaquin Valley (Cypher et al. 2000), and mountain lions in Southern California ([http://www.vetmed.ucdavis.edu/whc/scp/mnt\\_lion.htm](http://www.vetmed.ucdavis.edu/whc/scp/mnt_lion.htm)). Note that some studies have shown that GPS and radio collars may cause lesions and similar injuries to collared animals (Krausman et al. 2004) and caution is advised in their use. The kinds of data generated by radio-collared animals may be most effectively analyzed in a GIS, and may provide insights into timing and frequency of movements, habitats utilized, and effects of roads on behavior and movement patterns.

### **2.2.4 Required Expertise**

For general wildlife surveys and interpretation of existing literature, a B.Sc. degree and relevant field experience is sufficient to identify vertebrate animals and design and implement wildlife surveys, although the detection of rare or secretive species depends to a large extent upon the experience of the observer. California wildlife species are generally distinctive but technicians/biologists with specialized identification skills should be included for special status species that may be difficult to identify in the field. Where special status species occur or where



the only evidence of wildlife consists of tracks or scat, a specialist may be required to consult on identification by sight, sign, and survey methodologies. Coordination with collaborating agencies on planned wildlife surveys is required when determining if you or your office staff has the appropriate expertise to complete necessary surveys. A biologist may be required to have a protocol-level survey permit to conduct surveys for federally-listed species.

For most modeling approaches, and for the mapping of wildlife observations, movement corridors, and the like, the assistance of a GIS technician is likely to be required, and depending upon the rigor of the model, a statistical or mathematical background may be required. Typically, where off-the-shelf approaches are used, a biologist with a bachelor's degree and three or equivalent years of relevant experience, working in collaboration with a GIS technician should be able to identify and map species locations. Where novel approaches are implemented to predict species occurrences or model best minimization or mitigation strategies (e.g., Clevenger et al. 2002), an advanced degree and several years of GIS and statistical training is typically expected.

## 2.2.5 Data Considerations

### *Minimum Observation Data Set*

In order to best document and communicate crossing conflicts, a minimum of set of information for each observation is essential. These minimum data are needed for data reporting, analysis, and interpretation. For reporting, all data sets must answer the who, what, when, and where questions. The core data elements must consist of (*at a minimum*):

1. observer name
2. observer contact information (phone numbers, email address)
3. Caltrans district number
4. county name
5. site location description (county, route, and post mile)
6. site location geographic coordinates (e.g., latitude/longitude)
7. species common name
8. event type (e.g., vehicle-wildlife collision, dead animal, animal crossing road)
9. time of observation
10. date of observation
11. comments (for free-form additional information)

It is worth noting that both federal government (e.g., the National Biological Information Infrastructure, NBII – <http://nbii.gov>) and professional organizations (e.g., Biodiversity Information Standards, formerly known as the Taxonomic Database Working Group, or TDWG – <http://tdwg.org>; and the National Center for Ecological Analysis and Synthesis, or NCEAS – <http://nceas.uscb.edu>) have working groups, which are somewhat coordinated, working on data

standards for species observations, and their recommendations are likely to evolve into state and federal government standards for managing biodiversity data. Data managers should track those efforts as they progress.

## ***2.3 Collaborative Approach***

Previous wildlife crossing efforts have demonstrated the value of enlisting the assistance of county and state highway maintenance and public safety (sheriff departments, Highway Patrol) professionals as well as field staff from state and federal agencies (California Department of Fish & Game, U.S. Fish & Wildlife Service, National Park Service, Natural Resources Conservation Service) and NGOs such as Audubon California and The Nature Conservancy as early as possible in the planning process to provide information on areas of concern. The work in Ventura County, cited in Section 1.6.1, is an especially good example of a highly collaborative approach taken to study and enhance road crossings across an entire, largely urban California county and illustrates the value in consulting with agencies and individuals with a wealth of field experience, and how this experience may effectively inform decisions to enhance wildlife crossings.

As approaches to studying wildlife crossing issues are not standardized, frequent, on-going consultations with agency collaborators should begin at the earliest stages of project planning and continue through post-project assessment to help to:

- identify occurrences of species of management concern within the project area
- provide local knowledge of wildlife mortality, effects on habitat connectivity, cumulative effects, and other concerns
- provide assistance in long-term maintenance and monitoring of crossing sites and structures

Where listed species are involved, remember that standards for maintaining sustainable connectivity, gene flow, and sustainable genetic structures of populations are not well established, though connectivity is an increasing concern of many regulators. Consequently, it is important to consult with U.S. Fish & Wildlife Service and California Department of Fish & Game biologists on connectivity requirements (perhaps as a part of Section 7 consultation or HCP/NCCP planning) early and often. Please consult the associated website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)) for examples of collaborative approaches to wildlife crossing assessments.

## ***2.4 Use of GIS and Models to Predict Wildlife Passage***

Field studies are often required to assess wildlife populations in a study area; however, many transportation agencies have taken a different approach in an attempt to *predict* where road-wildlife conflicts might occur. Such efforts may be particularly appropriate in areas where new highway construction is planned and where there is scant history of field investigations. Predictive efforts have taken a variety of forms, but most rely upon various modeling approaches to simulate highway crossings. Most models involve the use of Geographic Information System

(GIS) technology, and several studies have assessed the efficacy of a modeling approach (e.g., Clevenger et al. 2002, Frank et al. 2005, Gontier et al. 2006, Malo et al. 2004, and Roe et al. 2006). Model types include:

- GIS using physical environmental attributes including land cover and riparian zones (e.g., Smith 1999, Clevenger et al. 2002)
- GIS using expert opinion – the opinions of agency staff with extensive field experience in a region (e.g., Clevenger et al. 2002)
- GIS using expert literature – analyses based upon published, peer-reviewed scientific studies (e.g., Clevenger et al. 2002)
- GIS using population viability analysis (PVA; van der Grift and Pouwels 2006)
- Statistical models using existing collision data and highway attributes (e.g., Malo et al. 2004)
- GIS least cost path analysis ( see [http://www.geog.ucsb.edu/~gallo/mountain\\_lion/](http://www.geog.ucsb.edu/~gallo/mountain_lion/) for Conception Coast mountain lions and <http://www.wildlands.org/corridor/lcpcor.html> for wildlife movement through corridors in Montana)

In one of the few studies to examine which source(s) of information may provide the best predictions of actual species movement patterns, Clevenger et al. 2002 compared the results of three black bear (*Ursus americanus*) habitat models (expert literature, expert opinion, and empirical habitat data) and found that models relying upon expert literature were best at predicting black bear movements across highways; these results may be relevant to a wide range of mammals.

The development of GIS predictions of wildlife movement corridors and of potential conflicts with highway facilities depends upon a level of technical sophistication that is typically found in a dedicated GIS facility with requisite staff, hardware, software, and training. In the majority of cases, GIS analyses depend heavily upon collaboration, as the several layers (“coverages”) of information required to predict animal locations and corridors of movement are often derived from multiple projects developed by multiple agencies or researchers, and in many cases these were originally developed for other purposes (e.g., the coverage of wetlands developed by the National Wetland Inventory). GIS is an exceedingly useful tool, and may be essential both in an assessment environment where it may predict the locations of wildlife corridors, as well as in a data management environment, where it may help to accumulate, maintain, analyze, and report on wildlife observation and related geo-spatial data (e.g., road-kill reports, track plate/raked soil/remotely-triggered camera locations, etc.).

#### **2.4.1 Large-scale Prioritization of Wildlife Crossing Corridors**

The development of a strategy to evaluate wildlife corridors statewide, including a prioritization method, is currently being explored. Locations identified as having the greatest likelihoods of animal-vehicle collisions with large animals will most likely be given the highest priority in order to ensure driver safety. Locations identified as impacting endangered or threatened species will also be given high priority due to regulatory and stewardship obligations. Statewide modeling and mapping of wildlife corridors will allow the Districts to visualize the regional

goals associated with safety and connectivity improvements for regional planning and prioritization.

The text box below provides an excellent example of a statewide prioritization effort of wildlife crossings from Florida (derived from Smith 1999). In Smith's (1999) analysis, nationally- and regionally-significant conservation areas and riparian corridors received the highest priority for mitigation measures.

## *Using GIS to Prioritize Florida Wildlife Crossings*

An innovative project in Florida (Smith 1999) specifically addresses the question of how to set wildlife crossing priorities across large spatial scales. Smith's work utilized a GIS approach to prioritize road crossings by assessing their "overall ecological impact." Ecological effect was determined by ranking roads according to several categories of ecological and planning criteria. Important environmental factors for prioritizing relative effect of roads on lands with conservation value were established through a survey conducted at a Florida Department of Transportation sponsored workshop on road-related wildlife mortality. Survey respondents were asked to rank various criteria associated with prioritizing sites for the location of underpasses on Florida roads in order to alleviate road-kills and to provide ecological linkages. Eleven elements were identified and ranked as follows:

1. Chronic road-kill sites
2. Known migration/movement routes
3. Identified hot spots of focal species
4. Landscape linkages (designated greenways)
5. Presence of listed species
6. Identified strategic habitat conservation areas
7. Riparian corridors (with potential for retrofitting existing structures)
8. Core conservation areas
9. Presence of separated required ecological resources (e.g., a forest patch and ephemeral wetland breeding area for amphibians that is separated by a highway) for a species or set of species
10. Public ownership (or in public land acquisition program) vs. private lands
11. Potential to be included in proposed road improvement project

(Criterion 2 was modified to apply to wildlife movement patterns typical for this region; Criterion 8 was divided between two other criteria, public lands and strategic habitat conservation areas due to the severe overlap with other criteria; and Criterion 9 was dropped due to a lack of data for identifying the locations of these areas).

These elements were used to create a rule-based GIS model which was used to rank priorities for mitigation actions. The model assigned the highest priority to road segments within nationally- and regionally- significant conservation areas and riparian corridors. Results suggested that the keys to mitigation of impacts of highways and automobile traffic on wildlife populations and ecologically sensitive areas include programming of wildlife crossing mitigation into road projects and identification of existing structures. Several road projects and suitable existing structures were identified within highly ranked ecological interface zones and the locations of additional needs (underpasses, culverts, etc.) were identified and prioritized.



## ***2.5 Analyze and Interpret Data to Evaluate Crossing Potential***

Once you have collected all the necessary data from your surveys to round out your baseline information, it is important to evaluate your site to understand the existing crossing functionality of your project area. The following topics should be considered when making this final evaluation of your baseline.

### **2.5.1 Areas of High Connectedness**

Areas with unusually high measures of connectedness, for example areas that may be easily reached by dispersing individuals or individuals searching for mates, are consequently also areas of relatively high corridor potential, as reductions in connectedness have been shown to reduce survivorship and productivity (e.g., Smith and Hellman 2002). Such sites may be especially important for special status and rare species, as these are species that have already been demonstrated to have small populations. Additional sources of mortality, or reductions in productivity, may constitute cumulative effects as per CEQA, further reduce the abundance of these species, and lead to mitigation efforts. Areas of high connectivity may be relatively difficult to define in nature, however, as their delineation implies a level of local knowledge that is not often available. Further, assessments designed to document areas of high connectedness must be regional in nature and include both adjacent as well as more distant habitat patches upon which animals depend at different times of the year (e.g., breeding vs. wintering) or during different phases of the life cycle (e.g., adult summer range vs. juvenile dispersal corridors). Consult with agency collaborators early in the planning process to begin to identify affected areas and species.

### **2.5.2 Adjacent important conservation areas**

If a highway facility bisects adjacent areas with known conservation importance, it should receive priority in wildlife crossing planning. For example, if a highway passes through a region with a National Wildlife Refuge on one side and a State Wildlife Area, Audubon Sanctuary, or other protected area with high conservation importance on the other, it should be afforded high priority to ensure safe passage of vertebrates between the adjacent protected areas. Such adjacent areas received the highest priority ranking in Smith's (1999) GIS-based prioritization scheme in Florida (see text-box, above).

### **2.5.3 Separation of seasonally-used habitats**

When assessing the effects of a transportation facility improvement, it is important to consider life cycle needs and movements between essential, seasonally-used habitats. Many animals may move seasonally between two adjacent or nearby habitat patches along or across roads, as during migration, dispersal, or for breeding, and accommodating these movements is essential to many species' survival. For example:

- Salamanders require streams, ponds, or wetlands for breeding, typically during the winter, but spend most of their lives underground in upland areas adjacent to the

breeding areas. California tiger salamanders, a federal and state-listed species, spend most of the year in underground burrows and descend to ponds with the first heavy rains in winter (Twitty 1941). Tiger salamanders are subject to high rates of mortality when they cross roads between their burrows and breeding ponds (Twitty 1941, Barry and Shaffer 1994).

- Western pond turtles occur throughout the Central Valley of California in a variety of natural and man-made habitats and may move among sites if their preferred moist conditions deteriorate due to seasonal drought (Germano and Bury 2001).
- Toads and some frogs require wetlands or ponds for breeding but spend most of the year in adjacent upland areas; Carr and Fahrig (2001) found that around ponds in Ontario, Canada, mobile frog species are more vulnerable to road mortality than are less mobile species. Findlay and Houlahan (2000), also working in Ontario, found widespread reductions in species abundances of multiple vertebrate taxa extending 2 km outwards from wetlands and showed that road density was strongly correlated with these reductions.
- Desert bighorn sheep move among isolated mountain ranges in southeast California in the course of a year (Epps et al. 2005).
- Deer in northeast California move, often in large numbers, from summer to winter ranges in the autumn and back again in the spring (Ford 1976).

Amphibians, generally, are known to be especially vulnerable to mortality as they attempt to cross roads in their annual movements to and from their breeding locales (e.g., Twitty 1941, Barry and Shaffer 1994, Marsh et al. 2005, Langton 2002), so for example, a section of road crossed by breeding Shasta or California tiger salamanders would be a priority for crossing enhancements.

## ***2.6 Existing Connectivity Attributes/Infrastructure***

Roadways may interact with wildlife in complex ways, effectively repelling some species during some seasons, acting as movement corridors during other seasons (Clevenger et al. 2003), and attracting others indirectly through favoring the growth of preferred food plants (Boarman et al. 1997, Forman and Alexander 1998). Roadways that are straight, with good sight-lines and adequate speed control are likely to be more permeable (i.e. have fewer wildlife crossing conflicts) than curved roads with vegetation or other obstacles to sight-lines in the right-of-way. Especially high rates of safe passage are provided by bridges and viaducts spanning canyons as these allow very high levels of connectivity and little if any impediment to wildlife movement, while especially low rates of safe passage are provided by a concrete median without small openings near the ground. Concrete median barriers enhance driver safety by separating opposing lanes of traffic, but provide low permeability to wildlife (Clevenger and Kociolek 2006). Between these two extremes are culverts, which have been shown both



*Figure 16: Culvert under rural paved road in the Sierra Nevada*

within (Ng et al. 2004) and outside of California (Yanes et al. 1995, Clevenger, Chruszcz, and Gunson 2001, Krawchuk et al. 2005, Taylor and Goldingay 2003) to provide safe passage for a wide variety of organisms. Culverts, although in most cases originally installed to provide continuity for water flow beneath roadways (Figure 16), may provide especially efficient wildlife crossings if modified from their original designs. The subject of modifying existing structures for enhanced wildlife crossing is discussed in [Section 3.3](#).

## 2.7 Road-side Vegetation

Road-side vegetation interacts with wildlife crossing in complex ways (e.g., Groot Bruinderink and Hazebroek 1996, Boarman et al. 1997, Clevenger and Waltho 2005). Many herbivores, including such diverse organisms as tortoises (Boarman et al. 1997) and deer (Feldhamer et al. 1986), tend to be attracted to roads due to the increase in forage that may occur there. Most large-bodied mammals are more inclined to approach roads and to use crossing structures if vegetation is close-by, minimizing the distance to cover, but mountain lions are less likely to use crossing structures if the distance to cover is minimized (Clevenger and Waltho 2005). Thus, in crossing assessments, the habitat preferences, including sources of both food and cover, of the animal species of management interest must be carefully considered within and along the right-of-way. Include a discussion of road-side vegetation in your baseline assessment.



Figure 17: Encourage use of native plants along roadsides (Caltrans photo)

## 2.8 Traffic Characteristics

The primary characteristics of traffic, i.e. volume and speed, interact in complex ways with wildlife crossing, and studies of different animals under different conditions or in different locations have reached different conclusions. Where both traffic volume and traffic speed are high, most animals perceive the roadway as a barrier and do not attempt to cross, but decreases in traffic volume may lead some animals to perceive the roadway differently and to attempt to cross. Often, decreases in traffic volume are accompanied by increases in traffic speed, and high speeds can lead to increased rates of animal-vehicle collision.

Field assessments must include evaluations of traffic characteristics; for example, Ng et al. (2004) found that decreases in traffic volume in more rural portions of Ventura County lead to an increase in the frequency of animal highway crossing and this increase in rate of crossing lead to an increase in the rate of vehicle/wildlife collisions (i.e. the



Figure 18: Motorist warning sign

barrier effect of the roadway was less evident to local wildlife when fewer cars were on the road). Conversely, another study from Ventura County found that the greatest incidence of wildlife/vehicle collisions occurred on the busiest stretches of the most heavily-used roads (Cavallaro et al., 2005), a result consistent with that observed by Clevenger et al. (2003) on their study site in Alberta, Canada and by a study of all vertebrates by Lodé (2000) for a roadway in France. Case (1978) found that traffic volume was not significantly correlated with the number of road-killed animals, but that the number of road-killed animals was significantly correlated with vehicular speed.

Thus, the relationships between traffic characteristics and rates of vehicle/wildlife collisions are complex, and these relationships are further compounded by daily and seasonal differences in both animal movement and traffic characteristics. Thus, no overall generalizations are possible, and Department personnel should be aware of these complex relationships and are encouraged to assess the local conditions (traffic characteristics plus wildlife behavior) to best accommodate local needs.

### **2.8.1 Daily and Seasonal Rates of Crossing**

Your baseline assessment should establish patterns in diurnal and seasonal rates of wildlife crossing, as typical daily or seasonal animal movements may result in large differences in rates of crossing, and these differences may, in turn, present quite different public safety and wildlife mortality considerations. Examples of temporal effects on wildlife movements and crossing conflicts include:

- Deer undercrossings on U.S. 395 were installed due primarily to increases in rates of animal-vehicle collisions during spring and fall deer migrations (Ford 1976).
- Cavallaro et al. (2005) found a pattern of an increased frequency of vehicle-animal collisions during the late night or early morning hours in Ventura County.
- Twitty (1941) and Barry and Shaffer (1994) found that California tiger salamanders had far higher rates of mortality while crossing the road between their aestivation sites and breeding pond on the campus of Stanford University.

Field assessments should take into account and document these temporal effects.

### **2.8.2 Relative Visibility/Compromised Line of Sight**

The baseline assessment must consider potential effects due to limited visibility, as sharp curves, undulations in the road surface, and roadside vegetation reduce a driver's line-of-sight, reduce driver response time, and may increase the risk of collision should an animal appear on the roadway (Hedlund et al. 2004). These considerations may be especially important for ungulates and other large-bodied animals as they present the greatest risk to driver safety. Practitioners must compare the conditions as they currently exist in the project area to those that would exist should the project be built and assess whether the new conditions would affect the probability of crossing. The effects of road-side vegetation on animal behavior must also be considered, as

road-side vegetation has been shown to both attract and repel wildlife, depending upon the species (see Section 2.7).

## ***2.9 Identify Limitations of Baseline Data***

In some cases, there may be insufficient information to thoroughly evaluate the pre-project conditions and therefore the potential effects of a road project on wildlife populations and/or habitats. A lack of information may be due to limitations on:

- data availability – there may have been no prior field work done in the project area or the results of prior investigations are unknown or unavailable to Caltrans staff
- data collection – there may be limits on access, lack of time, seasonal effects or other constraints that prevent or reduce the effectiveness and information content of pre-project surveys that would help to establish baseline conditions
- data analysis – there may be conflicts and incompatibilities with prior data collection efforts or changes in environmental conditions that render prior data ambiguous and confound efforts to utilize existing data to set project baselines
- data interpretation – there may be ambiguities in prior or current data sets that affect your ability to interpret wildlife presence, abundance, and movement patterns evaluate crossing.

It is essential to become familiar with the species of management interest and to make sure that your field surveys are conducted during seasons when the focal species are known to be most active. Many vertebrates have periods of relatively high rates of movement, whether for dispersal, breeding, or migration. For example, if your surveys are focused on potential project effects on salamander movements, it would be essential to conduct field work during the late fall, winter, and early spring when amphibians are moving between summer (non-breeding) and winter (breeding) portions of their range. The U.S. 395 underpasses in Lassen and Sierra counties were installed to enhance habitat connectivity and increase driver safety during spring and autumn migrations of mule deer (Figure 21; Ford 1976). Know the life cycle of your focal species and schedule your field work to ensure that efforts to estimate crossing effects occur when crossings, or physical or behavioral impediments to crossing, are most likely.



### 3 Project Effect Assessment

Now that you have established your baseline understanding of wildlife crossing at landscape, regional, and local scales, it is time to conduct your assessment of what effects the proposed project may have. In this assessment, it is important to focus on effects associated with the direct, indirect, temporary, and cumulative effects on your focal species, habitat, or habitat connectivity. Based on the life-cycle needs of particular species, different project elements and design features can create different effects. In order to get a clear picture of the effects of a proposed project on wildlife crossing in your project area, consider your baseline and the change in baseline should the project take place. Compare how wildlife is currently crossing to how it might utilize the area or cross the highway facilities should the proposed project occur.

A template for reporting has been developed to help to guide you through the process of documenting this assessment and is available at the wildlife crossing website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)).

Table 4, below, provides an overview of elements to consider when conducting a wildlife crossing assessment. All projects must consider NEPA and CEQA regulations. Invariably, the steps described below arise in every project and should be included in the effect assessment. Where listed species are present, additional steps are typically required.

Table 3: Planning Process Stages and Relevant Questions to Consider

<b>Planning Process Stage</b>	<b>Relevant Questions to Consider</b>
Baseline Information	What information is available? Do I have enough information to assess wildlife crossing?
Regulatory Context	What regulations apply in this instance?
Coordination	Have I worked with the PDT to develop the proposed mitigation measure, required schedules or timelines that I am recommending in my technical document? Can my recommendation be implemented? What are the adjacent land uses? Are landowners amenable to this connectivity enhancement? Have you coordinated with the appropriate agencies, including other transportation agencies (e.g., railroads)?
Effect Analysis	What barriers to connectivity exist? What assumptions am I making? Are known effects cumulative?
Mitigation	What are the goals of this mitigation recommendation? How does my recommendation contribute to solving problems? What regulations authorize the mitigation recommendation? Does my recommendation adequately address mitigation goals? If not, are future efforts or other efforts by other entities going to address these? Are the designs structurally feasible and meet engineering standards? Have alternative mitigation measures been explored?
Maintenance/Monitoring/Adaptive Management	What are the anticipated maintenance needs of your recommendation? Have these been discussed with maintenance? What funding and resources are available to implement post-project monitoring?

### ***3.1 Potential Temporary or Construction-Related Effects***

Although temporary, project-related construction activities may effect existing or potential wildlife crossing and these effects may be sustained beyond the construction interval. Construction effects such as noise, increased vehicle traffic, removal of vegetation, increases in dust, staging of equipment, and the construction of access roads may all result in reductions in habitat, either through direct habitat alterations or due to behavioral responses by animals to construction activities (Trombulak and Frissell 2000, Forman and Deblinger 2000). As an example, Welsh and Ollivier (1998) found that highway construction reduced amphibian abundances in streams following storm events that flushed fine sediments into their study sites in Humboldt county. Thus, potential effects due to construction activities should be considered in

project planning, especially when special status species are believed to exist within a project area, and mitigation measures for anticipated impacts must be proposed.

### ***3.2 Potential Direct and Indirect Effects***

It is essential to consider how your project may effect wildlife movement within, along, and across the right-of-way, especially when special status species may be involved. Be sure to consider both the potential for roads to attract wildlife, and thereby increase its susceptibility to effects (e.g., desert tortoise attracted to vegetation growing in the right-of-way; Boarman, Sazaki, and Jennings 1997) and the potential for the road to repel wildlife, and to serve as a physical or behavioral barrier to movement (e.g., coyotes and bobcats in Ventura county; Riley et al. 2006). Your considerations should include both direct and indirect effects. Direct effects include loss of habitat and blocking of movement corridors, while indirect effects include the growth of vegetation preferred by herbivorous species, indirectly increasing their susceptibility to vehicle strikes or an increase in traffic-related noise levels, with consequent effects on birds and some mammals (Figure 19). Also consider the larger picture – evaluate how your project may interact with other existing and planned projects and habitat alterations in the region to add to effects on wildlife and result in cumulative effects as per CEQA (see Section 3.5, below). Especially consider whether you may have a “source habitat” in the project region (sensu Pulliam 1988), as these habitats may be especially important for regional population persistence. Source habitats are those with a surplus of reproductive output, from which the surplus individuals may disperse to “sink habitats” which may have a deficit of reproduction. Although difficult to document in nature, your consultations with agency and other biologists may reveal habitat areas that are known to be especially important to regional persistence of species of management importance, and effects on these habitats may have widespread deleterious consequences.

You must make a determination as to whether the project is or is not likely to effect wildlife movement by estimating pre-project rates of crossing by species of management interest and comparing these estimates to those expected given the project specifications. Where effects are expected to be substantial, you must suggest an avoidance, minimization, or compensatory mitigation strategy.

### ***3.3 Changes/Effects to Existing and Potential Wildlife Crossing***

Your project effect assessment must consider how the project might affect existing as well as potential crossing behavior. Include in your assessment potential behavioral changes in wildlife associated with proposed improvements which may result in avoidance of the highway facility, thereby reducing crossing events. Estimate the magnitude of the reduction in the rate of crossing by the species of interest, and use this estimate to assess the effects of the project on the relative permeability of the highway compared to pre-construction conditions. Be sure to consider major changes such as the addition of lanes and/or median barriers on rates of passage as well as less conspicuous changes such as the deterrence effect of added lighting and increased traffic noise, as many animals perceive noise and light as sources of disturbance and are known to be sensitive to these and similar disturbances (van der Zande, ter Keurs, and van der Weijden 1980, Garber

1995, Reijnen 1996 and 1997, Forman and Alexander 1998, Forman 2000, Bull 2001, Bjurlin and Cypher 2003). Your mitigation suggestions should address these and related impacts associated with both the anticipated infrastructure (primary effects due to road widening, etc.) and resulting (secondary effects due to increased traffic, noise volume and duration, etc.) changes.

### **3.3.1 Change in Infrastructure**

Changes to infrastructure may affect rates of wildlife passage, and the potential magnitude of these effects depends upon the: 1) type of infrastructural change, 2) species of interest, and the 3) existing rate of crossing in the project area. Infrastructural changes may present both opportunities and barriers to wildlife passage in the project region. For example, if the infrastructural changes are or include culvert modifications, the new culverts may provide an opportunity to enhance existing rates of crossing and decrease rates of vehicle-animal collisions if the new culverts are larger than the existing culverts and include wildlife ledges, fencing, and vegetation to enhance their use. In contrast, if the infrastructural changes include the addition of median barriers or guardrails, and these are to be installed in an area of known animal crossing, these may substantially increase the risk of vehicle-animal collision, inadvertently trap animals inside the right-of-way, and decrease rates of crossing, resulting in the need to mitigate these potential impacts. Similarly, if the change in infrastructure increases the number of lanes of traffic, this change, too, may be expected to increase crossing conflicts and may require mitigation measures to offset the anticipated effects.

### **3.3.2 Changes in Traffic Patterns**

You must consider how project-related changes in traffic patterns may effect wildlife crossing. This assessment should take into account both diurnal as well as seasonal changes in traffic. If the projected annual average daily traffic (ADT) or the rate of truck use is expected to increase due to the project, you must estimate the resultant effect on pre-project vs. post-project rates of wildlife crossing and vehicle-animal collisions. Similarly, if night-time traffic volumes are expected to increase compared to pre-construction volumes and this increase in traffic volume may lead to increases in rates of vehicle-animal collisions, you will need to suggest measures to mitigate for these anticipated impacts. In the case of special status species, these considerations may be essential components of estimates of mortality and population persistence.

Changes in traffic patterns may be difficult to assess, and it is generally advisable to consult with your traffic engineer on existing and project-related changes traffic volumes.

### **3.3.3 Changes in Visibility**

Your evaluation must describe any anticipated changes in visibility, especially changes in lines-of-sight, as reductions in visibility may decrease driver response times to animals on the road surface and increase the probability of a collision (Hedlund et al. 2004). Line-of-sight reductions may result from grade/elevation changes, increases in road curvature, or increases in the obscuring effects of vegetation and each of these factors must be considered for effects on driver

visibility. If you anticipate significant effects on driver visibility, you must suggest measures to mitigate for these impacts.

### 3.4 Secondary Effects

Any of the changes described in the preceding sections of the manual may affect your focal species, and you should be prepared to document and to estimate the magnitudes of the anticipated effects. In addition to the primary effects on movement, roads have been shown to have many secondary effects that may be less apparent but no less important to population viability and persistence. When considering secondary effects, consider the “road-effect zone” of Forman and Alexander (1998), that is, the area over which significant ecological effects extend outward from a road (Figure 19).

The range of secondary effects may be large, and includes:

- avoidance of highway corridors by vertebrates due to vehicular noise (van der Zande, ter Keurs, and van der Weijden 1980; Reijnen 1996 and 1997; Forman Reineking, and Hersperger 2002)
- avoidance of highway corridors by vertebrates due to reduction in vegetation (Clevenger and Waltho 2005)
- attraction to roads due to increases in preferred vegetation (Boarman, Sazaki, and Jennings 1997)
- increased rates of predation adjacent to highway infrastructure (the “predator effect”; Hartmann 2003)

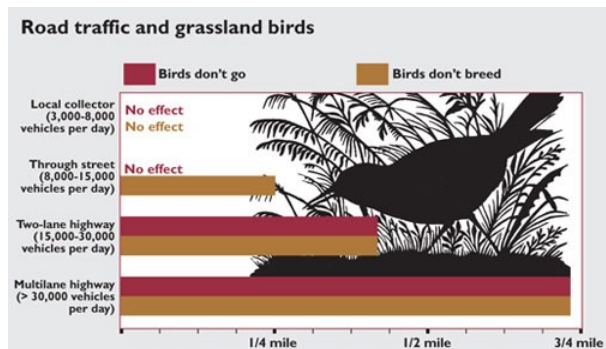


Figure 19: Ecological “road effect” zone for birds.

Derived from <http://www.harvardmagazine.com/online/050529.html>

You must be familiar with the specific habitat requirements, behavioral responses, and movement patterns related to life-cycle stages of your focal species to be able to adequately assess potential secondary effects of a highway project. Where special status species are present, you must examine potential secondary effects of the project (e.g., attraction or avoidance due to changes in vegetation) to estimate effects on the abundance and distribution of the focal species and any potential for these effects to increase mortality and reduce population persistence. Consultations with agency wildlife professionals in the area may help to identify potential significant secondary effects, and your assessment of secondary effects may also help to document cumulative effects, considered below.

### 3.5 Cumulative Effects

As part of your project effects assessment, you must consider how the potential effects of the proposed project may add to existing as well as reasonably foreseeable probable future effects on



wildlife, including wildlife crossing, in the area. Though such assessments are required under both NEPA and CEQA, it may be difficult to determine when a threshold of significant cumulative effects is exceeded (e.g., Theobald, Miller, and Hobbs 1997). For a cumulative effects assessment, you must take a regional view of existing conditions (land use, conservation areas, known or predicted wildlife corridors, areas of relatively natural vegetation) and place your project into this regional context to determine whether anticipated effects on crossing the right-of-way, changes in traffic, and other effects related to the proposed project will significantly add to existing effects on wildlife in the region. Cumulative effects analyses are essential for special status species and formally designated critical habitats, as NEPA and CEQA seek to eliminate significant effects and require that any potential effects be mitigated.

Wildlife crossing effects contribute to overall effects on species populations and habitats through a variety of mechanisms, including:

- isolating populations, with potential reproductive and genetic effects
- reduce available habitat indirectly through vehicle disturbance and road avoidance
- direct loss of habitat
- preventing essential movement (for foraging, breeding, dispersal)

The following eight steps, modified from the Caltrans Standard Environmental Reference, serve as guidelines for identifying and assessing cumulative effects:

1. Identify the species and habitats to consider in the cumulative effect analysis by gathering input from knowledgeable individuals and reliable information sources. This process is initiated during project scoping and continues throughout the NEPA/CEQA analysis.
2. Define the geographic boundary for each species to be addressed in the cumulative effect analysis.
3. Describe the current status and the historical trends of each species.
4. Identify the direct and indirect effects of the proposed project that might contribute to a cumulative effect on the identified species and/or habitats.
5. Identify the set of other current and reasonably foreseeable future actions or projects and their associated environmental effects to include in the cumulative effect analysis.
6. Assess the potential cumulative effects.
7. Report the results of the cumulative effect analysis.
8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

Your analysis of cumulative effects will need to take into account past, present, and reasonably foreseeable future actions and their effects on the species of management interest as well as the potential effects due to the proposed project. GIS may be helpful in this type of analysis by enabling you to integrate aerial photography with land use and proposed project shape files in an evaluation of cumulative effects on wildlife crossing and habitat connectivity.

## 4 Selecting Avoidance, Minimization, or Compensatory Mitigation Measures

Once a field assessment has confirmed the presence of sensitive species or habitats or concluded that a project has potential wildlife crossing effects, it is required to suggest appropriate avoidance, minimization, and/or compensatory mitigation strategies to address the impacts.

In most cases, the choice of strategy will depend upon:

- the type of project (new construction, retrofit, road resurfacing, etc.)
- integration with other project goals
- regulatory considerations (special status species, critical habitats)
- public safety
- public outcry over conspicuously high rates of mortality along well-traveled routes
- the focal species group, and
- additional site-specific considerations such as terrain, engineering feasibility, and cost

Some of these are in response to legal requirements (see Table 1), but others, notably public safety and public outcry, are matters of prudent public policy. On policy issues, be sure to consult with engineers and management.

Once you have considered the above, define the intended goals of the avoidance, minimization or compensatory mitigation actions you are going to consider. In a way similar to the baseline evaluation, ask yourself the question of what needs to be done and why. When doing so, consider if the intended result of your measures includes the following:

- reduction in animal-vehicle related mortality
- increase habitat connectivity/reduction in habitat fragmentation
- improved permeability of a crossing structure
- increased genetic exchange
- reduction in predator influence created by facility
- increased public safety

Lastly, before developing your avoidance, minimization, and mitigation measures evaluate why the Department should pursue such measures. Revisit the laws and regulations that apply to your situation to help justify and support the use of public funds for these measures.

### ***4.1 Project Types and Wildlife Crossing Considerations***

According to state and federal statutes, projects are generally required to avoid environmental effects if possible, minimize these impacts if avoidance is not possible, and compensate for what can't be avoided or minimized. Thus, the first consideration when project effects are expected is to consider alternative project designs that will avoid anticipated impacts. Where avoidance is

impractical or impossible, project modifications to minimize effects should be explored. And finally, where neither avoidance nor minimization is possible, compensate to mitigate for anticipated impacts.

The choice of mitigation action will depend upon the goals related to reduce the effects of a specific project type. For example, where the mitigation goal is to reduce mortality of amphibians crossing from breeding to summer range (e.g., due to regulatory considerations or public outcry), the best mitigation option may be to install culverts, with an associated substantial fencing system to direct animals to the culverts and prevent them from crossing the road. Where the primary goal is to restore or maintain habitat connectivity and benefit the widest range of species, the best option may be to build a large crossing structure (wildlife bridge or underpass), given cost constraints, and may be enhanced by partnering for the acquisition of conservation easements or land purchases to conserve the wildlife crossing in perpetuity.



Figure 20: Salamanders exiting culvert. Photo: FHWA Critter Crossings website

## ***4.2 Infrastructure Improvements to Wildlife Crossing***

When evaluating infrastructure alternatives to improve wildlife crossing it is important to note that one size does not fit all. Depending upon the goal(s) of your structural improvement and focal species that will be using it, different sizes, approaches, substrates, lighting, moisture, temperature, water flow, fencing mesh, and height will need to be considered.

### **4.2.1 Wildlife Bridges/Overpasses**

Wildlife bridges are vegetated structures that are designed primarily for the passage of large-bodied mammals, but they have been demonstrated to be used by all taxa and functional groups (e.g., Clevenger and Waltho, 2005).

- Typically the highest cost option, these are used mainly when wildlife/vehicle collisions are relatively frequent and result in severe injuries or fatalities, or when special status species or large-bodied mammals are involved (e.g., grizzly bears, wolves; Cavallaro et al. 2005)
- May serve as intermediate habitat for smaller-bodied organisms
- Maintain habitat connectivity
- Reduce collisions and facilitate crossing, especially when used in conjunction with vegetation and fencing to guide animals to over-crossing
- Substrate and vegetation on the overpass should match that of surrounding landscapes

- Vegetation is often used to provide a sight and sound barriers to encourage use by disturbance-shy animals
- Fencing and vegetation are used to direct animals to the overpass

#### 4.2.2 Wildlife Underpasses

Wildlife underpasses are structures that are constructed to allow safe passage of large-bodied animals. In periods of seasonal migrations, especially deer in California, the movements of animals across roadways present serious public safety conflicts. There is a series of three wildlife underpasses on U.S. 395 in Lassen and Sierra counties that were constructed between 1976-1978 to reduce deer-vehicle collisions (Ford 1976; Figure 21). As with wildlife bridges, these large structures may be primarily intended to benefit large-bodied animals, but simultaneously provide safe passage to a wide variety of small and medium-bodied animals, too, and are in most cases constructed with fencing to direct animals to and through the structure (Figure 21). The openness ratio is critical to use by the intended species, as a too-low underpass may be perceived as a tunnel, especially by deer. A large, open underpass with an openness ratio  $> 0.75$  is preferred (Cavallaro et al. 2005).



Figure 21: Wildlife Underpass, Sierra County. Photo courtesy Brian Ehler, Calif. DF&G

#### 4.2.3 Culverts

Culverts are used in both upland and riparian settings and come in a variety of sizes, from small pipes to large, pre-cast concrete boxes, but are typically galvanized steel, aluminum, PVC, or concrete pipes of various diameters.

Existing culverts were in most cases originally designed and installed to enhance drainage and thus typically benefit mostly smaller-bodied vertebrates, including both aquatic (amphibians) and terrestrial (small mammals, snakes, lizards, tortoises) species, although they have been demonstrated to benefit a variety of vertebrate species (Clevenger et al. 2001, Ng et al. 2004). Larger culverts may benefit a larger number of species including even large-bodied mammals like deer and bear (e.g., Cavallaro et al. 2005).

#### *Openness Ratio*

Some studies have found that the structure openness ratio, defined as a structure's (height x width)/length, is important for large and medium-bodied mammals (e.g., Ford 1976, Cain et al. 2003, Clevenger and Waltho 2005). As the openness ratio is a function of structure length, which corresponds to the width of the roadway, the appropriate structural dimensions will be determined by road width. A relatively large openness ratio (i.e.  $>.75$ ) may enhance a structure's use by large mammals by allowing sight through a crossing structure, as well as by providing more natural lighting conditions.



Best practices include:

- Even in riparian zones, culverts should be built or modified with dry ledges for use by water-shy organisms (Figure 22); these ledges should be constructed to be able to withstand flood events.
- Most mammals prefer to see through to habitat on the opposite side of the culvert – the culvert should not appear as a cave or burrow; the culvert openness ratio is important (see below). However, weasels and amphibians do not require such line of sight through the culvert (Clevenger et al. 2001; Dodd et al. 2004)
- Box Culverts are often deployed and documented as effective in both riparian and upland situations, especially when used in conjunction with fencing to guide (or “funnel”) animals in to the culvert (Cavallaro et al. 2005, Taylor and Goldingay 2003, Ng et al. 2004)
- Substrate in floor of culvert demonstrated to be important, and ideal substrate is believed to be that of the surrounding habitat (e.g., Dodd et al. 2004)
- Routine maintenance of existing culverts may in some cases be essential to maintain connectivity for species depending upon these culverts for safe crossing (e.g., Dodd et al. 2004). “Hanging culverts” are often created following periods of intense precipitation, and appropriate monitoring and maintenance should ensure access to and through the culvert; boulders, rip-rap or other coarse materials should not be used to maintain the aprons at the ends culverts used for passage by small-bodied animals, as rough materials may be difficult to negotiate for small bodied and hoofed animals.



Figure 22: Riparian culvert with rock ledge (derived from FHWA website)

A recent (November, 2006) publication that examines the use of culverts for fish and wildlife passage in greater detail is available from the Arizona Department of Fish & Game website (<http://www.azgfd.gov/hgis/pdfs/CulvertGuidelinesforWildlifeCrossings.pdf>).

#### 4.2.4 Fencing

Fencing is often used in conjunction with other crossing structures to exclude animals from portions of roadways where their crossing is not desired and to direct or “funnel” animals toward a desired crossing location such as a pipe, culvert, or underpass (Figures 21, 24). Exclusion fences have been used for diverse groups including amphibians, reptiles, deer, and elk (Aresco 2005, Gibbs 1998; Figure 23). Exclusion fences may, in some cases, act to trap wildlife within the right-of-way (Clevenger and Kociolek 2006), and must be



Figure 23: Desert Tortoise barrier fence (William Boarman photo)



built with one-way gates (e.g. Ford 1976; Figure 25), swing gates, or escape ramps (Figure 26) to enable animals otherwise trapped in the right-of-way to escape. To prevent small-bodied animals from entering the right-of-way through fences, fencing should be buried, or otherwise secured in the ground, and should be of a mesh size that will not trap animals in the roadway (see Figures 21, 23).

Fence design, height, and materials are important considerations, as these interact with species type to determine what kind, and how much fencing should be used in a specific setting (Table 5). The ends of fences should be located in a region that deters wildlife, such as a steep change in grade or an urban area, as this minimizes the potential for animals crossing the road to be trapped inside the right-of-way, and wherever possible, fences should only be used in conjunction with a crossing structure, as fences otherwise act as barriers to movement, with potentially serious consequences (Jaeger and Fahrig 2004).



Figure 24: One-way gate in Banff National Park, Canada

Important considerations for specific applications are described in Table 5, design specifications for desert tortoises are given in the Appendix, Section 7.2., and additional information will be provided on the associated website

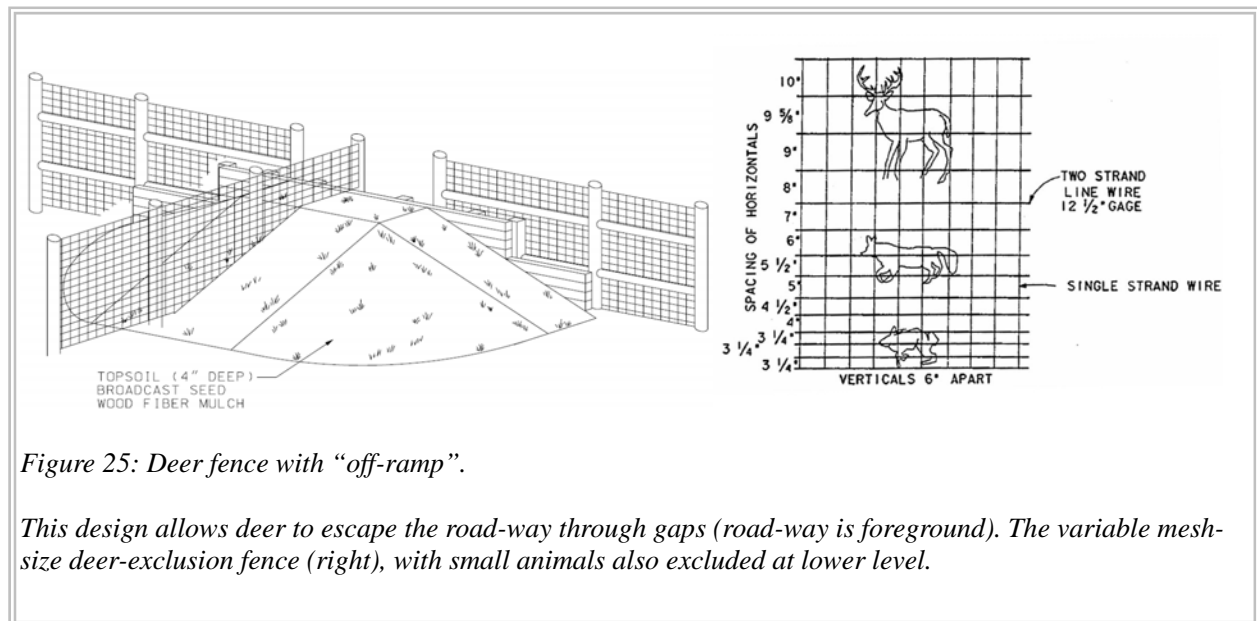


Figure 25: Deer fence with “off-ramp”.

This design allows deer to escape the road-way through gaps (road-way is foreground). The variable mesh-size deer-exclusion fence (right), with small animals also excluded at lower level.

([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)). Note, too, that in some studies, fencing has been shown to increase the rate of predation on prey that have been chased toward and trapped against fences by predators (e.g., Hartmann 2003, Little et al. 2002, Woods 1990).

Table 5: Fencing Attributes and Considerations.

<b>Functional Group</b>	<b>Height</b>	<b>Material</b>	<b>Additional Considerations</b>
Large mammals	8 – 12' (Clevenger and Waltho 2000, Putman et al. 2004, Cain et al. 2003)	Chain link (Singer and Doherty 1985, Foster and Humphrey 1995, Falk et al. 1978)	V-mesh difficult to climb may reduce maintenance costs. Should be buried if digging by coyotes likely to be a problem (Jacobson 2002). Remove trees, large bushes, etc. that could allow an animal to climb over fence. Fencing should extend on either side of the structure the entire length of the parcel boundary or just beyond a natural break in an animal's ability to traverse the landscape. Integrate one-way gates or escape ramps to prevent animals from being trapped in the right-of-way (Ford 1976).
Medium mammals	3 – 6' to prevent medium mammals from jumping or climbing over (Dodd et al. 2004, Taylor and Goldingay 2003)	Chain link (Taylor and Goldingay 2003) or wire with large gap beneath bottom strand if pronghorn passage desired.	To prevent animals from digging under fence, fencing should be buried several inches. Remove trees, large bushes, etc. that could allow an animal to climb over fence. In general, length of fencing should exceed an animal's ability to traverse the landscape and guide them to the crossing structure.
Small mammals	3 – 4' to prevent small animals from jumping or climbing over (Dodd et al. 2004)	Wire mesh (Lode 2000)	Many small mammals are fossorial; to prevent these animals from digging under fence, fencing should be buried several inches. Remove trees, large bushes, etc. that could allow an animal to climb over fence. In general, length of fencing should exceed an animal's ability to traverse the landscape and guide them to the crossing structure.
Terrestrial reptiles	1.5 – 2.5' with lipped wall or overhang to prevent animals from climbing or jumping over (Dodd et al. 2004, Puky 2003)	Impenetrable materials including galvanized tin, aluminum flashing, plastic, vinyl, concrete, or a very fine mesh.	Fencing should be buried to a depth of several inches to eliminate gaps that may be caused by animals digging. In general, length of fencing should exceed an animal's ability to traverse the landscape and guide them to the crossing structure. Some snakes and treefrogs have been observed climbing vegetation along fencing (Dodd et al. 2004), thus maintenance must include regular removal of vegetation near fencing.
Amphibians and aquatic reptiles	1.5 – 2.5' with lipped wall or overhang to prevent animals from climbing or jumping over (Dodd et al. 2004)	Impenetrable materials including galvanized tin, aluminum flashing, plastic, vinyl, concrete, very fine mesh.	Regular maintenance essential for use, as substrate has been shown to affect use by amphibians (Jackson in Evink et al. 1996). Some snakes and treefrogs have been observed climbing vegetation along fencing (Dodd et al. 2004), thus maintenance must include removal of vegetation near fencing.

#### 4.2.5 Median Barriers

Median barriers are nearly ubiquitous across the landscape and are commonly employed to reduce vehicle/vehicle collisions. Perforated median barriers have been deployed to enable passage by small animals, but nearly nothing is known about their efficacy in facilitating wildlife passage, reducing wildlife mortality, or reducing wildlife/vehicle conflicts. Clevenger and Kociolek (2006) recently conducted a review of median barriers, including an exhaustive literature review; this report is essential reading for Caltrans wildlife crossing design staff. Clevenger and Kociolek (2006) note that: “there is a glaring lack of information about how the ubiquitous median barriers on our roadways impact wildlife.....even the most basic or cursory guidelines to help transportation agencies when working on median barrier projects do not exist.” A good recent study showing the effectiveness of a barrier wall and culverts in reducing mortality of vertebrates in Florida is provided by Dodd et al. (2004), which found that the combination barrier wall/culvert system reduced mortality of vertebrates crossing a highway by 65-93% vs. pre-barrier conditions.



Figure 26: Median Barrier with gap. Caltrans photo.

Recently, Jersey-type and similar median barriers have been deployed with gaps between barrier segments (Figure 25) with the belief that the gaps between segments would permit safe passage of organisms that might otherwise be trapped on the road surface. However, the efficacy of median barriers with gaps has yet to be demonstrated in field situations (Clevenger and Kociolek 2006). Medians with “scuppers”, small, semi-circular openings designed to permit passage by small and medium-bodied mammals, have been deployed near San Luis Obispo, but their efficacy has yet to be demonstrated (Clevenger and Kociolek 2006).

#### 4.2.6 Signs

Signs are used extensively to inform motorists of regions where the danger of wildlife collisions is high. However, despite their widespread use, the effectiveness of signs in reducing collisions has been incompletely studied and is not well known (Transportation Research Board 2002).

- Some work has suggested that signs may be generally ineffective at reducing vehicle collisions with ungulates (reviewed by Groot Bruinderink and Hazebroek, 1996) except in specific cases, such as during well-defined seasonal migrations (Sullivan et al. 2004)
- Sign effectiveness has been shown to decrease



Figure 27: Wildlife Warning Sign (derived from <http://www.betterroads.com>)

with time, and most studies suggest that to remain effective at reducing motorist speeds and reducing animal-vehicle collisions, signs ought to be used seasonally and/or temporarily (e.g., Sullivan et al. 2004)

- Signs with additional warning mechanisms such as flashing lights, or words deployed seasonally, may be relatively more effective, as many signs are ignored by motorists (Carr et al. 2003, Hardy et al. 2006; Figure 26).
- Signs may be especially appropriate in situations where other crossing measures are impractical, such as in marshy areas or where traffic volumes are low (Carr et al. 2003). In such situations, signs designed to reduce vehicular speed through known wildlife crossing areas may help to reduce rates of collision.

#### **4.2.7 Lighting**

Lighting, especially when used in conjunction with fencing and signage, has been shown to be effective in reducing collisions with large mammals (Reed and Woodard 1981, Maine DOT 2001) by increasing driver visibility and reaction time, especially at night when many large animals are most active (Reed and Woodard 1981), and by reducing animal crossing by those animals that avoid lighted areas. Conversely, lighting components of a project may be evaluated to reduce glare in areas important for wildlife crossing where safe passage is ensured.

The use of lighting is, however, often limited to areas with a nearby power source, but has generally been found to be a cost effective solution to vehicle-animal collisions, especially in urban and suburban regions with high collision rates.

#### **4.2.8 Reflectors**

Reflectors, typically round plastic devices deployed on top of posts that reflect the lights of on-coming traffic at night, have been used in attempts to prevent deer from entering highway rights-of-way, but these devices have generally been found ineffective (D'Angelo et al. 2007) and their use to enhance wildlife crossing is not encouraged.

#### **4.2.9 Speed Bumps**

Speed bumps may be used to reduce vehicle speed and potential for vehicle/animal conflict in local streets, especially where the existing speed limits are relatively low, visibility is limited by a curve in the road or adjacent concealing vegetation, and where surrounding habitat increases the risk of collision (Carr et al. 2003). This is probably not a plausible measure for most highway systems but has been used in some regions with high rates of animal-vehicle collisions to get drivers' attention by creating noise and help to get drivers to slow down.

#### **4.2.10 Vegetation**

Vegetation must be carefully considered when designing mitigation structures, as vegetation may enhance or reduce the effectiveness of crossing structures by attracting or repelling species of management interest. Whenever possible, it is preferable to use native plants, as these, although

potentially more costly at the outset, may save money in the long term due to lower maintenance requirements, better establishment, and suppression of weed species (White and Ernst 2003). Exotic invasive species pose a serious threat to native species of plants and animals, and as many invasive species are found in association with roadsides, the responses of plants to mitigation and maintenance activities needs to be documented. The Federal Highway Administration maintains a website with much useful information on roads and invasive species at: <http://www.tfhr.gov/pubrds/marapr00/invasiv1.htm>.

The design for many wildlife overpasses and underpasses includes the removal of vegetation from wide strips on both sides of the road near to the crossing to discourage animal use of the road while vegetation is left in an area leading to the overpass or underpass. This design is intended to encourage wildlife use the overpass or underpass and these efforts to direct animal movements are often reinforced by fencing.

#### **4.2.11 Animal Detection Systems – Advanced Technology**

Although primarily intended to reduce the frequency of vehicle/animal collisions, the utilization of emerging technologies seeks to provide a new method to enhance the crossing of highways by large-bodied mammals. The current state of the art technology was comprehensively reviewed in the recent (08/2006) report, “Animal Vehicle Crash Mitigation Using Advanced Technology” (available at [http://www.oregon.gov/ODOT/TD/TP\\_RES/docs/Reports/AnimalVehicle.pdf](http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/AnimalVehicle.pdf)).

Two systems were chosen for evaluation. One system deployed in Yellowstone National Park, intended primarily for elk, the other in Pennsylvania intended primarily for deer.

The Yellowstone system consisted of a microwave signal “break-the-beam” system. While it performed well, it did not detect all of the elk that approached the road due to “blind spots” that may or may not be remedied in other installations. It also did not detect most medium and small sized mammals. This system was poorly accepted by motorists due to its intrusive design, and if deployed, especially in scenic areas, will need to be redesigned to “blend in” more with the surrounding landscape.

The Pennsylvania system was comprised of a microwave signal “area-coverage” system. It failed to detect humans as models for deer movement and was removed; thus, it contributes little to our knowledge of advanced systems for animal detection.

Further study of these and similar systems is needed before any conclusions can be reached regarding their effectiveness in reducing vehicle-animal conflicts.

#### **4.2.12 Escape Ramps/One-way Gates/Median Barrier Gaps**

Occasionally, despite the best prevention efforts, animals find their way on to roadways. It is essential to plan for such situations and to include escape ramps (Figure 24), one-way gates (e.g., Ford 1976 for deer underpasses in Lassen and Sierra Counties), gaps in median barriers (Figure 25), or similar structures to enable animals to get out of the right-of-way and to return to adjacent habitats.



## ***4.3 Modifying Existing Infrastructure to Enhance Wildlife Crossing***

In many cases, it may be possible to increase permeability, reconnect fragmented habitats, and increase public safety by modifying existing infrastructure. Such modifications may be possible for a fraction of the cost of providing new structures and may help to meet wildlife crossing goals.

### **4.3.1 Bridges and Overpasses**

The slopes beneath bridges and overpasses, even in suburban areas, are often used for movement between habitat patches by many species of wildlife. Bridges and overpasses, although not originally designed to facilitate animal movement, may be modified to permit safe passage by:

- modifying the slope beneath the bridge or overpass to allow easier movement
- providing a slope material that more closely matches surrounding natural substrates
- adding a bench or similar “wildlife path” to facilitate movement
- installing fencing to direct animals to the slope and to prevent their movement on to the road surface

An example is the Bocca/Floristan Upgrade and Bridge Replacement in Nevada County. Here, observations have confirmed use by deer of the slope under the bridge so a bench was provided above the rip-rap to enhance wildlife movement. Additional examples are provided on the wildlife crossing website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)).

### **4.3.2 Culverts**

In many cases, culverts have been installed to convey water under a roadway rather than to enhance wildlife movement; however, if existing culverts are large enough, they may allow safe passage of a variety of small and medium-bodied mammals from amphibians to coyotes (e.g., Yanes et al. 1995; Clevenger and Waltho 1999, Clevenger et al. 2001, Krawchuk et al. 2005, Ng et al. 2004, Taylor and Goldingay 2003). Providing appropriate substrate leading up to a culvert can enhance the possibility of its use: Figure 27 shows an example from San Bernardino County where small gravel was used to fill in the spaces in a rip-rap bed leading up to a series of culverts; these culverts were confirmed to allow passage of desert tortoises after the gravel was added. Adding ledges to culverts (Figure 22) has been shown to encourage many terrestrial species including coyotes, other small and medium-bodied mammals and reptiles to use culverts for crossing beneath roads. Maintenance of the entrances of culverts has been shown to greatly influence their rates of use (e.g., Yanes et al. 1995), as periods of high



*Figure 28: Culverts under I-15, San Bernardino County (Caltrans photo)*

precipitation can lead to scouring and “hanging culverts” which are inaccessible to animals. Culverts may also become clogged with sediment and may need to be cleaned periodically. Lastly, vegetation may grow up to obscure culvert entrances and must be maintained in an appropriate condition to ensure culvert use (Clevenger et al. 2001).

### 4.3.3 Median Barriers

Median barriers come in a variety of designs and materials and are used to enhance public safety by separating opposing lanes of traffic. However, median barriers also affect wildlife and these effects were comprehensively documented in a recent (October, 2006) Caltrans-supported report by Clevenger and Kociolek. Concrete “Jersey-style” barriers are the most common style in the U.S. and recently, “Jersey-style” median barriers with “scuppers”, or small openings on the bottom, have been installed with the intent of allowing passage beneath the barrier by smaller-bodied organisms; however, the efficacy of these openings in reducing mortality and increasing safe wildlife passage has yet to be demonstrated (Clevenger and Kociolek 2006). Jersey-style concrete barriers with gaps (Figure 25) may permit animals otherwise trapped on the right-of-way to escape and to pass safely across a road surface.



Figure 29: State Hwy. 163 median barrier.

Galvanized steel rails and cables are permeable to small and medium-sized vertebrates, but may impede highway crossing by large-bodied vertebrates (Clevenger and Kociolek 2006), and cables present risks to motorists. Because of the potential for trapping animals near traffic, separating young from their parents, and impeding or preventing passage of animals between habitats, median barriers often present wildlife crossing conflicts and modifications to original designs (e.g., scuppers, gaps, and one-way gates) may help to ameliorate some of these conflicts.

Table 6 summarizes some of the more common median barrier designs and ranks their potential for permeability to wildlife functional groups (after Clevenger and Kociolek 2006).

Table 6: Potential relative permeability of median barrier types to wildlife functional groups.

Median Barrier Type	Wildlife Functional Group				
	1	2	3	4	5
Concrete	Red	Red	Yellow	Green	Green
Ontario Tall Wall	Red	Red	Red	Red	Red
Concrete with gaps	Yellow	Yellow	Yellow	Green	Green
Concrete with scuppers	Yellow	Yellow	Yellow	Green	Green
Concrete with gaps and scuppers	Yellow	Yellow	Yellow	Green	Green
Metal beam	Green	Green	Green	Green	Green
Cable	Green	Green	Green	Green	Green
Centerline rumble strips	Green	Green	Green	Green	Green
Vegetated Median	Green	Green	Green	Green	Green
<b>Legend:</b> <b>Red:</b> no to low permeability, <b>yellow:</b> moderate permeability, <b>green:</b> high permeability. 1 = mice, shrews, salamanders, frogs, snakes; group 2 = rats, squirrels, weasels, turtles, young waterfowl, upland birds; group 3 = marten, fisher, mink, badger, skunk, fox, opossum; group 4 = coyote, bobcat, otter, raccoon; group 5 = bear, elk, deer, pronghorn, bighorn sheep, mountain lion.					

## 4.4 Choosing a Wildlife Crossing Improvement Measure

Potential strategies for improvements may include:

1. changing traffic patterns and trying to change driver behavior
2. modifying/controlling wildlife access to road-ways
3. providing infrastructure that allows wildlife passage over or under the roadway

### 4.4.1 Which Structure or Action?

In cases where the recommendation is to build structures specifically to enhance wildlife crossing, you will need to thoroughly justify your recommendation due to its cost. Your justification should be based upon effects, laws, regulations, and the ability of the recommendation to reduce effects. In some cases, retrofitting an existing bridge, underpass, or culvert will be less expensive than building a new structure and may be a viable alternative to new construction. Table 7 links structures to project goals and Table 8 links design specifications to focal animal groups; together they may help to justify a particular recommendation, but where possible it is best to cite a case study where your recommended action has had demonstrated benefits.

While controlling traffic speed is often the least expensive way to reduce rates of vehicle-wildlife collisions, improve driver safety, and protect wildlife, it is difficult to implement in many situations and may rely upon effective driver education. Where possible, traffic speeds may be reduced by:

1. reducing speed limits combined with enforcement
2. signs with or without accessories (flashing/blinking lights, warning messages)
3. signs and/or lights triggered by wildlife movement
4. rumble strips and other road-bed structures (e.g., Carr et al. 2003)

Controlling traffic speed through the use of signs may be the least effective of these alternatives, as several studies have shown that signs have little effect on driver behavior except immediately after installation (e.g., Ford 1976, Sullivan et al. 2004).

**Table 7:** Mitigation goals and wildlife size group-appropriate crossing structures.

		<b>Wildlife bridge / underpass</b>	<b>Large culverts</b>	<b>Small culvert or tunnel</b>	<b>Traffic calming &amp; education</b>
<b>Mitigation goals</b>	Retain/restore connectivity	X	X		X
	Reduce traffic accidents	X	X		X
	Connect habitats for protected species	X	X	X	
<b>Species size-group</b>	Small			X	X
	Medium	X	X		X
	Large	X	X		X

#### 4.4.2 How to Size a Structure

Generally, larger structures will provide greater opportunity for a larger number of wildlife species to safely cross over or under a roadway (Cavallaro et al. 2005; Clevenger and Waltho 2005). Vegetated overpasses (“wildlife bridges”) provide connectivity across a highway for the majority of mammals, terrestrial birds, and some reptiles. Similarly, wildlife underpasses provide safe crossing for a large number of vertebrates, although the openness ratio (see text box,

below) of the underpass must be large to ensure passage by deer and other large vertebrates (Ford 1976). Culverts with appropriate substrate provide connectivity to most small and medium-sized mammals, reptiles, amphibians, and occasionally some large mammals (Cavallaro et al. 2005). In all cases, the structure's openness ratio may be a critical consideration (see text box, below), as several studies have shown that the “tunnel effect”, i.e. the appearance of a tunnel rather than a movement corridor, diminishes the use of many structures (e.g., Ford 1976). Tables 7 and 8 and Section 3.4 summarize size considerations for wildlife structures.

#### **4.4.3 Adjacent Functions and Uses**

To make most effective use of crossing enhancement opportunities and actions, and to justify the expenditure of taxpayer dollars, it is essential to consider current and expected land uses and ownership surrounding the project area. In order to make mitigation actions more effective, they should be consistent with local planning regulations. CEQA and NEPA require Environmental Impact documents (EIRs and EISs) to document that feasible alternatives and mitigation measures are consistent with local land uses, planning documents, and regulations. In addition to the planning documents, these functions and uses may be known from knowledge of the area, or discovered through simple mapping of the area of concern. Facilitated crossing using structures or focused traffic calming should be connected to natural or semi-natural corridors that provide conduits to larger areas of natural habitat.

#### **4.4.4 Spacing of Structures**

The spacing of structures scales with animal size: smaller species require smaller but more closely-spaced structures with smaller openness ratios while larger species require larger, more widely-spaced structures (Clevenger and Waltho 2005) with larger openness ratios. Accommodating a diversity of species requires a diversity of crossing structures (e.g., over and under-passes, pipe and box culverts; Clevenger and Waltho 2005). While some studies have found that crossing *location* is the most important determinant of use (Yanes et al. 1995; Ng et al. 2004), others have emphasized structure *design* as being more important (Cain et al. 2003). A crossing plan should consider both local and regional wildlife movement needs, and take both habitat characteristics and focal species group into consideration (Clevenger and Waltho 2005) to benefit the largest number of species. Spacing of crossing location improvements may also depend on the topography and the appropriate site locations for improvements. Spacing of structures should help accomplish the goals you have considered to address the effects associated with your project and the context of your location.

### ***4.5 Design Specifications***

There are currently no standard design specifications for wildlife crossing structures adopted by the Department; however there are several examples of structures that have been utilized for different species and environmental circumstances. Since crossing locations can be expected to differ substantially from one another in terms of topography, facility type, focal species, grade, and other considerations, design specifications must be location, species, and goal-appropriate. The most appropriate design specification in any given situation will result from coordination



with your PDT, knowledge of what has worked elsewhere in similar circumstances, and consultations with local experts. Table 8 summarizes the preferred design specifications for the three functional species groups.

In general, the sizes of the animals in the focal group correlate directly with the size of the most appropriate crossing structure, e.g., large-bodied animals require large, open crossing structures, medium-sized animals will utilize both the larger structures required by larger animals as well as smaller culverts, and small-bodied animals will utilize the smallest culverts but terrestrial forms require ledges or other dry substrate if the culvert is installed in a drainage. Small animals may perceive the largest crossing structures as appropriate habitat and live permanently thereon (Clevenger and Waltho 2005).

The USDA Forest Service has a Website with a small library of design drawings for constructed crossings ([http://www.fs.fed.us/rm/RRR/Technologies/Wildlife\\_Crossings.html](http://www.fs.fed.us/rm/RRR/Technologies/Wildlife_Crossings.html)). The “Wildlife Crossing Toolkit” also has some useful descriptive drawings (<http://www.wildlifecrossings.info/summary.htm>). Additional design specifications are available in recent reports from work in Ventura County (Cavallaro et al. 2005) and are reviewed comprehensively by Forman and Alexander (1998). Some case studies of crossing improvements have also been identified on FHWA’s “Keeping it Simple” website at <http://www.fhwa.dot.gov/environment/wildlifeprotection/>.

Table 8: Preferred design specifications appropriate for functional species groups.

Species Group	Preferred Design Specifications
Large mammals (deer, elk, bear, mountain lion)	large, open crossing structures with an openness ratio of at least 0.75, are easily accessible, and incorporate fencing (“funneling”) to direct animals to the crossing structures and to prevent animals from entering the highway (Cavallaro et al. 2005); one-way gates or escape ramps must be incorporated to enable trapped animals to escape. Clear visibility through to vegetation at the other end of the crossing essential.
Medium-sized mammals (fox, coyote, skunk, rabbit, raccoon, opossum)	box or pipe culverts (Clevenger et al. 2003) that are at least 3’ high, have an openness ratio of at least 0.4, are easily accessible, incorporate funneling to prevent animals from entering the highway and direct them to the crossing structure (Cavallaro et al. 2005). Clear visibility through to vegetation at the other end of the crossing essential. Ledges needed in modified, existing culverts for drainage.
Small mammals (squirrels, rats, voles, mice), reptiles, and amphibians	a mix of small pipes, box culverts, and pipe culverts that are 1’ or more high, provide natural vegetation of low stature near the openings to provide cover, are easily accessible, and incorporate funneling to prevent animals from entering the highway and to direct them to the crossing structure (Cavallaro et al. 2005). Should be closely spaced to accommodate movements of small bodied animals.

## 4.6 Identify Maintenance Needs

Existing and newly-installed wildlife crossing structures must be periodically maintained to continue to provide safe passage as, in the absence of routine maintenance, these structures may be avoided or become unusable by the species that they were intended to benefit (e.g., Dodd

2004). Although crossing structures may become ineffective without post-project monitoring and maintenance, reliable funding has been a historical problem. As shown in the decision trees (Figures 2 and 3), it is essential to identify the requirements for monitoring (see also Section 3.8) and to monitor and maintain the crossing site and to ensure that long-term maintenance resources are provided in the project budget.

Maintenance staff should be involved in the wildlife crossings planning to provide input on design considerations and their effects on maintenance needs as well as in post-project assessments to consult on any maintenance concerns that may have arisen. It cannot be assumed that crossing structures, once in place, will remain effective without periodic maintenance, and maintenance crews must be informed of the procedures necessary to keep crossing structures accessible and to function as intended.

Maintenance activities may include:

- clearing of vegetation and maintenance of aprons of culverts. If scouring following storms prevents access, the scoured rocks or soil should be replaced with like materials to eliminate “hanging culverts” and not replaced with boulders, rip-rap or other substrates unsuited to the animal species the culvert was intended to benefit
- fences should be cleared of accumulated debris and repaired if they are torn or displaced from their original positions
- vegetated over and under-crossings should be kept free of weeds that inhibit passage of all but the largest animals while native plants are encouraged to provide cover or forage

## 4.7 Costs

The costs associated with mitigating wildlife/vehicle conflicts can be substantial and these costs increase through time. The materials costs of several types of structures for enhancing wildlife passage for a variety of mammals are estimated in Table 9 and were derived from the 2003 Caltrans Contract Cost Data book, available at:

<http://www.dot.ca.gov/hq/esc/oe/awards/2003CCDB/2003ccdb.pdf>.

Table 9: Crossing Structure Materials Costs

<b>Crossing Structure Type</b>	<b>Approximate Range of Cost(s)</b>
Box culvert, Class 1 concrete	\$565-\$1,380/cubic meter
Box culvert, Class 2 concrete	\$620-\$3,630/cubic meter
12” alternative pipe culvert	\$113/linear foot
18” alternative pipe culvert	\$192/linear foot
1050 mm alternative pipe culvert	\$1,250/meter

These costs are variable depending upon site and application-specific characteristics, and include material costs alone; installation and maintenance costs are additional. It is suggested that collaboration with your design engineer and project manager are essential in understanding the design and costs associated with proposed structural improvements or installation. Caltrans intends to compile cost data on a per project basis as projects are undertaken and to post available data on the website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)) that accompanies this manual.

## ***4.8 Post-project Monitoring and Adaptive Management***

It is essential to incorporate post-project monitoring and adaptive management into project planning and to assess the effectiveness of mitigation measures (Clevenger 2005; Dodd et al. 2004). Such monitoring and assessment actions are of great benefit to local, regional, and statewide transportation professionals, as knowledge of what does and does not work in particular circumstances will lead to better mitigation outcomes and save time, effort, and money. Projects should be monitored for several years, as field research has shown that there may be a lag period after project completion and effects on species populations (Findlay and Houlihan 1997, Findlay and Bourdages 2000). Long-term, post-project monitoring is also essential to accurately assess the results of installing crossing enhancements, as in many cases there is a period, often lasting up to 3 years for large-bodied mammals, of "structure shyness", that is, an active avoidance of new structures by the very animals that they are designed to benefit (Clevenger and Waltho 2003, Wildlife Crossings Toolkit 2003, Hardy et al. 2003; Huijser et al. 2006). Post-project assessments help to inform not only Caltrans, but also an international audience of biologists, planners, and engineers of effective design types and actions (Carr et al. 2003) and case study examples should be entered into the wildlife crossing website ([http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/)). The best projects will incorporate both pre-project assessments and post-project monitoring, to quantify and document mitigation effectiveness (e.g., Trombulak and Frissell 2000; Dodd et al. 2004).

Similarly, if post-project monitoring suggests that modifications to the original design will result in greater use, these modifications should be implemented, documented, and made widely known to Caltrans staff. For example, if an original project plan called for the installation of a culvert with associated fencing but the fencing was subsequently found to be inappropriate or ineffective, modified, and the modified design was shown to be more effective, this provides a valuable example of adaptive management. Such adaptive management actions may be especially helpful to improve mitigation performance elsewhere, and the results of such actions should be widely disseminated among Department staff, including by entering a case study record into the wildlife crossing website.

### *Mitigation Effectiveness Criteria*

- Comparison of pre- to post-project total number of crossings
- Comparison of pre- to post-project crossing rates for target species
- Comparison of pre- to post-project repel rates
- Comparison of pre- to post-project rates of percentage use
- Ratio of observed to predicted use of structures
- Post-project reduction in number of animal-vehicle collisions

P. Cramer, 2007; personal communication

Coordination with regulatory agencies is an essential component of monitoring and reporting requirements and may require partnering with adjacent landowners or land managers.

A range of options to assess project effectiveness has been described, but few projects have incorporated both pre-project assessments and post-project monitoring; three projects illustrate excellent design:

1. The SR 23 widening project in Ventura County utilized information from the Ng et al. (2004) study of mountain lion crossings in Southern California, which used a combination of remotely triggered cameras and gypsum track stations to monitor three culverts prior to, during, and after construction. This on-going study will evaluate of the effectiveness of mitigation and maintenance measures (improved fencing, culvert cleaning); thus, this project represents a good template for similar projects because of the thoroughness of the pre- and post-project monitoring and assessment (Sikich and Riley, 2007).
2. An assessment of a barrier wall and culvert project in Paynes Prairie State Preserve, Florida (Dodd et al. 2004) calculated rates of mortality along a busy highway for one year prior to project construction and compared these to the rates one year after the barrier wall and culverts were installed to quantitatively assess the effectiveness of the barrier wall and culvert system at reducing mortality rates.
3. Clevenger and Waltho (2005) studied primarily large-bodied mammals (carnivores and their prey) in Banff National Park, Canada and found that species' response to crossing structures was not uniform but was instead species-specific, and concluded that where the goal is to benefit a diverse array of species, a similarly diverse array (sizes, types) of crossing structures is needed.

Hardy et al. (2003) provide a generalized overview of the methodological issues involved in evaluating the effectiveness of mitigation strategies. According to the Hardy et al. (2003) approach, the seven steps to plan an effective evaluation effort are to:

1. Identify evaluation questions and definitions of effectiveness
2. Identify effectiveness criteria (see text box, above)
3. Design monitoring program
4. Pilot methods, adjust to meet goals, project budgets
5. Collect data for evaluation
6. Analyze data to determine effectiveness
7. Report results

It is also essential to document and report negative results, that is, findings that a project was not effective at meeting its objectives, and to try to understand the factors responsible for the lack of effectiveness. Documenting and disseminating the results of actions allows all to gain from local experience, and knowledge gained from one project may serve to increase the likelihood of success in the future.





## 5 Keeping Informed

The field of road ecology is advancing rapidly, with results of research and mitigation actions being published at ever-increasing rates. Similarly, new materials and techniques are being developed and field-tested which may provide a greater range of opportunities for enhancing wildlife crossing while protecting public safety. Thus, it is essential for Department staff to keep informed of new developments, and the following section provides a guide to primarily web-based resources that are updated continually and have been found to be particularly useful.

### 5.1 Internet Resources

The science of road ecology is new and developing rapidly. The internet may serve as the best resource to enable Caltrans staff to stay abreast of research and developments. Below is provided a listing of some of the internet resources that may be especially helpful.

#### 5.1.1 Caltrans Resources

- Caltrans Standard Environmental Reference (SER), Chapter 14, Biological Resources, <http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/ch14bio.htm#14decisiontree>.
- EnviroNet (Caltrans intranet site) – [http://pd.dot.ca.gov/env/bio/html/wildlife/crossing\\_index.htm](http://pd.dot.ca.gov/env/bio/html/wildlife/crossing_index.htm)
- Caltrans Intranet “Connectivity and Crossings” webpage [http://pd.dot.ca.gov/env/bio/html/wildlife/crossing\\_index.htm](http://pd.dot.ca.gov/env/bio/html/wildlife/crossing_index.htm)
- Caltrans Wildlife Crossings Collaboration Website. The Caltrans-supported website, [http://www.dot.ca.gov/hq/env/bio/wildlife\\_crossings/](http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/), provides a continuously updated and searchable electronic version of this manual, including a searchable bibliography, plus additional resources such as case studies and process decision trees.

#### 5.1.2 Federal Highway Administration Resources

- Federal Highway Administration (FHWA)
  - Keeping It Simple, part of the Critter Crossings Web site (<http://www.fhwa.dot.gov/environment/wildlifeprotection/index.cfm>)
  - federal wildlife legislation affecting transportation ([http://www.fhwa.dot.gov/environment/env\\_sum.htm](http://www.fhwa.dot.gov/environment/env_sum.htm))

#### 5.1.3 Academic Institution Resources

- U.C. Davis Road Ecology Center
  - the Road Ecology Center (<http://roadecology.ucdavis.edu/>) at the University of California, Davis has many resources, including scientific reports and upcoming workshop announcements
- The Wildlife, Fisheries, and Transportation Research Database hosted by the Center for

Transportation and the Environment at North Carolina State University in Raleigh (<http://www.itre.ncsu.edu/CTE/gateway/wildlife.htm>)

- contains links to primary literature, agency reports, and ICOET proceedings and is searchable by several criteria

#### **5.1.4 International Conference on Ecology and Transportation (ICOET)**

- The ICOET website (<http://www.icoet.net/>) contains announcements and links to PDF files to all conference proceedings

#### **5.1.5 Other Wildlife Crossings-related Websites**

- Wildlife and Roads Web Site
  - the Wildlife and Roads web site (<http://www.wildlifeandroads.org/>) is specifically oriented toward the evaluation of the use and effectiveness of wildlife crossings and should be consulted for additional information, current literature, and research results
- The Infra Eco Network Europe web site (<http://www.iene.info/>)
  - contains announcements, member information, and a database searchable by literature, measures (mitigation types), metadata, or projects
  - primarily European focus
- The deercrash.com web site (<http://deercrash.com/>) of the Deer-Vehicle Crash Clearinghouse at the Texas Transportation Institute
  - contains announcements and information for those interested in mitigating deer-vehicle conflicts
- The American Association of State Highway and Transportation Officials Center for Environmental Excellence web site (<http://environment.transportation.org/>)
  - site provides much current information, announcements, compliance guides, and even a technical assistance program
  - developed in cooperation with the Federal Highway Administration
- Wildlife Crossings Toolkit, USDA Forest Service (<http://www.wildlifecrossings.info/>)
- Wildlife crossing and structures, Defenders of Wildlife (<http://www.defenders.org/wildlife/flbears/wildlifecrossing.html>)
- Wildlife crossings – design and placement, USDA Forest Service ([http://www.fs.fed.us/rm/RRR/Technologies/Wildlife\\_Crossings.html](http://www.fs.fed.us/rm/RRR/Technologies/Wildlife_Crossings.html))
- Wildlife crossing guidebook for municipal planners, Portland Oregon (<http://www.metro-region.org/article.cfm?articleid=15005>)
- Wild animals and roads, Humane Society of the United States ([http://www.hsus.org/wildlife/issues\\_facing\\_wildlife/wildlife\\_crossings\\_wild\\_animals\\_and\\_roads/](http://www.hsus.org/wildlife/issues_facing_wildlife/wildlife_crossings_wild_animals_and_roads/))

## ***5.2 Additional Information on Wildlife Survey Methods***

There are many sources of additional information on field survey methods; some of the most useful include:

- The Caltrans Standard Environmental Reference, Volume 3 Biological Resources, Chapter 2 – Natural Environment Study, Section 2-4.4 cites 6 standard references (Brookhout, T. A. Editor. 1994; Cooperrider et al., Editors, 1986; Davis 1990; Hays et al. 1981; Leedy and Adams 1982; and Ralph et al. 1993) published by agencies or professional associations; each of these provides sufficient detail to enable any competent biologist to employ a field method with which he or she may not have previously been familiar.
- The California Department of Fish & Game Web site provides basic survey and monitoring protocols and guidelines ([http://www.dfg.ca.gov/hcpb/species/stds\\_gdl/survmonitr.shtml](http://www.dfg.ca.gov/hcpb/species/stds_gdl/survmonitr.shtml))
- The Wildlife Crossings Toolkit developed by the USDA Forest Service is designed for wildlife biologists and highway engineers and provides many useful case histories in a database format (<http://www.wildlifecrossings.info/beta2.htm>)
- *Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians.* 1994. Edited by Heyer et al. A superb overview of field methods for amphibians but with much relevance to reptiles.
- *Measuring and Monitoring Biological Diversity: Standard Methods for Mammals.* 1996. Edited by Wilson et al. Excellent reference providing thorough reviews of field methods appropriate for all mammal groups.
- *Ecological Census Techniques*, a text edited by Wm. J. Sutherland (1996, 2006), provides instructions for conducting ecological censuses for a variety of organisms and is written for specialists and non-specialists alike.
- Pollock et al. (2002) provide a thorough review of statistical methods for design and analysis of large-scale monitoring of wildlife, but is intended for a sophisticated audience most interested in experimental design and proper statistical analyses

## ***5.3 Additional Mitigation Design Information***

The following are recent reports that, although not updated, provide excellent coverage of wildlife crossings issues as well as numerous illustrations and photographs depicting specific case studies and real-world implementations of crossing structures.

- “Designing Road Crossings for Safe Wildlife Passage: Ventura County Guidelines” available at: [http://www.bren.ucsb.edu/research/documents/corridors\\_final.pdf](http://www.bren.ucsb.edu/research/documents/corridors_final.pdf).
- “Wildlife Crossings: Rethinking Road Design to Improve Safety and Reconnect Habitat”, describes an extensive effort in the Portland, Oregon region; available at: <http://www.metro-region.org/article.cfm?ArticleID=15005>
- “Doing the Right Thing: Improving Transportation and Enhancing Ecosystems, Exemplary Ecosystem Initiatives” found on the Federal Highway Administration web

site at <http://www.fhwa.dot.gov/environment/ecosystems/index.htm> has many excellent examples of wildlife crossing mitigation measures from 2002-2005 from sites across the country

## ***5.4 Recommended Reading***

There are two books which are extremely valuable introductions and summaries of wildlife crossings and road ecology and that come as close as any to be “essential reading” for Caltrans biologists:

- Road Ecology: Science and Solutions (Forman et al., Island Press, 2003), and
- Corridor Ecology (Hilty, Lidicker, and Merenlander, Island Press, 2006).

Both texts provide excellent introductions that examine the many interactions between roads and wildlife. For an excellent overview article on roads and their ecological effects, see:

- Forman, R.T.T. and L.E. Alexander. 1998. Roads and their major ecological effects. *Ann. Rev. Ecol. Syst.* 29: 207-231.

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## ***6.1 On-line Resources Cited***

Wildlife and Roads: A collaborative resource among the U.S.G.S., Utah State University, and the Transportation Research Board of the National Academies of Sciences for helping to mitigate roads for wildlife: <http://www.wildlifeandroads.org/index.cfm>

Surface Transportation Policy Project: [http://www.transact.org/default\\_ct\\_2\\_17\\_06.asp](http://www.transact.org/default_ct_2_17_06.asp)

UCSB Ventura County Report: [http://www.bren.ucsb.edu/research/documents/corridors\\_final.pdf](http://www.bren.ucsb.edu/research/documents/corridors_final.pdf)

Maureen Hartmann's Evaluation of Wildlife Crossing Structures: Their Use and Effectiveness, on the Wildlands web site; accessed 8/07; <http://www.wildlandscpr.org/evaluation-wildlife-crossing-structures-their-use-and-effectiveness>

Federal Highway Administration (FHWA) Critter Crossings Web site:  
<http://www.fhwa.dot.gov/environment/wildlifecrossings/>

Federal Highway Administration. 2002. Wildlife Habitat Connectivity Across European Highways. Office of International Programs, Federal Highway Administration, available at: [http://international.fhwa.dot.gov/wildlife\\_web.htm](http://international.fhwa.dot.gov/wildlife_web.htm)

Center for Transportation and the Environment (CTE) at North Carolina State University, at: <http://www.itre.ncsu.edu/CTE/index.asp>

Western Transportation Institute at Montana State University: <http://www.coe.montana.edu/wti/>

# 7 Appendices

## 7.1 Definitions

Definitions derived from Designing Road Crossings for Safe Wildlife Passage: Ventura County Guidelines; available at: [http://www.bren.ucsb.edu/research/documents/corridors\\_final.pdf](http://www.bren.ucsb.edu/research/documents/corridors_final.pdf).

**Connectivity:** The degree to which the landscape facilitates or impedes movement among habitat patches (Taylor and Goldingay, 2003). The concept of connectivity is used to describe how the spatial arrangement and quality of elements in the landscape affect the movement of organisms among habitat patches (Merriam, 1984; Taylor and Goldingay, 2003; Forman and Alexander, 1998).

**Crossing Structure:** A structure such as a pipe, culvert, bridge underpass or overpass that may be used by wildlife for passage over or under a roadway. Most traditional crossing structures are primarily intended to facilitate the flow of water. Studies have shown the crossing structures can also facilitate wildlife passage, reduce wildlife mortality from vehicle collisions, improve highway safety, and improve habitat connectivity.

**Crossing Substrate:** The surface material composing the bottom of the crossing structure.

**Functional Group:** A group of species that tend to prefer similar crossing structure design characteristics (see Section 3.4.1, above). Note that this term is not a scientific classification system.

**Landscape linkage:** a large regional arrangement of habitat, not necessarily linear or continuous, that enhances the movement of animals or the continuity of ecological processes at the landscape level (Bennett, 2003). A landscape linkage may include numerous wildlife movement corridors.

**Rescue Effect:** the emigration or movements of individuals from an area with a relatively large number of individuals (large local population) into an area with a relatively low number of individuals to rescue this population from local extinction. Related to source and sink habitats, below.

**Riparian:** plant communities contiguous to and affected by surface and subsurface hydrologic features of perennial and intermittent lotic and lentic water bodies such as rivers, streams, lakes, or drainage ways. Riparian areas have one or both of the following characteristics: 1) distinctively different vegetative species than adjacent areas, and 2) species similar to adjacent areas but exhibiting more vigorous or robust growth forms. Riparian areas are usually transitional between wetland and upland habitats (U.S. Fish & Wildlife Service/National Wetlands Inventory, 1997).

**Sink Habitat:** an area of habitat that is unable to support a viable long-term population by itself. A sink habitat offers suitable short-term cover, food, and water to animals, but production of young in a local population is less than the mortality rate.



**Source Habitat:** an area of habitat that is able to support a viable long-term population by itself. A source habitat offers suitable long-term cover, food, and water to animals, and productivity rate in the local population is greater than the mortality rate, resulting in net surpluses of individuals (population growth or source of additional individuals for dispersal to other regions).

**Wetland:** lands that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is periodically covered with shallow water; they generally contain plant communities that are adapted to periodic inundation. The frequency of occurrence of water is sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands include marshes, bogs, sloughs, vernal pools, wet meadows, river and stream overflows, mudflats, ponds, springs, and seeps.

**Wildlife Crossing:** 1) a region of concentrated animal movement where it intercepts a road. 2) a structure that facilitates the movement of animals from one side of a road to the other.

**Wildlife Movement Corridor:** A swath of wildlife habitat, generally vegetated, which joins two or more larger areas of wildlife habitat.

## ***7.2 U.S. Fish & Wildlife Service Recommended Specifications for Desert Tortoise Exclusion Fencing***

The following desert tortoise exclusion fencing specifications were derived from the U.S. Fish & Wildlife Service, Southwest Region 2, Arizona Ecological Services Field Office website at: <http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/DesertTortoise/Tortoise%20Fencing.pdf> accessed 01/2008.

### **RECOMMENDED SPECIFICATIONS FOR DESERT TORTOISE EXCLUSION FENCING September 2005**

These specifications were developed to standardize fence materials and construction procedures to confine tortoises or exclude them from harmful situations, primarily roads and highways. Prior to commencing any field work, all field workers should comply with all stipulations and measures developed by the jurisdictional land manager and the U.S. Fish and Wildlife Service for conducting such activities in desert tortoise habitat, which will include, at a minimum, completing a desert tortoise education program.

#### **FENCE CONSTRUCTION**

##### **Materials**

Fences should be constructed with durable materials (*i.e.*, 16 gauge or heavier) suitable to resist desert environments, alkaline and acidic soils, wind, and erosion. Fence material should consist of 1-inch horizontal by 2-inch vertical, galvanized welded wire, 36 inches in width. Other materials include: Hog rings, steel T-posts, and smooth or barbed livestock wire. Hog rings should be used to attach the fence material to existing strand fence. Steel T-posts (5 to 6-foot) are used for new fence construction. If fence is constructed within the range of bighorn sheep, 6-foot T-posts should be used (see New Fence Construction below). Standard smooth livestock wire fencing should be used for new fence construction, on which tortoise-proof fencing would

be attached.

#### Retrofitting Existing Livestock Fence

**Option 1 (see illustration below).** Fence material should be buried a minimum of 12 inches below the ground surface, leaving 22-24 inches above ground. A trench should be dug or a cut made with a blade on heavy equipment to allow 12 inches of fence to be buried below the natural level of the ground. The top end of the tortoise fence should be secured to the livestock wire with hog rings at 12 to 18-inch intervals. Distances between T-posts should not exceed 10 feet, unless the tortoise fence is being attached to an existing right-of-way fence that has larger interspaces between posts. The fence must be perpendicular to the ground surface, or slightly angled away from the road, towards the side encountered by tortoises. After the fence has been installed and secured to the top wire and T-posts, excavated soil will be replaced and compacted to minimize soil erosion.

**Option 2 (see illustration below).** In situations where burying the fence is not practical because of rocky or undigable substrate, the fence material should be bent at a 90E angle to produce a lower section approximately 14 inches wide which will be placed parallel to, and in direct contact with, the ground surface; the remaining 22-inch wide upper section should be placed vertically against the existing fence, perpendicular to the ground and attached to the existing fence with hog rings at 12 to 18-inch intervals. The lower section in contact with the ground should be placed within the enclosure in the direction of potential tortoise encounters and level with the ground surface. Soil and cobble (approximately 2 to 4 inches in diameter; can use larger rocks where soil is shallow) should be placed on top of the lower section of fence material on the ground covering it with up to 4 inches of material, leaving a minimum of 18 inches of open space between the cobble surface and the top of the tortoise-proof fence. Care should be taken to ensure that the fence material parallel to the ground surface is adequately covered and is flush with the ground surface.

#### New Fence Construction

Options 1 or 2 should be followed except in areas that require special construction and engineering such as wash-out sections (see below). T-posts should be driven approximately 24 inches below the ground surface spaced approximately 10 feet apart. Livestock wire should be stretched between the T-posts, 18 to 24 inches above the ground to match the top edge of the fence material; desert tortoise-proof fencing should be attached to this wire with hog rings placed at 12 to 18-inch intervals. Smooth (barb-less) livestock wire should be used except where grazing occurs.

If fence is constructed within the range of bighorn sheep, two smooth-strand wires are required at the top of the T-post, approximately 4 inches apart, to make the wire(s) more visible to sheep. A 20 to 24-inch gap must exist between the top of the fence material and the lowest smooth-strand wire at the top of the T-post. The lower of the top two smooth-strand wires must be at least 43 inches above the ground surface. (72-inch T-posts: 24 inches below ground + 18 inches of tortoise fence above ground + 20 to 24-inch gap to lower top wire + 4 inches to upper top wire = 66 to 70 inches).

#### INSPECTION OF DESERT TORTOISE BARRIERS

The risk level for a desert tortoise encountering a breach in the fence is greatest in the spring and fall, particularly around the time of precipitation including the period during which precipitation occurs and at least several days afterward. All desert tortoise fences and cattleguards should be inspected on a regular basis sufficient to maintain an effective barrier to tortoise movement. Inspections should be documented in writing and include any observations of entrapped animals; repairs needed including bent T-posts, leaning or non-perpendicular fencing, cuts, breaks, and gaps; cattleguards without escape paths for tortoises or needed maintenance; tortoises and tortoise burrows including carcasses; and recommendations for supplies and equipment needed to complete repairs and maintenance.

All fence and cattleguard inventories should be inspected at least twice per year. However, during the first 2 to 3 years all inspections will be conducted quarterly at a minimum, to identify and document breaches, and problem areas such as wash-outs, vandalism, and cattleguards that fill-in with soil or gravel. GPS coordinates and mileages from existing highway markers should be recorded in order to pinpoint problem locations and build a database of problem locations that may require more frequent checking. Following 2 to 3 years of initial inspection, subsequent inspections should focus on known problem areas which will be inspected more frequently than twice per year. In addition to semi-annual inspections, problem areas prone to wash-outs should be inspected following precipitation that produces potentially fence-damaging water flow. A database of problem areas will be established whereby checking fences in such areas can be done efficiently.

#### **REPAIR AND MAINTENANCE OF DESERT TORTOISE BARRIERS**

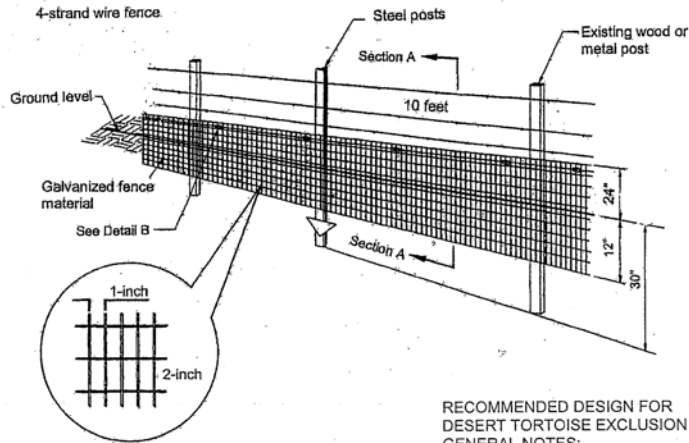
Repairs of fence wash-outs: (1) realign the fence out of the wash if possible to avoid the problem area, or (2) re-construct tortoise-proof fencing using techniques that will ensure that an effective desert tortoise barrier is established that will not require frequent repairs and maintenance.

Gaps and breaks will require either: (a) repairs to the existing fence in place, with similar diameter and composition of original material, (b) replacement of the damaged section to the nearest T-post, with new fence material that original fence standards, (c) burying fence, and/or (d) restoring zero ground clearance by filling in gaps or holes under the fence and replacing cobble over fence constructed under Option 2. Tortoise-proof fencing should be constructed and maintained at cattleguards to ensure that a desert tortoise barrier exists at all times.

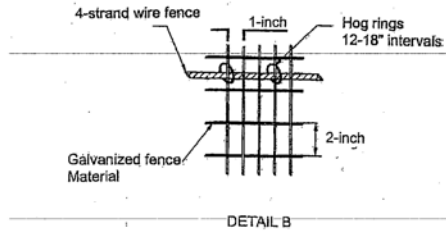
All fence damage should be repaired in a timely manner to ensure that tortoises do not travel through damaged sections. Similarly, cattleguards will be cleaned out of deposited material underneath them in a timely manner. In addition to periodic inspections, debris should be removed that accumulates along the fence. All cattleguards that serve as tortoise barriers should be installed and maintained to ensure that any tortoise that falls underneath has a path of escape without crossing the intended barrier.



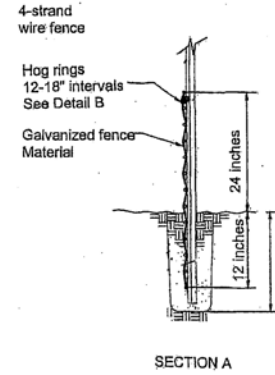
DESERT TORTOISE EXCLUSION FENCE (2005)



DETAIL A



DETAIL B



SECTION A

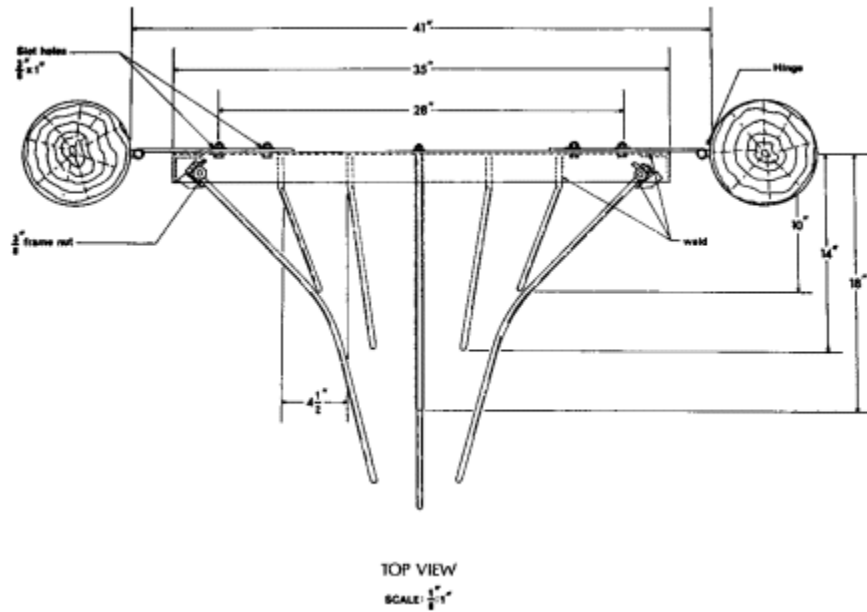
RECOMMENDED DESIGN FOR  
DESERT TORTOISE EXCLUSION FENCE  
GENERAL NOTES:

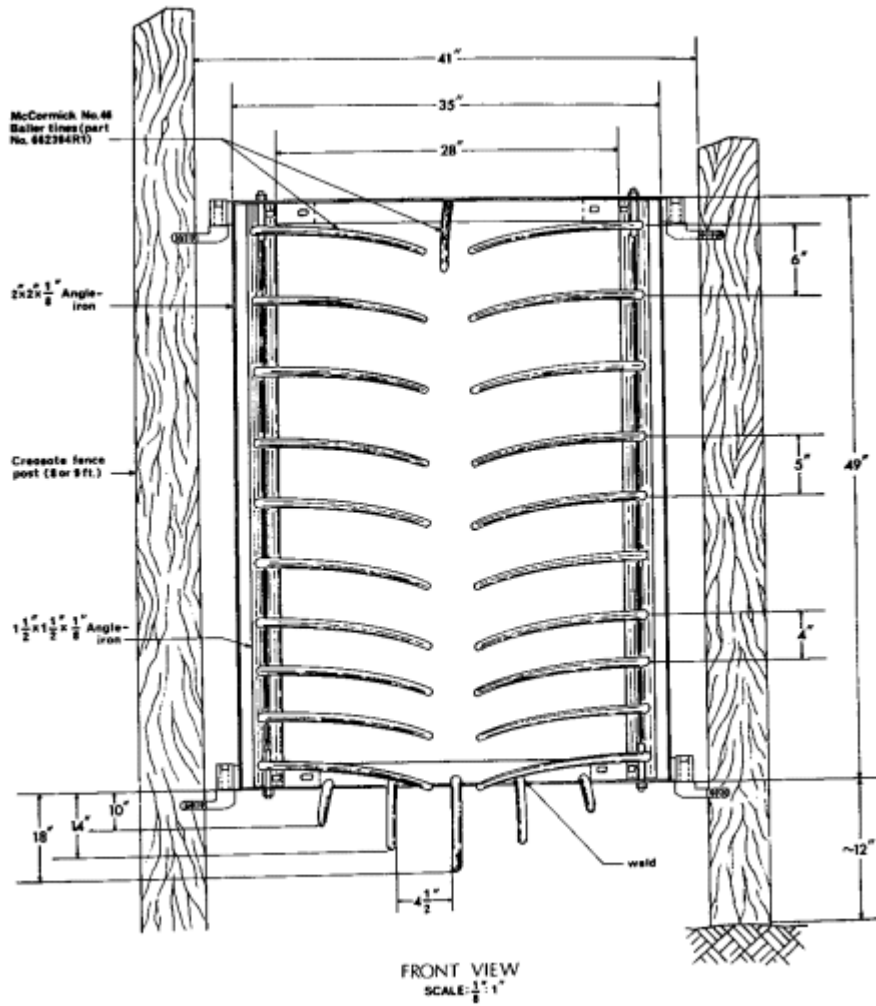
1. Ensure that fence posts and materials conform to the standards approved by the U.S. Fish and Wildlife Service.
2. Ensure that the height above ground level is no less than 18 inches and no higher than 24 inches.
3. Ensure that the depth of fence material below ground level is about 12 inches but no less than 6 inches. (See SECTION A above)
4. Install additional steel posts when span between existing fence posts exceed 10 feet.
5. Attach fence material to existing fence or wire using hog rings at 12-inch intervals.
6. Fasten fence material to posts with 3 tie wires with a wire near the top, bottom, and center of the fence material.
7. Backfill trenches with excavated material and compact the material.
8. Attach fence material to all gates. Ensure that clearance at base of gate achieves zero ground clearance.
9. Substitute smooth wire for barbed wire if additional support wires are necessary.
10. The number and placement of support wires may be modified to allow sheep and deer to pass safely.
11. Erosion at the edge of the fence material where the fence crosses washes may occur and requires appropriate and timely monitoring and repair.
12. Tie the fence into existing culverts and cattleguards when determined necessary to allow desert tortoise passage underneath roadways.

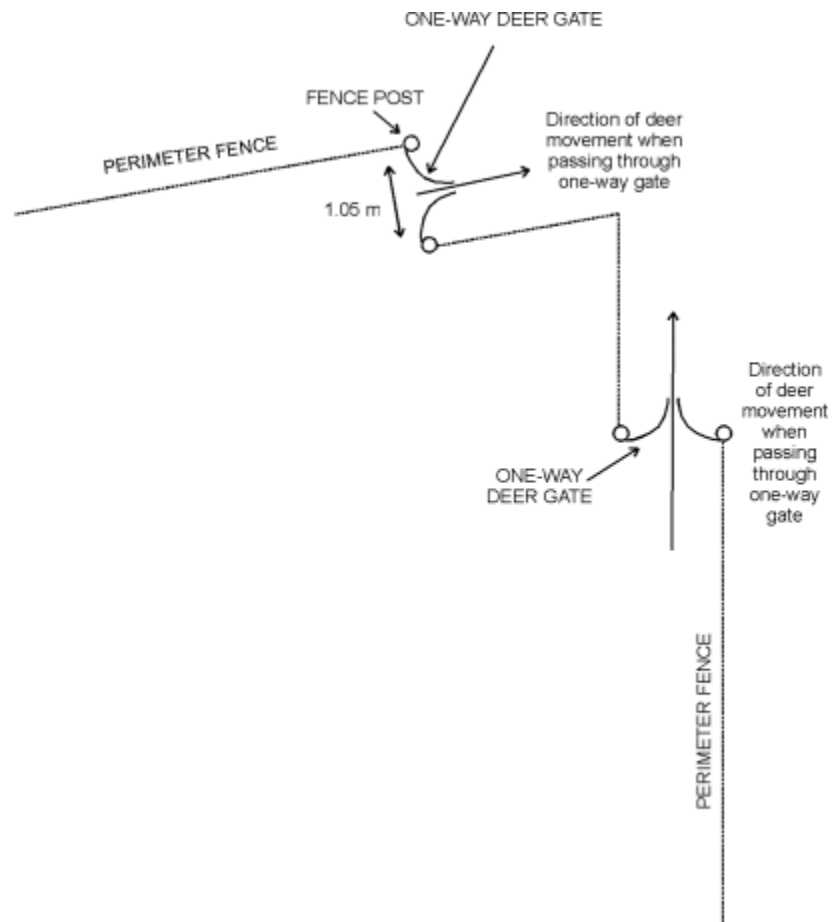


### 7.3 Deer One-way Gate Design Considerations

The following provides an example of design considerations for a one-way gate that is intended to allow deer and other large-bodied vertebrates to escape from roadway rights-of-way and is adapted from the Transport Canada web site, accessed 01/2008 (<http://www.tc.gc.ca/civilaviation/AerodromeAirNav/Standards/WildlifeControl/Deer/6c.htm>).







### **L.4.3 IP-3 – Joan Taylor Sierra Club**

#### ***IP-3-1***

Significant impacts will be avoided, minimized, and mitigated as required by the California Environmental Quality Act (CEQA). The first part of this comment is an introduction to the Sierra Club’s comments and references concerns addressed in Responses to Comments IP-3-2 through IP-3-26 and Responses to Comments IP-3a-1 through IP-3a-10. The commenters request to incorporate the Sierra Club’s previous comments by reference is acknowledged, and responses to the previous comments are provided in Responses to Comments IP-3a-1 through IP-3a-10.

#### ***IP-3-2***

The commenter’s reference to a larger project, upon which the claim of piecemealing is made, is the Interstate 10 (I-10) “Lifeline” Emergency Action Plan (EAP) project. As described in Chapter 1, Project Description, the EAP project is a multi-agency plan to address closures on I-10 between Hargrave Street in Banning and Indian Canyon Drive in Palm Springs. The EAP is a joint effort among Caltrans District 8; the County of Riverside; the Coachella Valley Association of Governments (CVAG); the Cities of Beaumont, Banning, and Palm Springs; the Morongo Band of Mission Indians (MBMI); the California Highway Patrol (CHP); and local emergency service providers. Each element of the EAP can be implemented separately by the agencies responsible and provide benefits to the public even if other elements are not implemented. The EAP includes several components to enhance communication, safety, access, and connectivity, as well as to relieve congestion and provide alternate routes between communities in the event of a shutdown of I-10 during an emergency. Components of the plan are to be evaluated for CEQA compliance independently of the larger plan and implemented by the agencies with jurisdiction over the component of the EAP. The County of Riverside, as lead agency of the Project, does not have the authority to approve other components of the plan which are located outside of its jurisdiction.

Furthermore, the Project meets the requirements for Logical Termini and Independent Utility as described in Chapter 1, Project Description. The Project alternatives both provide only surface street connections between the community of Cabazon and the City of Banning, as a bypass route to I-10, and do not rely on other transportation improvements to make use of the Project.

A project description under CEQA is required to discuss all relevant parts of a project, including future expansion or later phases of a project that will be a

reasonably foreseeable consequence from the Project's approval. See *Laurel Heights Improvement Ass'n v. Regents of Southern California* (1988) 47 Cal.3d. 376. Thus, the reverse is also accurate; if it is not a reasonably foreseeable consequence of the Project, it is not included as part of the Project Description. See *Pavlek v. Department of Water Resources* (2014) 231 Cal.App.4th 35, 46-7; and *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1224. Courts have been clear in that where a proposed project has independent utility or serves an independent purpose from another related activity, and is not dependent on completion of that related activity, the proposed Project does not need to include that related activity as part of the Project.

The I-10 Bypass Project does not rely on the completion of the other projects identified as part of the EAP and stands alone as a required project to relieve the traffic along the existing section of the I-10 freeway in the Banning area. Note in particular, this Project is similar to the *Del Mar Terrace Conservancy* case where the court held one section of a proposed State highway need not include a partial later extension since the proposed highway expansion had its own independent utility to relieve local traffic congestion. See *Del Mar Terrace Conservancy, Inc. v. City Council* (1992) 10 Cal.App.4th 712, 736.

### **IP-3-3**

Impacts on wildlife corridors are discussed in Section 2.15.2.4, Wildlife Corridors, and Table 2.15.1, Bridge and Storm Drain Crossing Suitability, of the Recirculated Draft EIR/EA, which provides information regarding the size, location, and openness ratio for the wildlife crossings included as part of the I-10 Bypass Project.

As a matter of clarity, the Project does not cross through an “Essential Connectivity Area.” As described in Section 2.15.2.2 of the Recirculated Draft EIR/EA, the nearest Essential Connectivity Area (San Jacinto Mountains – San Bernardino Mountains Essential Connectivity Area) is located four miles east of the Project area, east of Cabazon, near the unincorporated area of Whitewater. The San Jacinto Mountains – San Bernardino Mountains Essential Connectivity Area coincides with the easternmost leg of South Coast Wildland's San Bernardino-San Jacinto Connection Linkage Design, which was created based on the “least cost corridor” model for mountain lion. The “least cost corridor” model shows the route with the least resistance for a specific species to move across the landscape. In the case of mountain lion, South Coast Wildlands based its wildlife movement analysis on a model that incorporated weighted variables, (i.e., land cover, road density, topography, and



elevation) to produce a route with the least amount of resistance for mountain lions to move across the landscape.

As also described in Section 2.15.2.2 of the Recirculated Draft EIR/EA, the Project would bisect the middle leg of the South Coast Wildlands linkage design, which was included based on the least cost corridor for American badger (*Taxidea taxus*) and designed for small-to-medium-sized wildlife species, such as Pacific kangaroo rat (*Dipodomys simulans*), large eared woodrat (*Neotoma macrotis*) (previously considered a subspecies of *Neotoma fuscipes*), Merriam's kangaroo rat (*Dipodomys merriami*), and coast horned lizard (*Phrynosoma blainvillii* [*coronatum*]).

The number, frequency, and openness factors (10 wildlife crossings for Alternative 5 and 11 crossings for Alternative 12 [Preferred Alternative]) would maintain wildlife connectivity/movement across the Project for a diverse range of species to cross the Project including small-to-medium-sized wildlife species throughout the Project and large wildlife species at the bridges. The wildlife crossing would be designed consistent with the Caltrans Wildlife Crossing Guidance Manual (Meese et. al 2009).

Smaller culverts would be used on a more frequent basis along the Project that would accommodate smaller less mobile wildlife species. In addition, areas that would be subject to temporary project disturbance would be restored back to native habitats to help provide refugia cover at the approach of the wildlife crossings. Wildlife fencing would be installed to help guide wildlife towards the opening of the wildlife crossings.

#### **IP-3-4**

A portion of the Project is within the WRMSHCP which is contiguous with the CVMSHCP Cabazon Conservation Area and Sand Transport area as depicted on Figure 4-6d: Cabazon Conservation Area. To clarify, the nearest designated Corridor or Linkage within the CVMSHCP is at Fornat Wash, which is 3.8 miles east of the Project. Neither the WRMSHCP nor the CVMSHCP requires wildlife crossings; however, the Project was designed to maintain wildlife connectivity across the Project by incorporating 10 wildlife crossings for Alternative 5 and 11 crossings for Alternative 12 (Preferred Alternative) that would accommodate small, medium, and large wildlife species. The Linkage Design at this location was designed for small-to-medium-sized wildlife species. Both Smith Creek and San Gorgonio River would be spanned with bridges that would accommodate large wildlife species.

Additional alternatives were considered as discussed in Section 1.5, Identification of the Locally Preferred Alternative, in Chapter 1, Project Description, of the Recirculated Draft EIR/EA. Fourteen (14) potential Build Alternatives were evaluated in the Alternatives Screening Analysis technical study (LSA, September 2016). As discussed, after comparing and weighing the benefits and impacts of all feasible alternatives, Alternative 5 and Alternative 12 (Preferred Alternative) were carried forward. Therefore, a reasonable effort was made to avoid impacts, including impacts to wildlife corridors prior to consideration of mitigation. Although not required by either the WRMSHCP or the CVMSHCP, wildlife crossings were added to the design to facilitate north-south movement of wildlife across the Project including the focal species in the South Coast Wildlands linkage design as well as larger wildlife species at the bridges. Alternative 5 would include one bridge [12 ft (3.7m) H x 893 ft (272.2 meters) W x 101 ft (30.8 meters) L] and Alternative 12 (Preferred Alternative) would include three bridges [10 ft (3.0 meters) H x 1,072 ft (326.7 meters) W x 101 ft (30.8 meters) L, 12 ft (3.7 meters) H x 893 ft (272.2 meters) W x 101 ft (30.8 meters) L, and 8 ft (2.4 meters) H x 133 ft (40.5 meters) W x 101 ft (30.8 meters) L]. In addition to the bridge crossings, the Project would add an additional eight wildlife crossings to facilitate small-to-medium-sized wildlife species that would be designed consistent with the USDOT's Wildlife Crossings Structure Handbook, the Caltrans' Wildlife Crossings Guidance Manual, and the WRMSHCP (for small mammals). Please see Response to Comment F-1-9 for more detailed information regarding the dimensions of the wildlife crossings included as part of the Project design.

The Project is in compliance with the applicable habitat conservation plans (the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP) and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)) as discussed in Section 2.15.2.5, Habitat Conservation Plans. The Western Riverside County Regional Conservation Authority (RCA) and the Wildlife Agencies concurred with the Determination of Biological Equivalent or Superior Preservation (DBESP) addressed Sections 6.1.2 and 6.3.2 of the WRMSHCP on October 1, 2020. The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020 during the Joint Project Review process. Per Section 3.0 of the WRMSHCP, implementation and findings documenting the process described below will be made by the local permittees for each project for which a Criteria consistency review is conducted and will be included in the appropriate Project review and approval documentation.

The County, as a local permittee, determined that the Project is consistent with the WRMSHCP. Implementation and Findings documenting the criteria review consistency process, as described in Section 3.0 of the WRMSHCP, will be made by the Local Permittees for each project for which a Criteria consistency review is conducted and will be included in the appropriate project review and approval documentation. The Information and Findings will include the following:

- a. Brief description of the project and its location focusing on the location of the project with respect to the applicable MSHCP Core or Linkage, Area Plan Subunit and Cell or Cell Group;

**Response:** The new I-10 Bypass two-lane roadway, extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Morongo Trail (formerly Apache Trail) in the unincorporated community of Cabazon, is located within the WRMSHCP and crosses through the Pass Area Plan and the Special Linkage Area. The above Project Description is included in the Draft and Recirculated Draft EIR/EA. The Project is not located within a WRMSHCP criteria cell or core as stated in Section 2.15, Natural Communities, of the Draft and Recirculated Draft EIR/EA.

- b. Brief description of on-site biological resources focusing on presence or absence of Planning Species (subset of covered species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans) identified for the applicable Core or Linkage and Area Plan Subunit, Biological Issues and Considerations identified for the applicable Area Plan Subunit, and focus Vegetation Communities and connectivity identified for the applicable Cell or Cell Group;

**Response:** The biological resources within the WRMSHCP that would be affected by the Project include disturbed *Acacia greggii* Shrubland Alliance, disturbed *Eriogonum fasciculatum* Shrubland Alliance, and Riversidean Alluvial Fan Sage Scrub (RAFSS) vegetation communities, as described in Section 2.15 of the Draft and Recirculated Draft EIR/EA. The Project also crosses Smith Creek and two unnamed tributaries to Smith Creek that are considered CDFW Streambeds (Section 2.16 of the Draft and Recirculated Draft EIR/EA). Of the 11 planning species described in the WRMSHCP for the Pass Area Plan, loggerhead shrike and Los Angeles pocket mouse were observed on site. Special-status

wildlife species potentially affected by the Project include coastal California gnatcatcher, Los Angeles pocket mouse, burrowing owl, Le Conte's thrasher, nesting birds, and desert tortoise (Sections 2.18 and 2.19 of the Draft and Recirculated Draft EIR/EA). The USFWS determined that the Project does not include suitable habitat for desert tortoise and withdrew desert tortoise from consideration in the Section 7 Consultation (USFWS 2021). The habitat conditions on site were not suitable to any special-status plants species (Sections 2.17 and 2.19 of the Draft and Recirculated Draft EIR/EA). The Project crosses a non-criteria cell WRMSHCP Special Linkage that is also known as the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage (Section 2.15 of the Draft and Recirculated Draft EIR/EA).

The Project is within the WRMSHCP Pass Area Plan. The WRMSHCP describes that projects within the Pass Area Plan need to comply with the following three measures, outlined in Section 3.3.10 of the WRMSHCP for the Pass Area Plan, to (1) conduct Tribal coordination regarding Indian Lands, (2) apply the rebuttable presumption of significance in response to question IV(d) of Appendix G of the State CEQA Guidelines, regarding migratory wildlife corridors, and (3) forward the Draft and Final CEQA documentation for projects within this Special Linkage Area (including the I-10 Bypass Project) to the Western Riverside County Regional Conservation Authority (RCA) for informational purposes. Consistency with each of the WRMSHCP Pass Area Plan measures is discussed in the response to c. below.

- c. A brief analysis of the relationship of the project as proposed to the biological resources issues noted in (b) and discussion of the proposed project contribution toward achieving the MSHCP Criteria;

**Response:** An analysis of the Project's effects on biological resources is provided in Sections 2.15 through 2.20 of the Draft and Recirculated Draft EIR/EA, the Natural Environmental Study (NES) and Errata (March 2020), the Determination of Biological Equivalent or Superior Preservation (DBESP), and the Biological Opinion (BO), which all demonstrate consistency with the WRMSHCP.

In addition, the County complied with the three measures described in the Pass Area Plan, including the following:

1. The County has coordinated with the Tribe of Morongo Band of Mission Indians (MBMI) throughout the development process for this Project. The

MBMI expressed their support for the I-10 Bypass Alternative 12 (Preferred Alternative) in their September 25, 2018, letter to the County (included in Chapter 4, Comments and Coordination, of this Final EIR/EA). The Bureau of Indian Affairs (BIA) is also a cooperating agency under NEPA for the I-10 Bypass Project, and there is ongoing coordination with the BIA. In addition, the USFWS issued a Biological Opinion, dated January 8, 2021, that addresses take authorization for coastal California gnatcatcher and the withdrawal from consultation for desert tortoise consistent with the requirements for the Morongo Band of Mission Indians Tribal Trust Lands (Tribal Lands) and the WRMSHCP, and CVMSHCP Plan Areas.

2. The Project would not substantially interfere 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. The size, number, and spacing of wildlife crossings that will be constructed as part of the Project will maintain wildlife connectivity across the Project area through the WRMSHCP Special Linkage. The Project minimizes effects on wildlife movement by maintaining opportunities for wildlife to cross the Project area using three large bridge structures that will facilitate wildlife movement: (1) a 12 ft (H) by 893 ft (W) by 101 ft (L) structure at the San Gorgonio River, (2) a 10 ft (H) by 1,072 ft (W) by 101 ft (L) structure at Smith Creek, and (3) an 8 ft (H) by 133 ft (W) by 101 ft (L) structure at the unnamed Smith Creek Tributary. Eight additional wildlife crossings will provide additional opportunities for small-to-medium-sized wildlife across the length of the Project area at regular intervals (see Figure 11, NES Errata, March 2020). The *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod, K., November 2, 2000) was reviewed for features of the linkage and focal species that would use the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. In addition, the Project was designed to be significantly more porous than the barrier created by the I-10 freeway located to the north with only one crossing in the vicinity.
3. The RCA was provided copies of the Draft EIR/EA and the Recirculated Draft EIR/EA during circulation, and was involved with multiple discussions regarding the development of the measures stated herein. The Final EIR/EA will be distributed to the RCA according to State CEQA Guidelines.



- d. A brief discussion of any conflicts with the MSHCP Criteria due to project design features, surrounding land use conditions, on-site conditions different from those anticipated in the MSHCP or other appropriate factors and summary of features incorporated in the project to address those conflicts;

**Response:** The Project is a covered activity under the WRMSHCP, per Section 7.0 of the WRMSHCP. The Project does not conflict with the WRMSHCP Criteria. Project design features that avoid and minimize potential impacts to natural communities, wildlife connectivity, wetlands and waters, special-status wildlife species, and the associated avoidance, and minimization measures/commitments are summarized in Table C-1 in Appendix C, Avoidance, Minimization and/or Mitigation Summary.

- e. A Statement of Findings that the proposed project has been determined to be consistent with the MSHCP Criteria and the rationale for this determination. The Findings shall incorporate the information generated as part of (a) through (d) above and shall specifically describe the consistency of the project with Reserve Assembly criteria with emphasis on reserve configuration and connectivity and covered species.

**Response:** As described in the Criteria Consistency Review Process, Section 3.0 of the WRMSHCP, the County as the Local Permittee determined that the Project is a covered activity consistent with the MSHCP Criteria and complied with the Pass Area Plan requirements as supported above.

***IP-3-5***

The Project is a covered activity under the CVMSHCP. The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020 during the Joint Project Review process.

***IP-3-6***

The County has been coordinating with USFWS, CDFW, RCA, and CVCC throughout the development of this Project. The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020, during the Joint Project Review process. The Project does not include any structures that would impede sand transport. Also, see Responses to Comments F-1-21 through F-1-27 that are in response to USFWS sand transport comments.

**IP-3-7**

The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020, during the Joint Project Review process. The nearest biological corridor within the CVMSHCP is located at Fornat Wash, 3.8 miles east of the BSA.

**IP-3-8**

The Project has been determined to be consistent with the WRMSHCP and the CVMSHCP June 11, 2020; therefore, there is no significant impact under CEQA regarding inconsistencies with applicable habitat conservation plans.

Moreover, the commenter misinterprets the cited case and CEQA by stating “inconsistencies with applicable habitat conservations plans constitute significant effects under CEQA...” As *actually* stated by the court in the case, “There is no provision that any such inconsistencies necessarily constitute significant environmental impacts.” See *Joshua Tree Downtown Business Alliance v. County of San Bernardino* (2016) 1 Cal.App.5th 677, 695.

**IP-3-9**

Two clearly defined Build Alternatives are addressed in the I-10 Bypass Recirculated Draft EIR/EA (Alternative 5 and Alternative 12), of which Alternative 12 is identified as the “Locally Preferred Alternative,” which satisfies the requirement to identify a Preferred Alternative in a Draft EIR. The *Washoe Meadows* case was for a project with 5 Build Alternatives that were not clearly defined and the analysis in the Draft EIR for that project was not clear as to which alternative was being discussed and evaluated and which impacts and mitigations applied to which alternative. That is not the case in the I-10 Bypass Recirculated Draft EIR/EA. The Recirculated Draft EIR/EA clearly defined the two Build Alternatives and the analysis is clear as to which alternative is being evaluated in the discussion of the various environmental topics. Additionally, Table S.4 Summary of Impacts of Alternatives provided in the Executive Summary clearly shows which impacts and which mitigation measures apply to each build alternative and which apply to both alternatives. Therefore, there is no similarity between the I-10 Bypass Recirculated Draft EIR/EA and the Draft EIR that was the subject of the *Washoe Meadows* case.

Furthermore, in their conclusion regarding the *Washoe Meadows* case, the Court recognized that “there may be situations in which the presentation of a small number

of closely related alternatives” would be acceptable, but explained that in this case the five alternatives were vastly different because each alternative “created a different set of impacts, requiring different mitigation measures.” The two Build Alternatives described in the I-10 Bypass Recirculated Draft EIR/EA are clearly consistent with “a small number of closely related alternatives.” Therefore, the *Washoe Meadows* case is not applicable to the Project.

Lastly, recent case law has distinguished the *Washoe Meadows* case when it recently held a project that only described two design options was neither confusing nor inadequate under CEQA. See *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 333.

**IP-3-10**

As described in Chapter 1, Project Description, and depicted in Figure 1.4-5, Ultimate Right-Of-Way, Grading, and Structures, the preliminary design for both Build Alternatives account for a 4-lane roadway in terms of rights-of-way, grading, and bridges east of existing Westward Avenue to the intersection with Apache Trail and Bonita Avenue. The environmental analysis included in the I-10 Bypass Draft EIR/EA accounts for this ultimate condition and analyzes the potential effects accordingly.

Avoidance, Minimization, and Mitigation Measures were identified for potential impacts to wildlife that utilize the Project area. Measure WC-3 requires the preparation of a fencing plan, incorporated as part of final design, to deter wildlife from crossing the roadway and guide them to proposed wildlife crossings and bridges. Avoidance and minimization Measure WC-4 requires the design of appropriately sized and designed wildlife crossings to encourage their use. These measures will be implemented as part of the initial two-lane project. Through inclusion of the wildlife movement analysis and avoidance and minimization Measures WC-3 and WC-4, the I-10 Bypass Recirculated Draft EIR/EA adequately addresses the potential effect of wildlife mortality.

**IP-3-11**

Chapter 1, Project Description, includes a discussion of the Alternatives screening process undertaken by the County of Riverside and provides detailed explanations elaborating on the alternative description and reason for elimination. A total of fourteen alternatives were considered and twelve rejected for a variety of reasons. The methodology for the alternatives screening process is provided in Chapter 1, Project Description. The alternative screening analysis determined that 12 of the 14

Build Alternatives considered failed one or more of the screening criteria and were not carried forward in the I-10 Bypass Draft EIR/EA nor in the Recirculated Draft EIR/EA. As described in Chapter 1, key environmental constraints that were considered in the development and analysis of the alternatives include: (1) the ability of the County to acquire the necessary rights-of-way, (2) impacts to waters of the U.S. and waters of the State of California, (3) requirements of the Local Habitat Conservation Plans, and (4) the extent of hillside grading. In addition to these key environmental constraints, four potentially adverse impacts were identified that would result in unacceptable environmental impacts: (1) induced traffic on residential streets, (2) major cuts from hillside grading, (3) impacts to Los Angeles Pocket Mouse habitat, and (4) impacts to State and County-designated Mineral Resource Recovery Areas.

As described in Table 1.5.2, Alternatives Not Carried Forward, the primary reasons Alternative 7 was rejected was because this alternative would have required the reconstruction of two existing non-standard freeway interchanges up to full standard. The cost of this type of upgrade rendered this alternative prohibitive, and therefore infeasible. In addition, Alternative 7 was rejected due to the inability to acquire Tribal land and incompatibility with planned land uses for Tribal Lands. The primary reason Alternative 8 was rejected was because this alternative would have required the relocation of either I-10 or the railroad to accommodate the design and the County does not have the ability to acquire the necessary rights-of-way to implement these changes. To implement this alternative without relocating either I-10 or the railroad would require a non-standard design that would not meet County or Caltrans requirements and would not be consistent with the FTIP, land uses in respective General Plans, and the Circulation Elements of both the County and Banning. Thus, it was determined that Alternative 8 did not meet the Project purpose and was therefore rejected.

**IP-3-12**

Refer to Response to Comment IP-3-11, above. While Alternative 7 shares similar right-of-way conditions as Alternative 12, the proposed alignment of Alternative 7 would be near existing homes on tribal land that could potentially result in increased environmental impacts to tribal residents. The Morongo Band of Mission Indians (MBMI) has expressed support for Alternative 12 (Preferred Alternative) in several letters since 2008. In a letter dated October 2, 2008, MBMI expressed support for an alignment south of the I-10, in a letter dated February 21, 2013, MBMI stated that Alternative 12 (Preferred Alternative) would enable development of Morongo Band of Mission Indians Tribal Land south of I-10, and finally in a letter dated September

25, 2018, MBMI expressed support for Alternative 12 (Preferred Alternative) stating that Alternative 12 is a better option for meeting the Tribe's regional safety, mobility and economic development goals, provides cost savings due to reduced environmental and road construction impacts and is supportive of our long-term development plans. These letters are included in Section 4.4 of the Recirculated Draft EIR/EA. The applicable plans where conflicts would occur under Alternative 8 include: the FTIP, the Land Use Element of the County of Riverside General Plan, and the Circulation Elements of both the County of Riverside and City of Banning.

**IP-3-13**

The Project is a covered activity under both the WRMSHCP and the CVMSHCP and would comply with all respective requirements. The County has been coordinating with USFWS, CDFW, RCA, and CVCC. The Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative for construction on December 17, 2019, and the CVMSHCP consistency determination was formalized on June 11, 2020 during the Joint Project Review process. The RCA and the Wildlife Agencies concurred that the DBESP addressed Sections 6.1.2 and 6.3.2 of the WRMSHCP on October 1, 2020. Also, see Response to Comment IP-3-11 regarding the reasons why Alternatives 7 and 8 were dropped from further consideration.

**IP-3-14**

As noted in Responses to Comments IP-3-11 and IP-3-12, above, an Alternatives Screening Analysis study was prepared and this study provides facts and analysis to support the determination to include Alternative 5 and Alternative 12 (Preferred Alternative) and the No Build Alternative, and for rejecting the other alternatives including Alternatives 7 and 8. Note the cited case from the commenter refers to general statements as they relate to CEQA and required level of analysis. The comment does not illustrate how or why the alternatives analysis is somehow lacking or inaccurate.

State CEQA Guidelines Section 15126.6(c) states that a lead agency should identify any alternatives considered but rejected as infeasible and briefly explain the reason underlying the lead agency's determination. While the EIR/EA does explain in detail the reasons for why various alternatives were discarded, the reasons particularly for the rejection of Alternatives 7 and 8 are again provided below.

Alternative 7 and Alternative 8 were rejected due to the inability to acquire right-of-way. Alternative 7 was rejected due to the inability to acquire Tribal land and



incompatibility with planned land uses for Tribal Lands. As described in Table 1.5.2, Alternatives Not Carried Forward, Alternative 7 was also rejected because this alternative would have required the reconstruction of two existing non-standard freeway interchanges up to full standard. The cost of this type of upgrade rendered this alternative prohibitive, and therefore infeasible. In addition, Alternative 8 was also rejected due to the failure to meet design standards. The MBMI was opposed to and rejected Alternative 7 because this alternative intruded into Tribal Lands north of I-10, where there are extensive Tribal facilities and residential areas. A September 25, 2018, letter from MBMI that rejected Alternative 7 and endorsed Alternative 12 (Preferred Alternative) is included in Chapter 4, Comments and Coordination.

**IP-3-15**

This comment incorrectly states that I-10 Bypass Draft EIR/EA only proposed and evaluated two alternatives – the no-action (No Build) Alternative and Alternative 5. The I-10 Bypass Draft EIR/EA proposed and evaluated a total of three alternatives – the No Build Alternative, Alternative 5, and Alternative 12 (Preferred Alternative). A rigorous analysis of all feasible alternatives proposed is provided in Chapter 2 and evaluated 21 separate and unique environmental topics. Each topic area discusses the regulatory setting, the affected environment, environmental consequences, and identifies feasible avoidance, minimization, and/or mitigation measures where an adverse effect was identified. A rigorous CEQA evaluation was also included in the I-10 Bypass Draft EIR/EA and is provided in Chapter 3.

**IP-3-16**

Refer to Response to Comment IP-3-15 regarding the adequacy of the analysis contained in the I-10 Bypass Recirculated Draft EIR/EA. Refer to Response to Comment IP-3-11 for a brief discussion of the alternatives screening process undertaken by the County for this Project. Additional information pertaining to the additional reasons for alternative rejection that are beyond those cited in the comment from the case law is provided in Response to Comment IP-3-12.

The alternatives analysis also evaluated and rejected multiple alternatives that either did not reduce the significant impacts, meet the Project's key objectives, or were infeasible. See State CEQA Guidelines Section 15126.6(c). The commenter merely makes conclusory statements in their opinion that the number of alternatives evaluated were insufficient. Simply quoting a section of case law (*Save Round Valley*) does not illustrate how or why the EIR/EA is lacking in its alternatives analysis. In fact, the prior sentence in the quoted case states that an EIR is not

required to consider alternatives, which are infeasible; feasibility as defined by the court and CEQA means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors. See also PRC Section 21061.1.

**IP-3-17**

The Recirculated Draft EIR/EA considered a reasonable range of alternatives as documented in Responses to Comments IP-3-11, IP-3-12, IP-3-13, IP-3-14, IP-3-15, and IP-3-16. The comment merely cites the State CEQA Guidelines and case law. No further response is necessary.

**IP-3-18**

Chapter 1, Project Description, includes Table 1.5.1, Summary of Impacts of Alternative 5 and Alternative 12 (Preferred Alternative) for each environmental topic discussed in the I-10 Bypass Recirculated Draft EIR/EA. A quantitative comparison of impacts, where a quantitative comparison is appropriate between the alternatives, is included in the table (e.g., number of property acquisitions in the Community Impacts section of the table). In addition, the analysis provided in Table 1.5.1 includes other quantification of impacts, such as LAPM acreages, waters impact acreages, etc. The comment merely states positions from case law and makes unfounded conclusory statements. No further response is necessary.

**IP-3-19**

The text requiring native trees near bridge crossings has been deleted and replaced with the following text included in avoidance and minimization Measure WC-4: “Native grasses, forbs, and shrubs that are included in the *Chilopsis linearis* woodland, *Acacia greggii* shrubland, Coastal Sage Scrub, and Riversidean Alluvial Fan Sage Scrub will be planted on slopes at bridges and culverts to provide cover for wildlife and to encourage the use of the wildlife crossings.”

Measure WC-1 below is included in the I-10 Bypass Recirculated Draft EIR/EA (see Section 2.15.3.2 Wildlife Corridors) to mitigate the potential impact to wildlife and wildlife corridors as a result of temporary lighting during nighttime construction activities and permanent lighting required during nighttime operation of the completed I-10 Bypass Project.

**WC-1**            **Noise and Lighting.** During construction, if work must be conducted at night, the County of Riverside’s (County) Resident Engineer will ensure noise and direct lighting will be directed away from the wildlife

corridors. Construction will be limited to daylight hours to the extent feasible. If roadway lighting is needed temporarily during construction, the lighting would be restricted and shielded away from adjacent native habitat areas in compliance with Ordinance No. 655 – Regulating Light Pollution within 45 miles of the Palomar Observatory. Permanent lighting will only be provided near the wildlife corridors if absolutely necessary for safety. If permanent lighting is implemented, recessed lighting and/or glare shields would be used to prevent light from shining into the wildlife corridor habitat.

Lighting for the I-10 Bypass Project will be consistent with County lighting standards and requirements for this type of roadway facility. County lighting standards and requirements for road improvement projects are specified in County Ordinance No. 461.

One of the primary elements of the Project Purpose is to serve as an emergency bypass in the event of a closure along the I-10 Freeway within the Project limits. A single bridge is desired at the drainage crossings to allow continuous use of the center painted median as an additional temporary lane during emergency traffic rerouting.

Although the bridges would be able to accommodate crossing by large mammals, they are not the intended target species of this wildlife corridor. The wildlife corridor is primarily targeting small-to-medium-sized wildlife use as described in the *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod et al. 2005). The wildlife crossings would be designed consistent with the Caltrans Wildlife Crossing Guidance Manual (Meese et. al 2009). The single span bridges far exceed the recommended openness ratio for wildlife crossings.

**IP-3-20**

Although the Project area is within a WRMSHCP Special Linkage Area, the Project is not located within a Criteria Cell that would trigger the implementation of “Specific Initial Guidelines for Wildlife Movement Design Considerations within the Criteria Area.” The WRMSHCP and the CVMSHCP do not require wildlife crossings. As described in the *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod et al. 2005), this linkage primarily targets small- to medium-sized wildlife species. The number, frequency, and openness factors (10 wildlife crossings for Alternative 5 and 11

crossings for Alternative 12 [Preferred Alternative]) would maintain wildlife connectivity/ movement across the Project for a diverse range of species to cross the Project including small-to-medium-sized wildlife species throughout the Project and large wildlife species at the bridges.

**IP-3-21**

The width described in the table and text of the Recirculated Draft EIR/EA is the width of the opening as an animal is approaching the bridge whereas the length is referring to the distance the animal would traverse under the bridge to get to the other side. The crossing dimensions and openness factors are described in Table 2.15.1 of the Recirculated Draft EIR/EA. The large bridge crossings are large enough to accommodate all sizes of wildlife species. The culverts shown in Table 2.15.1 are specifically designed for conveying stormwater runoff and sand to support the Cabazon Conservation Area. avoidance and minimization Measure WC-4 would add an additional eight wildlife crossings to facilitate small-to-medium-sized wildlife species that would be designed consistent with the USDOT's Wildlife Crossings Structure Handbook, the Caltrans' Wildlife Crossings Guidance Manual, and the WRMSHCP recommendations.

**IP-3-22**

The Project is not an improvement to the I-10. Roads noted on the Riverside County General Plan Circulation Element are covered activities under the WRMSHCP. The WRMSHCP provides coverage for projects that are not already specifically identified within the WRMSHCP and provides a guide regarding how to implement projects consistent with the requirements.

The County determined that the Project is consistent with the WRMSHCP (see response to comment IP-3-4 regarding the County's WRMSHCP consistency determination), specifically the three measures in Section 3.3.10 of the WRMSHCP that describe the requirements of the Pass Plan, 1) coordination with the Tribe, 2) address significance, from Appendix G to the 1998 State CEQA Guidelines regarding migratory wildlife corridors, and 3) forward the Draft and Final CEQA documentation for projects within this Special Linkage Area to the RCA for informational purposes.

**IP-3-23**

Baseline data was modeled by South Coast Wildlands and presented in the *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San*

*Jacinto Connection* (Penrod et al. 2005). Wildlife crossings and wildlife fencing described in avoidance and minimization Measures WC-3 and WC-4 would be designed consistent with the Caltrans Wildlife Crossing Guidance Manual (Meese et. al 2009). Unlike the drainage culverts that are meant to transport sand and water runoff, the wildlife crossings are separate from the drainage culverts and are expected to require minimal maintenance. The effects of constructing the wildlife crossings are not expected to be any different than the effects of constructing the roadway, which were addressed in the Recirculated Draft EIR/EA. Wildlife movement through the Project site will be maintained throughout the construction period via either a bridge or a section of road that is not currently under construction.

**IP-3-24**

The Project is in compliance with the WRMSHCP and CVMSHCP requirements, which do not require wildlife crossings at this location. The County has decided to voluntarily construct these wildlife crossings to maintain wildlife movement through the area.

**IP-3-25**

Section 2.2, Growth, includes an analysis of the Project's potential to influence the location, type, and/or rate of future growth and development. This section summarizes the detailed analysis provided in the *Growth-Related Indirect Impact Analysis* (January 2017) prepared for the Project. The growth analysis was prepared by following the steps outlined in the *Standard Environmental Reference, Guidance for Preparers of Growth-Related, Indirect Impact Analyses* (Guidance for Preparers of Growth-Related Impact Analyses) (March 24, 2016) developed by the California Department of Transportation (Caltrans) in conjunction with the Federal Highway Administration (FHWA) and the United States Environmental Protection Agency (EPA). Indirect impacts considered in the analysis included potential changes in land use, economic vitality, and population density, which are all elements of growth.

Potential project-related growth impacts were considered in the context of the first-cut screening analysis approach as recommended in Caltrans' 2016 Guidance for Preparers of Growth-Related Impact Analyses. As described in Section 2.2, Growth, both Build Alternatives could potentially result in minor shifts in the locations and timing of growth in the growth analysis study area. Neither of the Build Alternatives would result in changes in the type or density of growth forecast in the growth analysis study area based on adopted General Plans and other land use plans. The influence of the Build Alternatives on the timing and location of growth in the growth



analysis study area would not result in substantial adverse effects on resources of concern different from those already anticipated based on the adopted land use plans in the growth analysis study area. The I-10 Bypass Draft EIR/EA did not consider the roadway in isolation in the evaluation of growth-inducing impacts.

Figure 2.2-1, Growth Study Area, shows that the growth study area defined in the analysis where potentially developable land exists extends well over a mile to the east and west of the proposed alignments and to the north to I-10 and south within areas of suitable topography (i.e., relatively flat) of the proposed alignments. This growth study area boundary and size is appropriate for the Project as the Project purpose is to provide a local roadway connecting Banning and Cabazon that would accommodate local trips on a local roadway, provide an alternate route between Banning and Cabazon in the event of a closure on I-10, provide a safe route for bicyclists and pedestrians, implement certain elements of the Riverside County and City of Banning General Plans and RCTC and SCAG circulation plans (see Section 1.3.2.4). The Project is not intended to relieve congestion on I-10 or address other regional circulation deficiencies. While there could be a benefit to regional congestion at key intersections along I-10 with the construction of the bypass, the deficiencies are attributable to major retail shopping seasons at the retail outlets located along I-10 and are not daily conditions. The comment only provides citations to the State CEQA Guidelines and case law without explaining how or why the EIR's growth-inducing analysis or discussion is somehow deficient. No further response is necessary.

**IP-3-26**

The lead agency disagrees with the commenter's assertions that the environmental documents are insufficient or that recirculation is required. All of the issues raised in this comment are addressed in Responses to Comments IP-3-1 through IP-3-26 as documented below.

- Wildlife corridors and habitat connectivity: IP-3-3, IP-3-19, IP-3-20, IP-3-21, IP-3-22, IP-3-23, and IP-3-24
- CVMSHCP compliance: IP-3-4, IP-3-5, IP-3-6, and IP-3-7
- WRMSHCP compliance: IP-3-4 and IP-3-20
- Adhering to guidance for proposed mitigation measures: IP-3-8, IP-3-16, IP-3-18, IP-3-23, and IP-3-24
- Piecemealing: IP-3-2
- Adequate range of alternatives: IP-3-11, IP-3-12, IP-3-13, IP-3-14, IP-3-15, IP-3-16, IP-3-17, and IP-3-18



Submitted via email

February 25, 2018

Attention: Mary Zambon  
Senior Transportation Planner  
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[Aaron.Burton@dot.ca.gov](mailto:Aaron.Burton@dot.ca.gov)  
[MZAMBON@RIVCO.ORG](mailto:MZAMBON@RIVCO.ORG)

**Re: I-10 Bypass EIR comments**

Dear Ms. Zambon:

These comments are submitted on behalf of the San Geronio Chapter of the Sierra Club and the Center for Biological Diversity (“the Center”) regarding the Draft Environmental Impact Report/Environmental Assessment (“DEIR/EA”) for the I-10 Bypass: Banning to Cabazon. The proposed Project is anticipated to build a road that may cause significant environmental impacts and will degrade the current and the ecosystem on the Project site. For the reasons detailed below, we urge that the following issues be re-evaluated and that substantial revisions to the DEIR/EA to better analyze, mitigate or avoid the Project’s potentially significant environmental impacts be included in a revised EIR for public review.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has 1.4 million members and supporters throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, wildlife connectivity, open space, air and water quality, and overall quality of life for people in Riverside County.

The Sierra Club is a national nonprofit organization of over 732,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth’s ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out

these objectives. Over 193,500 Sierra Club members reside in California. The San Gorgonio Chapter of the Sierra Club focuses on issues within the inland empire, including San Bernardino County.

### **I. DEIR/EA Piecemeals a Small Part of a Larger Project**

CEQA and NEPA prohibit “piecemealing.” Piecemealing is the process of dividing a large project into smaller individual subprojects in order to avoid consideration of the project’s impacts as a whole. *Banker’s Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*, 139 Cal.App.4th 249, 281 (2006). The Supreme Court laid out the piecemealing test in *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal.3d 376, 396 (1988), holding that “an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.”

IP-3a-1

In our 2013 scoping comments we brought to the attention of the County that it must not piecemeal the environmental analysis by looking only at the Banning to Cabazon portion, when the intent is clearly to continue this new road in subsequent phases all the way to Whitewater Canyon Road, or at least to Haugen-Lehman.<sup>1</sup> By failing to analyze the reasonably foreseeable consequences of the Project, this approach amounts to piecemealing the much larger project. Thus it is improper to perform a separate CEQA/NEPA for each section of the larger contemplated project. We encouraged the County to prepare a programmatic EIR for the whole project to begin with, with more detailed analysis for the current phase, so that this proposed project could tier off the PEIR as well as the subsequent phases. However, it failed to do so.

### **II. Wildlife Connectivity is Key**

As discussed in our scoping comments, the overriding concern with the above project is its impacts to one of the most critical wildlife movement corridors in California according to the South Coast Missing Linkages Project:

<http://www.scwildlands.org/reports/SCMLRegionalReport.pdf>

As acknowledged in the DEIR/EA the current phase of the I-10 bypass (Banning to Cabazon) crosses the San Gorgonio River and Smith Creek, which are both part of an identified key wildlife linkage by SC Wildlands between the San Bernardino and San Jacinto Mountains<sup>2</sup>. It is also called out in *California Essential Habitat Connectivity Project: A Strategy for Preserving a Connected California* (Spencer et al. 2010) as an “Essential Connectivity Area.” In fact, this is the only extant linkage in the vicinity that is not fragmented.

IP-3a-2

<sup>1</sup> <http://rcprojects.org/wp-content/uploads/2013/03/Low-Res-I-10-EAP-Public.pdf>

<sup>2</sup> [http://www.scwildlands.org/reports/SCML\\_SanBernardino\\_SanJacinto.pdf](http://www.scwildlands.org/reports/SCML_SanBernardino_SanJacinto.pdf)

### III. Compliance with the MSHCPs

The proposed project area is also identified as a wildlife movement corridor in the Western Riverside County Multiple Species HCP (WRCMSHCP) and is contiguous with wildlife movement corridors in the Coachella Valley MSHCP (CVMSHCP). The plan is to bridge the rivers to “minimize” impacts, but the goal under CEQA and NEPA is first to avoid impacts, then secondarily to minimize impacts. The County should endeavor to avoid impacts on wildlife corridors identified by the SC Wildlands, as well as the WRCMSHCP and the CVMSHCP.

IP-3a-3

Inconsistencies with applicable habitat conservation plans constitute significant effects under CEQA and NEPA, and therefore must be disclosed and mitigated. *See Joshua Tree Downtown Business Alliance v. County of San Bernardino*, 1 Cal.App.5th 677, 695 (2016) (an effect may be significant under CEQA if the project is inconsistent with applicable land use policies designed to mitigate environmental effects).

### IV. The Project Description is Vague and Ambiguous

The DEIR/EA fails to provide an adequate project description. “An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-93; *San Joaquin Raptor/Wildlife Reserve Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730.) While an EIR is not designed to freeze a project in the mold of the original proposal, “[o]n the other hand, a curtailed or distorted description of the project may ‘stultify the objectives of the reporting process.’” (*Dry Creek Citizens, supra*, 70 Cal.App.4th at 28.); *See also County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185 (1977) (an enigmatic or unstable project description impedes public input). The DEIR/EA identifies no preferred project and instead defers the decision to the final EIR. This failure to identify a preferred alternative provides the public and decision makers with inadequate information in order to analyze impacts and mitigation measures. (DEIR/EA at S-6) This approach also was expressly rejected last year in *Washoe Meadows Community v. Department of Parks & Recreation*, 17 Cal.App.5th 277, 288 – 289 (2017). For example, if a deal cannot be struck with the Morongo tribe that would provide an easement on their tribal lands as proposed in Alternative 12, the only alternatives would be the no-action alternative or Alternative 5.

IP-3a-4

Additionally, the County acknowledges that there is a forecasted need for four lanes in 20 years (DEIR/EA at S-2). Yet the DEIR/EA defers analysis of this action, although it allows portions of the ultimate width to be graded. Four lanes of traffic causing aversive effects as well as direct mortality will significantly impact wildlife. The County must address this impact under CEQA and NEPA now, instead of impermissibly deferring analysis.

## V. The DEIR/EA Fails to Analyze a Reasonable Range of Alternatives as Required by CEQA and NEPA

While the DEIR/EA proposed 14 alternatives, all but three were dismissed beyond preliminary environmental review. However, only one of retained alternatives is entirely on non-Tribal land. In view of Tribal Sovereignty issues, the County should retain at least two other non-Reservation alternatives to fulfill the intent of CEQA and NEPA to consider a reasonable range of alternatives including the environmentally superior alternative. In our scoping comments we advocated the same, and stated it was unclear why the original Alternatives 7 and 8 were dismissed from further analysis. They are valuable alternatives based on the fact that they would avoid many of the impacts associated with Smith Creek and its confluence with San Geronio River and the existing wildlife connectivity corridor.

It still remains unclear why these alternatives were summarily dismissed (DEIR/EA S-15) as failing to meet the purpose and infeasible. Rather than presenting an arbitrary conclusion, the County has an obligation under CEQA and NEPA to provide a factual explanation of why these alternatives failed. *See Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.*, 42 Cal.3d 929, 935 (1986) (“To facilitate CEQA’s informational role, the EIR must contain facts and analysis, not just the agency’s bare conclusions or opinions.”). In the absence of fully objective reasons, the DEIR/EA must analyze these alternatives, as they are likely environmentally preferable.

Because the DEIR/EA effectively proposes only two alternatives – the no-action and Alternative 5, it fails to consider a meaningful analysis of reasonable alternatives to the Project in order to lessen or avoid the Project’s significant impacts in violation of CEQA’s and NEPA’s mandates that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code §21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d). A rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate. The DEIR/EA fails to meet this requirement on two levels: the DEIR/EA analysis of the alternatives proposed is inadequate and the DEIR/EA fails to include a reasonable range of alternatives. Instead of providing a reasonable range of alternatives that fully mitigate or at least significantly limit the environmental impacts of the Project, the DEIR/EA skews the analysis of the proposed alternatives and leaves out other viable and feasible alternatives. The DEIR/EA’s limited range of alternatives improperly narrows the alternatives analysis and violates CEQA and NEPA. *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007). As courts have made clear, “[a] potential alternative should not be excluded from consideration merely because it ‘would impede to some degree the attainment of the project objectives, or would be more costly.’” *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007) (quotations omitted).

Although “an EIR need not consider every conceivable alternative to a project, it must consider a reasonable range of potentially feasible alternatives that will foster

IP-3a-5



informed decision decision-making and public participation.” Guidelines § 15126.6(a). Additionally, the “key to the selection of the range of alternatives is to identify alternatives that meet most of the project’s objectives but have a reduced level of environmental impacts.” *Watsonville Pilots Assn. v. City of Watsonville*, 183 Cal. App. 4th 1059, 1089 (2010).

The DEIR/EA should also include quantitative and meaningful comparison between the Project’s impacts and proposed alternatives’ likely impacts. Under CEQA, “the public agency bears the burden of affirmatively demonstrating that, notwithstanding a project’s impact on the environment, the agency’s approval of the proposed project followed meaningful consideration of alternatives and mitigation measures.” *Mountain Lion Foundation v. Fish & Game Com.*, 16 Cal. 4th 105, 134 (1997). The DEIR/EA clearly fails to meet this burden.

IP-3a-5

**VI. The Proposed Wildlife Undercrossings Fail to Meet the Minimum “Openness” Requirements of the WRMSHCP**

Most of the Build Alternative crossings fail to meet the minimum openness criteria of the WRMSHCP, yet the DEIR/EA asserts that the “Project is not expected to result in a substantial effect” and that “through compliance with the WRMSHCP there will be no adverse effects to this Special Linkage Area.” (2-14.9 ff ) However, this conflict with the WR MSHCP is significant. Table 2.14.1 Crossing Suitability (DEIR/EA at 2.14-10) identifies that none of the alternatives reaches the openness criteria for larger carnivores including mountains lions, which require an openness ration of 0.96 (DEIR/EA at 2.14-9). While the proposed bridge over Smith Creek in Alternative 5 does meet the criteria, all of the other bridges fail to meet the requirements. Therefore the alternatives need to be rethought to incorporate this critical impact avoidance. While the County may rely on requiring feasible mitigation under CEQA and NEPA, wildlife corridors are site specific, and once impacted, feasible mitigation may illusory. Further, failure to meet the minimum standard of the WRMSHCP would be a violation of the take permit. In addition, as noted above, inconsistencies with the WRMSHCP constitute a significant effect under CEQA and NEPA.

IP-3a-6

**VII. The Proposed Wildlife Crossing Do Not Follow Scientific Criteria**

Literature on wildlife crossings including underpasses is well documented in the scientific literature, yet the DEIR/EA, in addition to falling short on the openness requirement of the WRMSHCP, also fails to safeguard the potential wildlife passage under proposed bridges by for the following reasons:

- S-8 48’ allows for native trees near bridge crossings. This is objectionable because trees would provide cover for predators in the pinch points of the wildlife corridor created by the bridge, discouraging the use by wildlife;
- Night lighting - LAPM-5 allows for night lighting at “intersections on each end of the Project and possibly at bridges (if required for safety) (DEIR/EA

IP-3a-7

at 2.17-7), yet night lighting has the potential for a significant impact the wildlife corridors even with shielded and down-lighting. This is particularly concerning because of the proposed locations of the bridges which are near intersections and other bridges, which would compound impacts to wildlife corridors.

- Bridge design that would include separate bridge spans for opposing traffic directions would also encourage wildlife permeability, yet the actual designs of the bridges are not presented in the DEIR/EA. The DEIR/EA needs to include more specific bridge designs that not only meet/exceed the openness criteria of the WRC MSHCP but also incorporate separate bridge spans.

IP-3a-7

### VIII. The DEIR/EA Fails to Adequately Analyze the Project's Growth-Inducing Impacts.

EIRs are required to provide a detailed discussion regarding the growth-inducing impacts of a project. (Guidelines §§ 21100(b)(5); 21156.) Here, the DEIR/EA fails to include an adequate discussion of the growth-inducing impacts of adding highway infrastructure to the area. CEQA and NEPA require detailed analysis of such impacts, particularly for infrastructure projects. *See City of Antioch v. City Council*, 187 Cal.App.3d 1325, 1336 –37 (1986) “[c]onstruction of the roadway and utilities cannot be considered in isolation from the development it presages”); *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council*, 190 Cal.App.4th 1351, 1383 (2010) (“a roadway infrastructure project aimed at reducing regional traffic and related problems might still have growth-inducing impacts with indirect adverse impacts on the environment and might also result in adverse environmental impacts in the immediate vicinity of the project”); *Stanislaus Audubon Society, Inc. v. County of Stanislaus*, 33 Cal.App.4th 144, 152 (1995) (development of a golf course triggers the need to study potential growth-inducing impacts such as residential development even if no such development is currently proposed).

IP-3a-8

### IX. Conclusion

Given the possibility that we will be required to pursue appropriate legal remedies in order to ensure enforcement of CEQA and NEPA, we would like to remind the County of its duty to maintain and preserve all documents and communications that may constitute part of the “administrative record.” As you may know, the administrative record encompasses any and all documents and communications which relate to any and all actions taken by the County with respect to the Project, and includes “pretty much everything that ever came near a proposed [project] or [] the agency’s compliance with CEQA . . . .” (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further contains all correspondence, emails, and text messages sent to or received by the County’s representatives or employees, which relate to the Project, including any correspondence, emails, and text messages sent between the County’s representatives or employees and the project proponent’s representatives or

IP-3a-9



IP-3a-9

employees. Maintenance and preservation of the administrative record requires that, inter alia, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

The agencies cannot make the Finding of No Significant Impact, for the reasons stated above including impacts to corridors; failure to meet minimum openness standards hence a significant impact under the WRCMSHCP; piecemealing of the project and other issues. Please address these issues that we have identified above in a revised DEIR/EA that addresses the full scope of the project.

Thank you for the opportunity to comment.

Very truly yours,

Joan Taylor, Conservation Chair  
Tahquitz Group of the Sierra Club

Ilene Anderson  
Senior Scientist  
Center for Biological Diversity

cc: via email  
Karin Cleary Rose USFWS [karin\\_cleary-rose@fws.gov](mailto:karin_cleary-rose@fws.gov)  
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#### **L.4.4 IP-3a – Joan Taylor Sierra Club 2018**

##### **IP-3a-1**

Significant impacts will be avoided, minimized, and mitigated as required by CEQA. The first part of this comment is an introduction to the Sierra Club's comments and Responses to Comments IP-3a-1 through IP-3a-10. The commenter's request to incorporate the Sierra Club's previous comments by reference is acknowledged and responses to the previous comments are provided in Responses to Comments IP-3a-1 through IP-3a-10.

##### **IP-3a-2**

Please see Response to Comment IP-3-2.

##### **IP-3a-3**

Impact on wildlife corridors is discussed in Section 2.15.2.4, Wildlife Corridors, and Table 2.15.1, Bridge and Storm Drain Crossing Suitability, of the Recirculated Draft EIR/EA, which provides information regarding the size, location, and openness ratio for the wildlife crossings included as part of the I-10 Bypass Project.

As a matter of clarity, the Project does not cross through an "Essential Connectivity Area." As described in Section 2.15.2.2, the nearest Essential Connectivity Area (San Jacinto Mountains – San Bernardino Mountains Essential Connectivity Area - Spencer et al. 2010) is located four miles east of the Project area, east of Cabazon, near the unincorporated area of Whitewater. The San Jacinto Mountains – San Bernardino Mountains Essential Connectivity Area coincides with the easternmost leg of South Coast Wildland's San Bernardino-San Jacinto Connection Linkage Design, which was created based on the least cost corridor for mountain lion.

Also described in Section 2.15.2.2, the Project would bisect the middle leg of the South Coast Wildlands Linkage design which was included based on the least cost corridor for American badger (*Taxidea taxus*) and designed for small- to medium-sized wildlife species such as Pacific kangaroo rat (*Dipodomys simulans*), large eared woodrat (*Neotoma macrotis*) (previously considered a subspecies of *Neotoma fuscipes*), Merriam's kangaroo rat (*Dipodomys merriami*), and coast horned lizard (*Phrynosoma blainvillii [coronatum]*). The proposed wildlife crossings are large enough to facilitate movement of these small-to medium-sized wildlife species. In addition, the bridges are also able to facilitate movement for larger species such as mountain lion and mule deer, even though these larger species are not the target movement species for north-south movement at this location due to the habitat

conditions. In addition, accommodating the movement of these larger species is not required by the WRMSHCP at non-Criteria Cell Special Linkages. Table 2.15.1, Bridge and Storm Drain Crossing Suitability, of the Recirculated Draft EIR/EA provides information regarding the size, location, and openness ratio for the wildlife crossings included as part of the I-10 Bypass Project.

Smaller culverts would be used on a more frequent basis along the Project that would accommodate smaller less mobile wildlife species. In addition, areas that would be subject to temporary project disturbance would be restored back to native habitats to help provide refugia cover at the approach of the wildlife crossings. Wildlife fencing would be installed to help guide wildlife towards the opening of the wildlife crossings.

**IP-3a-4**

Please see Responses to Comments IP-3-9 and IP-3-10.

A portion of the Project is within the WRMSHCP which is contiguous with the CVMSHCP Cabazon Conservation Area and Sand Transport area as depicted on Figure 4-6d, Cabazon Conservation Area. To clarify, the nearest designated Corridor or Linkage within the CVMSHCP is at Fornat Wash, which is 3.8 miles east of the Project.

Additional alternatives were considered as discussed in Section 1.5, Identification of the Locally Preferred Alternative, in Chapter 1, Project Description, of the Recirculated Draft EIR/EA. Additionally, 14 potential Build Alternatives were evaluated in the Alternatives Screening Analysis technical study (LSA, September 2016). As discussed, after comparing and weighing the benefits and impacts of all feasible alternatives, Alternative 5 and Alternative 12 (Preferred Alternative) were carried forward. Therefore, a reasonable effort was made to avoid impacts, including impacts to wildlife corridors prior to consideration of mitigation. Although not required by either the WRMSHCP or the CVMSHCP, wildlife crossings were added to the design to facilitate north-south movement of wildlife across the Project including the focal species in the South Coast Wildlands Linkage Design as well as larger wildlife species at the bridges.

Compliance with the applicable habitat conservation plans (the Western Riverside County Multiple-Species Habitat Conservation Plan (WRMSHCP) and Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP) is discussed in Section 2.15.2.5, Habitat Conservation Plans.



The County determined that the Project is consistent with the WRMSHCP. Implementation and Findings documenting the criteria review consistency process, as described in Section 3.0 of the WRMSHCP, will be made by the Local Permittees for each project for which a Criteria consistency review is conducted and will be included in the appropriate project review and approval documentation. The information and Findings will include the following:

- a. Brief description of the project and its location focusing on the location of the project with respect to the applicable MSHCP Core or Linkage, Area Plan Subunit and Cell or Cell Group;

**Response:** The new I-10 Bypass two-lane roadway, extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning (City) east to the intersection of Bonita Avenue and Morongo Trail (formerly Apache Trail) in the unincorporated community of Cabazon, is located within the WRMSHCP and crosses through the Pass Area Plan and the Special Linkage Area. The above Project Description is included in the Draft and Recirculated Draft EIR/EA. The Project is not located within a WRMSHCP criteria cell or core as stated in Section 2.15, Natural Communities, of the Draft and Recirculated Draft EIR/EA.

- b. Brief description of on-site biological resources focusing on presence or absence of Planning Species (subset of covered species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans) identified for the applicable Core or Linkage and Area Plan Subunit, Biological Issues and Considerations identified for the applicable Area Plan Subunit, and focus Vegetation Communities and connectivity identified for the applicable Cell or Cell Group;

**Response:** The biological resources within the WRMSHCP that would be affected by the Project include disturbed *Acacia greggii* Shrubland Alliance, disturbed *Eriogonum fasciculatum* Shrubland Alliance, and Riversidean Alluvial Fan Sage Scrub (RAFSS) vegetation communities, as described in Section 2.15 of the Draft and Recirculated Draft EIR/EA. The Project also crosses Smith Creek and two unnamed tributaries to Smith Creek that are considered CDFW Streambeds (Section 2.16 of the Draft and Recirculated Draft EIR/EA). Of the 11 planning species described in the WRMSHCP for the Pass Area Plan, loggerhead shrike and Los Angeles pocket mouse were observed on site. Special-status

wildlife species potentially affected by the Project include coastal California gnatcatcher, Los Angeles pocket mouse, burrowing owl, Le Conte's thrasher, nesting birds, and desert tortoise (Sections 2.18 and 2.19 of the Draft and Recirculated Draft EIR/EA). The USFWS determined that the Project does not include suitable habitat for desert tortoise and withdrew desert tortoise from consideration in the Section 7 Consultation (USFWS 2021). The habitat conditions on site were not suitable to any special-status plant species (Sections 2.17 and 2.19 of the Draft and Recirculated Draft EIR/EA). The Project crosses a non-criteria cell WRMSHCP Special Linkage that is also known as the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage (Section 2.15 of the Draft and Recirculated Draft EIR/EA).

The Project is within the WRMSHCP Pass Area Plan. The WRMSHCP describes that projects within the Pass Area Plan need to comply with the following three measures, outlined in Section 3.3.10 of the WRMSHCP for the Pass Area Plan, to (1) conduct Tribal coordination regarding Indian Lands, (2) apply the rebuttable presumption of significance in response to question IV(d) of Appendix G of the State CEQA Guidelines, regarding migratory wildlife corridors, and (3) forward the Draft and Final CEQA documentation for projects within this Special Linkage Area (including the I-10 Bypass Project) to the Western Riverside County Regional Conservation Authority (RCA) for informational purposes. Consistency with each of the WRMSHCP Pass Area Plan measures is discussed in the response to c. below.

- c. A brief analysis of the relationship of the project as proposed to the biological resources issues noted in (b) and discussion of the proposed project contribution toward achieving the MSHCP Criteria;

**Response:** An analysis of the Project's effects on biological resources is provided in Sections 2.15 through 2.20 of the Draft and Recirculated Draft EIR/EA, the Natural Environmental Study (NES) and Errata (March 2020), the Determination of Biological Equivalent or Superior Preservation (DBESP), and the Biological Opinion (BO), which all demonstrate consistency with the WRMSHCP.

In addition, the County complied with the three measures described in the Pass Area Plan, including the following:

1. The County has coordinated with the Tribe of Morongo Band of Mission Indians (MBMI) throughout the development process for this Project. The

- MBMI expressed their support for the I-10 Bypass Alternative 12 (Preferred Alternative) in their September 25, 2018, letter to the County (included in Chapter 4, Comments and Coordination, of this Final EIR/EA). The Bureau of Indian Affairs (BIA) is also a cooperating agency under NEPA for the I-10 Bypass Project, and there is ongoing coordination with the BIA. In addition, the USFWS issued a Biological Opinion, dated January 8, 2021, that addresses take authorization for coastal California gnatcatcher and the withdrawal from consultation for desert tortoise consistent with the requirements for the Morongo Band of Mission Indians Tribal Trust Lands (Tribal Lands) and the WRMSHCP and CVMSHCP Plan Areas.
2. The Project would not substantially interfere 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. The size, number, and spacing of wildlife crossings that will be constructed as part of the Project will maintain wildlife connectivity across the Project area through the WRMSHCP Special Linkage. The Project minimizes effects on wildlife movement by maintaining opportunities for wildlife to cross the Project area using three large bridge structures that will facilitate wildlife movement: (1) a 12 ft (H) by 893 ft (W) by 101 ft (L) structure at the San Gorgonio River, (2) a 10 ft (H) by 1,072 ft (W) by 101 ft (L) structure at Smith Creek, and (3) an 8 ft (H) by 133 ft (W) by 101 ft (L) structure at the unnamed Smith Creek Tributary. Eight additional wildlife crossings will provide additional opportunities for small-to-medium-sized wildlife across the length of the Project area at regular intervals (see Figure 11, NES Errata, March 2020). The *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod, K., November 2, 2000) was reviewed for features of the linkage and focal species that would use the San Gorgonio River/San Bernardino-San Jacinto Mountains Linkage. In addition, the Project was designed to be significantly more porous than the barrier created by the I-10 freeway located to the north with only one crossing in the vicinity.
  3. The RCA was provided copies of the Draft EIR/EA and the Recirculated Draft EIR/EA during circulation, and was involved with multiple discussions regarding the development of the measures stated herein. The Final EIR/EA will be distributed to the RCA according to State CEQA Guidelines.

- d. A brief discussion of any conflicts with the MSHCP Criteria due to project design features, surrounding land use conditions, on-site conditions different from those anticipated in the MSHCP or other appropriate factors and summary of features incorporated in the project to address those conflicts;

**Response:** The Project is a covered activity under the WRMSHCP, per Section 7.0 of the WRMSHCP. The Project does not conflict with the WRMSHCP Criteria. Project design features that avoid and minimize potential impacts to natural communities, wildlife connectivity, wetlands and waters, special-status wildlife species, and the associated avoidance, and minimization measures/commitments are summarized in Table C-1 in Appendix C, Avoidance, Minimization and/or Mitigation Summary.

- e. A Statement of Findings that the proposed project has been determined to be consistent with the MSHCP Criteria and the rationale for this determination. The Findings shall incorporate the information generated as part of (a) through (d) above and shall specifically describe the consistency of the project with Reserve Assembly criteria with emphasis on reserve configuration and connectivity and covered species.

**Response:** As described in the Criteria Consistency Review Process, Section 3.0 of the WRMSHCP, the County as the Local Permittee determined that the Project is a covered activity consistent with the MSHCP Criteria and complied with the Pass Area Plan requirements as supported above.

The CVCC reviewed the I-10 Bypass project through the Joint Project Review process, and confirmed the Project's consistency with the CVMSHCP on June 11, 2020.

**IP-3a-5**

Please see Responses to Comments IP-3-9, IP-3-11, and IP-3-12.

**IP-3a-6**

Please see Responses to Comments IP-3-15 and IP-3-17.

Although the Project is within a WRMSHCP Special Linkage Area, the Project is not located within a Criteria Cell that would trigger the implementation of "Specific Initial Guidelines for Wildlife Movement Design Considerations within the Criteria Area." As described in the *South Coast Missing Linkages Project: A Linkage Design*

for the San Bernardino-San Jacinto Connection (Penrod et al. 2005), this linkage primarily targets small-to-medium-size wildlife species. The number, frequency, and openness factors (10 wildlife crossings for Alternative 5 and 11 crossings for Alternative 12 [Preferred Alternative]) would maintain wildlife connectivity/movement for a diverse range of species to cross the Project including small-to-medium-sized wildlife species throughout the Project and large wildlife species at the bridges.

**IP-3a-7**

The text requiring native trees near bridge crossings has been deleted and replaced with the following text included in avoidance and minimization Measure WC-4: “Native grasses, forbs, and shrubs that are included in the *Chilopsis linearis* woodland, *Acacia greggii* shrubland, Coastal Sage Scrub, and Riversidean Alluvial Fan Sage Scrub will be planted on slopes at bridges and culverts to provide cover for wildlife and to encourage the use of the wildlife crossings.”

Avoidance and minimization Measure WC-1 below is included in the I-10 Bypass Recirculated Draft EIR/EA (see Section 2.15.3.2, Wildlife Corridors) to mitigate the potential impact to wildlife and wildlife corridors as a result of temporary lighting during nighttime construction activities and permanent lighting required during nighttime operation of the completed I-10 Bypass Project.

**WC-1**      **Noise and Lighting.** During construction, if work must be conducted at night, the County of Riverside’s (County) Resident Engineer will ensure noise and direct lighting will be directed away from the wildlife corridors. Construction will be limited to daylight hours to the extent feasible. If roadway lighting is needed temporarily during construction, the lighting would be restricted and shielded away from adjacent native habitat areas in compliance with Ordinance No. 655 – Regulating Light Pollution within 45 miles of the Palomar Observatory. Permanent lighting will only be provided near the wildlife corridors if absolutely necessary for safety. If permanent lighting is implemented, recessed lighting and/or glare shields would be used to prevent light from shining into the wildlife corridor habitat.

Lighting for the I-10 Bypass Project will be consistent with County lighting standards and requirements for this type of roadway facility.



Although the bridges would be able to accommodate crossing by large mammals, they are not the intended target species. The wildlife corridor is primarily targeting small-to-medium-sized wildlife use as described in the *South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-San Jacinto Connection* (Penrod et al. 2005). The wildlife crossings would be designed consistent with the Caltrans Wildlife Crossing Guidance Manual (Meese et. al 2009).

**IP-3a-8**

Please see Response to Comment IP-3-25.

**IP-3a-9**

This comment has been noted. All documents and communications that constitute the administrative record will be maintained as required. This comment asserts “the agencies cannot make a Finding of No Significant Impact, for the reasons stated above including impacts to corridors; failure to meet minimum openness standards hence a significant impact under the WRMSHCP; piecemealing of the Project and other issues. Please address these issues that we have identified above in a revised DEIR/EA that addresses the full scope of the project.” These issues, have all been addressed as discussed above.

**From:** [Zambon, Mary](#)  
**To:** [Abby Annicchiarico](#); [King Thomas](#)  
**Cc:** [Adrian, Darren](#); [Marcinek, John](#)  
**Subject:** FW: Comments on I-10 Bypass: Banning to Cabazon Project Recirculated DraftEIR/Draft EA  
**Date:** Monday, August 19, 2019 12:27:27 PM  
**Attachments:** [image001.png](#)

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See below.

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**From:** Green, John F (Riverside) [mailto:john.green@woodplc.com]  
**Sent:** Monday, August 19, 2019 11:51 AM  
**To:** Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Cc:** Marcinek, John <JMARCINE@RIVCO.ORG>  
**Subject:** Comments on I-10 Bypass: Banning to Cabazon Project Recirculated DraftEIR/Draft EA

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Hello,

The I-10 Bypass: Banning to Cabazon Project Recirculated Draft Environmental Impact Report/Draft Environmental Assessment was recently brought to my attention. I am familiar with this area because of work on a variety of jobs in this corridor as a wildlife biologist. As such, I was surprised to see that the documents do not consider impacts to the federally listed as threatened coastal California gnatcatcher (*Polioptila californica californica*). Although this area is at the extreme eastern edge of this species range, where it can co-occur with the similar black-tailed gnatcatcher (*Polioptila melanura*), coastal California gnatcatchers and their habitat are present in the bypass area. I have personally detected them, as have other biologists. In the bypass project area there are records as far east as Cabazon. I don't know if all biologists have submitted their records, but certainly some of them are in the California Natural Diversity Database (CNDDDB). Although this is a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan, it is not covered east of that plan's boundary. I hope that potential impacts to this species will be addressed in the final EIR/EA, including a focused survey.

Sincerely,

### John F. Green, Senior Biologist

Wood Environment and Infrastructure, 1845 Chicago Avenue, Suite D, Riverside, CA 92507  
 Office +1 951 369 8060 x 111, Fax +1 951 369 8035, Mobile +1 951 751 0733, [john.green@woodplc.com](mailto:john.green@woodplc.com)



[woodplc.com](http://woodplc.com), As of 9 October 2017 Amec Foster Wheeler's parent company became Wood, PLC. Please note that as of 6 August 2018 we have moved to: 1845 Chicago Avenue, Suite D, Riverside, CA 92507, all phone numbers remain unchanged.

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[County of Riverside California](#)

#### **L.4.5 IP-4 – John F. Green**

##### ***IP-4-1***

Thank you for bringing this to our attention. The potential presence of the federally threatened coastal California gnatcatcher (*Polioptila californica californica*) was evaluated at the onset of the Project in 2011. At the time, the biological study area (BSA) was outside of the known geographic range based on the USFWS coastal California gnatcatcher 5-year review (2010) and there were no known California Natural Diversity Database (CNDDDB) occurrences within the United States Geological Survey (USGS) Quad search of the Whitewater, Cabazon, and Beaumont areas.

A new CNDDDB search found one record of coastal California gnatcatcher in 2016 within the western half of the BSA. Two other records from 2012 are located within 2 miles southeast of the BSA. Based on the most recent CNDDDB search, the Project will assume that coastal California gnatcatcher is present on-site and “take” of coastal sage scrub, and riversidean sage scrub will be mitigated accordingly. The discussion of coastal California gnatcatcher will be updated in the Final EIR/EA to address the recent coastal California gnatcatcher sightings.

**From:** [Zambon, Mary](#)  
**To:** [King Thomas](#); [Abby Annicchiarico](#)  
**Cc:** [Adrian, Darren](#); [Marcinek, John](#)  
**Subject:** FW: I-10 Bypass Road  
**Date:** Wednesday, September 25, 2019 4:41:26 PM  
**Attachments:** [I-10 Bypass updated letter of Support Alternate 12.pdf](#)  
[I-10 Bypass Revised Comments.pdf](#)

---

See attached and comment below.

---

**From:** Karen Woodard [mailto:KWoodard@morongo-nsn.gov]  
**Sent:** Wednesday, September 25, 2019 4:31 PM  
**To:** Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Cc:** Adrian, Darren <darren.adrian@kimley-horn.com>  
**Subject:** I-10 Bypass Road

**CAUTION:** This email originated externally from the **Riverside County** email system.  
**DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Mary,

I would like to take the time to reaffirm the Tribes comments and support for the I-10 Bypass Road. I am attaching the following documents to be considered with the recirculated DEIR/EA.

1. MBMI's letter dated 3/5/2018 (attached) submitted for the previous DEIR/EA circulation applies to this Recirculation of the DEIR/EA
2. MBMI prefers Alt 12 as indicated in our letter of support dated 9/25/2018 (attached).

Thank you.

Karen Woodard, Administrator  
Morongo Band of Mission Indians  
12700 Pumarra Road,  
Banning, CA 92220  
O 951-849-4697  
F 951-755-5124  
C 951-323-1635

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[County of Riverside California](#)



**MORONGO BAND OF MISSION INDIANS**  
**OFFICE OF TRIBAL HISTORIC PRESERVATION**  
12700 PUMARRA RD BANNING, CA 92220  
OFFICE 951-755-5025 FAX 951-572-6004

March 5, 2018

RE: I-10 ByPass Project

Dear Ms. Zambon,

As you are aware, the Morongo Band of Mission Indians has been engaged in ongoing government-to-government consultation involving the I-10 Bypass Banning to Cabazon Project since the initial planning phase. After reviewing the Draft EIR/EA, the Tribe would like to submit the following comments regarding potential impacts to cultural resources, and the need for amendments to the mitigation measures, to ensure the greatest amount of protection to resources depending on the alternative route selected.

Regarding the I-10 Bypass Banning to Cabazon Project's proposed mitigation to avoid and minimize impacts, the Tribe has these additional comments based on the Draft Environmental Impact Report/Draft Environmental Assessment:

CR-1: In addition to the outlined mitigation measures in the Draft Environmental Impact Report/Draft Environmental Assessment, the site archaeologist shall consult with Morongo Tribal Historic Preservation Office to assess the nature and significance of any finds through a consensus judgment (C-8).

IP-5-1

CR-2: In addition to the outlined mitigation measures, the Morongo Tribal Historic Preservation Officer also shall be notified immediate if any humans are discovered if, for any reason, a tribal monitor is not present (C-8).

IP-5-2

CR-3: Caltrans and county shall develop a Cultural Resources Mitigation and Monitoring Plan (CRMMP) that includes the measures cited in CR-3 as well as the presence of Morongo tribal monitors for all ground disturbing activity in the wash, the area between the eastern bridge over the wash to Hathaway Street and Westward Avenue, and utility relocation areas. Monitoring would include all ground disturbing in these areas, not just the initial ground breaking activities. Caltrans and the county will act immediately if tribal consultants are excluded from monitoring areas or from conducting stop-checks in areas outside the above locations. Artifacts recovered will be sent to the San Bernardino County Museum for care only after other preferred options outlined in the Tribe's confidential memo are exhausted. Caltrans and the county shall develop along with tribal consultation specific mitigation measures for the prehistoric features outlined CR-3 through avoidance, reburial or relocation, with avoidance as the preferred option (C-8 and C-9).

IP-5-3

CR-4: In addition to the outlined mitigation measure, there shall be a presence of a Morongo monitor at all times when an archaeologist or CRM technician is onsite unless the Tribe defers (C-8 and C-9).

IP-5-4

The Tribe will continue to consult under federal and state environmental and historic preservation regulations on the project's recommended mitigation requirements.

↑ IP-5-4

Respectfully,

Raymond Huaute  
Cultural Resource Specialist  
Morongo Band of Mission Indians  
Email: [rhuaute@morongo-nsn.gov](mailto:rhuaute@morongo-nsn.gov)  
Phone: (951) 755-5025

September 25, 2018

John Marcinek, Project Manager  
 "I-10 Bypass Project"  
 County of Riverside Transportation Department  
 14<sup>th</sup> Street Annex  
 3525 14<sup>th</sup> Street  
 Riverside, CA 92502

MORONGO  
 BAND OF  
 MISSION  
 INDIANS



A SOVEREIGN NATION

**SUBJECT: Letter of Support for the Southern I-10 Bypass Alternative**

Dear Mr. Marcinek:

I am writing as Tribal Chairman on behalf of the Tribal Council of the Morongo Band of Mission Indians (MBMI). For several years we have been working in concert with the County of Riverside, the City of Banning, and the State Department of Transportation (Caltrans), in support of the Southern Bypass Route for Interstate 10. Fortunately, with the substantial financial assistance from MBMI and the County of Riverside, we have moved to the point of narrowing many route alternatives in anticipation of selecting an optimal preferred route.

The attached exhibit shows the two alternate southern routes, Alternate 5 and Alternate 12. We feel strongly that alternative 12 presents a better option for meeting our regional safety, mobility and economic development goals. Alternate 12 also provide costs savings due to reduced environmental and road construction impacts and is supportive of our long-term development plans. While we had previous supported Alternative 13, which was presented some years ago, Alternative 12 is consistent with the 2008 resolution approved by the Tribal Council, the County of Riverside, and the City of Banning which endorsed a Southern Route and rejected the Ramsey extension, identified as Alternative 7.

We appreciate the opportunity to comment on this very important project. If I may be of any further assistance with regard to this matter please do not hesitate to contact me at your convenience.

Sincerely,

Robert Martin  
 Tribal Chairman

Cc: Kimberly Cluff, Morongo Legal Department  
 Titu Asghar, CEO Morongo  
 Karen Woodard, Realty Administrator

#### **L.4.6 IP-5 – Karen Woodard**

##### **IP-5-1**

Measure CR-1 was developed as a result of the Caltrans Section 106 consultation process. Therefore, as requested in Caltrans August 24, 2020, comments on Section 2.7 Cultural Resources and as discussed in the October 21, 2020, conference call with Caltrans, Bureau of Indian Affairs (BIA), Morongo Band of Mission Indians (MBMI), Riverside County Transportation Department (RCTD), and the Project consultant team, measure CR-1 has been replaced with the standard Caltrans measure.

##### **IP-5-2**

Measure CR-2 was developed as a result of the Caltrans Section 106 consultation process. Therefore, as requested in Caltrans August 24, 2020, comments on Section 2.7 Cultural Resources and as discussed in the October 21, 2020, conference call with Caltrans, Bureau of Indian Affairs (BIA), Morongo Band of Mission Indians (MBMI), Riverside County Transportation Department (RCTD), and the Project consultant team, measure CR-2 has been replaced with the standard Caltrans measure.

##### **IP-5-3**

The commenter’s request is acknowledged. This change has been incorporated in Section 2.7.4 under avoidance and minimization Measure CR-3 which states “Prior to project construction, the County, or their duly-appointed representative shall develop a Cultural Resources Mitigation and Monitoring Plan (CRMMP) in consultation with the Morongo Band of Mission Indians THPO...”

As requested in Caltrans August 24, 2020, comments on Section 2.7 Cultural Resources and as discussed in the October 21, 2020, conference call with Caltrans, Bureau of Indian Affairs (BIA), Morongo Band of Mission Indians (MBMI), Riverside County Transportation Department (RCTD), and the Project consultant team, “Caltrans” is not included in measure CR-3. This is because measure CR-3 was developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians and Caltrans is not included in this agreement.

##### **IP-5-4**

The commenter’s request is acknowledged. This change has been incorporated in Section 2.7.4 under avoidance and minimization Measure CR-4, which states “All construction monitoring shall be completed by teams minimally comprised of a qualified professional archaeologist and a representative of the Morongo Band of



Mission Indians.” CR-4 was developed as a result of a post-Section 106 agreement between the County of Riverside and the Morongo Band of Mission Indians and Caltrans is not included in this agreement.

***IP-5-5***

The commenter’s support for Alternative 12 (Preferred Alternative) and the benefit provided toward meeting safety, mobility, and economic development goals is acknowledged.

9/10/19 IP-6

Kerry Mariner requests to use previous  
comments:

IP-6-1

City Banning

Written comment card

KERRY MARINER

P.O. Box 912 mailing

Cabazon CA 92230 951-757-4039

49367 BlandheAve

**L.4.7 IP-6 – Kerri Mariner**

***IP-6-1***

The commenter's request for previous comments to be included is acknowledged. The responses to these comments are located under IP-6a. Construction of Alternative 12 (Preferred Alternative) would require an easement through the Morongo Band of Mission Indians tribal land. Improvements to railroad facilities, such as a grade separated railroad crossings, are not part of the I-10 Bypass Project. The purpose of the Project, as stated in Chapter 1 of the Recirculated Draft EIR/EA, is to provide a local roadway connecting Banning and Cabazon.

# I-10 BYPASS: BANNING TO CABAZON PROJECT

November 15, 2012 • Banning High School

COMMENT CARD IP-6a

Name: Kerri Mariner Phone: (951) 849-4442 Date: 11/15/12

Address: P.O. BOX 297 Cabazon Ca 92230

Affiliation: Cabazon Water District Email: kmarinercwd@yahoo.com

Comments: Wonderful idea. Easement may be necessary through tribal land and lots of flooding goes through there. Cabazon has been very limited to traffic closer of freeway's as long as 9 hours. The Train also is a big issue from

Fax comments to 951-955-3164 or mail this postcard. Leaving town Cabazon should receive  
Comments due by December 17, 2012. Easement for pipeline  I request to be on the Project Mailing List.

### Meeting Accommodations:

- How did you hear about this meeting or project? Water Board GM Calvin Louie
- If you are limited in your ability to communicate in English, were your communication needs adequately met?  
 Yes  No  Not Applicable
- If you were in need of a reasonable accommodation at this meeting as a result of a disability, were your accommodation needs adequately met?  
 Yes  No  Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

IP-6a-1  
IP-6a-2  
IP-6a-3

IP-6

MINUTES  
CITY COUNCIL  
BANNING, CALIFORNIA

02/13/18  
SPECIAL MEETING

A special meeting of the Banning City Council was called to order by Mayor Moyer on February 13, 2018 at 3:00 p.m. at the Banning Civic Council Chambers, 99 E. Ramsey Street, Banning, California.

COUNCIL MEMBERS PRESENT: Councilmember Andrade  
Councilmember Franklin  
Councilmember Peterson  
Councilmember Welch  
Mayor Moyer

COUNCIL MEMBERS ABSENT: None

OTHERS PRESENT: Alejandro Diaz, Interim City Manager  
Kevin Ennis, City Attorney  
Rochelle Clayton, Deputy City Manager  
Art Vela, Public Works Director  
Stephen Badgett, Interim Electric Utility Director  
Patty Nevins, Community Development Director  
Sonia Pierce, Senior Planner  
Sonja De La Fuente, Deputy City Clerk

### WORKSHOP

#### 1. I-10 Bypass Project Update

Juan Perez with the Riverside County Transportation Department provided a brief background regarding the I-10 Bypass Project, then introduced Darren Adrian with Kimley-Horn and Associates.

Mr. Adrian presented an update regarding the I-10 Bypass Project (see Exhibit A”).

Council Member Peterson asked the Lieutenant with the California Highway Patrol (CHP) some questions related to national security if trucks were able to bypass the weigh station on I-10. Lieutenant explained that all 16 weigh stations in southern California have bypass accessibility and the portable equipment is utilized there as well. He also advised they have mobile units with portable scales and radiological detectors they are able to dispatch to accommodate needed security. Council Member Peterson asked Mr. Adrian if the TSA or the Department of Homeland Security had been consulted with in regard to this project. Mr. Adrian advised that only the CHP has been consulted with thus far. Council Member Peterson’s main concern is the trucks bypassing the scales for security reasons.



Council Member Franklin expressed concern with the weight of the trucks that would travel the City's streets and the damage that can be incurred. She asked if there was anything that could be done to keep them off of the residential streets. Mr. Adrian informed the Council that the County would like to work with the City to address these concerns. He suggested using cones in an emergency situation and possibly disallowing certain turning movements. Council Member Franklin asked when they plan on completing the project. Mr. Adrian believes the two-lane phase would be completed by 2022 and based on statistical information, the four-lanes would be done around 2040. Council Member Franklin asked about horses and golf cart accessibility. Mr. Adrian was open to the possibility of widening the access.

Council Member Welch expressed concern with overuse of the bypass. He asked if the County is working with the Morongo tribe to assist with the expenses related to this project, as they have some development going in on the south side. Mr. Adrian indicated they would ask the Tribe to assist and has been in communication with the tribe and if a project came in it would provide a funding source for those improvements. Council Member Welch would like the County to consider a grade separation at I-10 and Hargrave. He also expressed concern with the bypass becoming a regularly used truck route. Mr. Adrian explained they are open to discuss the options further.

Council Member Andrade expressed her disappointment in the Public Hearing that was held at Banning High School. She is pleased with the presentation today and is in favor of a connection to Cabazon. Mr. Adrian apologized for her disappointment and would be happy to answer any questions she may have. Council Member Andrade suggested a presentation, then have workstations the attendees could visit following the presentation.

Mayor Moyer expressed concern with the project being completed with too many unresolved issues and would like them addressed prior to moving forward.

Council Member Peterson recommended the City hold a workshop on a non-Council meeting date, beginning at 6:00 P.M.

## PUBLIC COMMENTS

The Mayor opened the item for Public Comment.

Inge Schuler asked about Morongo Trail, where the bypass is supposed to begin. She pointed out that there could be back up on the freeway from trucks trying to cross the railroad tracks at that point. She would like to know the total expenditures to date broken down by year (since 2013) for this project and the projected final cost. She would also like to see a statistical breakdown on the number of accidents on I-10 in the various sections between the original proposed route (further east) and 8<sup>th</sup> Street in Banning. She provided her list of questions to Mr. Adrian.

Kerry Mariner, resident of Cabazon, shared an incident which took place eight months ago when a 13 year old boy had an accident involving head trauma and had to wait 17 minutes for an ambulance. Also, a lady lost her life about eight weeks ago. Both delays were caused by trains delaying traffic. She informed the Council that this project is a lifeline for Cabazon, as there is no access to hospitals if there are trains blocking the two exits from Cabazon.

IP-6a-4

Paul Perkins, Banning resident, asked about the Sheriff's involvement in this project and the contingency plan that been worked out with Morongo, CHP, and the Sheriff's.

Council Member Peterson asked if the road would be under CHP jurisdiction. The Lieutenant with CHP would have to defer that question to the Captain in their San Geronio office, as there are some areas in the state where there are shared jurisdictions. Some areas are within the City's limits and those areas would be out of their jurisdiction.

Jim Price, Banning resident, feels this project would benefit Cabazon and the Tribe, but has not heard how it benefits the City of Banning.

John Hagan, Banning resident, agrees that there should be a bypass, but does not believe the current plan will be effective. He feels it should be on the north side of I-10. He would like to see a plan to curtail trucks using the bypass when there is not an emergency situation.

Ann Price, Banning resident, asked why this is being called a bypass instead of a connection between Banning and Cabazon that restricts and prohibits trucks except in an emergency.

Jerry Westholder, Banning resident, expressed support of a bypass, but feels it should be north of I-10 or a grade separation at Hargrave and I-10.

Seeing no further comments, the Mayor closed Public Comment.

The Mayor announced that the Council would be happy to hold another meeting regarding the project and will coordinate with the County of Riverside Transportation Department.

Mr. Perez with the County of Riverside will be happy to work with the Council to schedule another meeting.

Director Vela explained the new deadline for public comment on the Draft Environmental Impact Report is February 27<sup>th</sup> and asked if the Council would like to request the public comment period to be extended again. It was the consensus of the Council to do so.

ADJOURNMENT

By common consent the meeting adjourned at 4:07 p.m.

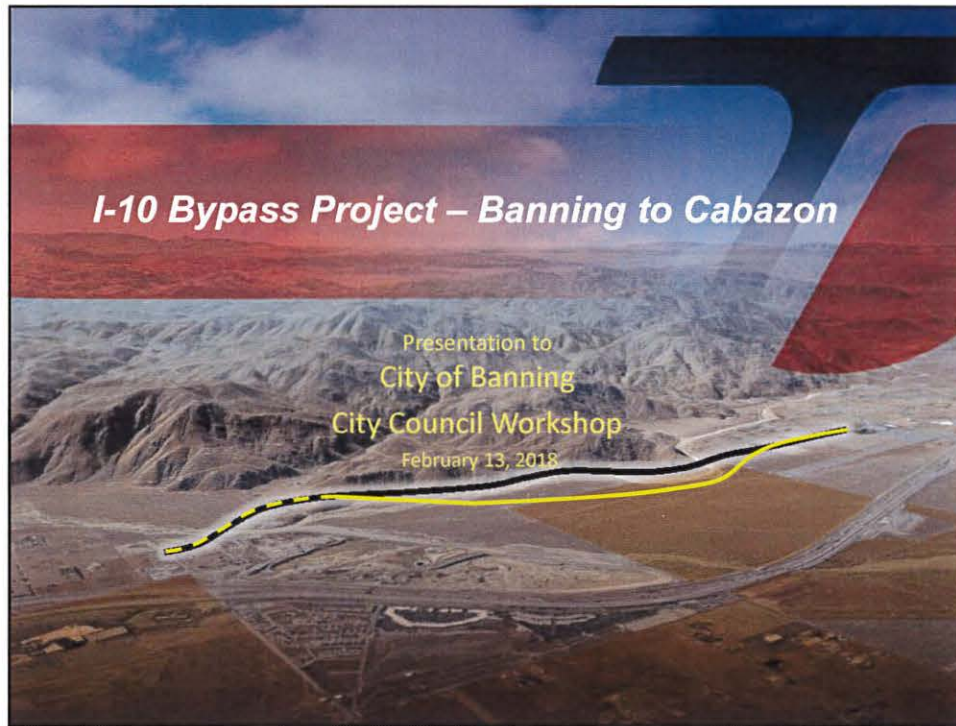
Minutes Prepared by:



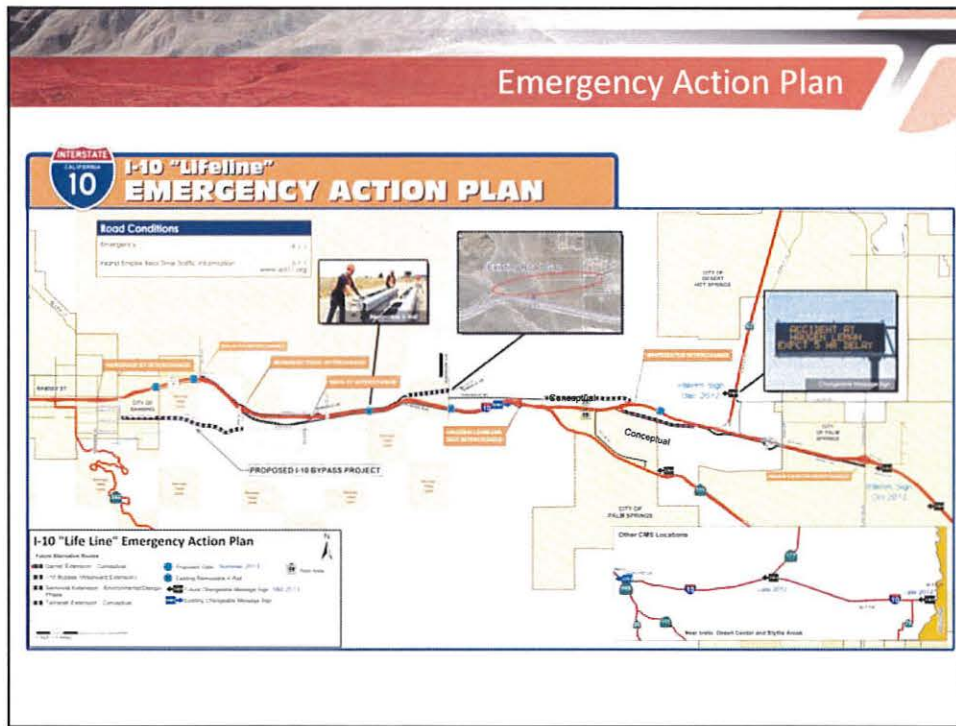
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Sonja De La Fuente, Deputy City Clerk

**These Action Minutes reflect actions taken by the City Council. The entire discussion of this meeting can be found by visiting the following website: <https://banninglive.viebit.com/player.php?hash=TlihMYp7o9ES> or by requesting a CD or DVD at Banning City Hall located at 99 E. Ramsey Street.**





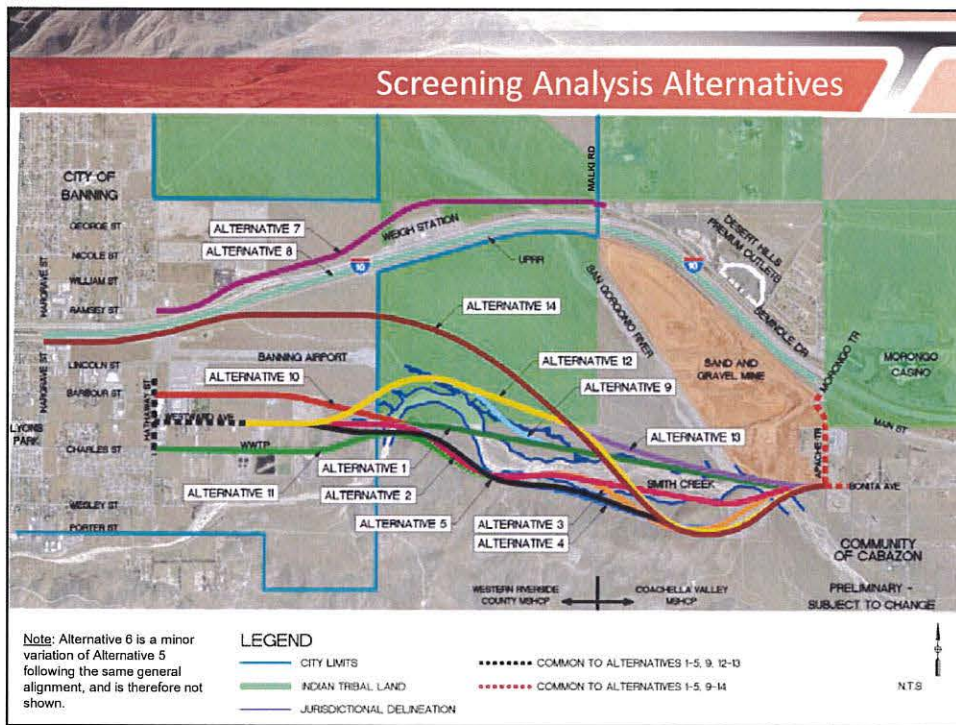
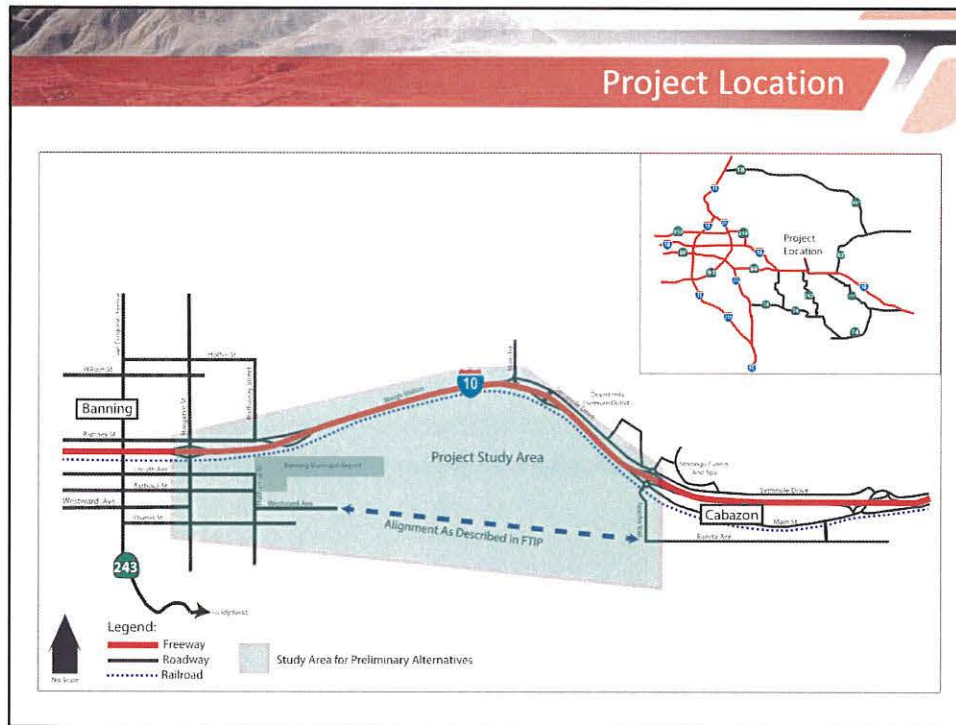


### Project Purpose Summary

Construct a new roadway connecting Banning and Cabazon to address the following:

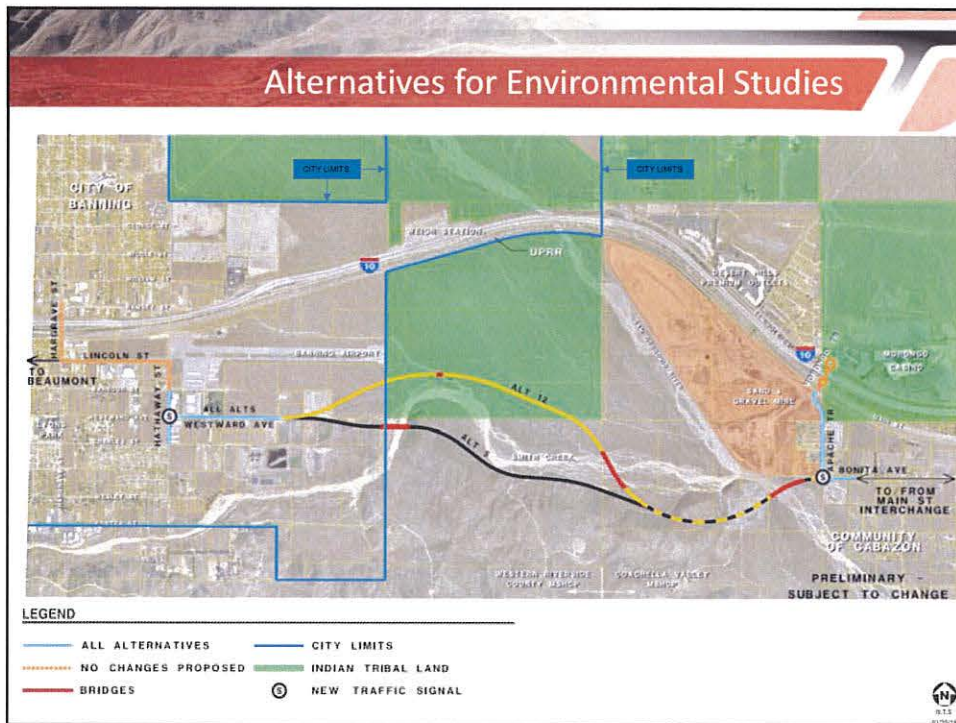
- Emergency bypass for I-10 between Hargrave Street in Banning and Apache Trail in Cabazon.
- Improve traffic circulation between Banning and Cabazon.
  - Alternative to freeway and at-grade railroad crossings
  - Improve emergency access
  - Provide bicycle and pedestrian access

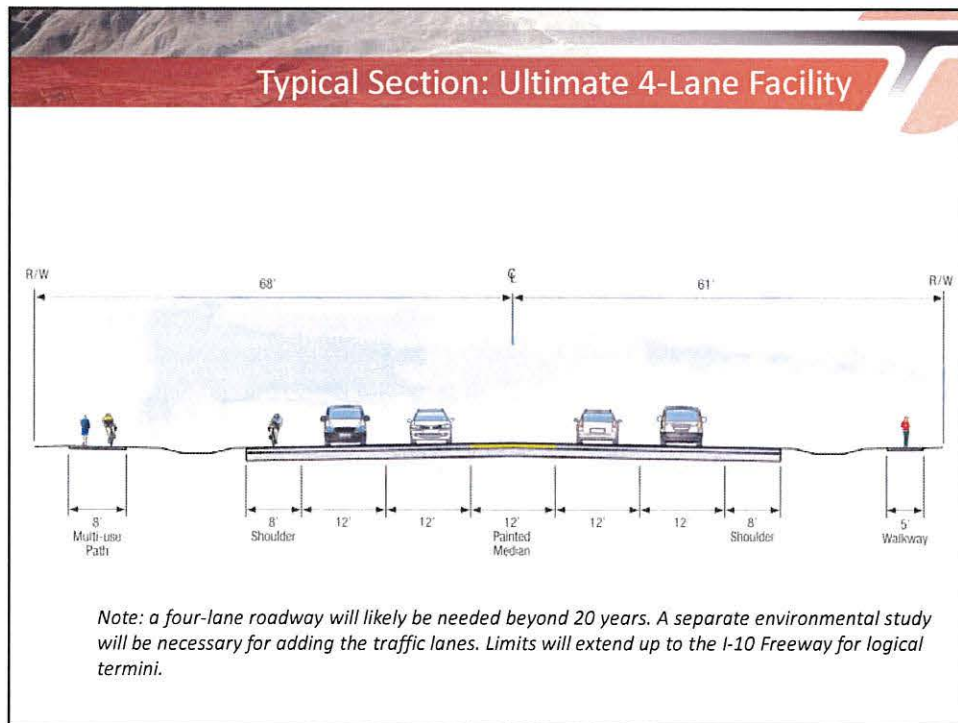
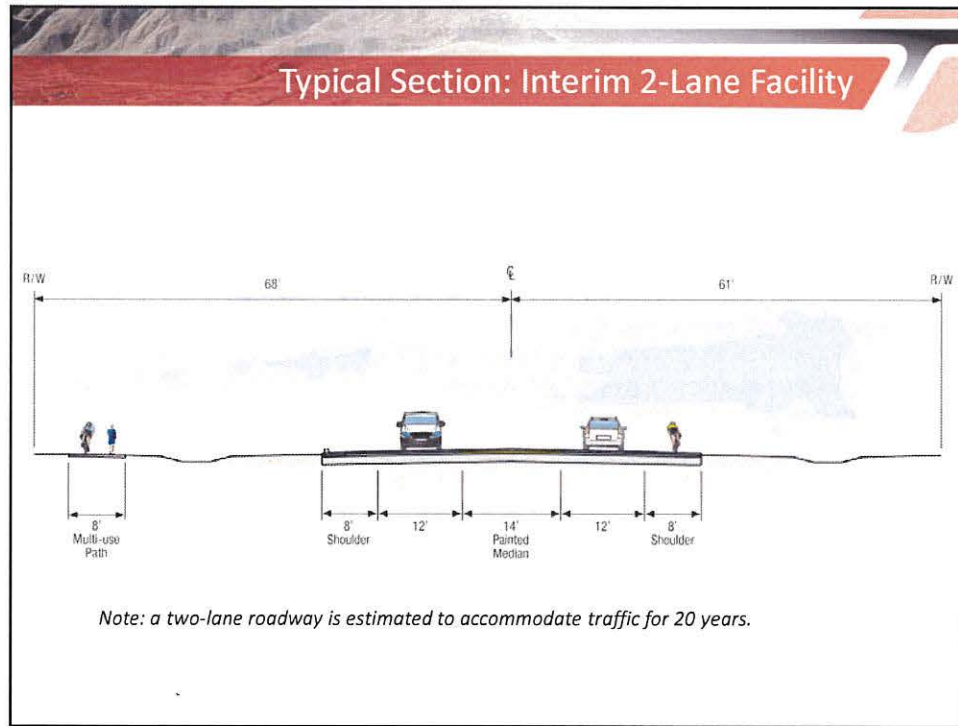




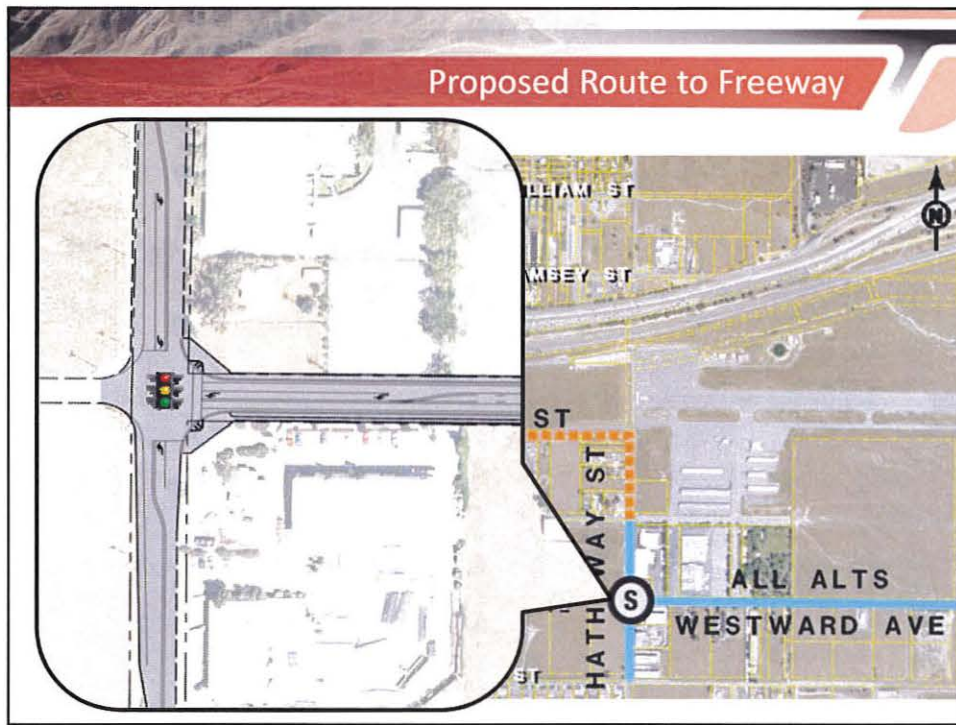
### Screening Analysis

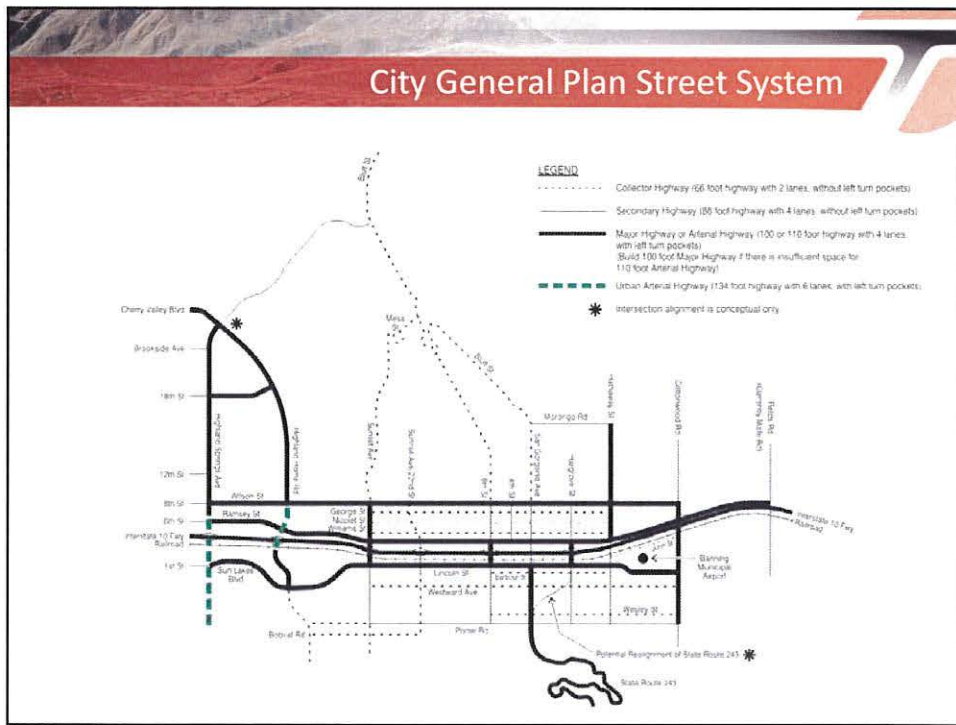
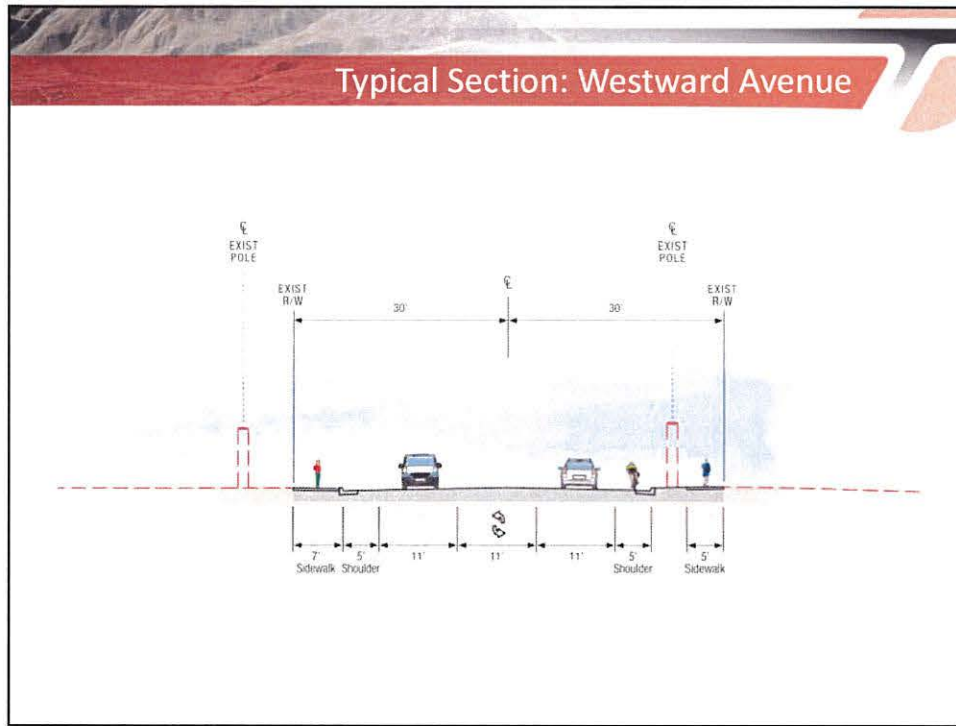
- Meeting Purpose and Need
- Feasibility
- Environmental Factors



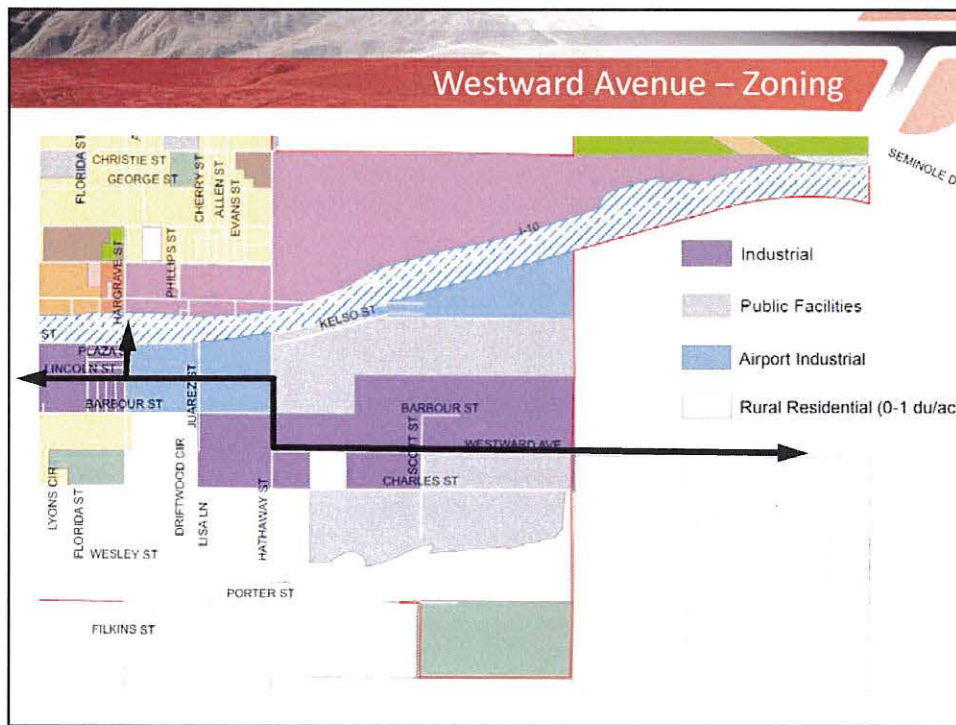
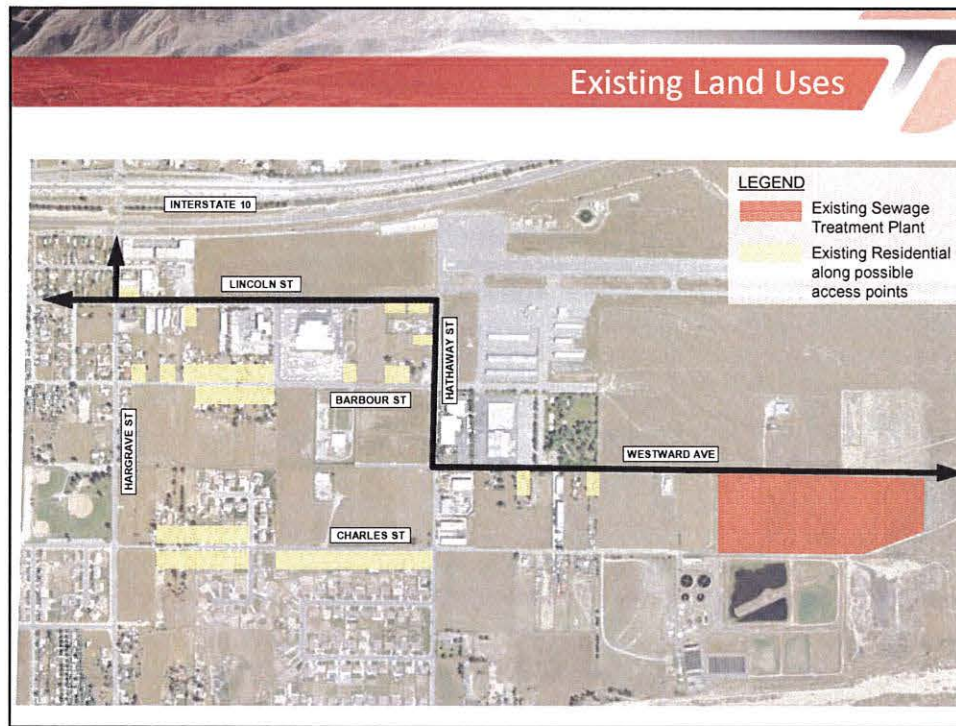






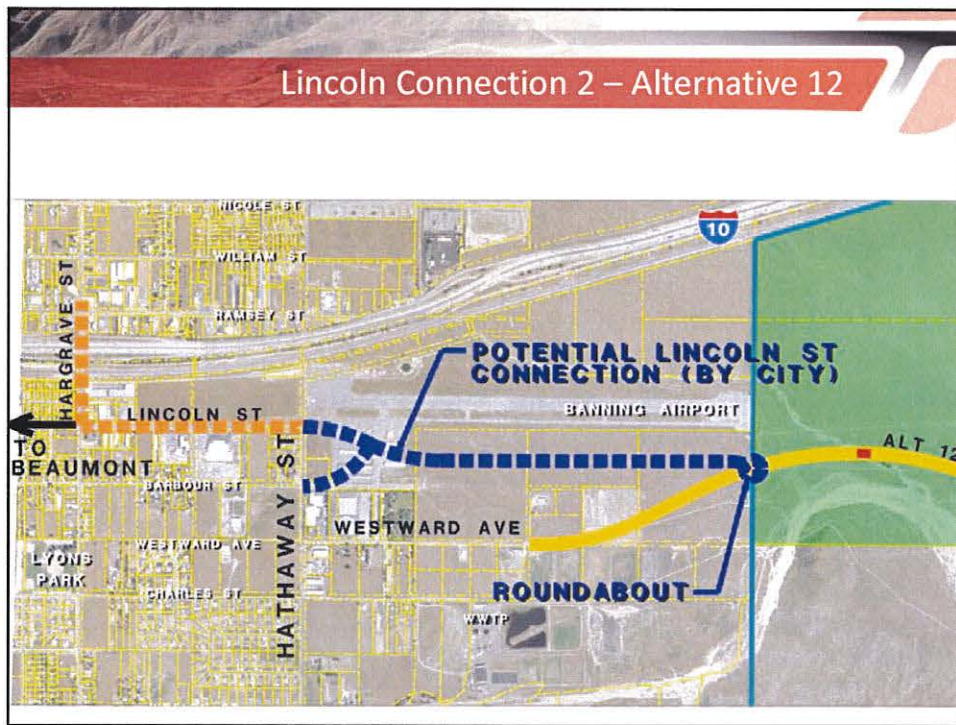


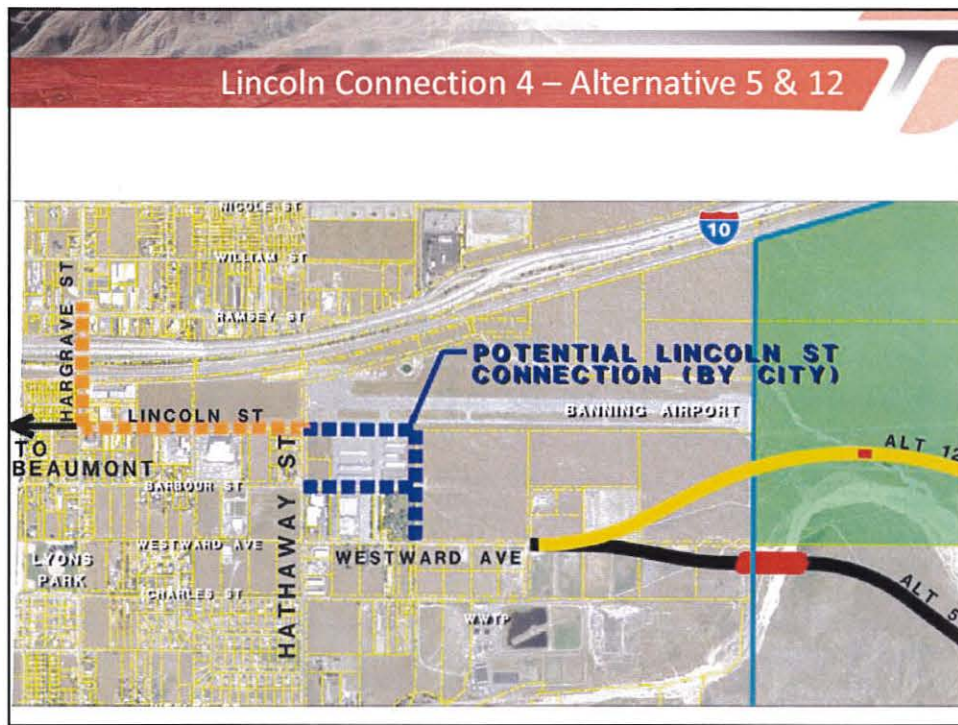
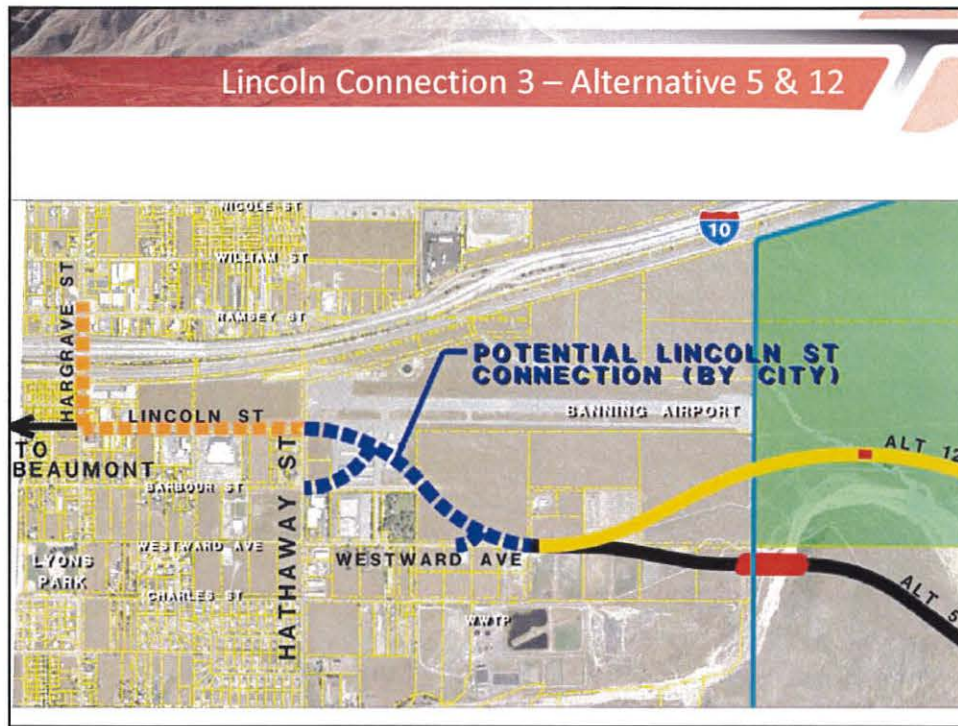




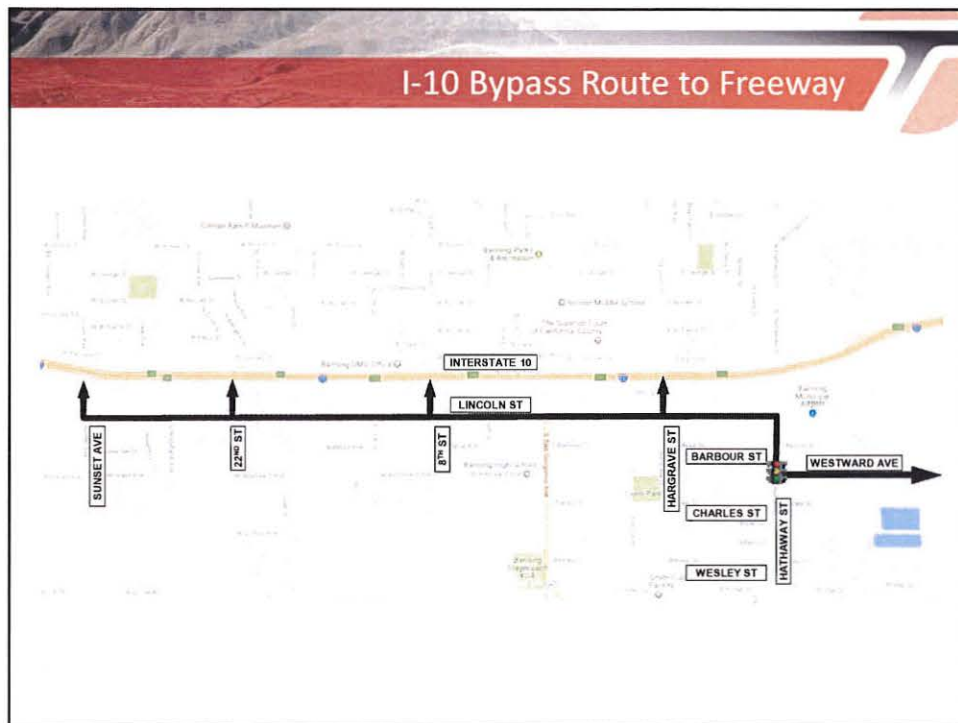




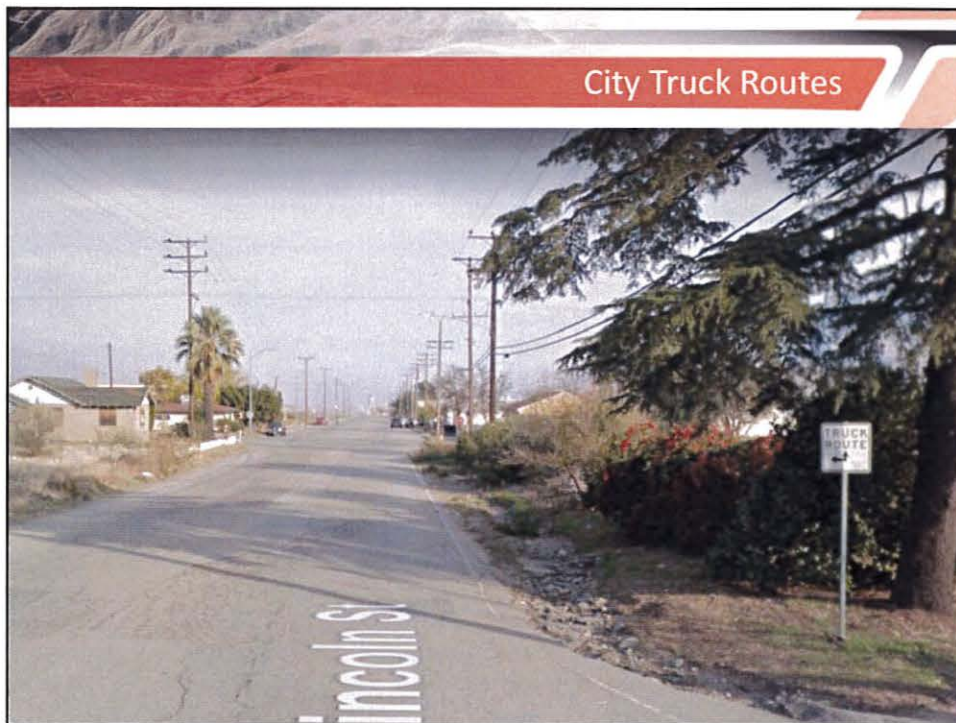
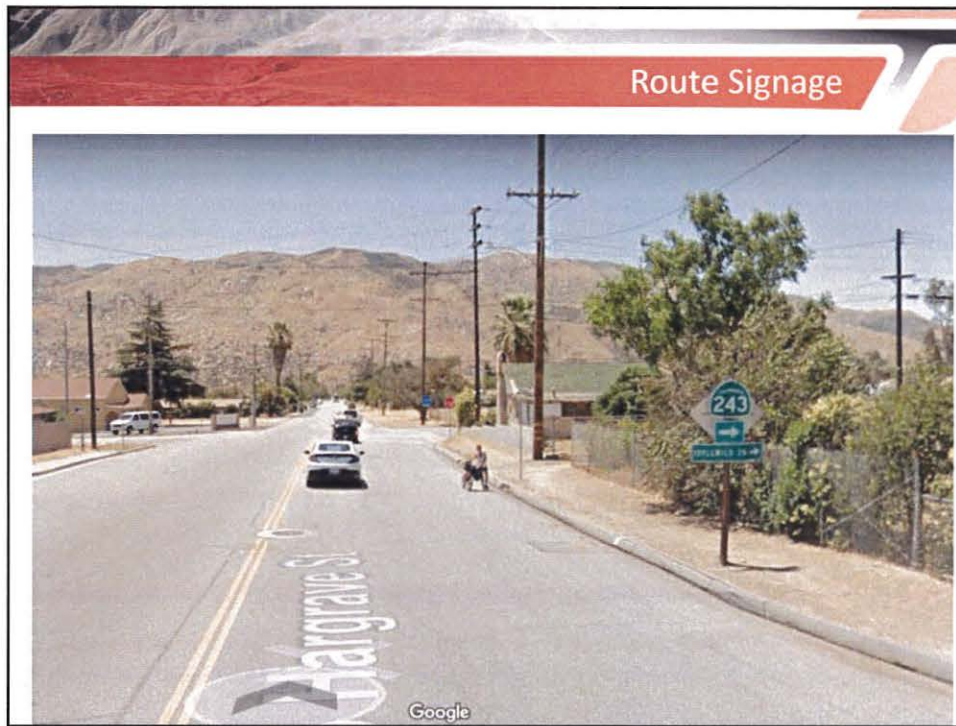


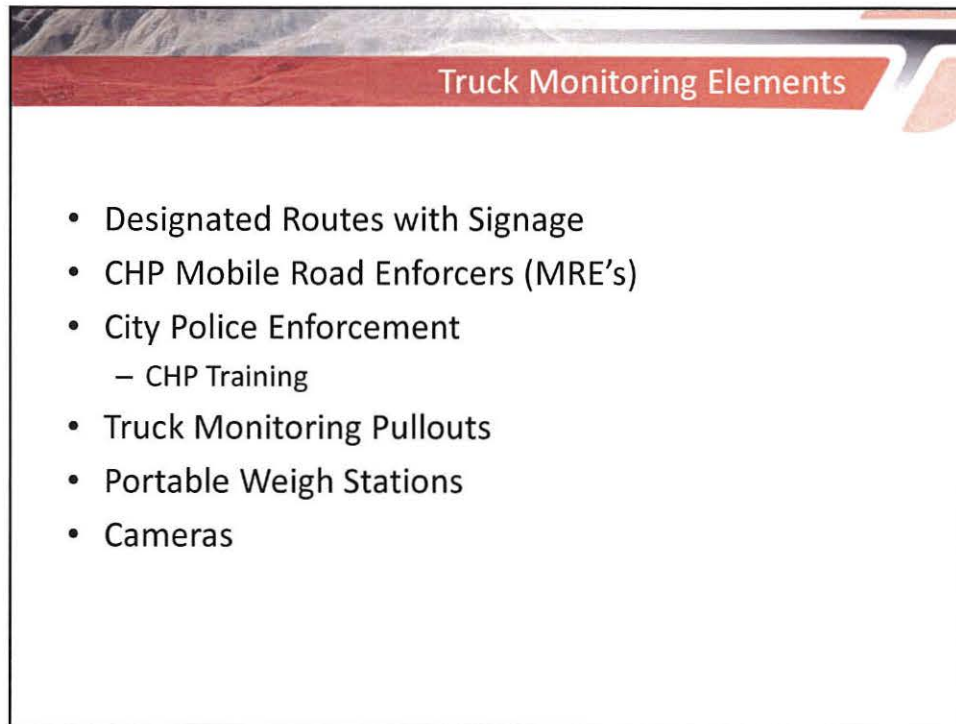










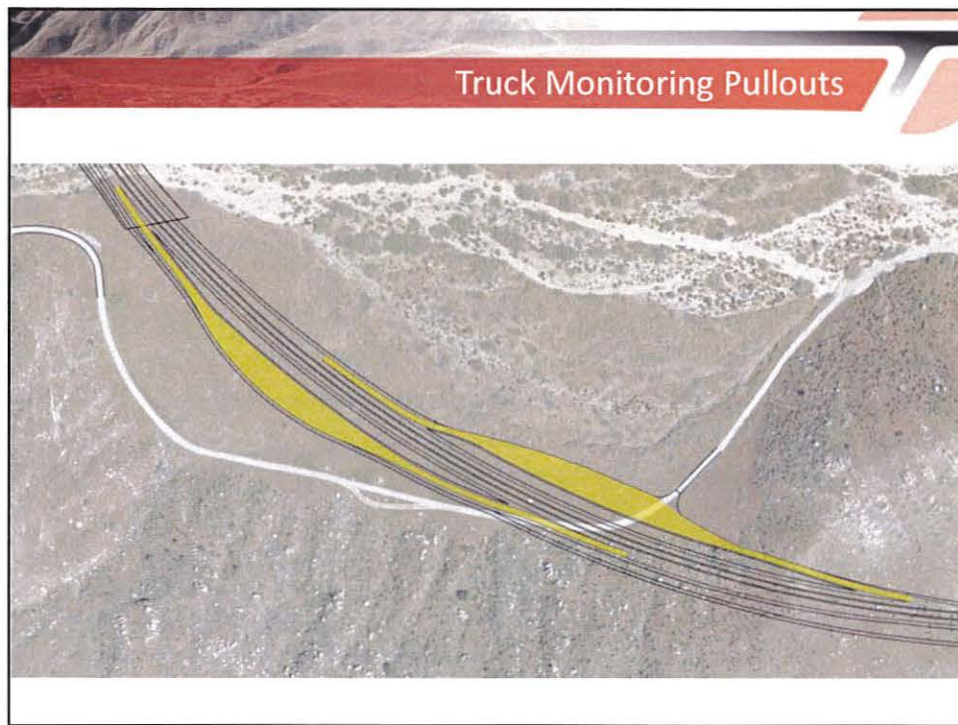
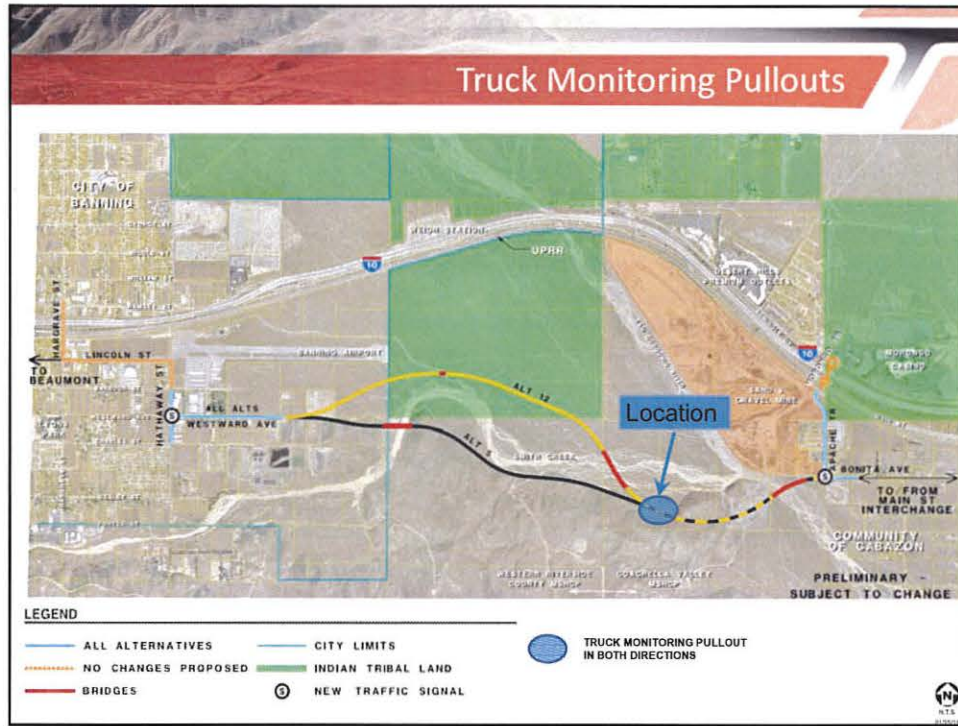


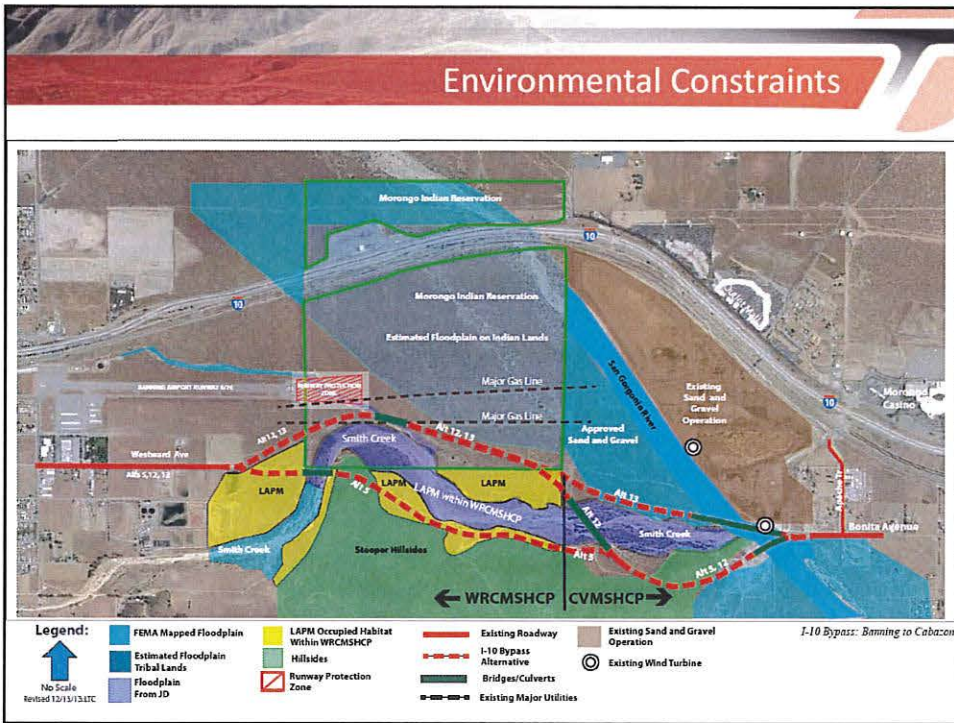
The slide features a red header bar with the text "Truck Monitoring Elements" in white. Below the header is a white background with a bulleted list of monitoring elements.

- Designated Routes with Signage
- CHP Mobile Road Enforcers (MRE's)
- City Police Enforcement
  - CHP Training
- Truck Monitoring Pullouts
- Portable Weigh Stations
- Cameras

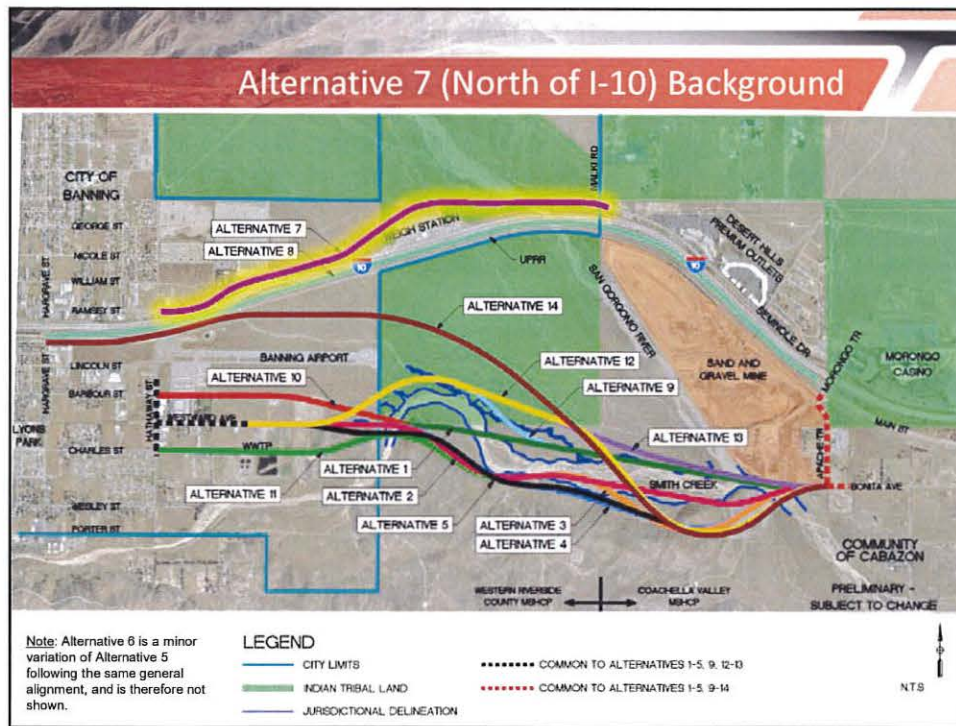








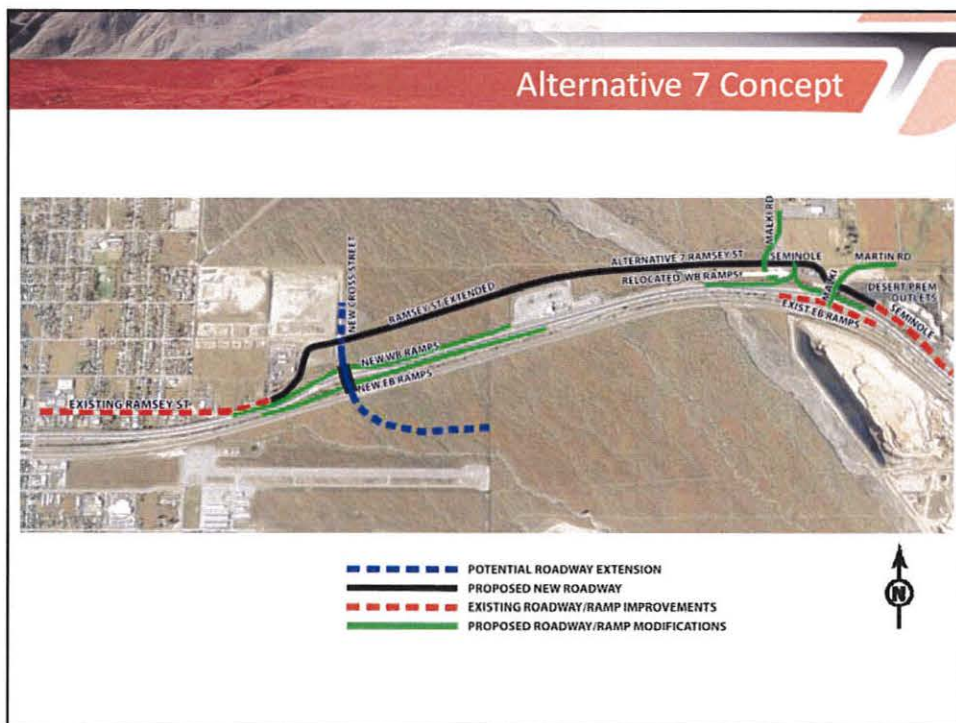
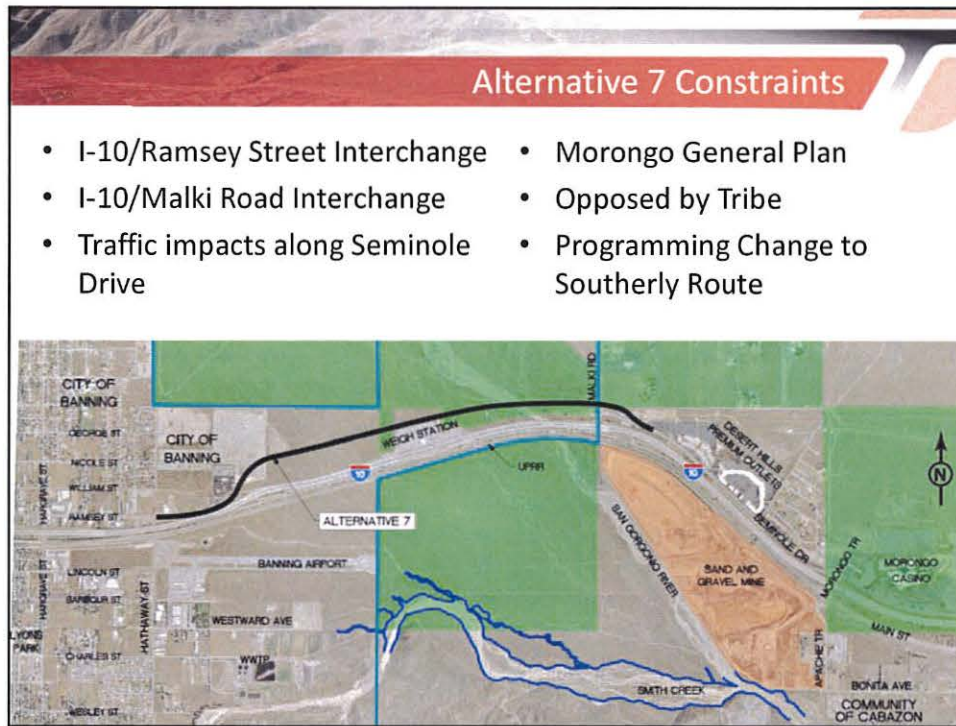


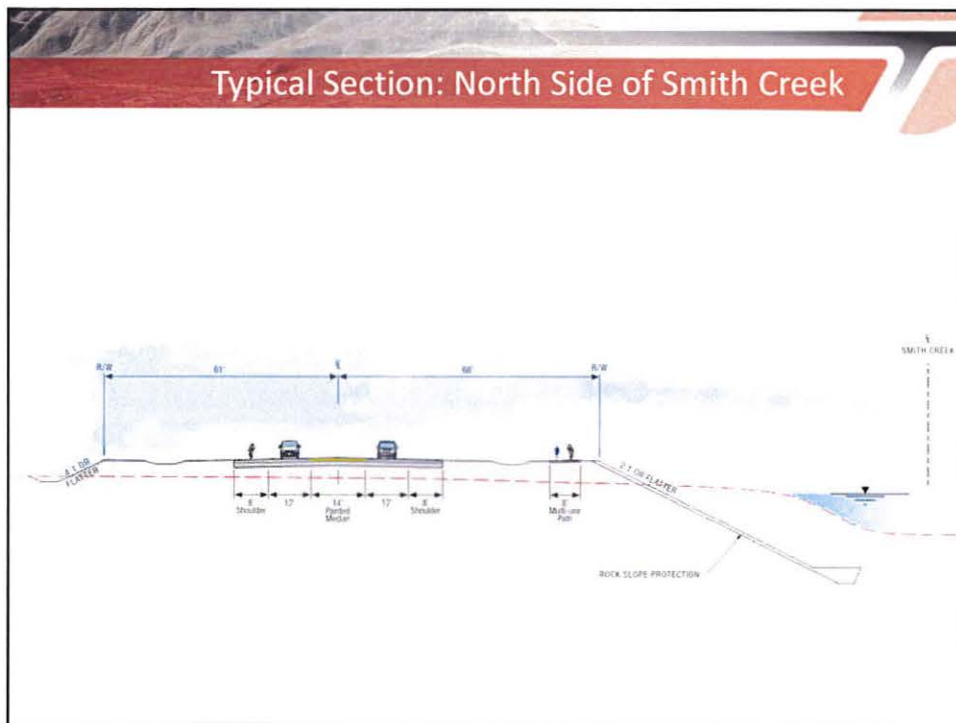
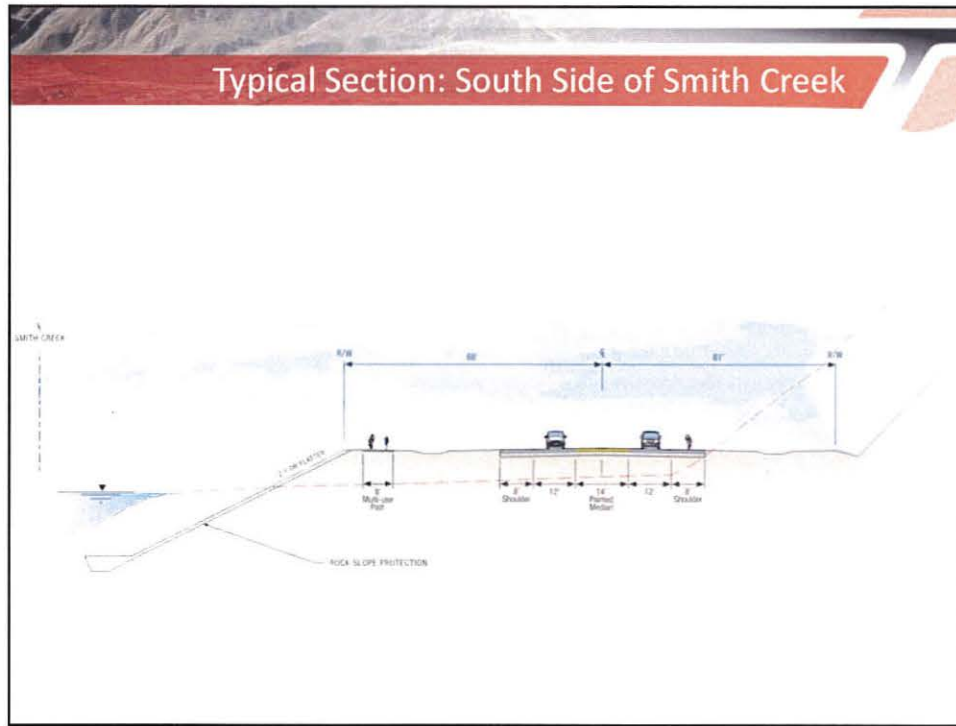


**Alternative 7 (North of I-10) Background**

- Originally studied in the Initial Concept Phase
- Opposed by Tribe
- Joint Planning Committee requested to shift the alignment south of I-10 (Oct. 2008)
- Congress reallocated funds to identify a connection south of I-10



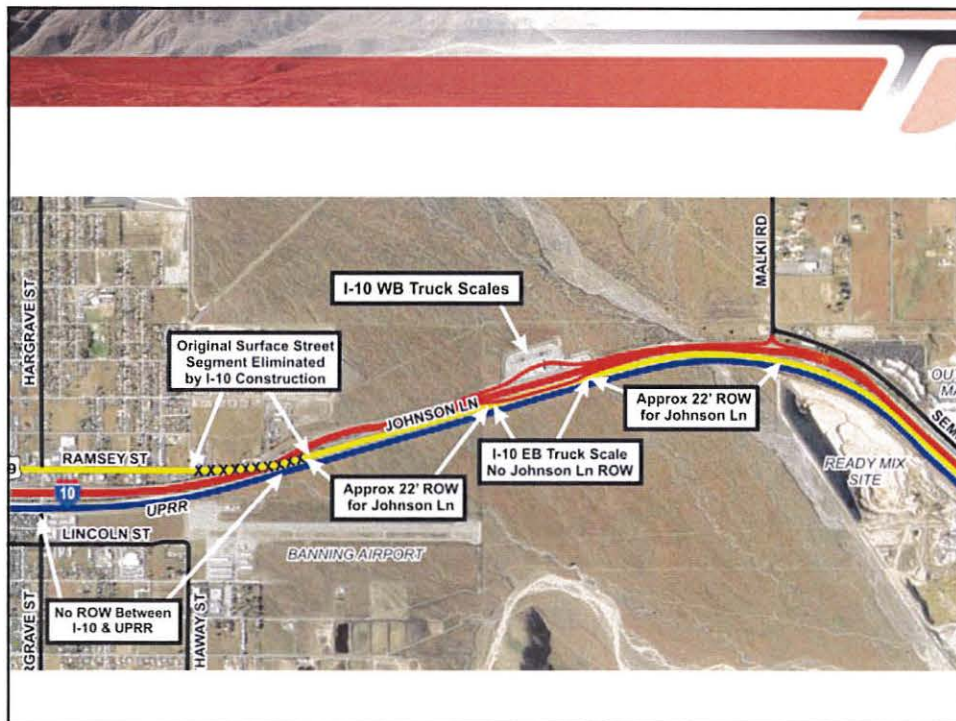




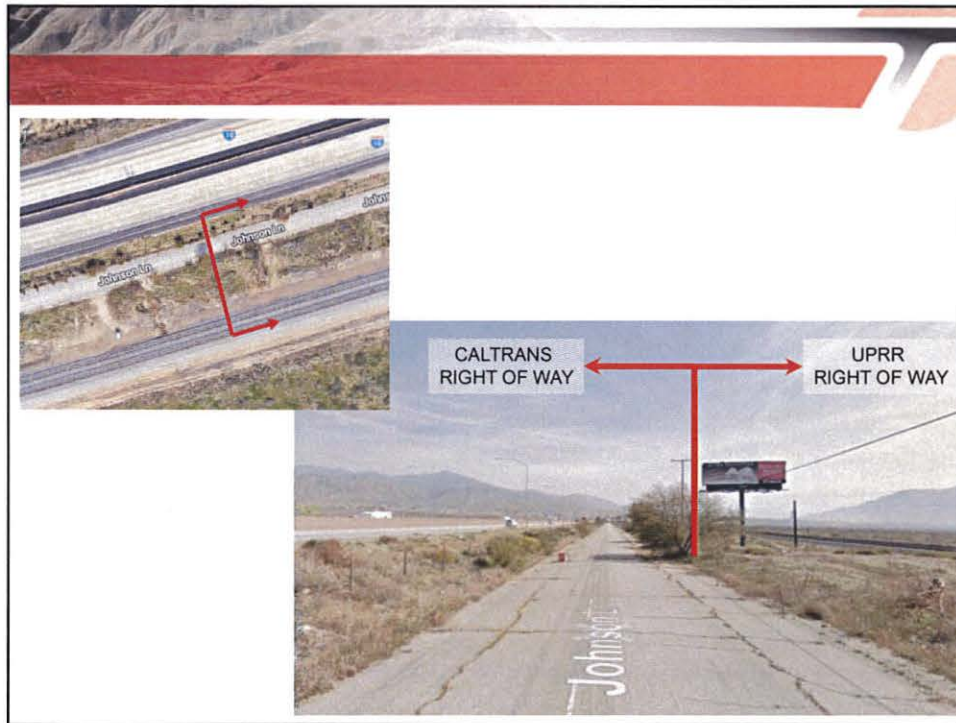
### Preliminary Construction Cost Estimate

	Alternative 5	Alternative 12
Roadway Items	\$ 36,851,800	\$ 25,871,800
Structure Items	\$ 23,573,400	\$ 32,505,800
<b>Subtotal Construction Costs</b>	<b>\$ 60,425,200</b>	<b>\$ 58,377,600</b>
Right of Way	\$ 7,600,000	\$ 8,500,000
<b>Total Capital Cost</b>	<b>\$ 68,025,200</b>	<b>\$ 66,877,600</b>

- Two lane facility, including ultimate four-lane bridges.
- Ultimate grading for future four-lane facility.
- Assumes no cost for right-of-way within tribal lands.
- Costs are in terms of current dollars.







### City Truck Routes

- Ramsey Street
- Portions of
  - Lincoln Street
  - Highland Springs Avenue
  - Hathaway Street
  - Sunset Avenue
  - Eighth Street
  - San Geronio Avenue
  - Hargrave Street

### City Coordination – Meetings

Title	Purpose
Stakeholder Meetings (4)	Report Status to Stakeholder Groups
PDT Meetings (29)	Provide Project Updates, Obtain Input and Coordinate
City of Banning Meeting	Project Status
Public Information Meeting	Obtain input from the public and agencies
City of Banning Meeting	Project Updates
City of Banning Meeting	Traffic Analysis Follow-Up
City of Banning Meeting	Project Updates
Public Scoping Meeting	Provide Notice of Preparation and obtain input from the public and agencies
City Council Meeting	Project Overview and Updates; Removal of Alt 13
City of Banning Meeting	Project Overview and Updates; Alt 7 and Removal of Alt 13
Meeting with City Manager	Project Overview and Updates; Alt 7 Concept and Constraints and Removal of Alt 13
City Council Workshop	Project Overview and Updates; Alt 7 Concept and Constraints, Removal of Alt 13, and Proposed Route to Freeway
Public Workshop Hearing (1/25/2018)	Obtain input from the public and agencies on the Draft Environmental Document

### City Coordination – Correspondence Letters

Date	From/To	Purpose
10/2/2008	Robert Martin, Tribal Chairman, MBMI; Brenda Salas, Mayor, City of Banning; Marion Ashley, District 5 Supervisor, County of Riverside/ Congressman Jerry Lewis	Letter requesting County of Riverside to be the lead agency for the I-10 Bypass Project; Transfer of earmark to the County of Riverside
11/17/2009	Juan C. Perez, Director, RCTD/ April Nitsos, Caltrans D8	I-10 Bypass, South (also known as Ramsey Street Extension), Transfer of Sponsorship of Earmark
4/11/2013	John Marcinek, County of Riverside/Kahono Oei, City Engineer, City of Banning	I-10 Bypass - Potential Future Connection to Lincoln Street
4/30/2013	Kahono Oei, City Engineer, City of Banning/Ryan Kuo SCAG	Request for Concurrence Letter for Functional Classification Change for Westward Avenue



#### **L.4.8 IP-6a – Kerri Mariner**

##### ***IP-6a-1***

As discussed in Section 2.1.2.2 in the Section 2.1, Community Impacts, Alternative 12 (Preferred Alternative) would require the acquisition of an easement of approximately 14 acres of Morongo Band of Mission Indians Tribal Lands. The Locally Preferred Alternative (Alternative 12) is consistent with the Morongo Band of Mission Indians' letters dated February 21, 2013, and September 25, 2018, which support an alignment that would facilitate the development of Tribal Lands. Alternative 5 does not cross tribal lands.

As discussed in Section in 2.8.2.1 of Section 2.8, Hydrology and Floodplains, floodplains in the Project area are defined according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) and the United States Army Corps of Engineers (USACE) *Flood Plain Information – San Gorgonio River and Smith Creek* report. Impacts of the Build Alternatives on existing floodplains are discussed throughout Section 2.8.3 including impacts related to incompatible floodplain development and potential risks to life and property.

##### ***IP-6a-2***

Existing traffic levels are discussed in Section 2.5.2 of Section 2.5, Traffic, and the potential impacts related to traffic and transportation are discussed in Section 2.5.3.

##### ***IP-6a-3***

Trains crossing the Union Pacific Railroad have been considered and are described in Section 2.5.2.3 and projected train crossings in the Opening Year and Future Year conditions are discussed in Section 2.5.3.5. The I-10 Bypass Project does not include improvements to railroad facilities.

There are several pipelines impacted by each alternative. Based on current records, easements are in place for impacted pipelines that are outside of Tribal Lands. Agreements for utilities within Tribal Lands are controlled by the Morongo Band of Mission Indians (MBMI), and the County has no authority regarding such agreements.

##### ***IP-6a-4***

The existing conditions of emergency medical services and facilities are discussed in Section 2.4.1.3 of Section 2.4, Utilities. Temporary and permanent impacts of the Project on Emergency Medical Services are discussed in Sections 2.4.2.1 and 2.4.2.2.

Section 2.4.2.2 includes the following text regarding emergency response times:  
“The Project would reduce emergency response times, specifically in Banning and Cabazon, because vehicles can avoid freeway congestion and possible delays at railroad track crossings. The Project would result in faster, more reliable response times for emergency services in the Project vicinity. These reductions in emergency response times would be beneficial.”

Martin Sanderson  
 P.O. Box 811  
 52008 Hattie Ave.  
 Cabazon, CA 92230  
 Ph: (951) 922-1880

September 5, 2019

Mary Zambon  
 Environmental Project Manager  
 Riverside County Transportation Department  
 3525 14<sup>th</sup> St.  
 Riverside, CA 92501

Re: Request for written comments concerning I-10 Bypass: Banning to Cabazon Project  
 Draft Environmental Assessment.

Issues Presented:

- 1) Project Funding
- 2) Public Safety for Cabazon
- 3) Return Cabazon to status that existed before I-10 construction

1) Please find enclosed a September 28, 2018 letter from County Executive Officer George A. Johnson indicating that the Desert Hills expansion was to allocate 25% of sales tax "toward mitigating the impacts on infrastructure and public safety in and around the Cabazon community". As of fiscal year ended 2017 the account balance was \$2,943,816.50. As of September 18, 2018 "there have been no draws to date from this fund".

IP-7-1

2) As statements from Cabazon residents have reflected during the Banning High School meeting and Banning City Council meeting there were several instances where a bypass to Banning would quite possibly have saved lives. Banning's reluctance to concur with the **3.3 miles** surface road extension construction appears to be one of inconvenience while Cabazon wants to establish reasonable public safety.

IP-7-2

3) The last issue has to do with the removal of the surface roadway near the Westbound Ramsey Street onramp to I-10. The remaining two-lane roadway, South of I-10, can be driven on from Cabazon to the Ramsey Street onramp/I-10 Bridge. It stops there. I have traveled several times in a vehicle as well as a bicycle.

IP-7-3

Thanks to you and your staff for your time and effort.

Sincerely  
  
 Martin L. Sanderson

COUNTY OF RIVERSIDE  
EXECUTIVE OFFICE

IP-7

GEORGE A. JOHNSON  
COUNTY EXECUTIVE OFFICER



LISA BRANDL  
CHIEF OPERATING OFFICER

DON KENT  
ASSISTANT COUNTY EXECUTIVE OFFICER  
COUNTY FINANCE OFFICER

September 28, 2018

Mr. Martin Sanderson  
PO Box 811  
Cabazon, CA 92230

RE: Cabazon Community Revitalization Funding

Dear Mr. Sanderson:

I'm writing in response to your letter dated August 2, 2018, regarding the sales tax dedicated towards revitalization of the Cabazon community. I would first like to clarify a few points raised in your letter.

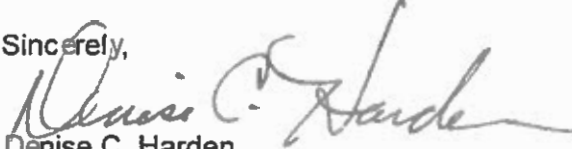
On December 10, 2013, the Riverside County Board of Supervisors approved setting aside 25% of the future growth in sales and used tax attributable to the expansion of the Desert Hills factory outlets toward mitigating the impacts on infrastructure and public safety in and around the Cabazon community. Per the Board's direction, a special fund was established specifically for this beginning effective January 1, 2014, and sunsetting on or before December 31, 2033.

The County Executive Office is responsible for administering the county's sales and use tax, and so we are responsible for establishing and managing this fund. We have been tracking the sales tax revenue generated on the expansion of the Desert Hills development, and annually transferring 25% of that revenue into this fund. The accumulated balance deposited at the end of last fiscal year was \$2,943,816.50.

Although the County Transportation Department is working on preliminary planning for infrastructure improvements in that area, there have been no draws to date from this fund. Any use of the revenue set aside in this fund will require approval of the Board of Supervisors.

I hope this information answers your questions. If I can be of any further assistance, please do not hesitate to contact me directly at (951) 955-1185.

Sincerely,

  
Denise C. Harden  
Executive Office Principal Budget Analyst

cc: Supervisor Marion Ashley, Fifth District

*copy of  
original  
w/ 9/5/19*

**L.4.9 IP-7 – Martin Sanderson**

***IP-7-1***

The commenter’s comment regarding the contribution of funding of infrastructure and public safety projects from the Desert Hills expansion is acknowledged. This comment does not address the analysis and environmental topics discussed in the Recirculated Draft EIR/EA document; therefore, the comment does not require additional response.

***IP-7-2***

One of the elements of the Project Purpose as stated in Chapter 1, Section 1.3 Purpose and Need, of the Recirculated Draft EIR/EA is “Provide an alternate route between Banning and Cabazon in the event of a closure on I-10.” However, the comment relates to preferences of cities and does not address the analysis and environmental topics discussed in the Recirculated Draft EIR/EA document; therefore, the comment does not require additional response.

***IP-7-3***

The comment refers to the removal of a section of surface roadway south of I-10 and near the Ramsey Street freeway ramps at I-10. This area would not be impacted by the Project alternatives as seen in Figure 1.1-2 of the Recirculated Draft EIR/EA.



September 25, 2019

To: May Zambon:  
Environmental Project Manager  
Riverside County Road Department:

From: Ron Roy:  
Beaumont Resident:  
35161 Hogan Dr.  
Beaumont, Ca. 92223

Re: I-10 Bypass: Banning to Cabazon Project: 2019 DEIRDEA: Comment letter

Dear Ms. Zambon:

I am requesting that the comment period deadline, scheduled to end today, September 25, 2019, is extended until a public workshop is held at Banning City Hall in order for, among other things, the Pass Area Residents to be fully informed about recent changes occurring in the Pass Area, and for Federal, State, and Local Officials and agencies to bring residents the most current information on the Pass Area, surrounding region, and nation, including air quality, national security, technological changes that can be implemented on a viable I10 pass corridor, environmental impacts on surrounding protected and natural areas, impact of transcontinental truck and other vehicular traffic, rail traffic, wind, dust, climate change, erosion and other impacts from the Cabazon Quarry, and other impacts and changes within the San Gorgonio Pass Corridor, surrounding areas, LA/Long Beach Ports and logistics.

IP-8-1

BANNING CITY COUNCIL: Please note that at the Banning City Council Meeting, held on September 24, 2019, the Banning City Council stated, on the record, that they were holding a public workshop on the project relating to the DEIR/DEA, "this fall". The implication here is that the comment period would be extended in order for the public to hear about, and consider, changes that have occurred in the area since the last 2017/2018 DEIR/DEA.



Also please note, some recent changes not factored in since the last DEIR/DEA was previously circulated for public review from 12/29/2017-4/30/2018.



IP-8-1

COMMUTER RAIL: The impact of Coachella Valley-San Gorgonio Pass Rail Corridor Service Project <https://www.rctc.org/projects/coachella-valley-san-gorgonio-pass-corridor-rail-corridor-service-project/> was not factored in previous DEIR/DEA. This project should take vehicular traffic off I10 through the Pass, may require additional right-of-ways to support additional railway, and generate other positive mitigation.

The rail project has \$50 million in Federal funding, and stations are being determined for the Pass Area. To that end the Morongo Nation has committed to a station site, near, or a part of, the I10 Bypass project. This needs to be considered for its impacts on commercial growth for the casino and Desert Hills Outlets, tourism, and in mitigating traffic congestion, air pollution, traffic safety, and national security. Residents need to know the impact of this station on the project.

IP-8-2

ALTERNATIVE TRANSPORTATION ROUTE: Moreover, Pass Area officials in the cities of Banning, Beaumont, and Calimesa are discussing the extension of the Coachella Valley Alternative Transportation Route: <http://www.coachellavalleylink.com> approximately 45 miles, from Palm Springs through the San Gorgonio Pass Cities, then through San Timoteo Canyon until the route reaches Barton Rd. in Redlands. This project will require, among other things, route consideration, additional right-of-way, and compatibility with I10, commuter and commercial rail, local streets and roads in the Pass, connection with residential, commercial and industrial areas that will most invariably impact the I10 Bypass project area.

IP-8-3

TRIBAL NATION RESPONSE TO ALTERNATIVES NORTH, OR ADJACENT TO I10 Also, during the 2017/2018 DEIR/DEA review period, Robert Martin, Chair of the Morongo Nation, when asked whether he would consider Alternatives 7, 8 or other “North of or adjacent to I10” routes, indicated he would go back to his membership, and ask them for their feedback and vote on these alternatives.

IP-8-4

**LACK OF INPUT REGARDING NATIONAL SECURITY FROM NATIONAL AGENCIES:**

Heretofore there has been virtually no representation, comments, presentations or public workshops from significant representatives from National Agencies involved in national security that would relate to the project. There's been no official comment on impacts relating to the transcontinental weigh-station, upgrading the weigh-station and other "check-point" infrastructure, counter-terrorism measures, transcontinental transportation impacts (I10 is a coast-to-coast highway). There are appropriate National Security, and National Defense agencies within the national government that need to be made aware of and address these issues.

IP-8-5

**LACK OF INPUT FROM NATIONAL AGENCIES INVOLVED IN TRANSPORTATION (US DOT) ENVIRONMENTAL PROTECTION, NATIONAL PARK SERVICE (New Sand-to-Snow Monuments).**

IP-8-6

INPUT FROM L.A./LONG BEACH PORT AUTHORITIES AND L.A/O.C. area transit entities.

WHAT ARE CALTRANS INTENTIONS WITH I10 THROUGH THE PASS AND PROJECT AREA. CALTRANS NEEDS TO UPDATE RESIDENTS OF NEW TECHNOLOGIES AND POLICIES (Alternative Transportation) that can improve the project area.

IP-8-7

**PREVIOUS MITIGATIONS ALREADY COMPLETED:**

Reverse Gates from Banning to Whitewater completed on I10 median. How will this modify mitigation of the project.

IP-8-8

ENVIRONMENTAL IMPACTS on existing protected areas. See comment letters from environmental groups.

PLEASE INCLUDE ALL MY PRIOR COMMENT LETTERS IN THIS COMMENT PERIOD.

IP-8-9

Thank you for your consideration of my concerns and requests. I hope the residents of this area are given the opportunity of a full appraisal of recent changes via an extension of the comment period co-insiding with public workshops.

Sincerely

Ron Roy  
Beumont, Ca.

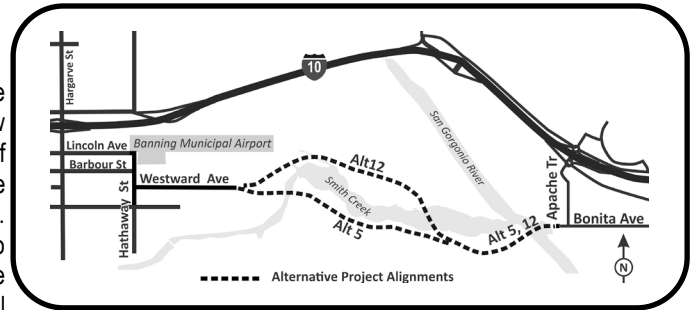
# Public Notice

## Notice of Availability of a Recirculated Draft Environmental Impact Report/ Draft Environmental Assessment

### I-10 Bypass: Banning to Cabazon Project

#### WHAT IS BEING PLANNED?

The County of Riverside, in cooperation with the City of Banning and the California Department of Transportation (Caltrans), proposes to construct a new two-lane roadway extending approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning, east to the intersection of Bonita Avenue and Apache Trail in the community of Cabazon. The proposed project includes bridges over Smith Creek and the San Geronimo River, paving of two lanes, a median, paved shoulders, drainages, a shared use path and sidewalks. The proposed project would serve to accommodate local trips on a local roadway and provide an alternate route between Banning and Cabazon in the event of a closure on I-10. Two alternative alignments for the new roadway are under consideration along with a No Action/No Project alternative.



Pursuant to Section 15072(f)(5) of the California Environmental Quality Act (CEQA) Guidelines, it has been determined that the project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

#### WHY THIS PUBLIC NOTICE?

The County of Riverside and Caltrans have studied the proposed project and prepared the *Recirculated Draft Environmental Impact Report/Environmental Assessment (DEIR/DEA)*, which considers the environmental impacts of the two alternative alignments and the No Action/No Project alternative. Environmental effects anticipated include noise, traffic, land use, visual and cumulative impacts. The DEIR/DEA was previously circulated for public review from December 29, 2017 to April 30, 2018. **This Recirculated DEIR/DEA is being recirculated for public review in accordance with Section 15088.5(a) of the CEQA Guidelines in order to include the identification of a Locally Preferred Alternative. This notice is to advise you that the Recirculated DEIR/DEA is available for you to read.**

#### WHAT'S AVAILABLE?

The Recirculated *DEIR/DEA* will be available for 45 days from August 12, 2019 until September 25, 2019. The document will be available for review at the following locations, at the website [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), or by contacting the Riverside County Transportation Department (contact information below).

- County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501. Monday – Friday, 8:00am to 5:00pm.
- Caltrans District Office, 464 West 4<sup>th</sup> Street, San Bernardino, CA 92401. Monday – Friday, 8:00am to 5:00pm.
- Banning Library, 21 West Nicolet St, Banning, CA 92220. During normal library hours.
- Cabazon Library, 50425 Carmen Ave, Cabazon, CA 92230. During normal library hours.

#### WHERE YOU COME IN

Would you like to make comments on the project, the alternative alignments or the Recirculated *DEIR/DEA*? **Please submit your comments in writing no later than September 25, 2019** to Mary Zambon, Environmental Project Manager, Riverside County Transportation Department, 3525 14<sup>th</sup> St., Riverside CA 92501. Comments received during the public review period for the Recirculated *DEIR/DEA* will be included in the *Final Environmental Impact Report/Final Environmental Assessment (FEIR/FEA)* and will be considered in selection of the Preferred Alternative. Comments previously provided on the *DEIR/EA* (circulated in December 2017) have been reviewed and will be included in the administrative record for the Project, and will not be responded to individually in the *FEIR/FEA*. Options for submitting comments that will be responded to in the *FEIR/FEA* include:

- Resubmit your previous comments from the December 2017 circulation of the Draft EIR/EA.
- Submit new comments on the Recirculated Draft EIR/EA.

The *FEIR/FEA* will identify the Preferred Alternative. After selection of the Preferred Alternative, the County will request approval of the EIR by the County Board of Supervisors for CEQA compliance, and Caltrans will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement (EIS) for compliance with the National Environmental Policy Act. Notice of said decision will be provided to any person requesting notification. No decision will be made until after the review period is complete and the *FEIR/FEA* is prepared.

#### CONTACT

For more information about this project or to receive a copy of the Recirculated *DEIR/DEA*, please contact Mary Zambon, Riverside County Transportation Department, at (951) 955-6759 or [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Under the Americans with Disabilities Act of 1990, requests for accommodations (documents in alternate formats, American Sign Language interpreter, etc) can be made by contacting the individual noted above.



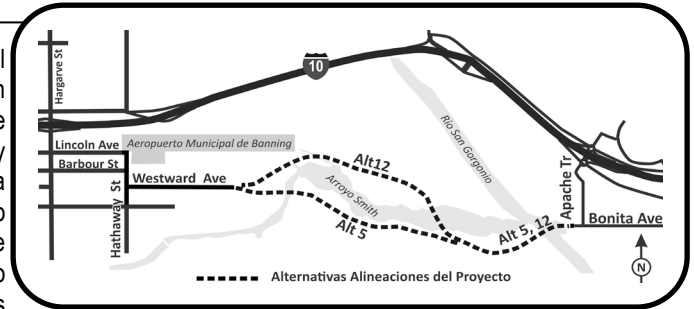
# Aviso Público

## Aviso de Disponibilidad de un Borrador Recirculado del Reporte de Impacto Ambiental / Borrador de una Evaluación Ambiental

### Proyecto de Circunvalación del I-10: Banning a Cabazon Project

#### ¿QUÉ SE ESTÁ PLANEANDO?

El Condado de Riverside, en cooperación con la Ciudad de Banning y el Departamento de Transportación de California (Caltrans, por su acrónimo en inglés), propone construir una nueva carretera de dos carriles que se extiende aproximadamente 3.3 millas desde la intersección de Hathaway Street y Westward Avenue en la Ciudad de Banning, al este hasta la intersección de Bonita Avenue y Apache Trail en la comunidad de Cabazon. El proyecto propuesto incluye puentes sobre el Arroyo Smith y el Río San Gorgonio, pavimentación de dos carriles, una mediana, arceos pavimentados, drenajes, un camino de uso compartido y baquetas. El proyecto propuesto serviría para acomodar los viajes locales en una carretera local y proporcionaría una ruta alternativa entre Banning y Cabazon en el caso de un cierre en la I-10. Dos alternativas de alineaciones para la nueva carretera se están considerando junto con la alternativa de No Acción/No Proyecto.



Conforme con la Sección 15072(f)(5) de las Directrices de la Ley de Calidad Ambiental de California (CEQA, por su acrónimo en inglés), se determinó que el sitio del proyecto no está presente en ninguna de las listas enumeradas en la Sección 65962.5 del Código de Gobierno incluyendo, pero no limitado a listas de instalaciones de desechos peligrosos, tierras designadas como propiedad de desechos peligrosos y sitios de eliminación de desechos peligrosos, y la información en la Declaración de Sustancias y Residuos Peligrosos requerida bajo la subdivisión (f) de esa sección.

Conforme con la Sección 15072(f)(5) de las Directrices de la Ley de Calidad Ambiental de California (CEQA, por su acrónimo en inglés), se determinó que el sitio del proyecto no está presente en ninguna de las listas enumeradas en la Sección 65962.5 del Código de Gobierno incluyendo, pero no limitado a listas de instalaciones de desechos peligrosos, tierras designadas como propiedad de desechos peligrosos y sitios de eliminación de desechos peligrosos, y la información en la Declaración de Sustancias y Residuos Peligrosos requerida bajo la subdivisión (f) de esa sección.

#### ¿POR QUÉ ESTE AVISO?

El Condado de Riverside y Caltrans han estudiado el proyecto propuesto y han preparado el Borrador Recirculado del Reporte de Impacto Ambiental /Borrador de una Evaluación Ambiental (*DEIR/DEA, por sus acrónimos en inglés*), que considera los impactos ambientales de las dos alineaciones alternativas y la alternativa de No Acción/No Proyecto. Los efectos ambientales anticipados incluyen ruido, tráfico, uso de la tierra, impactos visuales y acumulativos. El DEIR/DEA se distribuyó anteriormente para revisión pública el 29 de diciembre de 2017 hasta el 30 de abril de 2018. **Este Recirculado DEIR/DEA se está recirculando para revisión pública de acuerdo con la Sección 15088.5(a) de las Directrices de CEQA para incluir la identificación de una alternativa preferida localmente. Este aviso es para avisarle que el DEIR/DEA recirculado está disponible para que lo lea.**

#### ¿QUÉ ESTA DISPONIBLE?

El Recirculado *DEIR/DEA* estará disponible por 45 días a partir del 12 de agosto 2019 hasta el 25 de septiembre 2019. El documento estará disponible para revisión en los siguientes lugares, en el sitio web [www.rcprojects.org/i10bypass/](http://www.rcprojects.org/i10bypass/), o comunicándose con el Departamento de Transportación del Condado de Riverside (información de contacto debajo).

- Departamento de Transportación del Condado de Riverside, 3525 14th Street, Riverside, CA 92501. Lunes – Viernes, 8:00am hasta 5:00pm.
- Oficina del Distrito de Caltrans, 464 West 4th Street, San Bernardino, CA 92401. Lunes – Viernes, 8:00am hasta 5:00pm.
- Biblioteca de Banning, 21 West Nicolet St, Banning, CA 92220. Durante las horas regulares de la biblioteca.
- Biblioteca de Cabazon, 50425 Carmen Ave, Cabazon, CA 92230. Durante las horas regulares de la biblioteca.

#### DONDE ENTRA USTED

¿Desea hacer comentarios sobre el proyecto, las alternativas de alineaciones o el Recirculado *DEIR/DEA*? **Por favor envíe sus comentarios por escrito antes del 25 de septiembre 2019** a Mary Zambon, Gerente de Proyecto Ambiental, Riverside County Transportation Department, 3525 14th St., Riverside CA 92501. Los comentarios recibidos durante el período de revisión pública para el Recirculado DEIR / DEA se incluirán en el Reporte de Impacto Ambiental Final / Evaluación Ambiental Final (FEIR / FEA, por sus acrónimos en inglés) y se considerarán en la selección de la Alternativa Preferida. Los comentarios proporcionados anteriormente en el DEIR / EA (distribuidos en diciembre de 2017) se revisaron y se incluirán en el récord administrativo del Proyecto, y no se responderán individualmente en el FEIR / FEA. Las opciones para enviar comentarios que se responderán en el FEIR / FEA incluyen:

- Vuelva a enviar sus comentarios anteriores de la circulación de diciembre de 2017 del Preliminar EIR/EA.
- Envíe nuevos comentarios sobre el Recirculado DEIR/DEA

El FEIR/FEA identificará la Alternativa Preferida. Después de seleccionar la Alternativa Preferida, el Condado solicitará la aprobación del EIR por parte de la Junta de Supervisores del Condado para el cumplimiento de CEQA, y Caltrans decidirá si emitirá una Declaración de Impacto No Significativo o requerirá una Declaración de Impacto Ambiental (EIS, por su acrónimo en inglés) para cumplir con La Ley de Política Ambiental Nacional. Aviso de dicha decisión se proporcionará a cualquier persona que solicite la notificación. No se tomará ninguna decisión hasta que se complete el período de revisión y se prepare el FEIR / FEA.

#### CONTACTO

Para obtener más información sobre este proyecto o para recibir una copia del Recirculado DEIR/DEA, comuníquese con Mary Zambon, Riverside County Transportation Department, al (951) 955-6759 o [MZAMBON@rivco.org](mailto:MZAMBON@rivco.org). Bajo la Ley de Estadounidense con Discapacidades del Acto de Discapacidades de 1990, solicitudes de adaptaciones (documentos en formatos alternativos, Intérprete de lenguaje de señas estadounidense, etc) se puede hacer contactando el individuo mencionado anteriormente.



Submitted via email

February 25, 2018

Attention: Mary Zambon  
Senior Transportation Planner  
Riverside County Transportation Department  
3525 14th Street, Riverside, CA 92501  
[Aaron.Burton@dot.ca.gov](mailto:Aaron.Burton@dot.ca.gov)  
[MZAMBON@RIVCO.ORG](mailto:MZAMBON@RIVCO.ORG)

**Re: I-10 Bypass EIR comments**

Dear Ms. Zambon:

These comments are submitted on behalf of the San Geronio Chapter of the Sierra Club and the Center for Biological Diversity (“the Center”) regarding the Draft Environmental Impact Report/Environmental Assessment (“DEIR/EA”) for the I-10 Bypass: Banning to Cabazon. The proposed Project is anticipated to build a road that may cause significant environmental impacts and will degrade the current and the ecosystem on the Project site. For the reasons detailed below, we urge that the following issues be re-evaluated and that substantial revisions to the DEIR/EA to better analyze, mitigate or avoid the Project’s potentially significant environmental impacts be included in a revised EIR for public review.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has 1.4 million members and supporters throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, wildlife connectivity, open space, air and water quality, and overall quality of life for people in Riverside County.

The Sierra Club is a national nonprofit organization of over 732,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth’s ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out

these objectives. Over 193,500 Sierra Club members reside in California. The San Gorgonio Chapter of the Sierra Club focuses on issues within the inland empire, including San Bernardino County.

### **I. DEIR/EA Piecemeals a Small Part of a Larger Project**

CEQA and NEPA prohibit “piecemealing.” Piecemealing is the process of dividing a large project into smaller individual subprojects in order to avoid consideration of the project’s impacts as a whole. *Banker’s Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*, 139 Cal.App.4th 249, 281 (2006). The Supreme Court laid out the piecemealing test in *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal.3d 376, 396 (1988), holding that “an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.”

In our 2013 scoping comments we brought to the attention of the County that it must not piecemeal the environmental analysis by looking only at the Banning to Cabazon portion, when the intent is clearly to continue this new road in subsequent phases all the way to Whitewater Canyon Road, or at least to Haugen-Lehman.<sup>1</sup> By failing to analyze the reasonably foreseeable consequences of the Project, this approach amounts to piecemealing the much larger project. Thus it is improper to perform a separate CEQA/NEPA for each section of the larger contemplated project. We encouraged the County to prepare a programmatic EIR for the whole project to begin with, with more detailed analysis for the current phase, so that this proposed project could tier off the PEIR as well as the subsequent phases. However, it failed to do so.

### **II. Wildlife Connectivity is Key**

As discussed in our scoping comments, the overriding concern with the above project is its impacts to one of the most critical wildlife movement corridors in California according to the South Coast Missing Linkages Project:

<http://www.scwildlands.org/reports/SCMLRegionalReport.pdf>

As acknowledged in the DEIR/EA the current phase of the I-10 bypass (Banning to Cabazon) crosses the San Gorgonio River and Smith Creek, which are both part of an identified key wildlife linkage by SC Wildlands between the San Bernardino and San Jacinto Mountains<sup>2</sup>. It is also called out in *California Essential Habitat Connectivity Project: A Strategy for Preserving a Connected California* (Spencer et al. 2010) as an “Essential Connectivity Area.” In fact, this is the only extant linkage in the vicinity that is not fragmented.

<sup>1</sup> <http://rcprojects.org/wp-content/uploads/2013/03/Low-Res-I-10-EAP-Public.pdf>

<sup>2</sup> [http://www.scwildlands.org/reports/SCML\\_SanBernardino\\_SanJacinto.pdf](http://www.scwildlands.org/reports/SCML_SanBernardino_SanJacinto.pdf)

### III. Compliance with the MSHCPs

The proposed project area is also identified as a wildlife movement corridor in the Western Riverside County Multiple Species HCP (WRCMSHCP) and is contiguous with wildlife movement corridors in the Coachella Valley MSHCP (CVMSHCP). The plan is to bridge the rivers to “minimize” impacts, but the goal under CEQA and NEPA is first to avoid impacts, then secondarily to minimize impacts. The County should endeavor to avoid impacts on wildlife corridors identified by the SC Wildlands, as well as the WRCMSHCP and the CVMSHCP.

Inconsistencies with applicable habitat conservation plans constitute significant effects under CEQA and NEPA, and therefore must be disclosed and mitigated. *See Joshua Tree Downtown Business Alliance v. County of San Bernardino*, 1 Cal.App.5th 677, 695 (2016) (an effect may be significant under CEQA if the project is inconsistent with applicable land use policies designed to mitigate environmental effects).

### IV. The Project Description is Vague and Ambiguous

The DEIR/EA fails to provide an adequate project description. “An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-93; *San Joaquin Raptor/Wildlife Reserve Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730.) While an EIR is not designed to freeze a project in the mold of the original proposal, “[o]n the other hand, a curtailed or distorted description of the project may ‘stultify the objectives of the reporting process.’” (*Dry Creek Citizens, supra*, 70 Cal.App.4th at 28.); *See also County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185 (1977) (an enigmatic or unstable project description impedes public input). The DEIR/EA identifies no preferred project and instead defers the decision to the final EIR. This failure to identify a preferred alternative provides the public and decision makers with inadequate information in order to analyze impacts and mitigation measures. (DEIR/EA at S-6) This approach also was expressly rejected last year in *Washoe Meadows Community v. Department of Parks & Recreation*, 17 Cal.App.5th 277, 288 – 289 (2017). For example, if a deal cannot be struck with the Morongo tribe that would provide an easement on their tribal lands as proposed in Alternative 12, the only alternatives would be the no-action alternative or Alternative 5.

Additionally, the County acknowledges that there is a forecasted need for four lanes in 20 years (DEIR/EA at S-2). Yet the DEIR/EA defers analysis of this action, although it allows portions of the ultimate width to be graded. Four lanes of traffic causing aversive effects as well as direct mortality will significantly impact wildlife. The County must address this impact under CEQA and NEPA now, instead of impermissibly deferring analysis.

## V. The DEIR/EA Fails to Analyze a Reasonable Range of Alternatives as Required by CEQA and NEPA

While the DEIR/EA proposed 14 alternatives, all but three were dismissed beyond preliminary environmental review. However, only one of retained alternatives is entirely on non-Tribal land. In view of Tribal Sovereignty issues, the County should retain at least two other non-Reservation alternatives to fulfill the intent of CEQA and NEPA to consider a reasonable range of alternatives including the environmentally superior alternative. In our scoping comments we advocated the same, and stated it was unclear why the original Alternatives 7 and 8 were dismissed from further analysis. They are valuable alternatives based on the fact that they would avoid many of the impacts associated with Smith Creek and its confluence with San Geronio River and the existing wildlife connectivity corridor.

It still remains unclear why these alternatives were summarily dismissed (DEIR/EA S-15) as failing to meet the purpose and infeasible. Rather than presenting an arbitrary conclusion, the County has an obligation under CEQA and NEPA to provide a factual explanation of why these alternatives failed. *See Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.*, 42 Cal.3d 929, 935 (1986) (“To facilitate CEQA’s informational role, the EIR must contain facts and analysis, not just the agency’s bare conclusions or opinions.”). In the absence of fully objective reasons, the DEIR/EA must analyze these alternatives, as they are likely environmentally preferable.

Because the DEIR/EA effectively proposes only two alternatives – the no-action and Alternative 5, it fails to consider a meaningful analysis of reasonable alternatives to the Project in order to lessen or avoid the Project’s significant impacts in violation of CEQA’s and NEPA’s mandates that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code §21002; Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d). A rigorous analysis of reasonable alternatives to the project must be provided to comply with this strict mandate. The DEIR/EA fails to meet this requirement on two levels: the DEIR/EA analysis of the alternatives proposed is inadequate and the DEIR/EA fails to include a reasonable range of alternatives. Instead of providing a reasonable range of alternatives that fully mitigate or at least significantly limit the environmental impacts of the Project, the DEIR/EA skews the analysis of the proposed alternatives and leaves out other viable and feasible alternatives. The DEIR/EA’s limited range of alternatives improperly narrows the alternatives analysis and violates CEQA and NEPA. *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007). As courts have made clear, “[a] potential alternative should not be excluded from consideration merely because it ‘would impede to some degree the attainment of the project objectives, or would be more costly.’” *Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437, 1456-57 (2007) (quotations omitted).

Although “an EIR need not consider every conceivable alternative to a project, it must consider a reasonable range of potentially feasible alternatives that will foster



informed decision decision-making and public participation.” Guidelines § 15126.6(a). Additionally, the “key to the selection of the range of alternatives is to identify alternatives that meet most of the project’s objectives but have a reduced level of environmental impacts.” *Watsonville Pilots Assn. v. City of Watsonville*, 183 Cal. App. 4th 1059, 1089 (2010).

The DEIR/EA should also include quantitative and meaningful comparison between the Project’s impacts and proposed alternatives’ likely impacts. Under CEQA, “the public agency bears the burden of affirmatively demonstrating that, notwithstanding a project’s impact on the environment, the agency’s approval of the proposed project followed meaningful consideration of alternatives and mitigation measures.” *Mountain Lion Foundation v. Fish & Game Com.*, 16 Cal. 4th 105, 134 (1997). The DEIR/EA clearly fails to meet this burden.

#### **VI. The Proposed Wildlife Undercrossings Fail to Meet the Minimum “Openness” Requirements of the WRMSHCP**

Most of the Build Alternative crossings fail to meet the minimum openness criteria of the WRMSHCP, yet the DEIR/EA asserts that the “Project is not expected to result in a substantial effect” and that “through compliance with the WRMSHCP there will be no adverse effects to this Special Linkage Area.” (2-14.9 ff ) However, this conflict with the WRMSHCP is significant. Table 2.14.1 Crossing Suitability (DEIR/EA at 2.14-10) identifies that none of the alternatives reaches the openness criteria for larger carnivores including mountains lions, which require an openness ration of 0.96 (DEIR/EA at 2.14-9). While the proposed bridge over Smith Creek in Alternative 5 does meet the criteria, all of the other bridges fail to meet the requirements. Therefore the alternatives need to be rethought to incorporate this critical impact avoidance. While the County may rely on requiring feasible mitigation under CEQA and NEPA, wildlife corridors are site specific, and once impacted, feasible mitigation may illusory. Further, failure to meet the minimum standard of the WRMSHCP would be a violation of the take permit. In addition, as noted above, inconsistencies with the WRMSHCP constitute a significant effect under CEQA and NEPA.

#### **VII. The Proposed Wildlife Crossing Do Not Follow Scientific Criteria**

Literature on wildlife crossings including underpasses is well documented in the scientific literature, yet the DEIR/EA, in addition to falling short on the openness requirement of the WRMSHCP, also fails to safeguard the potential wildlife passage under proposed bridges by for the following reasons:

- S-8 48’ allows for native trees near bridge crossings. This is objectionable because trees would provide cover for predators in the pinch points of the wildlife corridor created by the bridge, discouraging the use by wildlife;
- Night lighting - LAPM-5 allows for night lighting at “intersections on each end of the Project and possibly at bridges (if required for safety) (DEIR/EA

at 2.17-7), yet night lighting has the potential for a significant impact the wildlife corridors even with shielded and down-lighting. This is particularly concerning because of the proposed locations of the bridges which are near intersections and other bridges, which would compound impacts to wildlife corridors.

- Bridge design that would include separate bridge spans for opposing traffic directions would also encourage wildlife permeability, yet the actual designs of the bridges are not presented in the DEIR/EA. The DEIR/EA needs to include more specific bridge designs that not only meet/exceed the openness criteria of the WRC MSHCP but also incorporate separate bridge spans.

### **VIII. The DEIR/EA Fails to Adequately Analyze the Project's Growth-Inducing Impacts.**

EIRs are required to provide a detailed discussion regarding the growth-inducing impacts of a project. (Guidelines §§ 21100(b)(5); 21156.) Here, the DEIR/EA fails to include an adequate discussion of the growth-inducing impacts of adding highway infrastructure to the area. CEQA and NEPA require detailed analysis of such impacts, particularly for infrastructure projects. *See City of Antioch v. City Council*, 187 Cal.App.3d 1325, 1336 –37 (1986) “[c]onstruction of the roadway and utilities cannot be considered in isolation from the development it presages”); *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council*, 190 Cal.App.4th 1351, 1383 (2010) (“a roadway infrastructure project aimed at reducing regional traffic and related problems might still have growth-inducing impacts with indirect adverse impacts on the environment and might also result in adverse environmental impacts in the immediate vicinity of the project”); *Stanislaus Audubon Society, Inc. v. County of Stanislaus*, 33 Cal.App.4th 144, 152 (1995) (development of a golf course triggers the need to study potential growth-inducing impacts such as residential development even if no such development is currently proposed).

### **IX. Conclusion**

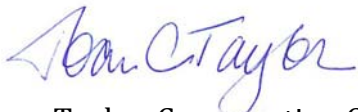
Given the possibility that we will be required to pursue appropriate legal remedies in order to ensure enforcement of CEQA and NEPA, we would like to remind the County of its duty to maintain and preserve all documents and communications that may constitute part of the “administrative record.” As you may know, the administrative record encompasses any and all documents and communications which relate to any and all actions taken by the County with respect to the Project, and includes “pretty much everything that ever came near a proposed [project] or [] the agency’s compliance with CEQA . . . .” (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further contains all correspondence, emails, and text messages sent to or received by the County’s representatives or employees, which relate to the Project, including any correspondence, emails, and text messages sent between the County’s representatives or employees and the project proponent’s representatives or

employees. Maintenance and preservation of the administrative record requires that, inter alia, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

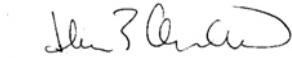
The agencies cannot make the Finding of No Significant Impact, for the reasons stated above including impacts to corridors; failure to meet minimum openness standards hence a significant impact under the WRCMSHCP; piecemealing of the project and other issues. Please address these issues that we have identified above in a revised DEIR/EA that addresses the full scope of the project.

Thank you for the opportunity to comment.

Very truly yours,



Joan Taylor, Conservation Chair  
Tahquitz Group of the Sierra Club



Ilene Anderson  
Senior Scientist  
Center for Biological Diversity

cc: via email

Karin Cleary Rose USFWS [karin\\_cleary-rose@fws.gov](mailto:karin_cleary-rose@fws.gov)

Heather Pert, CDFW [Heather.Pert@wildlife.ca.gov](mailto:Heather.Pert@wildlife.ca.gov)

#### **L.4.10 IP-8 – Ron Roy**

##### ***IP-8-1***

The commenter requests an extension of the comment period to allow for a public workshop in the City of Banning. According to CEQA Section 15087(i), “Public hearings are not required as an element of the CEQA process.” The County held a public hearing during the prior circulation period for the Draft EIR/EA, which occurred between December 29, 2017, and April 30, 2018. In addition, the County is the CEQA Lead Agency for the I-10 Bypass Project and the Banning City Council has not requested the County to extend the public review period for the Recirculated Draft EIR/EA. The Recirculated Draft EIR/EA document was circulated for the required 45 days and followed public hearing requirements; therefore, no extension of the public review period is required. The I-10 Bypass will not be a truck route and does not include improvements to railroad facilities. Therefore, the Project will not impact truck and rail traffic.

##### ***IP-8-2***

The Coachella Valley-San Gorgonio Pass Rail Corridor Service Project (CVSGPRCSP) has identified the area of Banning and Cabazon as a potential site for a future train station to serve the Coachella Valley-San Gorgonio Pass Rail Corridor. Planned improvements provided by the CVSGPRCSP are discussed in Section 2.5.2.3 of the Recirculated Draft EIR/EA. The location of the station has not been confirmed and, therefore, precise analysis of the impacts of the I-10 Bypass Project on this station is not currently possible. The I-10 Bypass does not include improvements to railroad facilities. Additionally, new rail projects would not change the need of the region for an alternative route for emergency access alternative to I-10, which would be served by the I-10 Bypass Project.

##### ***IP-8-3***

The Coachella Valley Alternative Transportation Route (CVATR) is a 50-mile alternative transportation route from Palm Springs to the Salton Sea. This Project is for bicyclists, pedestrians, and small electric vehicles in this region. The I-10 Bypass Project is over 30 miles away from the alignment of the CVATR and would have no impact on the operations of the CVATR. Therefore, the CVATR would not impact or be impacted by the I-10 Bypass Project and did not need to be analyzed in the Recirculated Draft EIR/EA.

**IP-8-4**

Morongo Band of Mission Indians (MBMI) Chairman Robert Martin stated in the Banning Town Hall Meeting on April 11, 2018, that the Tribe wants to work with the City and all in the Pass Area; however, any alternative north of the I-10 freeway would be difficult since these properties are within a tribal residential area. Chairman Martin also noted that a Morongo membership vote on this topic occurred in 2006/2007 and the route north of I-10 was not the preferred route.

MBMI sent a letter on September 25, 2018, to the Riverside County Transportation Department regarding alternative consideration indicating that Alternative 12 (Preferred Alternative) presented “a better option for meeting our regional safety, mobility, and economic development goals.” Additionally, “Alternative 12 (Preferred Alternative) also provides costs savings due to reduced environmental and road construction impacts and is supportive of our long term development plans”. Alternatives north of I-10 were evaluated and dropped from further consideration for reasons discussed in Chapter 1 of the Recirculated Draft EIR/EA.

**IP-8-5**

The Environmental Protection Agency (EPA), a federal agency, reviewed the Draft EIR/EA circulated in December 2017, and provided comments on that document (EPA letter dated April 25, 2018). As a local road, the I-10 Bypass is not anticipated to impact national security. The weigh station located on I-10 would continue to function as intended. In Section 1.4.2.8, one project element that is included is a turn out area for CHP to regulate truck traffic and prevent unauthorized usage of the I-10 Bypass by trucks during standard traffic conditions. Therefore, trucks will still have to pass through the weigh station as they travel on I-10. The truck turnout was requested by the CHP, a project stakeholder, who has provided input throughout the development of the I-10 Bypass Project.

**IP-8-6**

The EIR/EA document was circulated through the State Clearinghouse for State agencies with jurisdiction over the Project area and was also sent to various federal agencies including the Bureau of Land Management, Natural Resources Conservation Service, Office of Environmental Management, and Federal Transit Administration as seen in Chapter 6, Distribution List. The I-10 Bypass Project does not include improvements to railroad facilities and would not impact operations at the Port of Los Angeles or the Port of Long Beach and is not under the jurisdiction of Los Angeles or Orange County transit agencies. The Federal Highway Administration (FHWA) is the



federal transportation agency with jurisdiction over this Project, and FHWA has assigned NEPA authority to Caltrans; as such, there is no other federal transportation agency with jurisdiction over the I-10 Bypass Project. Lions Park is located at the intersection of Charles Street/Hargrave Street in Banning, 0.5 mile west of the Project limits and the James A. Venable Civic Center and Park is located at 50390 Carmen Avenue in Cabazon, approximately 1.5 mile southeast of the Project limits. There are no other parks or recreational facilities, national or otherwise, located within 1.5 miles of the I-10 Bypass Project limits and the Project would not impact national parks and recreation facilities. Therefore, there is no need to distribute the Recirculated Draft EIR/EA to the federal agencies discussed in this comment.

**IP-8-7**

This is not a comment on the contents and analysis of the Recirculated Draft EIR/EA document; therefore, no further response is required.

**IP-8-8**

This is not a mitigation measure related to the analysis in the document and does not modify the Project design or Project Purpose and Need. This is not a comment on the contents and analysis of the EIR/EA document; therefore, no further response is required.

Regarding “Environmental Impacts on existing protected areas. See comment letters from environmental groups;” please see comment letter F-1 (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) and comment letters IP-3 and IP-3a (Sierra Club and the Center for Biological Diversity), and the Responses to Comments F-1-1 through F-1-40, IP-3-1 through IP-3-26, and IP-3a-1 through IP-3a-9.

**IP-8-9**

The commenter’s request for previous comments to be included is acknowledged. These responses are located under the responses to comments in Section IP-8a.

**From:** [Zambon, Mary](#)  
**To:** [King, Thomas](#); [Shelby Cramton](#)  
**Cc:** [Adrian, Darren](#); [Landaal, Dennis](#); [Marcinek, John](#); [Vombaur, Susan](#)  
**Subject:** FW: I-10 Bypass: Banning to Cabazon  
**Date:** Tuesday, February 27, 2018 7:02:31 AM  
**Attachments:** [January 15 2014 Email from Ron Roy to Mary Zambon re I-10 bypass.pdf](#)  
[January 17 2014 Mary Zambons reasons for removing route alternatives 7 & 8 I-10Bypass.pdf](#)  
[January 21 2014 Ron Roy My email reply to Ms Zambons Jan 17 14 email explaining omission of 7 and 8.pdf](#)

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This is the first of 4 emails from Ron Roy, please include all emails in the comment from Ron Roy.

**From:** Ron Roy [mailto:rroy310@gmail.com]  
**Sent:** Monday, February 26, 2018 10:24 PM  
**To:** Aaron.Burton@dot.ca.gov; Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Subject:** I-10 Bypass: Banning to Cabazon

Re: I-10 Bypass: Banning to Cabazon

RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
 FEDERAL PROJECT NO. DEMO03L 5956 (210)

Dear Mr Burton:

During January 2014 Mary Zambon and I exchanged emails regarding concerns I had about the above I-10 Bypass project.

Attached are copies of these email exchanges, which shows the date each email was posted.

I am requesting that these copies are entered into the official record, including public comments for the project.

Please let me know if you have any problems reading the documents. Also please confirm that you received the files.

Thank You

Sincerely

Ron Roy, Beaumont

### Confidentiality Disclaimer

This email is confidential and intended solely for the use of the individual(s) to whom it is addressed. The information contained in this message may be privileged and confidential and protected from disclosure. If you are not the author's intended recipient, be advised that you have received this email in error and that any use, dissemination, forwarding, printing, or copying of this email is strictly prohibited. If you have received this email in error please delete all copies, both electronic and printed, and contact the author immediately.

[County of Riverside California](#)

Re: I-10 Bypass: Banning to Cabazon  
 RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
 FEDERAL PROJECT NO. DEMO03L 5956 (210)  
 Draft Environmental Impact Report/Environmental Assessment

January 15 2014 Email from Ron Roy [rroy310@gmail.com](mailto:rroy310@gmail.com) to Mary Zambon [mzambon@rctlma.org](mailto:mzambon@rctlma.org) Re

## I10 Bypass: Banning to Cabazon: Draft route alternative 8

To: Mary Zambon: Riverside County Transportation Department  
 From: Ron Roy: San Gorgonio Pass Resident

Dear Ms. Zambon

I live in the San Gorgonio Pass and I'm concerned about the necessity for and scope of this project. My understanding is that the primary reason for a "bypass" along this portion of I10 is to allow a safe and expedient alternate route adjacent to I10 to avoid the calamitous "carmagedden" that held up traffic for over 14 hours on the I10 pass corridor a few years back.

Therefore it seems that Alternatives 7 and 8, due to their close proximity to I10, would be best suited for this purpose. I'm partial to 8 because, correct me if I'm wrong, its the old decommissioned US Route 99 that used to be the primary highway before I10 was built in the early 1960s. I would be interested in seeing Route 99 restored in the Banning-Cabazon section, to both celebrate it's richly historic role in the evolution of California's transportation system, and to bring it back to life as a useful I10 bypass route in the event of a carmagedden.

IP-8a-1

Oddly, however, I did not see Alternative 8 (or 7) included in the Preliminary Alternatives for Environmental Review. Could you explain why 8 (and 7) were omitted.

Also, do you have a map showing the old Route 99 as it traverses through the pass and/or confirm its location within or near the proposed alternatives.

IP-8a-2

Finally, I note that Caltrans will be involved in the I10 Bypass project. Could you tell me their role here. Does Caltrans control alternatives 7 and 8 and will these routes be included in Caltrans DEIR?

IP-8a-3

Re: I-10 Bypass: Banning to Cabazon

RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
FEDERAL PROJECT NO. DEMO03L 5956 (210)

January 17 2014 Mary Zambon Reply to My Email:

Zambon, Mary Jan 17 (4 days ago)

to **John**, me

Hello Ron Roy,

Thank you for your interest in the I-10 Bypass: Banning to Cabazon project. Perhaps you have seen information on the project at the County's website <http://rcprojects.org/i10bypass/>. The Initial Study can be viewed at the website and provides a brief summary of the Alternative Screening process.

Alternatives 7 & 8 were assessed in the Alternatives Screening Analysis and have been recommended to be removed from further consideration for several reasons:

- Neither Alternative meets County and/or Caltrans' design standards; and, placement of frontage roads adjacent to freeways is no longer considered best practice. Also, a closure on the I-10 could involve adjacent roads (ie., a hazardous materials spill on the I-10 could result in closure of adjacent roads, etc).
- Either Alternative would require additional right of way that may not be able to be obtained; additional right of way needed for Alt 7 would be within Morongo Tribal lands and Alt 8 would require right of way from the railroad and Caltrans.
- Neither Alternative would provide a link between the City of Banning and the community of Cabazon.
- Regional planning documents upon which funding is based support Alternatives south of the I-10.

I have been told that the extension of Johnson Rd is may be Route 99 but I don't have any map documenting that at this point. I have asked our consultant preparing the environmental document to see if that is easily available.

Caltrans is involved in the project because federal funding will be used for the project, and because we are working closely with Caltrans (and other agencies, such as the City of Banning, the Morongo Tribe and emergency service providers) to address incidents on the I-10. Caltrans will function as the NEPA (National Environmental Policy Act) lead agency and the County as the CEQA (California Environmental Quality Act) lead agency. The environmental document will be an Environmental Assessment (NEPA)/Environmental Impact Report (CEQA), one document that combines the requirements of both laws. There will be a section in the EA/EIR

that explains why Alts 7 & 8 (and others) have been considered and removed from additional evaluation.

Please let me know if you would like to be on the project mailing list to receive notification when the EA/EIR is available for public review.

Sincerely,

Mary Zambon  
Senior Transportation Planner  
Riverside County Transportation Department  
3525 14th Street  
Riverside, CA 92501  
[951 955 6759](tel:9519556759)  
[mzambon@rctlma.org](mailto:mzambon@rctlma.org)

**From:** Ron Roy [<mailto:rroy310@gmail.com>]

**Sent:** Wednesday, January 15, 2014 1:32 PM

**To:** Zambon, Mary

**Subject:** I10 Bypass: Banning to Cabazon: Draft route alternative 8



**I-10 Bypass: Banning to Cabazon**  
**RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00**  
**FEDERAL PROJECT NO. DEM003L 5956 (210)**

January 21 2014 Ron Roy EmailReply to Mary Zambon’s January 17, 2014 Email:

Dear Ms. Zambon

Thank you for your reply to my concerns. In response would you clarify the following concerns I have to your reply?

- |  |  |         |
|--|--|---------|
| <ul style="list-style-type: none"> <li>• According to the attachment I’ve included with this email, is it true that the proposed bypass will be only 2.75 miles long?</li> </ul>   |  | IP-8a-4 |
| <ul style="list-style-type: none"> <li>• Also, have Ramsey St. in Banning and Seminole Lane in Cabazon been accepted and assumed to be EXISTING bypass alternatives that need to be linked somehow with a new bypass linkage? If so, how would routes 7 and 8 apply here in terms of acceptability or non-acceptability? If Ramsey St. and Seminole Lane are not considered existing bypass alternatives what is your reasons for omitting them?</li> </ul>  |  | IP-8a-5 |
| <ul style="list-style-type: none"> <li>• In terms of road width, what is the actual amount of right-of-way that you need for your bypass? Your studies mentioned “2 lanes” are needed. Is that true and if so what is the width required here? Also, given that millions of vehicles traverse this pass in both EAST and WEST directions each month, does that require that, due to this extraordinarily large volume of traffic, you will need bypass lanes on BOTH THE NORTH AND THE SOUTH sides of the freeways to accommodate this large volume of traffic? If not, your reasons?</li> </ul> |  | IP-8a-6 |
| <ul style="list-style-type: none"> <li>• What is the narrowest actual distance between the existing I10 right-of-way and the railroad right-of-way? What is the widest actual distance here?</li> </ul>  |  | IP-8a-7 |
| <ul style="list-style-type: none"> <li>• Regarding the stretch along the sand-and-gravel pit, have you considered an southern alternate route between I10 and the gravel pit? What is the narrowest and widest distance between I10 and the railroad right-of-way along this stretch and how does this match up with your preferred bypass right-of-way width. Could any of this “sand-and-gravel” stretch be accommodated by Seminole Way, Johnson Lane or Main Street and/or right-of-way adjacent to these streets?</li> </ul>  |  | IP-8a-8 |
| <ul style="list-style-type: none"> <li>• My understanding is that Johnson lane, which is part of old route 99 has been ceded to Riverside County by Caltrans. If that is the case, what is the width of</li> </ul>   |  | IP-8a-9 |

- |   |          |
|---|----------|
| this right of way and how does this width match your preferred width for bypass alternative?  | IP-8a-9  |
| <ul style="list-style-type: none"> <li>• Why would you foresee problems obtaining right of way from Caltrans when it is a fellow transportation agency, especially if the right of way is not in current use, and could be used to cure a national highway bottleneck?</li> </ul>   | IP-8a-10 |
| <ul style="list-style-type: none"> <li>• Regarding your comment that : "Neither Alternative meets County and/or Caltrans' design standards; and, placement of frontage roads adjacent to freeways is no longer considered best practice. Also, a closure on the I-10 could involve adjacent roads (ie., a hazardous materials spill on the I-10 could result in closure of adjacent roads, etc)." why specifically does neither alternative meet County or Caltrans design standards? Also, could not the potential for hazardous material spills be mitigated via a barrier of some sort (such as concrete) at much less cost than creating a whole new road system miles south of I10?</li> </ul>   | IP-8a-11 |
| <ul style="list-style-type: none"> <li>• Regarding your comment that ""Either Alternative would require additional right of way that may not be able to be obtained; additional right of way needed for Alt 7 would be within Morongo Tribal lands and Alt 8 would require right of way from the railroad and Caltrans". How much "additional right-of-way" does this bypass need? Is it more than that needed for the study's "preferred" alternatives, which are far south of the freeway? Also wouldn't it be easier to obtain right-of-way from Caltrans, and to a lesser extent, the railroads, than from Morongo Tribal Nation and private land owners?</li> </ul>  | IP-8a-12 |
| <ul style="list-style-type: none"> <li>• Also is there a potential benefit for Morongo Tribe if a bypass directs traffic nearer to its Casino and neighboring properties?</li> </ul>  | IP-8a-13 |
| <ul style="list-style-type: none"> <li>• Regarding your comment "Neither Alternative would provide a link between the City of Banning and the community of Cabazon." My understanding is that this is not the primary purpose of the bypass. To prioritize here would be to put the parochial interests of a few hundred residents in unincorporated Cabazon above the regional, state, and national interests of the millions of vehicular users who utilize I10 each month. Besides, isn't there already access between Banning and Cabazon, and if not, couldn't that access be provided by a separate road network, based on a separate and distinct road study and funding source, aside from the I10 bypass needs. Isn't this afterall, the historically primary function of Riverside County Road Department: to make smaller county access roads (rather than national freeway bypasses).?</li> </ul> | IP-8-14  |
| <ul style="list-style-type: none"> <li>• Regarding your comment: "Regional planning documents upon which funding is based support Alternatives south of the I-10", please note that Route 8 is south of the I-10</li> </ul>   | IP-8a-15 |

Thank you for your reply to my concerns.

**From:** [Zambon, Mary](#)  
**To:** [King, Thomas](#); [Shelby Cramton](#)  
**Cc:** [Adrian, Darren](#); [Landaal, Dennis](#); [Marcinek, John](#); [Vombaur, Susan](#)  
**Subject:** FW: I-10 Bypass: Banning to Cabazon  
**Date:** Tuesday, February 27, 2018 7:02:56 AM  
**Attachments:** [June 25 2014 Ron Roy email to Mary Zambon regarding Morongo Bypass Route North of I10 and Caltrans Median Gate project on the I10 Freeway Median in project area.pdf](#)  
[June 17 2014 PE Article MORONGO RESERVATION Plan to alleviate traffic on I10 plus I10 Median Gate Project.pdf](#)

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2 of 4

**From:** Ron Roy [mailto:rroy310@gmail.com]  
**Sent:** Monday, February 26, 2018 11:14 PM  
**To:** Aaron.Burton@dot.ca.gov; Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Subject:** I-10 Bypass: Banning to Cabazon

To: Aaron Burton: Cal DOT

From: Ron Roy: Beaumont

Re: I-10 Bypass: Banning to Cabazon

RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
 FEDERAL PROJECT NO. DEMO03L 5956 (210)

Dear Mr. Burton:

During 2014 Mary Zambon and I exchanged emails regarding my concerns about the above I-10 Bypass project. After our January 2014 emails (previously sent as copies in an earlier email today to Aaron Burton: DOT), on June 25, 2014 I emailed Ms. Zambon regarding new information relating to the project.

Attached is a copy of the June 25, 2014 email I sent to Ms. Zambon, in which I ask how the various agencies involved in the project are factoring in proposals by the Morongo tribe to extend roadways North of I10, and the Caltrans I-10 Median Gate Project, in modifying, reducing, or eliminating their proposed mitigations found in the EIR, or eliminating the I-10 Bypass project altogether since the aforementioned tribal proposal and Caltrans I-10 median gate project eliminates the need for the I-10 Bypass project known as: RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00 FEDERAL PROJECT NO. DEMO03L 5956 (210)

Attached also please find a copy of a June 17 2014 Press Enterprise Article <http://www.pe.com/articles/morongo-696328-county-freeway.html> which addresses the Morongo tribe proposal and the Caltrans I-10 Median Gate Project.

Please include this February 26, 2017 email, along with its attachments into the official record as my public comments on he I-10 Bypass project known as: RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00 FEDERAL PROJECT NO. DEMO03L 5956 (210).

Re: I-10 Bypass: Banning to Cabazon  
RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
FEDERAL PROJECT NO. DEMO03L 5956 (210)  
Below email sent to Aaron Burton: Cal DOT on February 26, 2018

June 25 2014 Ron Roy email to Mary Zambon regarding Morongo Bypass Route North of I10 and Caltrans Median Gate project on the I10 Freeway Median in project area.

Dear Ms Zambon

Per the PE article:Morongo Reservation Plan to Alleviate Traffic on I10 (attached below),and as a follow up to my previous email comments regarding I-10 Bypass, I'm glad to see that RCTLMA is working with Morongo Tribe regarding alleviating congestion/bottlenecks from future Carmaggedon Events like the 2012 disaster.

Given this and Caltrans completing an \$860,000 project June 6 that added a series of five gates on the freeway median between Banning and the Highway 62 exit near Palm Springs that will allow traffic to make a U-turn when the freeway is closed, how do these recent events effect or change the I10 Bypass project and the 2.75 mile stretch it covers.

IP-8a-16

I see that historic Route 99 along this stretch has been re-striped with cars occassionally traveling on the old roadbed. Has Caltrans answered you regarding how they will use Rte 99 as part of the bypass?

IP-8a-17

Are you regularly communicating with Caltrans about the bypass, and what role do you see Caltrans playing in here.

IP-8a-18

Finally: I want to bring up the eastbound Inspection Station in the Bypass corridor. Its very small, obsolete: When its open, trucks backup onto I10 outside lanes for up to a mile creating very dangerous conditions for interstate 10 travelers following a 70 mph speed limit.

IP-8a-19

Will this inspection station be closed down and moved to a safer location, such as a few miles west nearer Banning City Limits.

IP-8a-20

Thank you

Ron Roy



GAIL WESSON, STAFF

### **Seminole Drive extension project**

A draft study and environmental assessment is available for public comment until June 28.

**The route:** A one-mile extension of Seminole from where it dead-ends east of Morongo Casino, Resort & Spa to Rushmore Avenue at Kimdale Drive in Whitewater.

**The study:** Available for review at the Cabazon Public Library, 50425 Carmen Ave., or the county Transportation Department, 3525 14th St., Riverside.

**The benefit:** Building the "missing link" gives Interstate 10 motorists an alternate route between Cabazon and Whitewater if the freeway closes in an emergency.

A project is in the works to build a two-lane road on the Morongo Reservation north of Interstate 10 to keep east-west traffic moving if the freeway is closed because of an emergency.

The Morongo Band of Mission Indians is partnering with Riverside County on the project, which would extend Seminole Drive near the Morongo Casino, Resort & Spa.

In the past, motorists have been stranded for hours at points between Banning and Palm Springs, because there is no alternate route if the freeway is closed.



The freeway is the link between desert communities and the rest of Southern California. In 2012, an average of 91,000 to 103,000 vehicles per day traveled the route at the Morongo Trail interchange depending on direction of travel, according to Caltrans data.

Under the proposal, Seminole Drive, which now dead-ends east of the casino, would be extended about one mile to intersect Rushmore Avenue and Kimdale Drive. From that area of windswept scattered homes approaching Whitewater, motorists would be able to take Tamarack Road to the Haugen-Lehmann Way entrance to I-10.

Caltrans completed an \$860,000 project June 6 that added a series of five gates on the freeway median between Banning and the Highway 62 exit near Palm Springs that will allow traffic to make a U-turn when the freeway is closed.

“Morongo previously entered into a memorandum of understanding with the County of Riverside and others to examine solutions for alleviating traffic congestion during major incidents on Interstate 10. The Morongo Band of Indians will continue to work closely with the County, Caltrans and our neighbors in the Pass to improve public safety along the freeway,” tribal Chairman Robert Martin said in a written statement.

“They have been very cooperative. We have been out there meeting regularly,” Patty Romo, the county’s deputy transportation director, said by phone of the partnership with Morongo.

Paving will cost an estimated \$800,000. Romo said the tribe, which makes grants for projects that benefit the tribe and the surrounding area, took action to reprogram \$200,000 from another project to pay for the Seminole environmental work.

Sales tax generated by the new Desert Hills Premium Outlets shops will pay for the rest. County supervisors voted in December to set aside 25 percent of sales taxes generated from new stores to pay for increased sheriff’s patrols by the outlets and make road improvements to keep traffic flowing nearby.

“We’re going to try to do this with our own county crews,” Romo said. “I’m hoping we can do it by the end of the year.”

Because the project crosses tribal land, the environment review involves compliance with state and federal rules. The environmental document must be approved by the Bureau of Indian Affairs. Then the tribal council would be asked to grant a 100-foot-wide right-of-way for a road easement.

The route will be parallel and just north of a separate right-of-way for the underground Colorado River Aqueduct pipeline that brings water to the Inland area.

Members of the public can comment on the draft environmental report until June 28. The assessment looks at potential impacts of the project, including traffic, noise, vistas and effects on plants and animals in the area.

**From:** [Zambon, Mary](#)  
**To:** [King, Thomas](#); [Shelby Cramton](#)  
**Cc:** [Adrian, Darren](#); [Landaal, Dennis](#); [Marcinek, John](#); [Vombaur, Susan](#)  
**Subject:** FW: I-10 Bypass Project: Public Comments  
**Date:** Tuesday, February 27, 2018 7:03:21 AM  
**Attachments:** [July 1 2014 email from Mary Zambon in reply to Ron Roy June 25 2014 email.pdf](#)

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3 of 4

**From:** Ron Roy [mailto:rroy310@gmail.com]  
**Sent:** Monday, February 26, 2018 11:34 PM  
**To:** Aaron.Burton@dot.ca.gov; Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Subject:** I-10 Bypass Project: Public Comments

To Aaron Burton: Cal DOT  
From: Ron Roy: Beaumont

### **Re: I-10 Bypass: Banning to Cabazon**

#### **RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00 FEDERAL PROJECT NO. DEMO03L 5956 (210)**

Attached is a copy of a July 1, 2014 email by Mary Zambon in reply to my June 25, 2014 email, previously submitted today (February 26, 2018) in an email.

Please include the attachment in my public comments and the official record on the above I-10 Bypass project.

Thank you  
Ron Roy

#### **Confidentiality Disclaimer**

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[County of Riverside California](#)

July 1 2014 email from Mary Zambon in reply to Ron Roy June 25 2014 email I-10 Bypass Project

**I-10 Bypass: Banning to Cabazon**  
**RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00**  
**FEDERAL PROJECT NO. DEMO03L 5956 (210)**

Mary Zambon email of July 1, 2014:

Hello Mr. Roy,

Caltrans' project adding the gates within the freeway median is one effort to alleviate traffic backups during emergency situations along the I-10. Caltrans, the CHP, the County, the City of Banning and the Morongo Tribe are working together since multiple improvements are needed to be available in emergency situations along the I-10. The I-10 Bypass: Banning to Cabazon project is continuing through the preliminary engineering and environmental phase. Caltrans is a partner in the project and the federal environmental lead agency.

The County's road maintenance supervisor informed me that Railroad Avenue was restriped in January 2014 – perhaps that is what you were referring to ?

We are not aware of any immediate plan to relocate the eastbound inspection station.

Sincerely,

Mary Zambon  
Senior Transportation Planner  
Riverside County Transportation Department  
3525 14th Street  
Riverside, CA 92501  
[951 955 6759](tel:9519556759)  
[mzambon@rctlma.org](mailto:mzambon@rctlma.org)

**From:** [Zambon, Mary](#)  
**To:** [Shelby Cramton](#); [King, Thomas](#)  
**Cc:** [Adrian, Darren](#); [Landaal, Dennis](#); [Marcinek, John](#); [Vombaur, Susan](#)  
**Subject:** FW: I-10 Bypass Project  
**Date:** Tuesday, February 27, 2018 7:04:03 AM  
**Attachments:** [I-10-Median-Gate-Barrier-Completion-Press-Release-tp-080114.pdf](#)

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4 of 4

**From:** Ron Roy [mailto:rroy310@gmail.com]  
**Sent:** Monday, February 26, 2018 11:42 PM  
**To:** Aaron.Burton@dot.ca.gov; Zambon, Mary <MZAMBON@RIVCO.ORG>  
**Subject:** I-10 Bypass Project

To: Aaron Burton: Cal DOT  
From: Ron Roy: Beaumont

Re: I-10 Bypass: Banning to Cabazon

RIVERSIDE COUNTY, CALIFORNIA DISTRICT 8 – RIV – 00  
FEDERAL PROJECT NO. DEMO03L 5956 (210)

Dear Mr. Burton:

Please include the attachment in this email (which is a Caltrans Press Release announcing the completion of the I-10 Median Gate Barrier) into the official public record and public comments for the above project.

Thank you

Ron Roy

**Confidentiality Disclaimer**

This email is confidential and intended solely for the use of the individual(s) to whom it is addressed. The information contained in this message may be privileged and confidential and protected from disclosure. If you are not the author's intended recipient, be advised that you have received this email in error and that any use, dissemination, forwarding, printing, or copying of this email is strictly prohibited. If you have received this email in error please delete all copies, both electronic and printed, and contact the author immediately.

[County of Riverside California](#)



# PRESS RELEASE

14-134

Date: August 1, 2014  
District: 8 – San Bernardino  
Contact: Tyeisha Prunty, Caltrans Public Affairs  
Phone: (909) 383-1910  
FOR IMMEDIATE RELEASE

## INTERSTATE 10 (I-10) MEDIAN GATE BARRIERS

**San Bernardino** – Caltrans announces the completion of the I-10 median gate barriers as part of the joint I-10 Emergency Plan agreement between the County of Riverside, California Highway Patrol, Morongo Band of Mission Indians, Coachella Valley Association of Governments, Riverside County Transportation Commission, City of Palm Springs, City of Banning, and Caltrans.

Median gate barriers are installed at five locations along I-10 to assist in mitigating the impact of major closures and incidents and to improve public safety during emergencies. The cost of the project is \$980,514. The project was completed on June 6, 2014.

Median gate barrier locations:

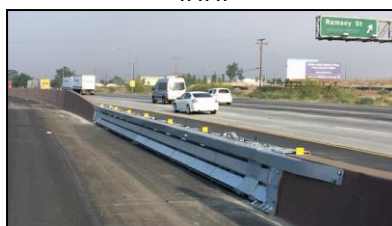
- 1.1 miles east of Hargrave Street undercrossing, in Banning
- 0.1 miles west of Malki Road., in Cabazon
- 1.4 miles east of Main Street, in Cabazon
- 2.3 miles west of Haugen-Lehmann Way, in Whitewater
- 1.2 miles west of route 10/62 separation, near Palm Springs

This 19-mile segment of I-10, between the City of Palm Springs and Banning has experienced several incidents causing lengthy traffic delays, leaving motorists stranded without an exit from the freeway. The newly installed median gate barriers are one of many tools available to the California Highway Patrol, to divert traffic around the incident area.

In addition to the median gate barriers, the I-10 Emergency Plan also includes various road developments, changeable message signs, vehicle detection stations, closed-circuit television cameras, and a multi-agency implementation plan.

Caltrans would like to thank the motoring public for their patience during construction, and all agencies involved, for support in the development of the I-10 Emergency Plan.

###





# MORONGO RESERVATION Plan to alleviate traffic on I-10

<http://www.pe.com/articles/morongo-696328-county-freeway.html>

To help motorists if the freeway is closed, Seminole Drive may be extended through reservation territory.

- **More from this story**



**[SLIDE SHOW:](#)**

[MORONGO RESERVATION: Plan to alleviate traffic on I-10](#)  
[3 Photos »](#)

BY GAIL WESSON / STAFF WRITER

Published: June 16, 2014 Updated: June 17, 2014 10:04 a.m.

#### **L.4.11 IP-8a – Ron Roy 2018**

##### ***IP-8a-1***

Please refer to Section 1.3, Purpose and Need for the Project, in the Project Description of the EIR/EA regarding the purpose of this Project. The communities of Banning and Cabazon have no local roadway connecting them. All travel between Banning and Cabazon, whether local or through traffic, must be accommodated on I-10, and this creates several problems for both local and regional travelers as well as for bicyclists and pedestrians as described in Section 1.3.

Alternative 8 considered an alternative following Ramsey Street and Johnson Lane, which is the original route of US-60/70/99. As described in Section 1.5.2, Alternatives Development, Alternatives 7 and 8 were removed from further consideration for the following reasons:

- **Alternative 7:** Inability to acquire right-of-way from Morongo Band of Mission Indians as this alternative would require right-of-way north of I-10 near tribal residences. Impacts to local circulation. Alternative 7 is also inconsistent with the FTIP, land uses identified in the County General Plan, and the Circulation Element of the Riverside County General Plan, which shows the roadway south of I-10, and is, therefore, inconsistent with the Project purpose. Alternative 7 would require bringing at least two non-standard freeway interchanges up to full standard. The cost of bringing these interchanges up to full standard would be prohibitive, making this alternative infeasible.
- **Alternative 8:** Inability to acquire right-of-way as this alternative would require the relocation of either I-10 or the railroad, which is considered infeasible. Failure to meet County and Caltrans design standards. Alternative 8 is also inconsistent with the FTIP, the land uses identified in the County General Plan, and the Circulation Elements of both the Riverside County General Plan and the Banning General Plan, neither of which show a roadway between I-10 and the UPRR tracks. Therefore, Alternative 8 is inconsistent with the Project purpose.

Additionally, Alternatives 7 and 8 were thoroughly evaluated in the Alternatives Screening Analysis technical study (LSA, September 2016) incorporated by reference in the Recirculated Draft EIR/EA.

**IP-8a-2**

Figure 2.8-1 (following IP-8a-5 below) of the Alternatives Screening Analysis technical report (LSA 2016) shows the Original Ramsey Street/Johnson Lane (Pre 1964 US 60-70-99).

**IP-8a-3**

Caltrans is involved in the Project because federal funding will be used for the Project, and because the Project proponent, Riverside County, is working closely with Caltrans (and other agencies, such as the City of Banning, the Morongo Band of Mission Indians (MBMI), and emergency service providers) to address incidents on the I-10. Caltrans is the NEPA (National Environmental Policy Act) lead agency and the Riverside County Transportation Department is the CEQA (California Environmental Quality Act) lead agency.

Alternatives 7 and 8 are summarized in Section 1.5.2, Alternatives Development. Alternatives 7 and 8 were removed from further consideration for reasons stated above under Response to Comment IP-8a-1 and will not be analyzed further in the Final EIR/FONSI (joint CEQA/NEPA document).

**IP-8a-4**

As described in Section 1.1, Introduction, the Project would be approximately 3.3 miles from the intersection of Hathaway Street and Westward Avenue in the City of Banning east to the intersection of Bonita Avenue and Apache Trail in the unincorporated community of Cabazon.

**IP-8a-5**

Alternative 7 would connect Ramsey Street and Seminole Drive. Alternative 8 would follow Johnson Lane and would connect Hargrave Street to the Ramsey Street interchange. Both of these alternatives were considered but removed from further consideration as discussed in Section 1.5.2, Alternatives Development, and under Response to Comment IP-8a-1, above.

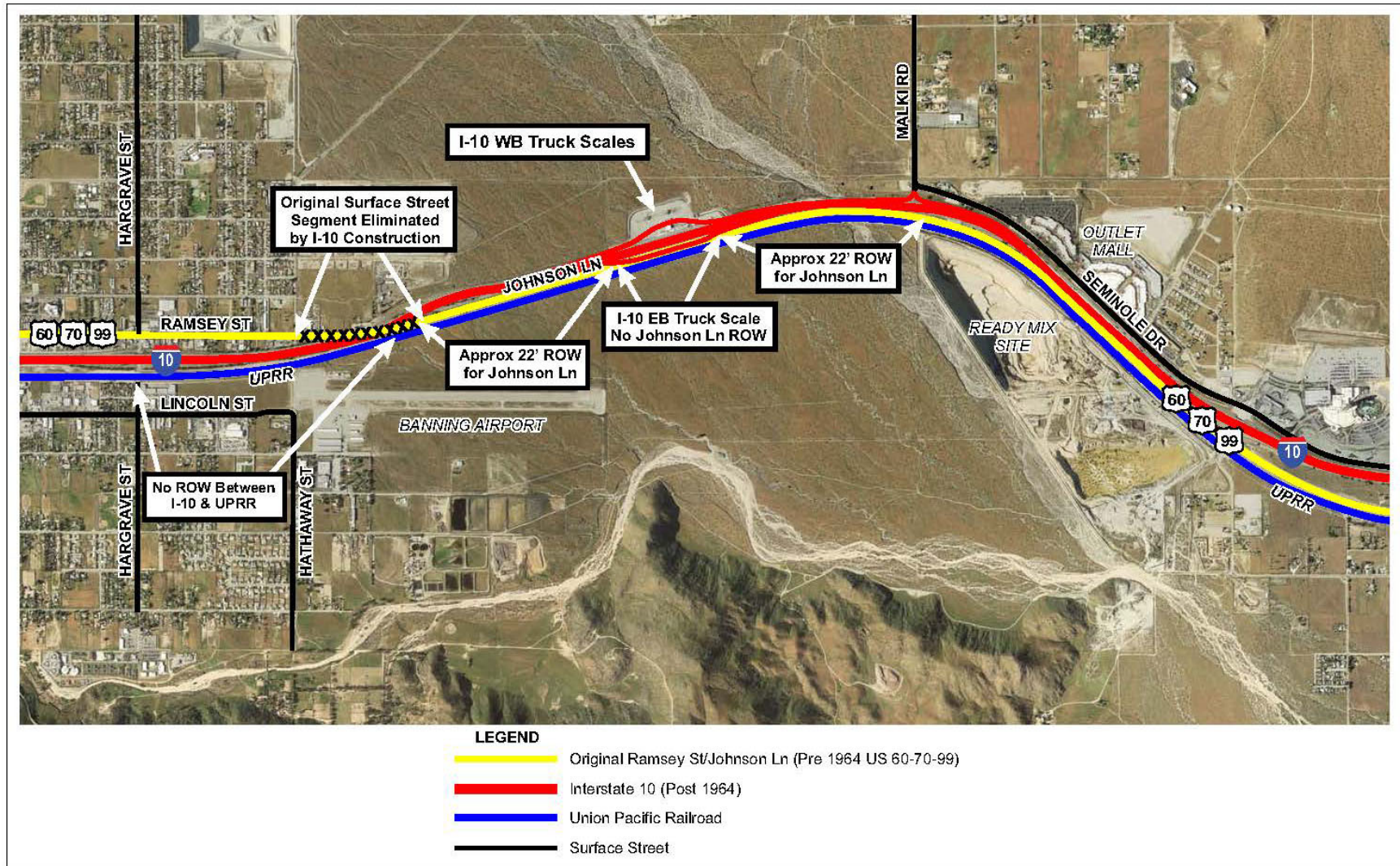


FIGURE 2.8-1



NO SCALE

Source: Google Earth (2015)

I:\KHA1101\GVRamseySt-JohnsonLn Original Connect.cdr (8/29/2016)

I-10 Bypass: Banning to Cabazon  
 Ramsey Street-Johnson Lane Original Connection

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**IP-8a-6**

The Project would construct a two-lane facility. However, traffic forecast volumes estimate the need for four lanes on this roadway after completion of the initial two-lane roadway and prior to the 20-year planning horizon. Alternative 5 and Alternative 12 (Preferred Alternative) would provide one 12 ft travel lane in each direction with an 8 ft paved shoulder that could be used by bicyclists and a 14 ft painted median within a 54 ft paved cross section. An 8 ft shared-use pathway would also be developed outside the paved surface on the south side of the roadway, adjacent to Smith Creek. If feasible, the ultimate 129 ft right-of-way for the future four-lane roadway will be acquired even though the Project will only construct a two-lane facility. Bypass lanes would not be constructed on both the north and south sides of the I-10 as part of this Project. Elements of the Project include providing a local roadway connecting Banning and Cabazon that would accommodate local trips on a local roadway and providing an alternate route between Banning and Cabazon in the event of a closure on I-10. As such, the I-10 Bypass Project is not intended to accommodate the traffic volume on I-10. The eastbound and westbound lanes would be constructed south of the I-10 under Alternatives 5 and 12 (Alternative 12 is the Locally Preferred Alternative), which are carried forward in this EIR/EA. On December 17, 2019, the Project Development Team (PDT) identified Alternative 12 as the Preferred Alternative.

**IP-8a-7**

There is approximately 80 ft between the paved edge of the eastbound I-10 shoulder and the northerly UPRR tracks. The right-of-way is split approximately 30 ft for Caltrans and 50 ft for the railroad.

**IP-8a-8**

Alternative 8 analyzed in the Alternatives Screening Analysis technical study (LSA, September 2016) incorporated by reference in the Recirculated Draft EIR/EA considered a route immediately south of the I-10 along Johnson Lane, the original route of US-60/70/99 now squeezed between I-10 and UPRR.

There is approximately 80 ft between the paved edge of the eastbound I-10 shoulder and the northerly UPRR tracks.

The minimum cross section for a two-lane Johnson Lane with shoulders/bicycle lanes would be 40 ft plus the necessary widths for grade changes, drainage facilities, and retaining walls. In theory, a two-lane, 40 ft roadway could be constructed within the

80 ft area, assuming the necessary right-of-way could be obtained from Caltrans and the UPRR. Given the limited space between the railroad and the freeway, this alternative would be limited to two lanes (one in each direction) unless either the freeway or railroad was realigned at a significant cost.

The Alternative 8 alignment would have made a hard left-turn at its intersection with Malki Road, then cross under I-10 on Malki Road, intersect Seminole Drive, and proceed down existing Seminole Drive to the Morongo Trail roundabouts. Main Street does not extend across the sand and gravel mine.

**IP-8a-9**

Available right-of-way between Caltrans and UPRR is believed to be approximately 22 feet (ft) between the Ramsey Street Interchange and Malki Road. At the I-10 Weigh Station, there is no available right-of-way. The proposed two-lane road is 54 feet wide just for the roadway pavement (i.e., excluding sidewalk and drainage ditches). The future four-lane facility forecast to be needed in approximately 20 years is 76 feet wide for just the roadway pavement.

**IP-8a-10**

The proposed roadway is too wide to fit between I-10 and the railroad without impacting the I-10 Eastbound Weigh Station. In addition, Caltrans would likely need space for additional lanes along I-10 in the future.

**IP-8a-11**

The reasons why specifically neither Alternatives 7 or 8 meet County or Caltrans' design standards are provided below.

Alternative 7 would connect Ramsey Street with Seminole Drive. It would cross into Morongo Band of Mission Indians Tribal Lands that contain Tribal facilities and residential areas, and would increase traffic volumes at existing interchanges and roads (e.g., the I-10/Malki Road interchange; I-10/Morongo Trail interchange; and Seminole Drive between Malki Road and Morongo Trail).

The Ramsey Street interchange is considered a "Partial Interchange" because it does not provide access in all directions. Therefore, the existing interchange fails to meet current Caltrans and Federal Highway Administration (FHWA) design standards.

Caltrans *Highway Design Manual* Section 502.2 states the following:

### **502.2 Local Street Interchanges**

An interchange is expected to have an on- and off-ramp for each direction of travel. If an off-ramp does not have a corresponding on-ramp, that off-ramp would be considered an isolated off-ramp.

**Isolated off-ramps or partial interchanges shall not be used because of the potential for wrong-way movements.** In general, interchanges with all ramps connecting with a single cross street are preferred (Text in **bold** represents a mandatory design standard). The existing Ramsey Street interchange does not meet this mandatory criterion. Additionally, the existing I-10/Malki Road interchange also has several nonstandard features, including:

- The I-10 westbound off-ramp and on-ramp both terminate directly into the Seminole Drive intersection with Malki Road, which violates the following requirements of Topic 504.3(3) of the *Caltrans Highway Design Manual*: **The minimum distance (curb return to curb return) between ramp intersections and local road intersections shall be 400 feet.** The preferred minimum distance should be 500 ft (Bold is a mandatory standard).
- The Malki Road/Martin Road intersection is located approximately 150 ft north of the Malki Road/I-10 westbound ramps intersection, again violating the 400 ft intersection spacing standard. The existing entrance gate to the MBMI Reservation is located approximately 400 ft from the ramp intersection with Malki Road, consistent with the 400 ft standard.
- The westbound I-10 off-ramp at Malki Road does not provide for a 150 ft minimum tangent (straight) segment before the intersection with the local street.
- Malki Road north of I-10 ends at its intersection with the I-10 westbound ramps and Seminole Drive (see Figure 2.7-3). However, another segment of Malki Road begins approximately 900 ft east of the Malki Road/westbound I-10 ramps intersection and extends to the south under I-10 to the eastbound ramps. With this configuration, there are two existing offset partial interchanges: one partial interchange north of I-10 that provides access from Malki Road to the westbound ramps, and one partial

interchange south of I-10 that provides access to the eastbound ramps. This configuration violates the design guideline (Caltrans *Highway Design Manual* Section 502.2, Local Street Interchanges) discussed in Section 2.7.2.1, Ramsey Street Interchange, that requires an interchange to provide on- and off-ramps in both directions.

- The eastbound ramp intersection with Malki Road is located immediately adjacent to the Johnson Lane (old US-60/70/99) intersection, violating the 400 ft requirement.

Although Alternative 7 would incorporate revised alignments of Seminole Drive, Malki Road, and Martin Road to address some of the existing nonstandard features, existing nonstandard features at the eastbound ramps and the discontinuous alignment of Malki Road at I-10 (partial interchange provides access to the eastbound ramps only) would be maintained since the Project is not making those issues any worse and correcting them is beyond the scope of this effort.

Alternative 8 would follow the alignment of a defunct roadway that was known as Johnson Lane. Given the limited space between the railroad and I-10, this alternative would be limited to two lanes (one in each direction) and would not likely meet current design standards.

There is approximately 80 ft between the paved edge of the eastbound I-10 shoulder and the northerly UPRR tracks. The right-of-way is split approximately 30 ft for Caltrans and 50 ft for the railroad. The 30 ft of Caltrans right-of-way reflects the agency's standard width for the right-of-way between the edge of pavement and the edge of right-of-way; this area provides a "clear recovery zone" as described in Topic 7-02.1 of the *Highway Design Manual*. The 30 ft buffer provides:

"An area clear of fixed objects adjacent to the traveled way is desirable to provide a clear recovery zone (CRZ) for vehicles that leave the traveled way. Studies have indicated that on high-speed highways, a clear width of 30 feet from the edge of the traveled way permits about 80 percent of the errant vehicles that leave the traveled way to recover. Thirty feet should be considered the minimum clear recovery zone where possible for freeways and high-speed expressways. High-speed is defined as operating speeds greater than 45 mph."

The undeveloped northerly edge of the UPRR right-of-way is approximately 45 ft in width. However, the UPRR plans to use that space for additional tracks; such new track could facilitate the planned extension of additional passenger trains between Los Angeles and the Coachella Valley.

In the event of an I-10 closure as the result of a hazardous materials spill, traffic could be diverted to the I-10 Bypass which would serve as a detour route during the freeway closure. However, the I-10 Bypass Project is not intended to serve as a mitigation for potential hazardous material spills.

**IP-8a-12**

For Alternative 7, additional right-of-way is needed for the realignment of Malki Road to address existing deficiencies at the Malki Road interchange as described above under Response to Comment IP-8a-11.

For Alternative 8, the minimum cross section for a two-lane Johnson Lane with shoulders/bicycle lanes would be 40 ft plus the necessary widths for grade changes, drainage facilities, and retaining walls. The right-of-way in this area is split approximately 30 ft for Caltrans and 50 ft for the railroad. However, the UPRR plans to use that space for additional tracks; such new track could facilitate the planned extension of additional passenger trains between Los Angeles and the Coachella Valley. The 30 ft of Caltrans right-of-way reflects the agency's standard width for the ROW between the edge of pavement and the edge of right-of-way; this area provides a "clear recovery zone" as described in Topic 7-02.1 of the Caltrans *Highway Design Manual*. Therefore, right-of-way obtained from Caltrans in this area would result in an inconsistency with highway design standards.

**IP-8a-13**

The Morongo Casino and neighboring properties are already located off of I-10. Therefore, locating the bypass near the Casino would not be expected to significantly benefit the MBMI by directing traffic to the Casino and neighboring properties.

**IP-8a-14**

The purpose of the Project as described in Section 1.3.1 in the Recirculated Draft EIR/EA, Purpose of the Project is to provide a local roadway connecting Banning and Cabazon that would:



- Accommodate local trips on a local roadway;
- Provide an alternate route between Banning and Cabazon in the event of a closure on I-10;
- Provide a safe route for bicyclists;
- Provide a safe route for pedestrians;
- Provide a connection from Cabazon to I-10 and to the adjacent City of Banning that does not require an at-grade crossing of the railroad tracks;
- Improve the transportation facilities connecting Banning and Cabazon to address growth and mobility needs as identified in the 2015 County General Plan policy cited in Section 1.3.2.4, as well as in the Banning General Plan Circulation Element, and;
- Improve the transportation facilities connecting Banning and Cabazon consistent with the 2016–2040 SCAG RTP/SCS and the 2019 FTIP.

Banning and Cabazon have no local roadway connecting them. The two communities are located approximately 3 miles apart, with I-10 providing the only roadway connection. This Project is proposing the construction of a local roadway.

***IP-8a-15***

The County of Riverside acknowledges that Alternative 8 is south of the I-10.

***IP-8a-16***

Caltrans' project adding the gates within the freeway median is one effort to alleviate traffic backups during emergency situations along the I-10. Caltrans, the CHP, the County, the City of Banning, and the MBMI are working together since multiple improvements are needed to be available in emergency situations along the I-10. Even with implementation of the I-10 gates in the median project, the I-10 Bypass Project is still needed to provide a local connection between Banning and Cabazon and to provide a relief route for I-10 traffic during potential freeway closures during emergency situations.

***IP-8a-17***

State Route 99 has been decommissioned. This comment may be referring to Railroad Avenue, which was restriped in January 2014. Alternative 8 considered an alternative alignment following Johnson Lane, which was the route of US-99. However, this alternative has been removed from further consideration as discussed under Response to Comment IP-8a-1.

**IP-8a-18**

Yes, the County of Riverside is regularly communicating with Caltrans about the bypass. Caltrans is a partner in the Project and the federal NEPA lead agency as described under Response to Comment IP-8a-3.

**IP-8a-19**

The I-10 Bypass Project does not include improvements to I-10 and, as such, improvements to the eastbound Inspection Station on the I-10 are outside the scope of this Project.

**IP-8a-20**

The I-10 Bypass Project does not include relocation of the inspection station. The County is not aware of any immediate plan to relocate the eastbound inspection station.

I want #5 please!!

IP-9-1

SUSAN BLAIR  
1520 Plum St Cabazon  
92230

9/10/19

I-10 Bypass

**L.4.12 IP-9 – Susan Blair**

***IP-9-1***

The commenter's support for Alternative 5 is acknowledged.

**From:** [Zambon, Mary](#)  
**To:** [Abby Annicchiarico](#); [King Thomas](#)  
**Cc:** [Adrian, Darren](#); [Marcinek, John](#)  
**Subject:** FW: I-10 Emergency Bypass  
**Date:** Thursday, September 12, 2019 5:27:56 PM

Comment following.

**From:** Taffy Brock [mailto:[tandjbrock@verizon.net](mailto:tandjbrock@verizon.net)]  
**Sent:** Thursday, September 12, 2019 4:53 PM  
**To:** Zambon, Mary <[MZAMBON@RIVCO.ORG](mailto:MZAMBON@RIVCO.ORG)>  
**Subject:** Fwd: I-10 Emergency Bypass

**CAUTION:** This email originated externally from the **Riverside County** email system.  
**DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Please see below.. original message had a mistake in the email address

-----Original Message-----

**From:** Taffy Brock <[tandjbrock@verizon.net](mailto:tandjbrock@verizon.net)>  
**To:** MZAMBON <[MZAMBON@rctima.org](mailto:MZAMBON@rctima.org)>  
**Sent:** Thu, Sep 12, 2019 12:29 PM  
**Subject:** I-10 Emergency Bypass

Hi, our names are James and Taffy Brock. We live at 52091 Esperanza Ave/ P.O. Box 37, Cabazon, Ca 92230. We just wanted to comment on how badly this is needed for our community. When we are stuck on our side of town because trains are stopped at our only two way to get out ... it can become life or death situations! When it happens there's a good chance there will be no sheriffs or emergency personnel on this side. ... it's an awful situation to be in! As well as when traffic on the 10 gets backed up for hours we have no way to get out to get to schools, hospitals, etc. we get very cut off here. This would open up a lot for us! We desperately need it! On another thing though we are very concerned about the choice of it going through the Indian Res.... they are notorious for backing out or changing things up.... so that is a concern to us. Thank you for your time

IP-10-1

IP-10-2

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[County of Riverside California](#)



**L.4.13 IP-10 – Taffy Brock**

***IP-10-1***

The commenter's support for Alternative 5, Alternative 12 (Preferred Alternative), and improvements to safety during an emergency is acknowledged. The I-10 Bypass Project does not include improvements to railroad facilities.

***IP-10-2***

The Morongo Band of Mission Indians sent a letter on September 25, 2018, to the County of Riverside Transportation Department regarding alternative consideration. The letter included a statement that the Morongo Band of Mission Indians decided that Alternative 12 (Preferred Alternative) presented “a better option for meeting our regional safety, mobility, and economic development goals.” Additionally, “Alternative 12 also provide costs savings due to reduced environmental and road construction impacts and is supportive of our long term development plans.” This letter confirms the Morongo Band of Mission Indians support for Alternative 12 (Preferred Alternative).

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## **L.5 Comments from Utilities**



Mike Campisi  
Pipeline Planning Assistant

9400 Oakdale Ave  
Chatsworth, CA 91311

August 28, 2019

Mary Zambon  
Riverside County Transportation Department  
mzambon@rivco.org

**Subject: I-10 Bypass: Banning to Cabazon Project**

**DCF: 1773-19-5000(3)\_5010**

Southern California Gas Company (SoCalGas) Transmission Department operates and maintains high-pressure natural gas transmission pipeline(s) in the vicinity of your project. The pipeline is shown on the attached map(s). Please note, only the high-pressure transmission pipeline information is current on these atlas prints.

Our Gas Distribution Department may have other gas facilities within your project area. To assure no conflict with the SoCalGas' distribution pipeline system, please contact [SCGSERegionRedlandsUtilityRequest@semprautilities.com](mailto:SCGSERegionRedlandsUtilityRequest@semprautilities.com).

This is only a response to a gas facility map request; a review of potential conflicts associated with your request has not been conducted. Consequently, **this letter does not constitute clearance for any construction work near or around SoCalGas' pipeline(s)**. As your project plans are developed, you must notify SoCalGas - Gas Transmission Department regarding the improvements that are proposed near our pipeline(s) and within our easement(s) before you begin any construction, including potholing. In doing so, please allow sufficient time as there may be certain requirements that need to be incorporated into your project's design and could significantly affect your project construction schedule.

Sincerely,

Mike Campisi  
Pipeline Planning Assistant  
SoCalGas Transmission Technical Services  
[SoCalGasTransmissionUtilityRequest@semprautilities.com](mailto:SoCalGasTransmissionUtilityRequest@semprautilities.com)

# SCG Transmission General Requirements

U-1



August 28, 2019

Mary Zambon  
Riverside County Transportation Department  
mzambon@rivco.org

**Subject: I-10 Bypass: Banning to Cabazon Project**

**DCF: 1773-19-5000(3)\_5010**

The following are general requirements provided when performing work or planning projects near SoCalGas high pressure lines. Please review requirements along with project plans and notify SoCalGas Transmission Department about any questions or conflicts.

It is highly recommended that communication is maintained with SoCalGas to address all conflicts. Depending on the specific scope of your project there may be less or more requirements that need to be discussed regarding your project.

- 1- Consideration must be given to the safety of our pipeline(s) during all project stages. | U-1-1
- 2- SoCalGas must have continuous and uninterrupted access to the pipeline(s) and easement(s). In addition, SoCalGas conducts routine patrols and surveys of the pipeline(s); SoCalGas needs drivable access along the pipeline(s)/easement(s). | U-1-2
- 3- Buried pipelines must have a minimum cover of 3 feet and a maximum cover of 7 feet below finished grade. No change of grade whatsoever, even within these parameters, shall be made without prior approval of SoCalGas. | U-1-3
- 4- Prior to SoCalGas approving encroachment onto its easement(s), SoCalGas must be furnished with final grading plans showing the depth of the pipeline(s) below the existing surface and the depth of the pipeline(s) below the proposed finished grade. These elevations must meet SoCalGas' requirements for buried pipelines. | U-1-4
- 5- No permanent structures, such as buildings, block walls, foundations, gates, etc., shall be constructed within the easement or over the pipeline(s). | U-1-5



# SCG Transmission General Requirements

U-1

- 6- There shall be no planting of trees or other deep-rooted plants within the easement(s) or over the pipeline(s). | U-1-6
- 7- Substructures shall cross perpendicular to the easement(s). Substructure crossings must provide a minimum of 18-inches vertical clearance from the pipeline(s). Additional separation is required for leach lines, fuel lines, etc. | U-1-7
- 8- Parallel encroachments within the easement(s) are prohibited. In areas where a parallel substructure is being constructed outside of the easement(s), SoCalGas requires five feet of separation, with three feet of undisturbed fill, in order to protect the integrity of our facilities and allow the facilities to be safely accessed during inspection, maintenance, and repair. Additional separation may be needed for leach lines, fuel lines, high voltage electric, etc. | U-1-8
- 9- All encroachments onto SoCalGas' easement(s) must have written approval of SoCalGas prior to construction or encroaching onto the easement(s). | U-1-9
- 10- All work within the SoCalGas easement(s) and/or within 10 feet of the pipeline(s) must be witnessed by a SoCalGas representative, and no work will be allowed without the SoCalGas representative on site. | U-1-10
- 11- No heavy equipment shall cross the pipeline(s) without SoCalGas' approval. Additional protective measures may be required where heavy equipment is expected to cross the pipeline(s). | U-1-11
- 12- No mechanical equipment shall operate within three horizontal feet of the pipeline(s), and any closer work must be performed by hand. | U-1-12
- 13- No mechanical equipment shall operate within two vertical feet of the pipeline(s), and any closer work must be performed by hand. | U-1-13
- 14- Buried pipeline(s) shall not be left exposed, and exposed pipeline(s) shall not be buried, without prior inspection and approval by SoCalGas. If the pipeline(s) are exposed during construction (e.g. substructure crossings, etc.), the pipeline must be backfilled with sand or zero-sack slurry only. | U-1-14
- 15- No vibratory compaction is permitted over the pipeline(s). In rare cases, vibratory compaction may be approved by SoCalGas' Engineering Department following review of detailed site conditions, pipeline data, and equipment specifications. | U-1-15
- 16- All contractors and subcontractors must be notified of the presence of the pipeline(s). | U-1-16
- 17- Contractors and subcontractors must call DigAlert (811) at least 2 working days prior to construction, grading, or excavation. | U-1-17
- 18- Once approved, encroachments within SoCalGas' easement(s) shall be documented in an easement amendment or other document, as deemed appropriate by SoCalGas' Land Services Department. | U-1-18

# SCG Transmission General Requirements

In addition to the previous requirements, SoCalGas recommends the following:

- 19- Potholes should be made, as necessary, to establish the horizontal and vertical alignment of the pipeline(s) within the project area. This information should be indicated on the plans, as needed. CAUTION: SoCalGas personnel must be present during potholing operations. Arrangements for SoCalGas personnel to stand by during potholing activities can be made by calling DigAlert at 811. | U-1-19
- 20- Consideration should be given to building setbacks from the easement lines. A minimum 15-foot setback is recommended whenever possible. | U-1-20
- 21- All potential buyers or tenants of the property should be made aware of the presence of the pipeline(s) and easement restrictions. | U-1-21

Sincerely,

SoCalGas Transmission Technical Services

**L.5.1 U-1 – SoCal Gas August 28, 2019**

**U-1-1**

Comment acknowledged regarding the need for safety related to the gas pipeline.

**U-1-2**

Comment acknowledged regarding access needs for the pipeline.

**U-1-3**

Comment acknowledged regarding vertical design parameters of the pipeline.

**U-1-4**

Comment acknowledged regarding the need to submit final grading plans for approval.

**U-1-5**

Comment acknowledged regarding structures within the easement or over the pipeline.

**U-1-6**

Comment acknowledged regarding no trees within easement or over pipeline.

**U-1-7**

Comment acknowledged regarding perpendicular crossings and clearances.

**U-1-8**

Comment acknowledged regarding parallel substructures.

**U-1-9**

Comment acknowledged regarding approval of substructures.

**U-1-10**

Comment acknowledged regarding the requirement for a SoCal Gas representative on site.

**U-1-11**

Comment acknowledged regarding restrictions of heavy equipment over pipeline.

**U-1-12**

Comment acknowledged regarding mechanical equipment maintaining minimum horizontal clearances from pipeline.

**U-1-13**

Comment acknowledged regarding mechanical equipment maintaining minimum vertical clearances from pipeline

**U-1-14**

Comment acknowledged regarding requirements for exposed pipeline.

**U-1-15**

Comment acknowledged regarding restriction of vibratory equipment over pipeline.

**U-1-16**

Comment acknowledged regarding notifications to contractors and subcontractors.

**U-1-17**

Comment acknowledged regarding requirement to contact DigAlert.

**U-1-18**

Comment acknowledged regarding the need for an easement amendment or similar document.

**U-1-19**

Comment acknowledged regarding potholing requirements.

**U-1-20**

Comment acknowledged regarding setbacks from easement lines.

**U-1-21**

Comment acknowledged regarding notification of pipeline to potential land buyers or tenants.



James Chuang  
Senior Environmental Specialist

Southern California Gas Company  
Sempra Energy utilities  
GT02A  
555 Fifth Street  
Los Angeles, Ca. 90013  
Tel: 213-231-6228  
Fax: 323 518 2324

09/25/2019

Ms. Mary Zambon  
Senior Transportation Planner  
Riverside County Transportation Dept.  
3525 14<sup>th</sup> Street  
Riverside, CA 92501

**Re: I-10 Bypass Project: Banning to Cabazon Project**

Dear Ms. Zambon:

Southern California Gas Company (SoCalGas) appreciates the opportunity to review and respond to the Recirculated Draft Environmental Impact Report (DEIR) for the I-10 Bypass Project: Banning to Cabazon Project. SoCalGas understands that the proposed project would construct a new two-lane roadway extending approximately 3.3 miles (mi) from the intersection of Hathaway Street and Westward Avenue in the City of Banning east to the intersection of Bonita Avenue and Apache Trail in the unincorporated community of Cabazon in Riverside County. A Locally Preferred Alternative (LPA) was selected out of the two alternatives identified in the DEIR: Alternative 12. Given the potential impacts to our facilities due to the LPA, we respectfully request that the following comments be incorporated in the administrative record:

- SoCalGas operates and maintains several natural gas transmission and distribution pipelines and facilities within the project area. They include the following:
  - One 36-inch gas transmission pipeline
  - One 30-inch gas transmission pipeline
  - One 24-inch gas transmission pipeline
  - One 8-inch gas distribution pipeline

U-2-1

The potential relocation or replacement of existing transmission or distribution lines within the proposed project due the LPA could impact East Westward Avenue, Bonita Avenue, Apache trail, and near the southwest corner of the Morongo Band of Mission Indians Tribal Lands north of Smith Creek.

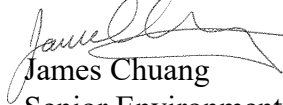
Riverside County Transportation Department should coordinate SoCalGas to determine how the proposed project may impact potential pipeline relocation and replacement plans and other direct impacts or modifications to existing natural gas pipelines and associated facilities. Please contact us if you have any questions regarding the information provided in order to ensure any potential relocations and/or modifications are documented in the Final EIR.

U-2-2



Please do not hesitate to contact SoCalGas Gas Transmission Pipeline Planning Assistant Mike Campisi at [SoCalGasTransmissionUtilityRequest@socalgas.com](mailto:SoCalGasTransmissionUtilityRequest@socalgas.com). You can also reach me at (213) 231-6228 or email: [EnvReview@socalgas.com](mailto:EnvReview@socalgas.com).

Sincerely,



James Chuang  
Senior Environmental Specialist  
Southern California Gas Company

CC: [SoCalGasTransmissionUtilityRequest@socalgas.com](mailto:SoCalGasTransmissionUtilityRequest@socalgas.com)

**L.5.2 U-2 – SoCal Gas September 25, 2019**

**U-2-1**

Comment acknowledged regarding presence of existing facilities and conflicts with Alternative 12 (Preferred Alternative).

**U-2-2**

The four identified gas pipelines have been confirmed based on available information, and necessary relocations documented in the Final EIR/EA.