NEPA/CEQA RE-VALIDATION FORM

DIST./CO./RTE.	08-RIV-91; 08-RIV-15
PM/PM	ORA-91-R14.43/R18.91; RIV-91-R0.00/R13.04; RIV-15-35.64/45.14
E.A. or Fed-Aid Project No.	Previous EA 08-0F540 PN 08000000239. New EA 08-0F543 PN 080000000136
Other Project No. (specify)	Not Applicable
PROJECT TITLE	Previously State Route 91 Corridor Improvement Project (SR-91 CIP). Now Interstate 15 / State Route 91 Express Lane Connector (I-15/SR-91 ELC) Project
ENVIRONMENTAL APPROVAL TYPE	Environmental Impact Report (EIR)/Environmental Impact Statement (EIS)
DATE APPROVED	August 2012
REASON FOR CONSULTATION (23 CFR 771.129)	*Check reason for consultation:* ☐ *Project proceeding to next major federal approval* ☒ *Change in scope, setting, effects, mitigation measures, requirements* ☐ *3-year timeline (EIS only)* ☐ ***N/A** (Re-Validation for CEQA only)*
DESCRIPTION OF CHANGED CONDITIONS	*See the project description for the entire project, and changes in the project design, as follows below.*

NEPA CONCLUSION – VALIDITY

Based on an examination of the changed conditions and supporting information: *[Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.]*

☐ **The original environmental document or CE remains valid. No further documentation will be prepared.**

☒ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☒ is included on the continuation sheet(s) or ☐ is attached. With this additional documentation, the original ED or CE remains valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☒

☐ **The original document or CE is no longer valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☐

Supplemental environmental document is needed. Yes ☐ No ☐

New environmental document is needed. Yes ☐ No ☐ (If "Yes," specify type: _____)

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

Signature: Environmental Branch Chief	6/14/2019 Date	Signature: Project Manager/DLAE	6/14/19 Date

D. CIACCHELLI

CEQA CONCLUSION: *(Only mandated for projects on the State Highway System.)*

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: *(Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.)*

☐ **Original document remains valid. No further documentation is necessary.**

☒ **Only minor technical changes or additions to the previous document are necessary. An addendum has been or will be ☒ prepared and is ☒ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. *(CEQA Guidelines, §15164)***

☐ **Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15163)***

☐ **Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15162)***
(Specify type of subsequent document, e.g., Subsequent FINAL EIR)

_____

☐ **The CE is no longer valid. New CE is needed. Yes ☐ No ☐**

CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEQA conclusion above.

Signature: Environmental Branch Chief	6/14/2019 Date	Signature: Project Manager/DLAE	6/14/19 Date

D. CIACCHELLI

NEPA/CEQA RE-VALIDATION FORM

CONTINUATION SHEET(S)

Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

Changes in project design (e.g., scope change, a new alternative, change in project alignment).

An Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was adopted in 2012 for the State Route (SR) 91 Corridor Improvement Project (SR-91 CIP). The SR-91 CIP Alternative 2f was proposed in several phases to maximize use of available funds and consisted of an Initial Phase and an Ultimate Project. The SR-91 CIP 2012 EIR/EIS analyzed both the Initial Phase and the Ultimate Project phases. The Record of Decision (ROD) was prepared for the Initial Phase. A new ROD will be needed for this project and for future phases.

Construction of the SR-91 CIP Initial Phase was completed under Expenditure Authorization (EA) 08-0F540. The Initial Phase included improvements on SR-91 from approximately the Orange/Riverside county line to the Interstate 15 (I-15) interchange and a single-lane direct connector to and from I-15 south, extending from SR-91 to the Ontario Avenue interchange. Construction of the Initial Phase began in June 2014 and was opened to traffic in March 2017.

Separate projects have been identified below and programmed to incorporate the following remaining improvements of the Ultimate Project by 2035. See Attachment 1 for the Ultimate Project Study Area.

The Ultimate Project would provide the following improvements:

<u>Eastbound SR-91</u>

- A sixth general purpose (GP) lane would be provided between SR-241 and SR-71. Between SR-241 and Coal Canyon, widening on eastbound (EB) SR-91 is proposed to accommodate the additional lane. Between Coal Canyon and Green River Road, the centerline of SR-91 is proposed to be shifted northward and widening of westbound (WB) SR-91 is proposed to accommodate the additional EB lane.
- The Green River Road EB off- and on-ramps would be widened and realigned to accommodate the Ultimate Project.
- Between Green River Road and SR-71, restriping EB SR-91 is proposed to accommodate the additional GP lane.
- From I-15 to Pierce Street, a fourth GP lane would be added by widening EB SR-91 between I-15 and the Pierce Street off-ramp. The EB tolled Express Lane would be extended from I-15 to the McKinley Street interchange by restriping the inside GP lane.
- The McKinley Street EB ramps would be modified to accommodate the widening of SR-91, and additional lanes would be added to the ramps.
- A new collector-distributor road would be constructed, combining the Pierce Street and Magnolia Avenue EB off-ramps into one exit point from SR-91, which is also the termination point of the fourth GP lane addition.

<u>Westbound SR-91</u>

- A sixth GP lane would be provided between SR-71 and SR-241. Between Coal Canyon and SR-241, widening on WB SR-91 is proposed to accommodate the additional lane.
- Between Green River Road and Coal Canyon, widening of WB SR-91 is proposed to accommodate the additional lane.
- The Green River Road WB on-ramp would be widened and realigned to accommodate the Ultimate Project.
- Between the SR-71 south–west connector to Green River Road, the additional GP lane would be added by restriping. An auxiliary lane would also be added in advance of the Green River Road off-ramp by restriping.
- From Pierce Street to I-15, a fourth GP lane would be added by widening WB SR-91 between the Pierce Street WB on-ramp and I-15. The WB high-occupancy vehicle (HOV) lane would be converted to a tolled Express Lane within these limits.

- The McKinley Street WB ramps would be modified to accommodate the widening of SR-91, and an additional lane would be added to the ramps.

I-15

- A single-lane tolled Express Lane would be constructed in the median in the northbound (NB) and southbound (SB) directions extending from the Ontario Avenue interchange to the Cajalco Road interchange.
- A single-lane tolled Express Lane connector would be provided from EB SR-91 to NB I-15 that would extend in the median of I-15 to the Hidden Valley Road interchange.
- A single-lane tolled Express Lane would be constructed in the median of I-15 that would begin at the Hidden Valley Road interchange and would continue SB as a single-lane Express Lane connector to WB SR-91.

I-15/SR-91 ELC Project Status

The I-15/SR-91 ELC Project is a component of the Ultimate Project that is to be examined in this re-validation under EA 08-0F543. See Attachment 2 for the ELC Project Study Area. As previously analyzed in the SR-91 CIP Final EIR/EIS, this component involves adding: (1) a single-lane tolled Express Lane connector from the EB SR-91 Express Lanes to the NB I-15 Express Lanes that would extend in the median of I-15 to the Hidden Valley Road interchange; and (2) a single-lane tolled Express Lane in the median of I-15 that would begin at the Hidden Valley Road interchange and would continue SB as a single Express Lane connector to the WB SR-91 Express Lanes. In addition, operational improvements are proposed along EB SR-91 by extending the EB Express Lane to approximately 0.5 mile east of the I-15/SR-91 interchange and widening EB SR-91 to accommodate extending the #4 GP lane from the SR-91 bridge over Arlington Channel to east of Promenade Avenue. A variable toll messaging sign (VTMS) would be installed on EB SR-91 near the Orange/Riverside county line.

I-15/SR-91 ELC Project Design Changes

The I-15/SR-91 ELC Project is consistent with the project features identified in the SR-91 CIP Final EIR/EIS, except for the following design changes:

Separated Connectors

The design of the I-15 south-to-SR-91 west and the SR-91 east-to-I-15 north connectors was changed so each of the connectors would have an independent alignment. The design changes include the following changes:

- The south-to-west connector would connect approximately 45 feet higher to the existing (constructed as part of the Initial Phase) I-15/SR-91 ELC (Bridge No. 56-0817F). The previous design was approximately 45 feet lower and connected to the existing Temescal Wash bridge. The profile of this connector is now approximately 30 feet over the existing north-to-west connector bridge. The previous design was approximately 15 feet below the existing north-to-west connector bridge.
- The east-to-north connector profile generally follows the profile analyzed in the Final EIR/EIS; however, the connector bridge has been shortened from one large bridge to three shorter bridge segments by implementing 30-foot-high retaining wall structures with fill material below the roadway instead of the roadway being placed on more costly bridge structures.

Barrier Separation

To make room for the additional buffer required for the toll facility and to provide standard shoulder widths along EB SR-91, the Main Street EB on-ramp is proposed to be realigned approximately 8 feet farther south. Also, as a result, the buffer width between EB and WB SR-91 would be reduced by approximately 7 feet.

Toll Lane Improvements

An additional toll lane would be added on I-15 that extends north of the Hidden Valley Parkway interchange. To accommodate this additional toll lane, the existing NB off-ramp and existing NB on-ramp of the Hidden Valley Parkway interchange would be realigned to the east.

Soundwall

As part of design development, one soundwall (SW2192) required minor changes from what was presented in the Final EIR/EIS. This soundwall, described below, would not affect the outcome decisions made in the Final EIR/EIS and would still be considered reasonable and feasible.

Soundwall SW2192 would be approximately 90 feet long and located within private property in the northeast quadrant of the I-15/SR-91 interchange. See Attachment 3 for the location of the soundwall. Two easements would be required: a temporary construction easement (TCE) that would be 161 feet long and roughly 15 feet wide, and a footing easement that would be 110 feet long and 5 feet wide to protect the footing in perpetuity to ensure no one structurally damages the wall. Soundwall SW2192 would be a combination transparent/masonry-block wall.

Changes in environmental setting (e.g., new development affecting traffic or air quality).

To the extent the environmental setting has changed, it is the result of design changes that occurred during the Initial Phase that were addressed in previous re-validations of the EIR/EIS. The changes did not result in any substantial impacts to the environment. Attachment 4 provides a summary of the previous re-validations for the Initial Phase.

Changes in environmental circumstances (e.g., a new law or regulation, change in the status of a listed species).

The following are changes in environmental circumstances from what was previously analyzed in the Final EIR/EIS:

Hazardous Materials/Waste

The governing regulatory guidance for conducting initial site assessments (ISA)/hazardous materials/ hazardous waste assessments at the time the Phase I ISA was conducted for the Final EIR/EIS was the American Standards for Testing and Materials (ASTM) E 1527-05, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process. The regulatory guidance has since been updated to the current ASTM E 1527-13. The major changes in the current version are discussed below:

Recognized Environmental Conditions (REC) – The revised Standard simplifies the definition of an REC to be "a release, a likely release, or a material threat of a release of hazardous substances to the environment and property." A Historical Recognized Environmental Condition (HREC) now refers only to "historic releases which have been remediated to the satisfaction of regulatory authorities for unrestricted use," therefore limiting an HREC to past releases that do not subject the property to any use restrictions, activity and use limitations (AULs), or other engineering or institutional controls. An HREC is no longer considered an REC. Finally, a new term was introduced: Controlled Recognized Environmental Conditions (CRECs). This term describes "releases that have been addressed to the satisfaction of regulatory authorities, but from which residual contamination has been permitted to remain in place subject to the implementation of use restrictions, AULs, or other institutional or engineering controls on the subject property." A CREC is an REC and must be identified as such in the conclusions section of the Phase I report.

Vapor Migration – The potential for vapor migration, including vapor that migrates in the subsurface, must be considered in the Phase I report.

Agency File Reviews – If a relevant property appears on a federal, state, or tribal record, the new Standard requires a review of "pertinent regulatory files and/or records associated with the listing." The environmental professional can exercise discretion when mandating a review but must document the reasons why a review was not conducted if a document review is deemed unnecessary.

An ISA Addendum was prepared and approved in October 2018 to update the information related to the I-15/SR-91 ELC Project site and accommodate changes with the toll lane improvements.

Air Quality

The governing regulatory guidance for conducting project air quality analysis in 2010 was the Clean Air Act Amendments (CAAA) of 1990. The United States Environmental Protection Agency (EPA) reviews the most up-to-date scientific information and the existing ambient standards for each pollutant every

5 years and obtains advice from the Clean Air Scientific Advisory Committee (CASAC) on each review. Based on these, EPA applies consideration to revise the National Ambient Air Quality Standards (NAAQS) accordingly. The changes and adjustments to the NAAQS, especially those that occurred since approval of the project's 2012 Final EIR/EIS, include the following:

1. The 8-hour ozone (O_3) standard of 0.075 parts per million (ppm) was established in 2008. On March 12, 2008, EPA promulgated attainment designations based on the 8-hour O_3 standard. On October 1, 2015, EPA strengthened the 8-hour O_3 NAAQS based on new scientific evidence regarding the effects of ground-level O_3 on public health and the environment. The new 8-hour O_3 NAAQS standard (primary and secondary) is 0.070 ppm. The area designation/classification based on the new standard passed Final rule on March 1, 2018, and attainment demonstration plans in the State Implementation Plan (SIP) will be due by late 2019.

EPA revised the air quality standards for particle pollution in 2012. The new revisions became effective on January 15, 2015, and include the following:

1. The annual particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) standard, for primary and secondary, was strengthened from the 2006 level of 15 micrograms per cubic meter ($\mu g/m^3$) to 12.0 $\mu g/m^3$ (primary) and 15.0 $\mu g/m^3$ (secondary); the 24-hour standard of 35 $\mu g/m^3$ was retained.
2. The 24-hour particulate matter less than 10 microns in diameter (PM_{10}) standard of 150 $\mu g/m^3$ was retained.

Since approval of the Final EIR/EIS, the Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and Federal Transportation Improvement Program (FTIP) have been updated (2016-2040 RTP/SCS and 2017 FTIP).

In June 2018, the Federal Highway Administration (FHWA) confirmed that the previously issued Project-Level Conformity Determination for the SR-91 CIP remains valid for obtaining the ROD for the I-15/SR-91 ELC Project. Consistent with 40 *Code of Federal Regulations* (CFR) 93.104d, the I-15/SR-91 revised ELC Project does not prompt any of the three triggers that would require a redetermination of conformity:

1. **The project design concept and scope have not changed:**
   In February 2018, California Department of Transportation (Caltrans) District 8 Traffic Planning determined that the I-15/SR-91 ELC improvements were consistent with the SR-91 CIP and that no revisions to the Traffic Operational Analysis Report are required.

2. **No 3-year lapse in major steps to advance the project:**
   The SR-91 CIP Initial Phase was opened to traffic in March 2017. The environmental permits are still open, and plant establishment and warranty repair work is ongoing. The project is active.

3. **The I-15/SR-91 ELC Project does not necessitate performing a supplemental environmental document for air quality purposes.**

The description of the project in the 2012 RTP is as follows: Project ID No. RIV071250; Description: **Phase 1**: On SR-91/I-15: SR91 – Construct 1 mixed flow lane (SR-71 through I-15)/1 aux lane at various locations (SR-241 through Pierce) (OC PM 14.43-18.91), CD system (2/3/4 lanes from Main Street to I-15), 1 toll express lane (TEL) and convert HOV to TEL in each direction (OC to I-15); I-15 – construct TEL median direct connector NB I-15 to WB SR-91 and EB SR-91 to SB I-15, 1 TEL in each direction (SR-91 direct connector – Ontario Interchange) (I-15 PM 37.56-42.94). **Phase 2:** on SR-91/I-15: SR91 – Add 1 mixed flow lane in each direction (SR241 – SR71)(I15 – Pierce); I15 – add toll express lane (TEL) median direct connector (SB15 to WB91 & EB91 to NB15), 1 TEL each direction from Hidden Valley –SR-91 direct connector and from Ontario Interchange to Cajalco Interchange.

Therefore, since the approved RTP description matches the proposed work, no further air quality analysis was required for the I-15/SR-91 ELC Project.

Noise

The base cost allowance for noise abatement reasonableness and feasibility was $55,000 at the time of the Final EIR/EIS. The 2019 base cost analysis is now $107,000 per benefited receptor.

A Supplemental Noise Study Report (NSR) and Supplemental Noise Abatement Decision Report (NADR) were completed for the I-15/SR-91 ELC Project and approved in June 2019. These analyses used $107,000 per benefited receptor.

Biology

The California Natural Diversity Data Base (CNDDB); Information, Planning and Conservation System (IPaC); and the National Marine Fisheries Service (NMFS) databases were accessed to obtain updated species lists to determine whether there were changes to the species listed in the Final EIR/EIS. The updated IPaC and NMFS database searches are included in Attachments 5 and 6. Since approval (May 2010) of the *Natural Environment Study* (NES), three additional special-status species were identified as having potential to occur within the Biological Study Area (BSA): Santa Monica dudleya *(Dudleya cymosa* ssp. *ovatifolia)*, arroyo chub *(Gila orcuttii)*, and yellow rail *(Coturnicops noveboracensis)*. A Supplemental NES was approved in May 2019.

Changes to environmental impacts of the project (e.g., a new type of impact, or a change in the magnitude of an existing impact).

There are no new or substantive changes for the following resource areas, as identified in the SR-91 CIP Final EIR/EIS.

3.1 – Land Use

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed or substantial impacts to land use. These design changes do not result in changes to zoning, and land use remains consistent with the Riverside County General Plan. A temporary construction easement for parcel 115-353-015 will be required during construction of Soundwall SW2192; however, no additional avoidance, minimization, and mitigation measures (AMMs) would be required. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new avoidance, minimization, and mitigation measures (AMMs) are required.

3.2 – Growth

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed or substantial impacts to growth. The I-15/SR-91ELC Project would not foster economic or population growth. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.3 – Farmlands/Timberlands

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in substantial impacts to Farmlands of Local Importance and Timberlands. While there is an area of Farmland of Local Importance located within the project study area in the southeast quadrant of the I-15/SR-91 interchange, the identified farmland is located outside the I-15/SR-91 ELC Project footprint. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.4 – Community Impacts

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed or substantial impacts to the community. No minority or low-income populations that would be adversely affected by the proposed project have been identified. Therefore, this project is not subject to the provisions of Executive Order 12898. Additionally, the current use of the project location is an interchange. The proposed improvements do not change the existing use; therefore, the project would not affect community character and cohesion. No acquisitions are required for the project; therefore, no relocations would occur. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.5 – Utilities/Emergency Services

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to utilities/emergency services. Any additional utilities relocations resulting from separation of the connectors, changes to the barrier separation, or improvements to the toll lanes would be coordinated with the utility companies and emergency service providers to reduce disruptions to service. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.6 – Traffic and Transportation/Pedestrian and Bicycle Facilities

A memorandum was prepared and approved in May 2018, confirming the analysis in the SR-91 CIP Traffic Operations Analysis Report is still valid. Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to traffic and transportation/pedestrian and bicycle facilities. These changes in design are anticipated to improve traffic and transportation within the project area. The I-15/SR-91 ELC Project would be consistent with the traffic and transportation analysis in the Final EIR/EIS. Therefore, no new AMMs would be required.

3.8 – Cultural Resources

No cultural resources were identified in the Historic Property Survey Report (HPSR) within the revised I-15/SR-91ELC Project area. Therefore, the design changes for the I-15/SR-91 ELC Project, separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to cultural resources and would not result in any historic properties being affected. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.9 – Hydrology and Floodplains

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to hydrology. The project is located within a 100-year base floodplain but would not result in a significant encroachment in the 100-year floodplain. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.10 – Water Quality and Stormwater Runoff

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to water quality and stormwater runoff analysis. These improvements are in compliance with all federal, state, and local water quality policies. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.11 – Geology/Soils/Seismic/Topography

Project design would follow all required building codes. Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to geology, soils, seismic, and topography. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.12 – Paleontology

The project is located in a mix of high and low paleontological sensitivity areas, and AMMs to reduce impacts to paleontological resources were already identified in the SR-91 CIP Final EIR/EIS. Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to paleontological resources from those previously analyzed in the SR-91 CIP Final EIR/EIS. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.14 – Air Quality

Confirmation from FHWA was received in June 2018 that the previously issued Project-Level Conformity Determination for the SR-91 CIP remains valid for obtaining the ROD for the I-15/SR-91 ELC Project because the project conforms with 40 CFR 93.04d: the project design concept and scope have not changed, there has not been a 3-year lapse in major steps to advance the project, and the I-15/SR-91 ELC Project is not performing a supplemental environmental document for air quality purposes. The I-15/SR-91 ELC Project would be consistent with the air quality analysis in the Final EIR/EIS. Therefore, no new AMMs are required.

3.16 – Energy

Separation of the connectors, changes to the barrier separation, and improvements to the toll lanes would not result in any new/changed substantial impacts to energy resources. The project changes would use energy-efficient lighting; therefore, the project would not produce inefficient, wasteful, or unnecessary energy consumption. Therefore, the I-15/SR-91 ELC Project would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

3.23 – Relationship between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The I-15/SR-91 ELC Project would not change the outcome of what was determined and addressed in Section 3.23 of the Final EIR/EIS.

3.24 – Irreversible and Irretrievable Commitments of Resources that would be Involved in the Proposed Project

The I-15/SR-91 ELC Project would not change the outcome of what was determined and addressed in Section 3.24 of the Final EIR/EIS.

3.25 – Cumulative Impacts

The I-15/SR-91 ELC Project would not change the cumulative impacts as identified in the Final EIR/EIS.

While the following resources did require additional technical studies, there are no substantive changes for these resources, as identified in the SR-91 CIP Final EIR/EIS.

3.7 – Visual/Aesthetics

Since approval of the Final EIR/EIS, design changes, consisting of the addition of two direct connectors and the lower profile of the EB to NB connector, have been incorporated into the I-15/SR-91 ELC that have resulted in visual changes. These changes were analyzed in a *Scenic Resource Evaluation and Visual Impact Assessment Addendum of State Route 91 Corridor Improvement Project.* The addendum was approved in December 2018.

New visual simulations were prepared to display the potential changes associated with the I-15/SR-91 ELC Project and can be found in Attachment 7. The addendum also analyzed the proposed mitigation associated with the changes to the visual environment of the study area. The analysis confirmed that the new changes associated with the I-15/SR-91 ELC Project are not anticipated to result in changes to visual resources beyond what was identified in the 2010 Visual Impact Assessment and analyzed in the Final EIR/EIS. No additional impacts were identified, and no new AMMs are recommended.

3.13 – Hazardous Waste/Materials

Since approval of the Final EIR/EIS, project limits expanded by adding a toll lane on I-15 that extends north of the Hidden Valley Parkway interchange, which required updated information about potential hazardous material/waste sites that could affect the project site. Impacts from these changes were analyzed in the ISA Addendum approved in October 2018. Addendum activities conducted include identification of contaminated properties on or adjacent to the project site, review of historical records of releases adjacent to or on the project site, identification of other environmental issues that may exist on or near the project site, and other potential environmental issues that may affect Caltrans and/or other project proponent's ability to construct, operate, and maintain the proposed project.

The ISA Addendum did not reveal any additional RECs in connection with the project beyond those identified and analyzed in the Final EIR/EIS for hazardous materials/waste. No additional AMMs beyond those identified in the Final EIR/EIS were recommended.

3.15 – Noise

As of May 2019, RCTC has constructed all of the soundwalls committed in the Final EIR/EIS for the SR-91 CIP.

A Supplemental NSR (SNSR) and Supplemental NADR (SNADR) were prepared to account for geometric changes to the express lanes connectors since approval of the 2012 Final EIR/EIS. The connectors have different horizontal and vertical alignments than originally proposed in the 2012. As mentioned in the "Changes in Environmental Circumstances" section of this re-validation, the base cost

allowance for noise abatement reasonableness and feasibility increased from $55,000 in 2012 to $107,000 per benefited receptor.

Traffic noise impacts associate with the geometric changes to the express lane connector would occur at two single-family residences located along Cresta Road, north of SR-91 and east of I-15. The SNSR concluded that a soundwall with heights ranging from 8 to 10 feet would be needed to provide feasible abatement of traffic noise of reducing existing noise levels to 5 decibels (dB) for the two impacted receptors.

The SNADR determined that Soundwall SW2192 is reasonable from a basis of cost, and the property owner is in favor of the soundwall; therefore, a soundwall is recommended to be constructed.

Biological Resources (3.17 – Natural Communities, 3.22 – Invasive Species)

Since approval of the Final EIR/EIS, design changes have been incorporated into the I-15/SR-91 ELC Project's final design. The potential impacts of these changes, as well as the potential project impacts due to changes in the affected biological environment, were analyzed in a Supplemental NES that was approved in May 2019. To complete the analysis of the biological environment for the Supplemental NES, habitat assessment site visits were conducted; new species lists from the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and National Oceanic and Atmospheric Administration (NOAA) were obtained; and a review was conducted of the *Final Jurisdictional Delineation Report* approved in November 2009.

New species lists (see Attachments 5 and 6) were obtained to update the occurrence of flora and fauna in the project area. The IPaC planning tool was used to obtain a species list from USFWS. One species, Santa Monica Mountains dudleya *(Dudleya cymosa* ssp. *ovatifolia),* was not previously identified in the approved May 2010 NES. The CNDDB was used to obtain a CDFW species list. Two species, arroyo chub *(Gila orcuttii)* and yellow rail *(Coturnicops noveboracensis),* were not previously identified in the approved May 2010 NES. The NMFS was used to obtain NOAA species lists of endangered or threatened species and critical habitat in California. No new species were identified from this database search.

No suitable habitat for the Santa Monica Mountains dudleya was observed during focused surveys conducted in 2008 or 2014 nor during the 2018 site visits. Additionally, no species were observed during the March 9, 19, or April 11, 2018, site visits. The lack of suitable habitat and absence of the Santa Monica Mountains dudleya during the site visits results in a no effect finding for the species. According to the database search results, no suitable habitat occurs within the project study area for the arroyo chub or the yellow rail, which results in a no effect finding for both species.

The I-15/SR-91 ELC would result in temporary impacts to 1.56 acres of United States Army Corps of Engineers (USACE) non-wetland jurisdictional features and 0.01 acre of permanent impacts to USACE non-wetland jurisdictional features. No USACE wetlands would be impacted for project development.

The I-15/SR-15 ELC would result in temporary impacts to 1.69 acres of CDFW and Regional Water Quality Control Board (RWQCB) jurisdictional features and 0.02 acre of permanent impacts to CDFW and RWQCB jurisdictional features. See Attachment 8 for figures of impacts to CDFW/RWQCB waters. Project development would not impact CDFW riparian habitat. Authorization under Section 404 of the Clean Water Act (CWA) Nationwide Permit and Water Quality Certification under Section 401 of the CWA (and a Porter- Cologne Water Quality Control Act permit for impacts on state waters only), and a CDFW 1602 Streambed Alteration Agreement would be required.

According to the analysis in the Supplemental NES, the project would implement the AMMs as included in the previously approved NES and the Final EIR/EIS. The analysis shows that the project, including the design changes, would result in minimal changes to the biological environment, and the AMMs included in the previously approved NES and Final EIR/EIS would suffice to mitigate these minimal changes without the need for new mitigation measures; therefore, no new mitigation measures have been recommended.

Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

Since approval of the Final EIR/EIS, the Initial Phase of the SR-91 CIP has been constructed. Attachment 9 contains the Environmental Commitments Record (ECR) for the Initial Phase, which includes all measures committed to in the Final EIR/EIS. This ECR also includes the additional AMMs

required as a result of the design changes analyzed in the various re-validations completed during design and construction of the Initial Phase of the SR-91 CIP.

Changes to environmental commitments since the environmental document was approved (e.g., the addition of new conditions in permits or approvals). When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.

While there are no new visual impacts resulting from the I-15/SR-91 ELC Project related to project changes, in order for the SR-91 CIP to satisfy the ECR requirements for tree replacement, the SR-91 CIP needed to either:

- Plant 1,877 trees with 1,500 shrubs for the 150 trees with no plantable areas adjacent, or
- Plant 1,228 trees with 7,990 shrubs utilizing the 10:1 tree equivalent ratio for the community adjacent trees, or
- A combination of trees and shrubs between the limits of the two options.

The most recent count of tree replacements for SR-91 CIP is 1,169 and 4,977 (5-gallon shrubs). The planting of 87 trees within the I-15/SR-91 interchange was deferred due to conflict with the future I-15 Express Lanes Project (ELP). These trees were transferred from the SR-91 CIP via Revalidation 30 and will be planted by the I-15 ELP through the ELP's Revalidation 11.

Assuming all community adjacent trees are replaced at a 1:1 tree ratio, the SR-91 CIP required an additional 360 trees to fulfill ECR Measure V-2. Through the SR-91 CIP, 324 trees were donated to the City of Corona to plant within their community. Additionally, 236 trees were donated to Riverside County Parks and Recreation to plant within their jurisdiction. Final count for the SR-91 CIP, including landscape plan quantities and community donations, totaled 2,227 tree equivalents, which exceed the requirements of the ECR.

There remains a commitment to place 87 trees from the SR-91 CIP. These remaining tree replacements from the SR-91 CIP have been deferred via a re-validation of the SR-91 CIP to the I-15 ELP (EA 0J0800) through a re-validation of the ELP. The 87 trees transferred from the SR-91 CIP would be in addition to any tree replacement commitments already determined for EA 0J0800. Commitment V-2 has been satisfied and has been removed from the Ultimate Project ECR. Table 1 lists the trees to be planted.

Table 1. Trees to be Planted by EA 0J0800

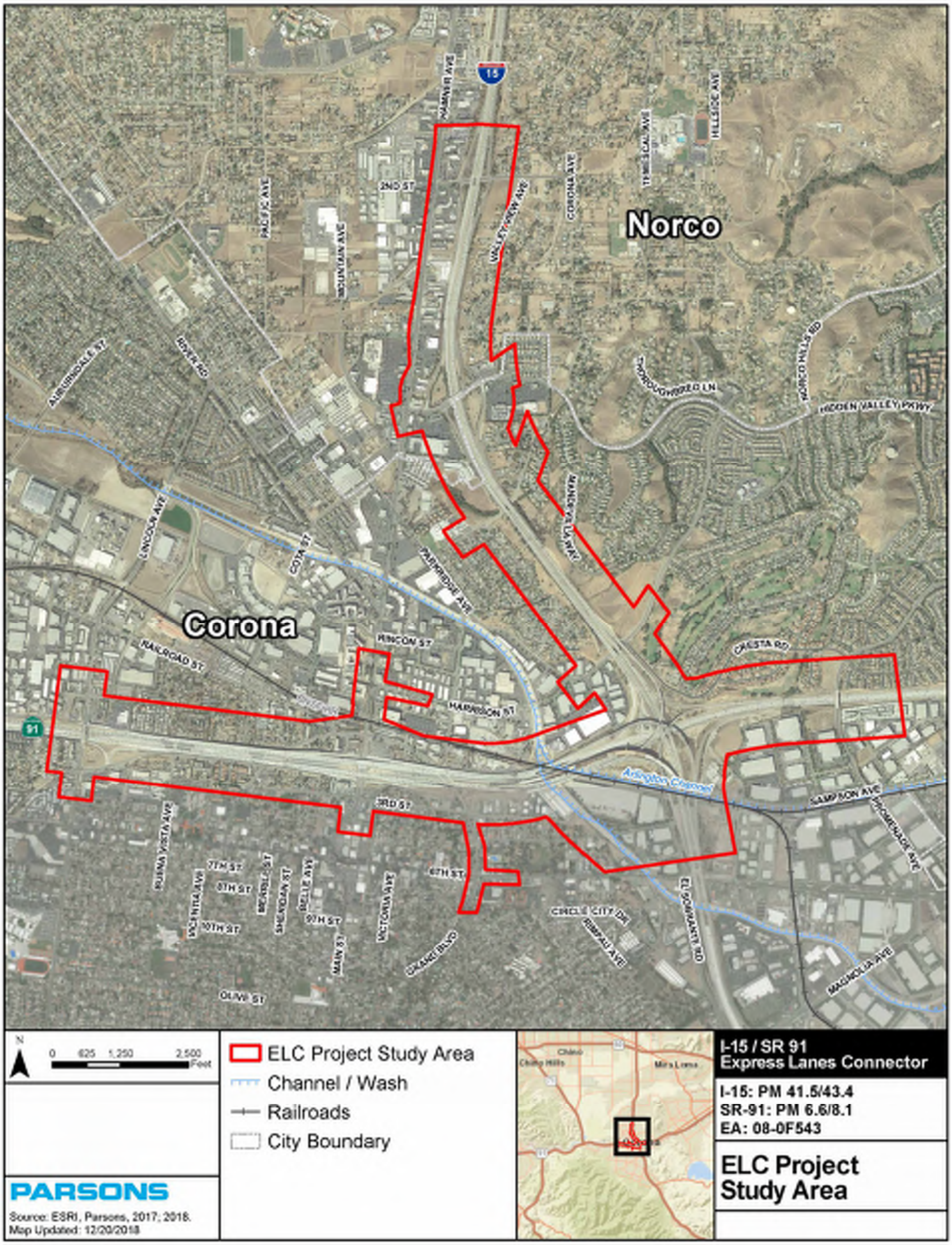
Botanical Name	Common Name	Size	Quantity
Chilopsis Linearis	Desert Willow	24" Box	15
Pinus Canariensis	Canary Island Pine	No. 15	3
Platanus Racemosa	California Sycamore	24" Box	2
Platanus Racemosa	California Sycamore	No. 15	18
Quercus Wislizenii	Interior Live Oak	24" Box	3
Quercus Wislizenii	Interior Live Oak	No. 15	2
Quercus Agrifolia	Coast Live Oak	No. 15	12
Parkinsonia Florida	Blue Palo Verde	24" Box	19
Parkinsonia Florida	Blue Palo Verde	No. 15	13
		Total	**87**

Attachment 10 contains the ECR, which will be applicable to all projects constituting the Ultimate Project, including the I-15/SR-91 ELC Project.

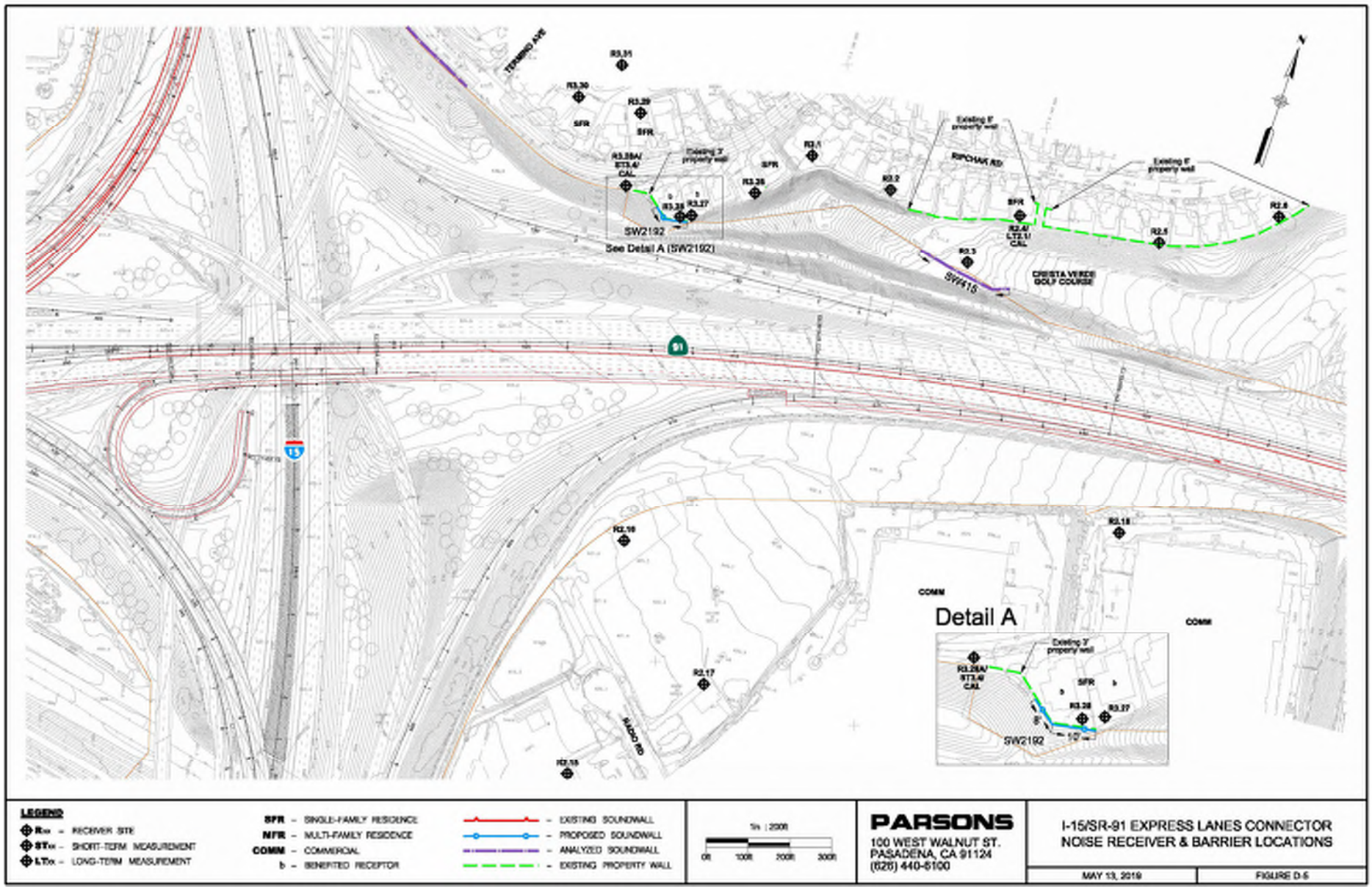
ATTACHMENT 1
Ultimate Project Study Area


San Bernardino County
Riverside County
Orange County
Corona
GREEN RIVER RD
COAL CANYON TRAIL
ONTARIO AVE
CAJALCO RD
MAGNOLIA AVE
MCKINLEY ST
PIERCE ST
SR 91 CIP Ultimate Project Study Area
Key Streets
Highway
City Boundary
County Boundary
PARSONS
I-15 / SR 91
Express Lanes Connector
I-15: PM 41.5/43.4
SR-91: PM 6.8/8.1
EA: 0J-0F643
SR 91 CIP Ultimate
Project Study Area

ATTACHMENT 2
ELC Project Study Area


Norco
Corona
ELC Project Study Area
Channel / Wash
Railroads
City Boundary
PARSONS
Source: ESRI, Parsons, 2017; 2018.
Map Updated: 12/20/2018
0 625 1,250 2,500 Feet
I-15 / SR 91
Express Lanes Connector
I-15: PM 41.5/43.4
SR-91: PM 6.6/8.1
EA: 08-0F543
ELC Project
Study Area
Arlington Channel
2ND ST
3RD ST
6TH ST
RAILROAD ST
RINCON ST
HARRISON ST
SAMPSON AVE
CRESTA RD
HIDDEN VALLEY PKWY
THOROUGHBRED LN
NORCO HILLS RD
HILLSIDE AVE
CORONA AVE
VALLEY VIEW AVE
HAMNER AVE
PARTRIDGE AVE
LINCOLN AVE
COTA ST
CIRCLE CITY DR
EL SOBRANTE RD
MAGNOLIA AVE
PROMENADE AVE

ATTACHMENT 3
Soundwall Location


TERRACE AVE
R3.31
R3.30
R3.29
SFR
SFR
R3.28A/ ST3.4/ CAL
Existing 3' property wall
SW2192
See Detail A (SW2192)
R3.28
R3.27
SFR
R3.A
R3.26
R3.2
RIPCHAK RD
Existing 6' property wall
SFR
R2.4/ LT2.1/ CAL
R2.6
R2.5
R3.3
SW415
CRESTA VERDE GOLF COURSE
91
15
R2.10
R2.18
COMM
Detail A
COMM
Existing 3' property wall
R3.28A/ ST3.4/ CAL
SFR
R3.28
R3.27
SW2192
R2.17
HUDSO RD
R2.16
LEGEND
R## – RECEIVER SITE
ST## – SHORT-TERM MEASUREMENT
LT## – LONG-TERM MEASUREMENT
SFR – SINGLE-FAMILY RESIDENCE
MFR – MULTI-FAMILY RESIDENCE
COMM – COMMERCIAL
b – BENEFITED RECEPTOR
EXISTING SOUNDWALL
PROPOSED SOUNDWALL
ANALYZED SOUNDWALL
EXISTING PROPERTY WALL
1in : 250ft
0ft 100ft 200ft 300ft
PARSONS
100 WEST WALNUT ST.
PASADENA, CA 91124
(626) 440-6100
I-15/SR-91 EXPRESS LANES CONNECTOR
NOISE RECEIVER & BARRIER LOCATIONS
MAY 13, 2019
FIGURE D-5

ATTACHMENT 4
SR-91 CIP Final EIR/EIS Initial Phase Re-validations

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
1.	**Design Change #1** *Horizontal Alignment* • Shift the Serfas Club Drive alignment approximately 6 degrees to accommodate a right-turn pocket from northbound (NB) Serfas Club Drive to eastbound (EB) Pine Crest Drive, avoid right-of-way (ROW) impacts to Assessor's Parcel Number (APN) #102 -113-001, and accommodate a driveway from APN #102-050-002 (Arco/McDonald's) to Serfas Club Drive. The change addresses City of Corona and County of Riverside concerns of proposed intersections leading to traffic circulation issues. *ROW* • Chevron Station at APN #102-091-020 to be protected in place instead of acquired (as originally reported in the Final Environmental Impact Report [EIR]/Environmental Impact Statement [EIS]). • Arco/McDonalds at APN #102-050-002 to be reconfigured to provide a driveway. Acquisition of this property not required. • Acquisition of a currently vacant parcel (site of a former golf course) at Serfas Club Drive/Pine Crest Drive (APN #102-050-012). • The change would address City of Corona concerns regarding the tax revenue loss from acquisition of the Chevron Station. *Slope-Fill Work* • Implement slope-fill work to correct differences in elevation between the roadway improvements at Serfas Club Drive and adjacent parcel APN #102-050-003.The change is required as a result of the change in horizontal alignment of Serfas Club Drive. *Traffic Signal Synchronization* • Frontage Road/Serfas Club Drive traffic signal synchronized with Pine Crest Drive/Serfas Club Drive signal to accommodate right-turn pocket from NB Serfas Club Drive to EB Pine Crest Drive. The change is required to address City of Corona and County of Riverside concerns of proposed intersections leading to traffic circulation issues. **Design Change #2** *Traffic Signal Installation* • Install new traffic signal at Corona Town Center and Lincoln Avenue to facilitate right-turn movements onto NB Lincoln Avenue from Corona Town Center and for left-turn movements from southbound (SB) Lincoln Avenue onto Corona Town Center. • The change is required as ROW mitigation for impacts to parking lot access at Corona Town Center. **Design Changes #3–#6**	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	California Highway Patrol (CHP) Turn-Around Facilities within the Existing Median • Redesign of CHP turn-around based on revised State Route (SR) 91 median geometry, at SR-91 near western limits of project. • Minor realignment of EB SR-91 near the proposed SR-91/SR-71 toll facilities to allow sufficient horizontal clearances for a CHP turn-around area. • Modification of median barriers under the SR-91 to Interstate 15 (1-15) flyover structure to allow room for a CHP turn-around. • Modification of median barriers along 1-15 between the Magnolia Boulevard and Ontario Avenue interchanges to allow room for a CHP turn-around. • CHP turn-around areas are a requirement for the enforcement component of Express Toll Lanes. **Design Change #7** *Horizontal Alignment* • Realign Green River Road to accommodate Initial Phase instead of the Ultimate Project. • Shift Green River Road alignment south, closer to SR-91, to accommodate a retaining wall for the Initial Phase of the project. • Minimize impacts to entrance driveway of Green River Golf Course by pulling cul-de-sac south, closer to SR-91. • Eliminate separate bicycle parking lot directly adjacent to the Reach 9 Phase 11B Project and place parking lot west of cul-de-sac bulb. • The purpose of this change is to minimize impacts to facilities related to the United States Army Corps of Engineers (USACE), Orange County Public Works, and City of Corona. **Design Change #8** *Rail Relocation* • Relocate rail switches at Porphyry Yard within Burlington Northern Santa Fe (BNSF) Railroad ROW (APN #115-050-019), beneath the SR-91/1-15 interchange, to accommodate interchange improvements. • Install fifth storage track (1,561 feet of track) due to loss of existing storage track resulting from rail switch relocation. • Relocate a small segment of BNSF maintenance access road to allow enough vehicle spacing between a proposed bridge column for the SR-91/1-15 interchange and the railroad.	
2.	**Design Change #1: SCE Utility Relocation at Lincoln Avenue and D Street** *Utility Relocation* • Relocate overhead Southern California Edison (SCE) electrical utility facilities from the north side of the property (apartment complex at northwest corner of D Street and South Lincoln Avenue)	Two additional measures were added to the project, included in the Initial Site Assessment (ISA) Addendum: **Hazardous Waste and Materials**

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	and realign underground on the south side of the property along D Street, generally located between South Lincoln Avenue and Magdalena Circle. • The purpose of this change is to accommodate widening SR-91 and construction of a soundwall where existing poles for electrical lines are located at the northern end of the property, adjacent to EB SR-91. **Design Change #2: Access Easement for Building Demolition at Lincoln Avenue and D Street** *Temporary Access Easement (TAE)* • Provide a TAE at the eastern end of the condominium complex generally located at D Street, between South Lincoln Avenue and Magdalena Circle. • The purpose of this change is to provide access to the rear of an existing condominium complex, via a private driveway at the eastern end of the property. Access to the rear of the property is necessary to conduct the proposed demolition of one condominium unit, which is necessary to accommodate widening of SR-91 and realignment of C Street. **Design Change #3: SCE Utility Relocation at Smith Avenue and Pleasant View Avenue** *Utility Relocation* • Relocate SCE electrical utility facilities from the north side of the property (apartment complex at northwest corner of Pleasant View Avenue and Smith Avenue) and realign on the south side of the property along Pleasant View Avenue generally located between South Smith Avenue and Yorba Street. • The purpose of this change is to accommodate construction of a soundwall where existing poles for electrical lines are located at the northern end of the property, adjacent to EB SR-91. **Design Changes #4–#6** *AT&T, Time Warner Cable (TWC), and Southern California Gas (SCG) Utility Relocations at East Grand Boulevard and 3rd Street* • Relocate AT&T utility facilities along East Grand Boulevard (beneath SR-91) from Joy Street to 3rd Street before tying into existing facilities at Joy Street and 4th Street, and East Grand Boulevard and Joy Street. • Relocate TWC utility facilities along East Grand Boulevard (beneath SR-91) from Joy Street to 3rd Street before tying into existing facilities at 3rd Street (between East Grand Boulevard and Victoria Avenue), and East Grand Boulevard (between 3rd Street and Joy Street). • Relocate SCG utility facilities along Harrison Street and Blaine Street between North Main Street and Joy Street. Proposed SCG utility facilities include approximately 1,800 linear feet of 8-inch main along Blaine Street and 250 linear feet of 2-inch main along Harrison Street. The existing SCG regulator station affected by the proposed freeway widening at East Grand Boulevard would be abandoned. The proposed redundant piping under Blaine Street and Harrison Street that ties	• For buildings that would be demolished as part of ROW acquisition and/or construction, Asbestos-Containing Material (ACM) and Lead-Based Paint (LBP) testing shall be performed after ROW acquisition and prior to building demolition. • Herbicide, pesticide, and fungicide testing shall be performed on the soils within acquired ROW at the Green River Golf Club (5215 Green River Road, Corona, CA).

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	into existing facilities at Joy Street eliminates the need for a new regulator station at East Grand Boulevard. • These changes would meet vertical clearances along East Grand Boulevard beneath the SR-91 overhead (OH) bridge. Due to widening of the bridge, the roadway profile would need to be lowered approximately 3 feet beneath the bridge, which would affect existing AT&T underground facilities. **Design Change #7** *Curb and Gutter Shift at Main Street and East 4th Street* • Shift curb and gutter approximately 14 feet easterly at APN #117-114-012, northeast corner of South Main Street and East 4th Street. • This design change is necessary to accommodate the proposed median widening of the Main Street undercrossing beneath SR-91. The existing South Main Street/East 3rd Street intersection consists of two through lanes in each direction, two SB left-turn lanes to EB SR-91, and one NB left-turn lane to westbound (WB) SR-91. The proposed Main Street undercrossing consists of three through lanes and two left-turn lanes in each direction. **Design Change #8** *Access to Bridge Construction Temporary Construction Licenses (TCL) for Temescal OH and SR-91/ I-15 Viaduct* TAEs • Provide TAEs for access to bridge construction areas beneath the SR-91/I-15 interchange. • The purpose of the proposed TAEs is to provide access to bridge construction areas via Riverside County Flood Control & Water Conservation District (RCFC&WCD) and BNSF Railroad ROW. Access to bridge construction areas will be permitted through a BNSF-issued TCL. However, access onto BNSF ROW permitted by the TCL requires TAEs for access points that fall outside of the original area of potential effect (APE). **Design Change #9** *Access to Bridge Construction TCLs for Prado OH* TAEs • Provide TAEs for access to bridge construction area within BNSF ROW, beneath the SR-91 Prado OH Bridge. • The purpose of the proposed TAEs is to provide access to the bridge construction area via BNSF ROW. Access onto BNSF ROW permitted by a TCL requires TAEs (also within BNSF ROW) directly east and west of the Prado OH Bridge, which fall outside of the original APE. **Design Change #10** *APE Shift for Building Demolition*	

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	Temporary Construction Easement (TCE) • Provide a TCE at APN #118-160-058, which is adjacent to a proposed building demolition at APN #118-160-059 (full acquisition). • The purpose of this change is to conduct demolition activities at adjacent APN #118-160-059. A TCE is necessary at APN #118-160-058 for equipment mobilization and access to the adjacent demolition site. No additional improvements or acquisition are proposed on APN #118-160-058. **Design Change #11** *APE Shift for Building Demolition* Building Reface • Reface existing building at APN #118-160-056, which is adjacent to a proposed building demolition at APN #118-160-057 (full acquisition). • The purpose of this change is to reface the existing building at APN #118-160-056. Currently, the existing structures on both parcels are attached. With demolition of the structure on APN #118-160-057, the structure on APN #118-160-056 will require refacing. The proposed building reface activities lie on the APE boundary, requiring the APE to be shifted to include APN #118-160-056. **Design Change #12** *APE Shift for Access to SCE Utility Relocation* Utility Relocation • Relocate SCE overhead electrical lines at APN #118-270-012. This parcel would be accessed via Sierra Vista Street, at the east end of the parcel. • The purpose of this change is to relocate existing overhead electrical lines to tie into an existing pad-mounted transformer. The transformer is located behind the Cardenas Market building at adjacent APN #118-270-035. Electrical service to the existing pad-mounted transformer would be re-established via an underground feed system beneath Sierra Vista Street from existing power poles on APN #118-270-012. **Design Change #13** *APE Shift for Access to Demolition Activities* Permanent Access Easement (PAE) • Provide a PAE at APN #118-250-020, between SR-91 and Pomona Road, east of Lincoln Avenue. • The purpose of this change is to provide temporary access to Mill Creek Restaurant, which is proposed to be demolished to accommodate freeway widening. Furthermore, the purpose of this change is also to provide permanent access for maintenance of a proposed storm water Best	

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	Management Practice (BMP) facility between APN #118-250-020 and SR-91. The proposed PAE is partly outside of the APE, requiring a shift of the APE to include APN #118- 250-020. **Design Change #14** *APE Shift for Access to SCE Utility Relocation* Utility Relocation • Obtain a permanent utility easement (access is covered under Design Change #8) at APN# 115-050-030 (RCFC&WCD ROW) to relocate existing SCE overhead electrical lines to a proposed underground electrical conduit that crosses beneath SR-91. • The purpose of this change is to obtain a permanent utility easement inside APN #115-050- 030 to relocate existing SCE overhead electrical lines that cross over SR-91 adjacent to Temescal Wash to a proposed underground electrical system that crosses beneath SR-91 along an existing RCFC&WCD maintenance road. Existing overhead lines require relocation due to proposed bridge and interchange improvements at the SR-91/I-15 interchange. Electrical overhead lines would no longer be able to cross over SR-91 because they would be in the path of the interchange's increased vertical profile. Therefore, electrical lines would need to be relocated to an underground system to cross the freeway. A utility easement is necessary within APN #115-050-030 to install the proposed underground vault and related conduits to relocate the electrical lines. **Design Change #1** *APE Shift for Traffic Signal Modification at West Grand Boulevard and West 2nd Street* • Reconfigure traffic signals at the intersection of West Grand Boulevard and West 2nd Street. • The purpose of this change is to accommodate the proposed widening of the SR-91 Bridge over West Grand Boulevard. **Design Change #16** *Access Easement for Building Cut and Reface (Site Mitigation)* TAEs • Provide TAE at APN #101-170-038 and #101-170-010. • The purpose of this change is to conduct a partial demolition and cut and reface of an existing storage facility building at APN #101-170-038. Access to the proposed cut and reface activities would be provided via a TAE on APN #101-170-010, which is a vacant parcel located adjacent to APN #101-170-038. **Design Change #17** *Relocation of up to Four Additional Historic Streetlights within Grand Boulevard Historic District* Streetlight Relocation	

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• Relocate up to four additional acorn-style streetlights within the Grand Boulevard Historic District. • The purpose of this change is to accommodate widening of the SR-91 bridges over East and West Grand Boulevard and to accommodate underground utility relocations along East Grand Boulevard, under Design Changes #4, #5, and #15.	
3.	**<u>Noise Abatement</u>** *Soundwall E-1 (Noise Study Area E)* • Soundwall E-1 is generally located at the Edge of Shoulder (EOS) along WB SR-91, between Green River Road and Green River Golf Club. The Final EIR/EIS reported that Soundwall E-1 would be constructed during the Ultimate Project. Soundwall E-1 was not found to be reasonable or feasible for the reasons stated below and will not be built as part of the Initial Phase of the project: • As shown in the Supplemental Noise Study Report (NSR), construction of the project's Initial Phase will not result in noise impacts to the receivers in receiver areas representing the Green River Mobile Home Park. Figure 7-1 in the Supplemental NSR provides a summary of modeled noise impacts for each receiver located within the Green River Mobile Home Park; none of the receiver levels surpassed the Noise Abatement Criteria (NAC) of 67 A-weighted decibels (dBA) levels, which is required for construction of a soundwall. • The California Department of Transportation's (Caltrans) Traffic Noise Analysis Protocol requirement to obtain at least a 50 percent vote in favor of the wall was not achieved. According to the sound barrier survey results, Soundwall E-1 received six votes. Two of the six votes were in support of the wall, and four opposed the soundwall; indicating that less than 50 percent of the adjacent property owners were in support of the soundwall. During the final design phase, further coordination was conducted with local stakeholders (discussed above), who indicated that they oppose the soundwall during the project's Initial Phase, resulting in the elimination of Soundwall E-1.	N/A
4.	**<u>I-15 and Main Street Area Design Refinements</u>** • Shift the EB Main Street on-ramp to SR-91 and the EB SR-91 to I-15 connector braid west, reducing the complicated "stacked" construction over Temescal Wash and the BNSF railroad corridor. This allows the EB Main Street on-ramps to SR-91 to tie into EB SR 91 much sooner.	The following measure was required related to hazardous waste/materials. Results of the LBP survey conducted at the 6th Street overcrossing and the Temescal Wash Bridge along I-15 indicated that lead-based and lead-containing paints are present at these locations; as such, the following measure would apply at these locations:

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
		HW-17: Where lead is present and dust-producing activities will be performed, the California Occupational Safety and Health Administration (Cal-OSHA) regulation for lead in construction (Title 8, California Code of Regulations, Section 1532.1) identifies that the employer shall treat the employee as if they would be exposed to lead above the Permissible Exposure Limit (PEL) and shall implement employee productive measures until an employee exposure assessment is performed to document otherwise. Lead was identified in the yellow traffic striping paint, the grey paint on the guard rail, and black traffic paint. Contractors involved in renovation/ demolition activities should be informed of the presence of and potential health hazards associated with lead-containing paints. Care should be taken to protect workers (i.e., respiratory protection) when disturbing lead-containing paints during renovation/demolition activities.
5.	**<u>Serfas Club Drive Area Design Refinements</u>** • In the area between Serfas Club Drive and Maple Street, the modification involves a reconfiguration of the EB Serfas Club Drive on-ramp and the EB Maple Street off-ramp. The modification involves shifting the proposed braid of the two ramps farther to the west by approximately 1,300 feet from its previous location and closer to Serfas Club Drive. The Serfas Club Drive EB on-ramp will cross under the Maple Street EB off-ramp. • This modification also affects the frontage road design, which will be shifted closer to the SR-91 mainline, resulting in less required ROW. The parcels along the frontage road are designated as full acquisitions, which means the project refinements will result in larger remnants being available as a result of less ROW being required. • All of the improvements are within the footprint that was identified in the adopted EIR/EIS.	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
6.	The California Department of Fish and Wildlife (CDFW) has determined that the project could adversely affect existing fish or wildlife resources and has included measures [necessary to protect those resources] in the Section 1602 Streambed Alteration Agreement entered into between CDFW and the Riverside County Transportation Commission (RCTC). **Retaining Walls 203 and 205 Area Design Refinements** • Replace approximately 1,050 feet of Retaining Wall 203 with a 2:1 fill slope. This wall is located along the north side of SR-91 and extends from Prado Road to a point approximately 3,350 feet east of Prado Road. The fill slope will eliminate a portion of Retaining Wall 203; as such, the distance between the western portion of Retaining Wall 203 and the eastern portion of Retaining Wall 203 will be approximately 1,050 feet. The fill slope limits overlap the limits of both walls; as such, the total length of the fill slope is approximately 1,650 feet. The remaining western portion of Retaining Wall 203 will be 310 feet, and the eastern portion of Retaining Wall 203 will be 1,740 feet. The original design for Retaining Wall 203 had a height ranging from 25 feet to 35 feet. The proposed design refinement has Retaining Wall 203A ranging in height from 7.5 feet to 25 feet and Retaining Wall 203B ranging in height from 7.5 feet to 27.5 feet. • Replace Retaining Wall 205 with a 2:1 cut slope. This wall is located along the north side of SR-91 and extends from SR-71 lo a point approximately 2,700 feet east of SR-71. As such, the cut slope replacing Retaining Wall 205 will be approximately 2,700 feet in length. The remaining portion of Retaining Wall 205 will be 365 feet. • Relocation of approximately 800 feet of USACE maintenance road toward the east end of Retaining Wall 205 to allow for construction of the cut slope. • Construction of drainage ditch to convey flow in the northwest quadrant of the SR-91/SR-71 interchange. This ditch is approximately 565 feet in length. It has a 4-foot-wide flat bottom with 12-foot-wide side slopes for a total width of 28 feet. This drainage ditch is at the toe of the proposed fill slope. The runoff will outlet into the existing flood control channel.	An additional measure was added to V-2: **Visual/Aesthetics** Prior to the implementation of the 2:1 slopes in the area between Bridge Nos. 56-0637 Prado OH and 56-0634 West Prado OH, RCTC will ensure that the design-build contractor will minimize the impacts for the loss of visual quality by incorporating V-2 measures as approved by Caltrans and the permitting agencies.
7.	**Reduction of Soundwall D1-B – 900 feet west of Buchanan Avenue** • NB D1-B will be built on private property along the southeast edge of Villaggio Condominium Complex. The result of this revalidation will construct sound barrier NB D1-B. NB D1-B would be constructed outside of State (Caltrans) ROW next to existing property walls and first-row buildings on the SR-91 side. • Updates to the recommended ramp closure at the SR-91 Main Street interchange are necessary to conduct construction activities and implement interchange improvements.	N/A
8.	**TCE in Chino Hills State Park (CHSP)**	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• It was identified in the adopted EIRIEIS that 2.14 acres of TCE would be required within CHSP. boundaries. Based on final design and construction methods for the Green River Road WB off-ramp, it has been identified that additional TCE areas would be required within CHSP property adjacent to Prado Road near one of the park entrances. • The purpose of the additional TCE areas is for access and temporary storage of materials and equipment.	
9.	No project changes are proposed. Mapping exhibits need to be corrected: errata sheets illustrating Noise Barrier O-3 not being constructed were attached.	N/A
10.	During preparation and review of the design plans, 64 locations were identified that required analysis. The proposed 64 design refinements include striping, sign installations, testing and upgrading of communication equipment within an existing building, and utility relocations for the SR-91 Corridor Improvement Project (CIP).	N/A
11.	**Two Optional Barrier Locations have been Evaluated to Replace Previously Identified Barrier M1.** • Refinements to previously identified Barriers NB-M1 and NB-M2 were identified. These barriers, near Serfas Club Drive, were included in the adopted EIR/EIS and to Barrier EB-M1 that subsequently replaced these barriers in Revalidation #5. Supplemental NSR Addendum #1 (March 2015) was prepared for Revalidation #5 Supplemental NSR. The proposed design refinements for the SR-91 CIP are described below. Barrier M1-A: • In the area between Serfas Club Drive and Maple Street, the modification involves reconfiguration of Noise Barrier EB-M1 from Revalidation #5. This revalidation evaluates two barrier alternatives, M1A Option 1 and Option 2, located along the EOS of the SR-91 EB off-ramp. Noise Barrier M1A Option 1 extends from Station 98+00 to Station 116+00. Noise Barrier M1A Option 2 extends from Station 193+20 and curves along the frontage road and joins with the EOS of the SR-91 off-ramp to Maple Street at Station 1 03+00 then continues to Station 116+00. Both options also include a noise barrier (S200), approximately 300 feet in length, along the property line of three residences on the west side of Ridgeview Terrace. Both noise barrier options (M1A Options 1 and 2) are feasible and would provide the appropriate level of noise abatement.	N/A
12.	**Relocation of Soundwall M-1** • Refinements to the project within the Auto Center Drive/Serfas Club Drive to Maple Street area would involve reconfiguring the EB Serfas Club Drive on-ramp and the EB Maple Street off-ramp. These refinements were approved in Revalidation #5 (December 4, 2014).	No changes to avoidance, minimization, and/or mitigation measures, but measures Reval 12-A, Reval 12-B, and Reval 12-C were added.

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• However, Noise Barrier NB M-1 at the EOS would cause a visual obstruction to commercially zoned properties along Frontage Road, which are currently owned by RCTC (a public entity). The new NB M-1B, would be constructed just outside the properties of the impacted receivers, providing feasible noise reduction (5-dBA minimum) for 12 residences while providing visibility to the commercial property between these residences and SR-91.	
13.	**Ramp Closure Revision** • A proposed ramp closure at the SR-91/Auto Center Drive/Serfas Club Drive interchange would need to be revised from 6 months to 15 months.	N/A
14.	**Refinements to the Project within the Lincoln Avenue to Grand Boulevard Area** • Buena Vista Mobile Manor, located south of SR-91 and east of Lincoln Avenue and which would have received feasible noise abatement from Noise Barrier NB Q-1, has been acquired for the Ultimate Project ROW. In addition, it has been indicated that continued visibility of the major car dealership Honda Cars of Corona, located north of SR-91 and just east of Lincoln Avenue, could be compromised by the originally proposed NB P-1. • As a result of these changes, the westerly portions of NBs P-1 and Q-1, which were originally proposed to begin approximately 700 feet east of Lincoln Avenue, have been analyzed in a Supplemental NSR to confirm that new lengths would still provide a comparable level of noise attenuation as that proposed in the project's EIR/EIS. • Sound Barrier P1A Option 1 is shorter in length by 150 feet; Soundwall P1A Option 2 is shorter by 230 feet. Barrier Q-1A is shorter in length by approximately 200 feet.	No changes to avoidance, minimization, and/or mitigation measures, but measure Reval 14A was added.
15.	**Temporary Sound Barrier Installation** • Due to noise exposure from construction activities near Prado Road (bridge demolition), temporary sound barrier will be installed to shield residents from construction noise. • A portion is located within CHSP and involves the installation of acoustical sound blankets/batting material panels, mounted on a steel frame; • The other portion of the temporary wall will consist of truck trailers with batting material installed in gaps and skirting along the bottom of the trailers.	N/A
16.	**Refinements to a Project Wall located along the northwest area of the SR-91/I-15 Interchange, between Corona Avenue and Parkridge Avenue** • The purpose of this revalidation is to document the change in location (from the EOS to the top of berm) and a design change (to accommodate a previous commitment [Committed Wall]), as well as the EIR/EIS commitment to build K1-A.	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• Although the 2012 EIR/EIS proposed the K1-A wall location to be moved from the EOS to the top of slope, the height at this location was not evaluated. Now that the project is in design and construction, technical analysis has been conducted to determine the height at which K1-A would provide comparable noise reduction, as the 14-foot-high wall evaluated in the project's NSR, but at the top of slope as proposed in the EIR/EIS. Additionally, the previous documents confirmed the height and location of the northerly segment of wall: • The northerly 1,100-foot-long segment of K1-A will be 14 feet high; the southerly segment will be 12 feet high.	
17.	**Noise Barrier T-1 Removal** • Due to design refinements made, a Supplemental NSR was conducted and included analysis near the Main Street interchange. The Supplemental NSR concluded that there is no traffic noise impact in the affected area. • NB T-1 is therefore being removed from the project.	N/A
18.	**Utility Work** • This revalidation is to document the revision to install two 5-inch-diameter power poles at Wardlow Wash, just south of SR-91, which has been found, by CDFW, to be located within their jurisdiction. The work is proposed south of the EB SR-91 at the SR-71 south to SR-91 connector. The project would entail the installation of two wooden power poles and service cabinet in uplands adjacent to Wardlow Wash. Work will occur on fill previously placed as part of the separate SR-91 Eastbound Widening Project.	N/A
19.	**Noise Study Report Approval Date** • Caltrans and RCTC were unable to locate a signed copy of the NSR at the request of a resident in the SR-91 corridor. • In the process of fulfilling this request, a discrepancy in the EIR/EIS was discovered. The approved EIR/EIS shows the approved date for the NSR as April 2010, even though the document was approved in May 2010. A memo was prepared to document approval of the NSR for the SR-91 CIP to complete the administrative record. • The purpose of this revalidation is to reaffirm approval of the project NSR and to update the date of the approval to May 2010 in the environmental document.	N/A
20.	**Emergency Access Feature Incorporation** • Due to emergency access issues that arose during construction, a temporary ramp was developed at the end of Green River Road, partially using the Old Santa Ana River Trail, to avoid and minimize any potential impacts of a WB freeway shutdown.	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• The purpose of this revalidation is to incorporate this emergency access as a permanent project feature. The emergency detour ramp (located approximately at station 573+00) near Green River Road will be permanently maintained and opened to the public in the event WB SR-91, west of Green River Road, becomes partially or fully impassable.	
21.	**Contra-Flow Plan** • Due to mudslides in December 2014, a median contra-flow plan is proposed between Coal Canyon and the Serfas Club/Auto Center Drive/Auto Center Drive interchange to alleviate traffic and provide access to communities.	N/A
22.	**Cultural Resources** • During the construction phase of the SR-91 CIP, west of I-15, installation of utilities required additional analysis to accommodate activities just outside the originally approved APE. Due to design changes during construction, the APE was extended through Revalidation #10 for utility modification, roadway striping, and sign installation, in and along SR-91 and I-15.	N/A
23.	**Soil Placement, Grading, and Landscaping** • The design refinement involves placement and grading of a soil pile located between the SB SR-71 on-ramp to SR-91 EB, and the BNSF railroad to the south. This design refinement involves the placement of 37,000 cubic yards of fill and landscaping of the disturbed area.	N/A
24.	**Ramp Closure Extension** Extend previously approved long-term ramp closures for two on-ramps and two off-ramps to complete the work required for widening of SR-91: • EB Main Street On-ramp – from a 15-month closure to an 18-month closure; • WB Main Street Off-ramp- from a 12-month closure to a 15-month closure; • WB Maple Street Off-ramp – from a 2-month closure to a 4-month closure; and • EB Serfas Club Drive On-ramp – from a 15-month closure to a 17-month closure.	N/A
25.	**New Access Point** • A new access point for equipment to reach the construction at Bridge 30 (1-15 at Temescal Wash) is necessary. The new access will be from All American Way, which is located outside the existing APE and was not included in the EIR/EIS. The contractor will be utilizing the new access to move equipment and construction materials in and out of the channel during demolition and construction of the new pier wall for Bridge 30. The access is temporary for a period of 1 month once construction is ready to begin.	Based on the results of the environmental re-evaluation, there is a potential for temporary impacts to the vegetation. Any impacts will be addressed in the project restoration plan. To minimize impacts to the surrounding area, the following will be addressed:

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• The SR-91 CIP will be starting demolition of Bridge 30. During a preconstruction site visit, it was determined that the pile driver will not be able to access the bridge through the access ramp from Harrison Yard (main access point). **RCFC&WCD Approval** • AWJV submitted a request to RCFC&WCD to amend the existing Encroachment Permit (EP 3516) to allow access from All American Way. The amendment was approved by RCFC&WCD in February 2016, which included compliance with Clean Water Act (CWA) Section 401, CWA Section 404, and National Pollutant Discharge Elimination System (NPDES) requirements. **CDFW Approval** AWJV has also received e-mail approval from CDFW for the new access from All American Way. The following are the requirements from CDFW: • Develop and implement a focused training for all staff working in the area to ensure and document avoidance of fish and wildlife resources. • Work in the concrete channel is promptly cleared/cleaned-up (no discharges). • Quantify and restore any vegetation impacts offsite (if necessary).	1) Delineating the limits of disturbance area (in the earthen area) with environmental sensitive area (ESA) fencing. 2) Potential use of crane pads to limit any potential grading. 3) Installing BMPs if grading or fill activities occur in this earthen area for access. 4) Regular housekeeping of construction litter/pollution through the access area. 5) Regular biological monitoring to ensuring compliance with the permits. The measures for vegetation and/or revegetation are not required by RCFC&WCD, who owns the property being accessed. AWJV will implement measures along the access route to avoid any disturbance of the existing native and non-native vegetation as specified by the biologist.
26.	**Ramp Closure Amendments** The SR-91 CIP requires a second amendment for the Ramp Closure Study to address the impacts of adding two temporary ramp closure locations along the SR-91 CIP for the WB Lincoln Avenue on-ramp and the EB Maple Street/6th Street off-ramp. • WB Lincoln Avenue On-ramp: 2-month closure. • EB Maple Street/6th Street Off-ramp: 6-week closure.	N/A
27.	**Ramp Closure Extension** Two long-term ramp closures necessary for construction of the SR-91 CIP required to be extended by 3 more months than identified in the original Ramp Closure Study and two amendments that followed. The duration of the following ramps will be extended: • WB Maple Street/6th Street Off-ramp – extend by 3 months for a total of 6 months. • EB Serfas Club Drive On-ramp – extend by 3 months for a total of 17 months.	N/A
28.	**Heightened Soundwall for Aesthetic Purposes**	Unknown at this time.

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	• The purpose of this revalidation is to document the increase in height of an existing soundwall on top of Retaining Wall 03B for aesthetic purposes and to block views of the freeway from Northmoor Drive residences.	
29.	**<u>Plantings at Walls Requirement Change</u>** Per clause 'C' of Measure V-1 and related text in Measure V-4, planting of trees, shrubs, and/or vines at soundwalls and retaining walls is required. Required plantings at all soundwalls and retaining walls, however, has not been possible. • The purpose of this re-evaluation is to document the language modification in Measures V-1 and V-4, of the Environmental Commitment Record (ECR), which require plantings. Every effort was made to meet the requirements of Measures V-1 and V-4 to plant trees or shrubs and vines at the base of the walls. However, landscaping at every soundwall and retaining wall was not possible. Planting of trees, shrubs, and/or vines was not possible at every soundwall and retaining wall due to four primary reasons: • Paving associated with the wall –The wall is either sitting above a retaining wall, barrier, or adjacent to paved surfaces; which do not allow for landscaping. • Lack of maintenance access – No access to the back side of most of the walls that are at grade. • Inability to get irrigation to areas where walls are located. • Other project structures interfered with the planting area.	Measures V-1 and V-4 required plantings at all soundwalls and retaining walls, however, this requirement was not met.
30.	**<u>Transfer of SR-91 CIP-required Trees to I-15 Toll Express Lanes Project.</u>** • Per Measure V-2 of the SR-91 CIP, trees removed by the project are required to be replaced at a 1:1 ratio. This requirement, however, conflicts with the upcoming I-15 TEL Project where the two projects overlap – at the SR-91/I-15 interchange. Forty-four (44) trees not planted by the SR-91 CIP will be planted by the I-15 TEL Project, generally located between Temescal Wash and the BNSF railroad tracks, along I-15. The installation of vegetation, which could possibly become habitat for nearby species and migratory birds, only to have it removed within a short time frame, could cause temporary impacts to biological resources. To avoid impacting the area twice and throw away improvements, planting of those 44 SR-91 CIP trees is being deferred to the I-15 TEL Project.	Based on the results of this re-evaluation, to ensure the planting of 44 trees by the I-15 TEL Project, the following measure was required: V-7: During construction of the I-15 TEL Project, a revalidation shall be processed for the addition of 44 trees to be planted at the SR-91/I-15 interchange.
31.	**<u>Fair Share Contributions Requirement Update</u>** • ECR Measure T-3 describes the fair share contributions required to mitigate SR-91 CIP impacts to the City of Corona. These improvements were to be completed differently depending on which alternative was implemented; Alternative 1, which would be completed in 2015, or Alternative 2	Table 3.1 of Measure T-3 was updated.

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	which would consist of an Initial Phase in 2015 and then the Ultimate Phase in 2035. Alternative 2 was selected as the preferred alternative and construction of the Initial Phase began in 2014. Measure T-3 states: • RCTC's Project Manager will ensure that RCTC pays the fair share contribution for the project-related impacts at area intersections. Those fair shares are shown by intersection in Table T-3.1. The recommended improvements include additional turn and through lanes. Summaries of the improved intersection delays and level of service (LOS) are provided in Tables T-3.2, T-3.3, and T-3.4 for 2015 with the Initial Phase of Alternative 2, Design Year 2035 with Alternative 1, and Design Year 2035 with Alternative 2 conditions, respectively.	
32.	Document the transfer of geotechnical investigations proposed for SR-91	N/A

ATTACHMENT 5
IPaC Database Search

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:
Consultation Code: 08ECAR00-2019-SLI-0994
Event Code: 08ECAR00-2019-E-02293
Project Name: 15-91 ELC

May 22, 2019

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.

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0994

Event Code: 08ECAR00-2019-E-02293

Project Name: 15-91 ELC

Project Type: TRANSPORTATION

Project Description: Project Description

California Department of Transportation District 8 (Caltrans), Riverside County Transportation Commission (RCTC), and Federal Highway Administration (FHWA) propose to construct the Interstate 15 (I-15)/State Route 91 (SR-91) Express Lane Connector (ELC). The project is in the City of Corona at the junction of SR-91 and I-15 in western Riverside County. Improvements will consist of adding a tolled express lane connector from southbound I-15 Express Lanes to westbound SR-91 Express Lanes and an express lane connector from eastbound SR-91 Express Lanes to northbound I-15 Express Lanes. In addition, operational improvements along eastbound SR-91 are proposed to be constructed to enhance operations from west of the I-15 (PM 6.6) to east of South Promenade Avenue (PM 8.1). Additionally, a new VTMS sign will be constructed in Orange County, near the Orange/Riverside County Line. Please see Figure 1 Project Location Map and Figure 2 Project Vicinity Map attached.

The I-15/SR-91 ELC project is one of four components of the SR-91 Corridor Improvement Project (CIP) Ultimate Project to follow the Initial Project and is the second project being advanced. The Expenditure Authorization (EA) for this project is 08-0F543.

The SR-91 CIP consisted of an Initial Project and an Ultimate Project proposed in several phases over a 20-year period. Separate projects would be identified and programmed to incorporate the components of the phasing plan for improvements on SR-91 and I-15 between the Initial Project and completion of the Ultimate Project by 2035. The SR-91 CIP Initial Project was completed under EA is 08-0F540. The Initial Project included implementation of improvements on SR-91 from approximately the Orange/Riverside County line to the I-15 interchange and a single-lane direct connector to and from the I-15 south, extending from SR-91 to the Ontario Avenue interchange. Construction of the Initial Project began in June 2014, and was opened to traffic in March 2017.

RCTC, Caltrans, and FHWA now propose to construct the ELC project because funding has been secured for this component of the Ultimate Project of the SR-91 CIP. The ELC project is included in the approved SR-91 CIP Final EIR/EIS as one of four components of the Ultimate Project. The ELC project is consistent with the project features identified in the approved SR-91 Final EIR/EIS.

The I-15/SR-91 ELC project (RIV160101) is listed in the Federal Transportation Improvement Program (FTIP) Amendment #17-16, as RTPID: RIV021250B, Project ID: RIV160101.

IN WESTERN RIVERSIDE COUNTY ON SR-91/I-15: ON I-15 - ADD TOLL EXPRESS LANE MEDIAN DIRECT CONNECT FROM SB15 TO WB91 & EB91 TO NB15, 1 TOLL EXPRESS LANE EACH DIRECTION FROM HIDDEN VALLEY TO SR91 DIRECT CONNECTOR. CONSTRUCT OPERATIONAL IMPROVEMENT AND AUXILARY LANE ALONG SR91. CONSTRUCT ADDITIONAL SIGNAGE ALONG SR91 AT PM R18.0 IN OR COUNTY.

The 2017 FTIP Amendment #17-16 is consistent with the 2016 RTP/SCS and the 2017 FTIP as previously amended. SCAG approval 1/23/18, Caltrans approval 2/08/18, FHWA approval 3/2018.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.892690429000055N117.5563238302284W

Counties: Riverside, CA

Endangered Species Act Species

There is a total of 12 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[1], 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
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad *Anaxyrus californicus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly *Rhaphiomidas terminatus abdominalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1540	Endangered
Quino Checkerspot Butterfly *Euphydryas editha quino (=E. e. wrighti)* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5900	Endangered

Flowering Plants

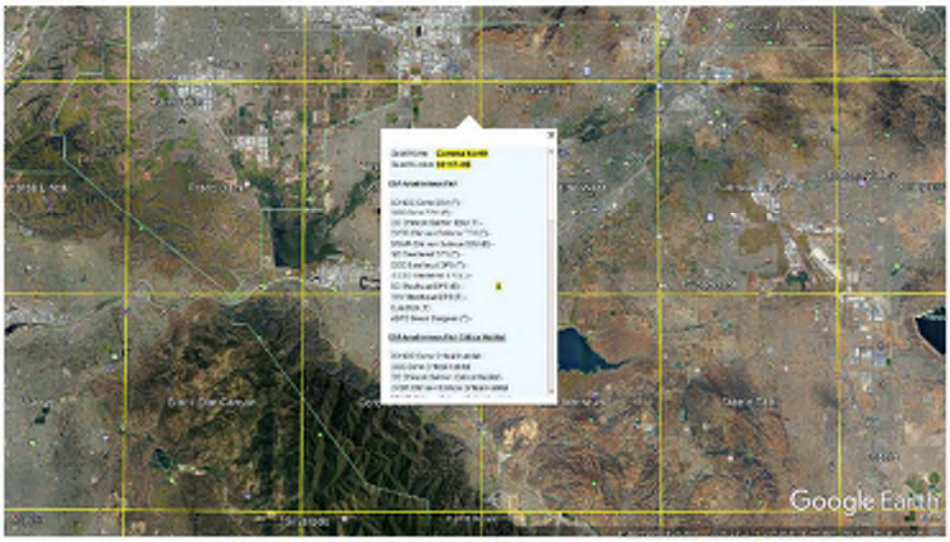
NAME	STATUS
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Santa Monica Mountains Dudleyea *Dudleya cymosa ssp. ovatifolia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2538	Threatened
Thread-leaved Brodiaea *Brodiaea filifolia* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

ATTACHMENT 6
NMFS Database Search

NOAA Species List – NMFS WCR CA Species List May 2019



Quad Name **Corona North**
Quad Number **33117-H5**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Corona South**

Quad Number 33117-G5

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - X
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

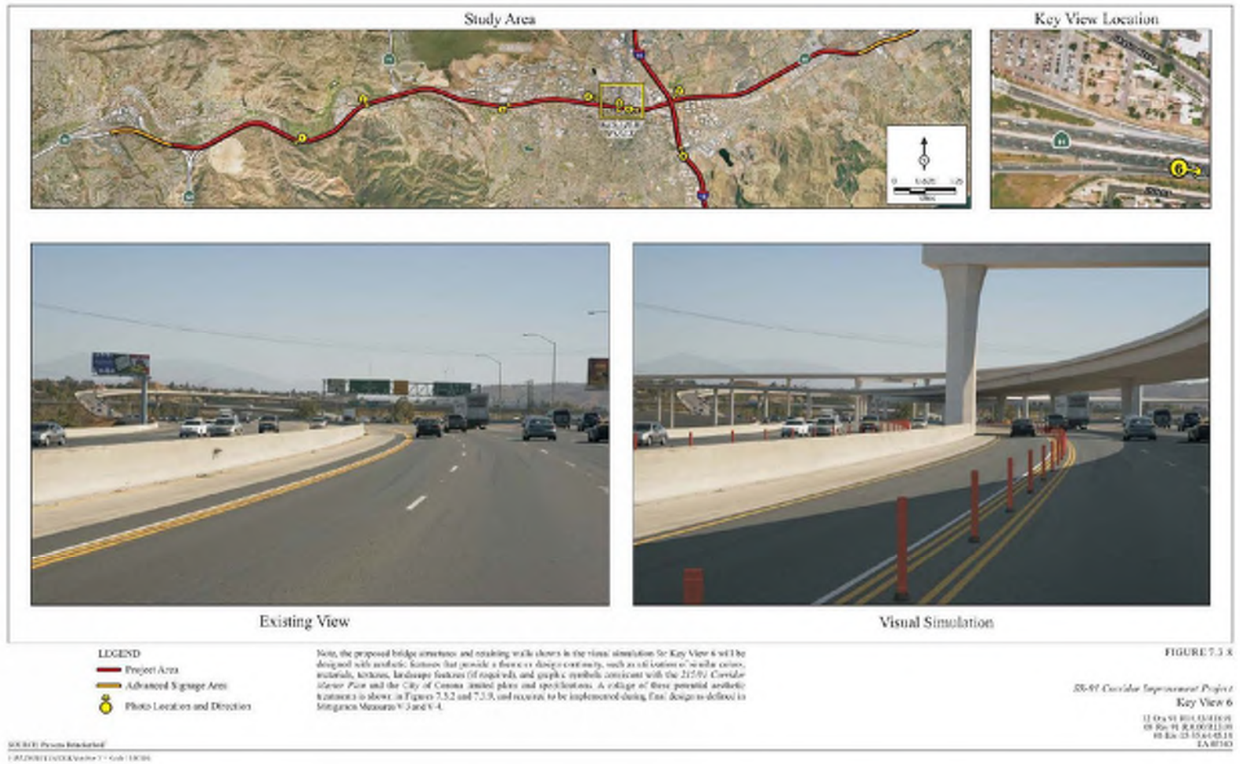
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office 562-980-4000

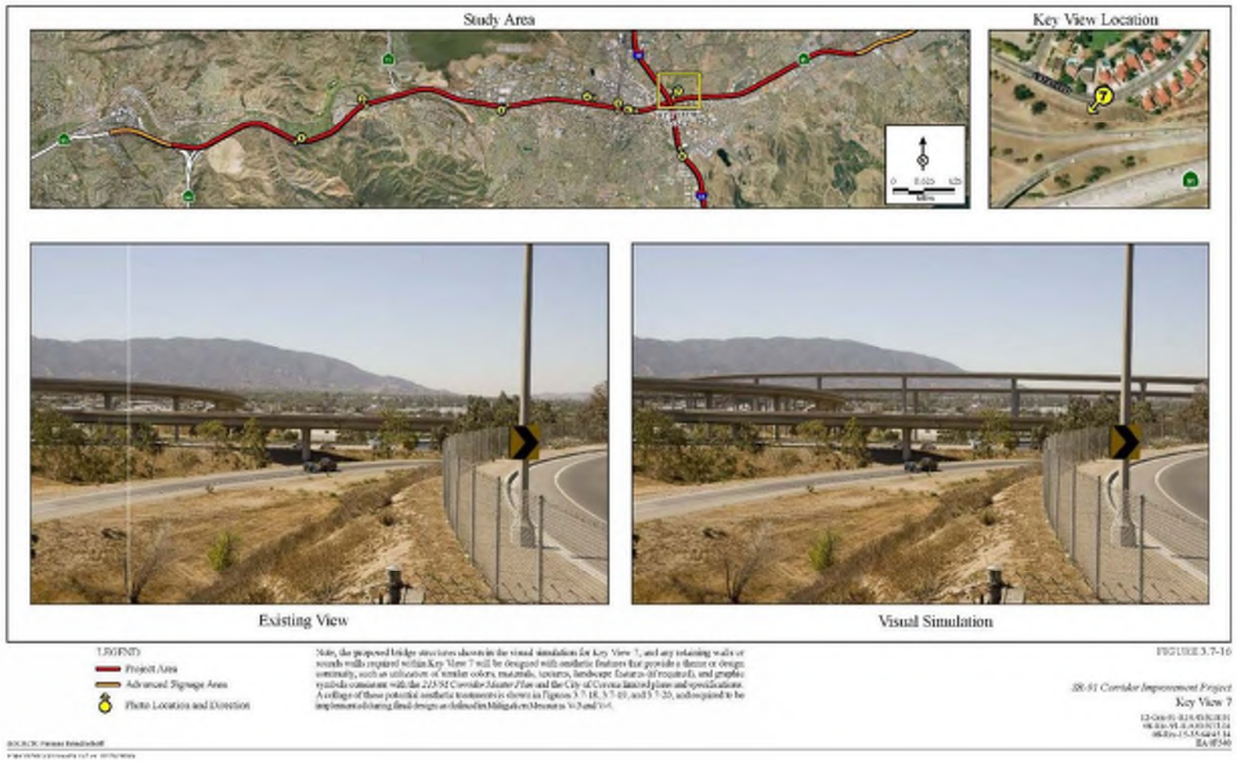
MMPA Cetaceans -
MMPA Pinnipeds -

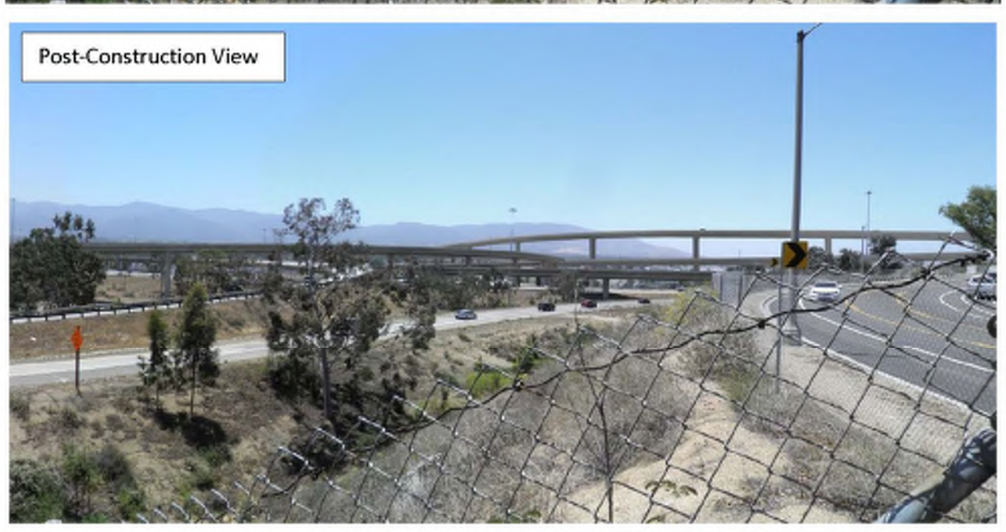
ATTACHMENT 7
Visual Simulations

Key Viewpoint #6, Revised Simulation
Existing view from 2018 (top) and revised simulation (bottom right). The simulation from 2010 can be seen in the lower left image from the original *Visual Impact Assessment*.

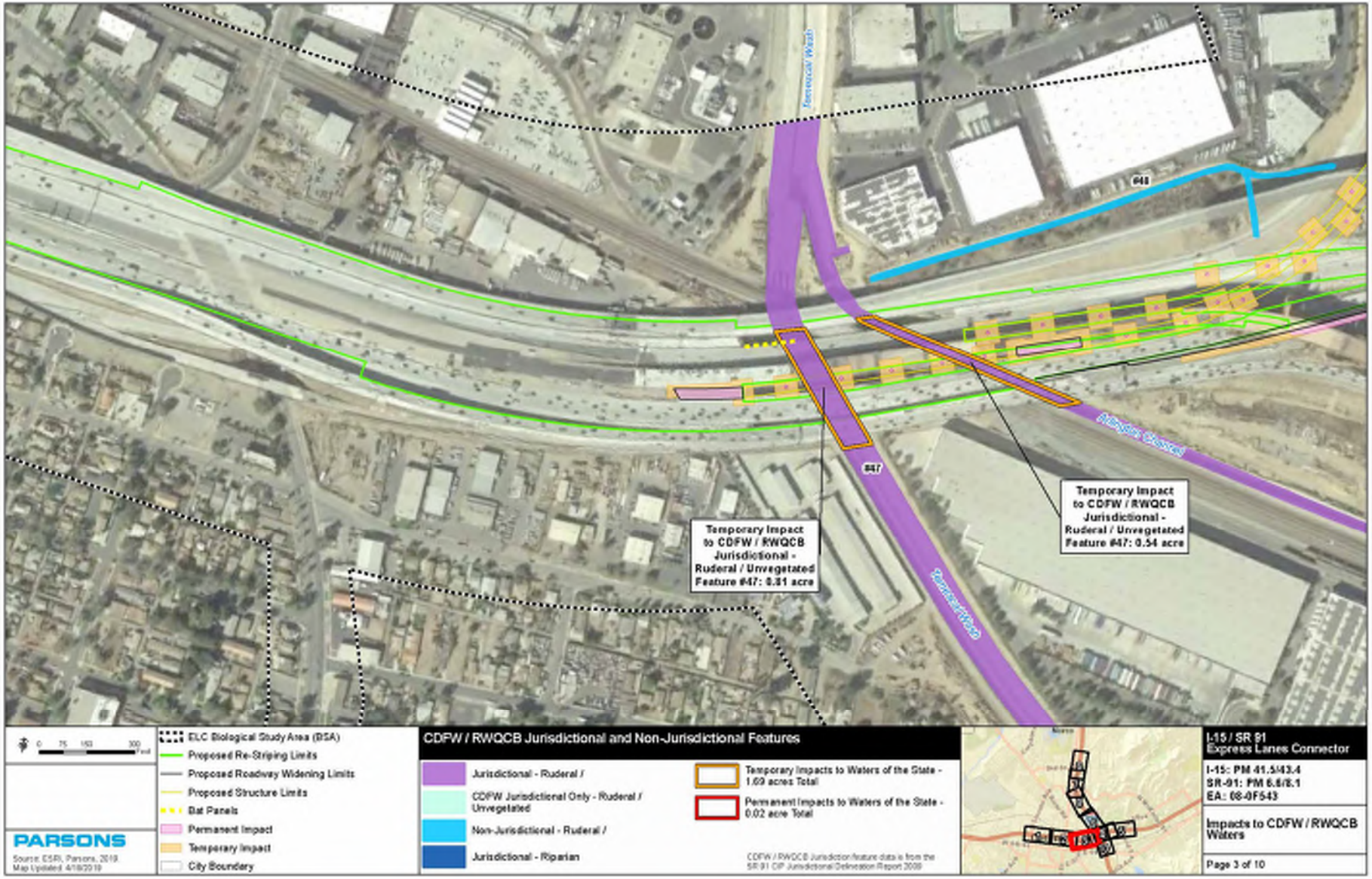


Key Viewpoint #7, Revised Simulation
Existing view from 2018 (top) and revised simulation (bottom right). The simulation from 2010 can be seen in the lower left image from the original *Visual Impact Assessment*.





ATTACHMENT 8
Impacts to CDFW/RWQCB Waters


Temporary Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #47: 0.81 acre
Temporary Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #47: 0.54 acre
#47
#48
Arroyo Channel
Temescal Wash
0 75 150 300 Feet
ELC Biological Study Area (BSA)
Proposed Re-Striping Limits
Proposed Roadway Widening Limits
Proposed Structure Limits
Bat Panels
Permanent Impact
Temporary Impact
City Boundary
PARSONS
Source: ESRI, Parsons, 2019
Map Updated: 4/18/2019
CDFW / RWQCB Jurisdictional and Non-Jurisdictional Features
Jurisdictional - Ruderal /
CDFW Jurisdictional Only - Ruderal / Unvegetated
Non-Jurisdictional - Ruderal /
Jurisdictional - Riparian
Temporary Impacts to Waters of the State - 1.69 acres Total
Permanent Impacts to Waters of the State - 0.02 acre Total
CDFW / RWQCB Jurisdiction feature data is from the SR-91 CIP Jurisdictional Delineation Report 2009
I-15 / SR 91 Express Lanes Connector
I-15: PM 41.5/43.4
SR-91: PM 6.6/8.1
EA: 08-0F543
Impacts to CDFW / RWQCB Waters
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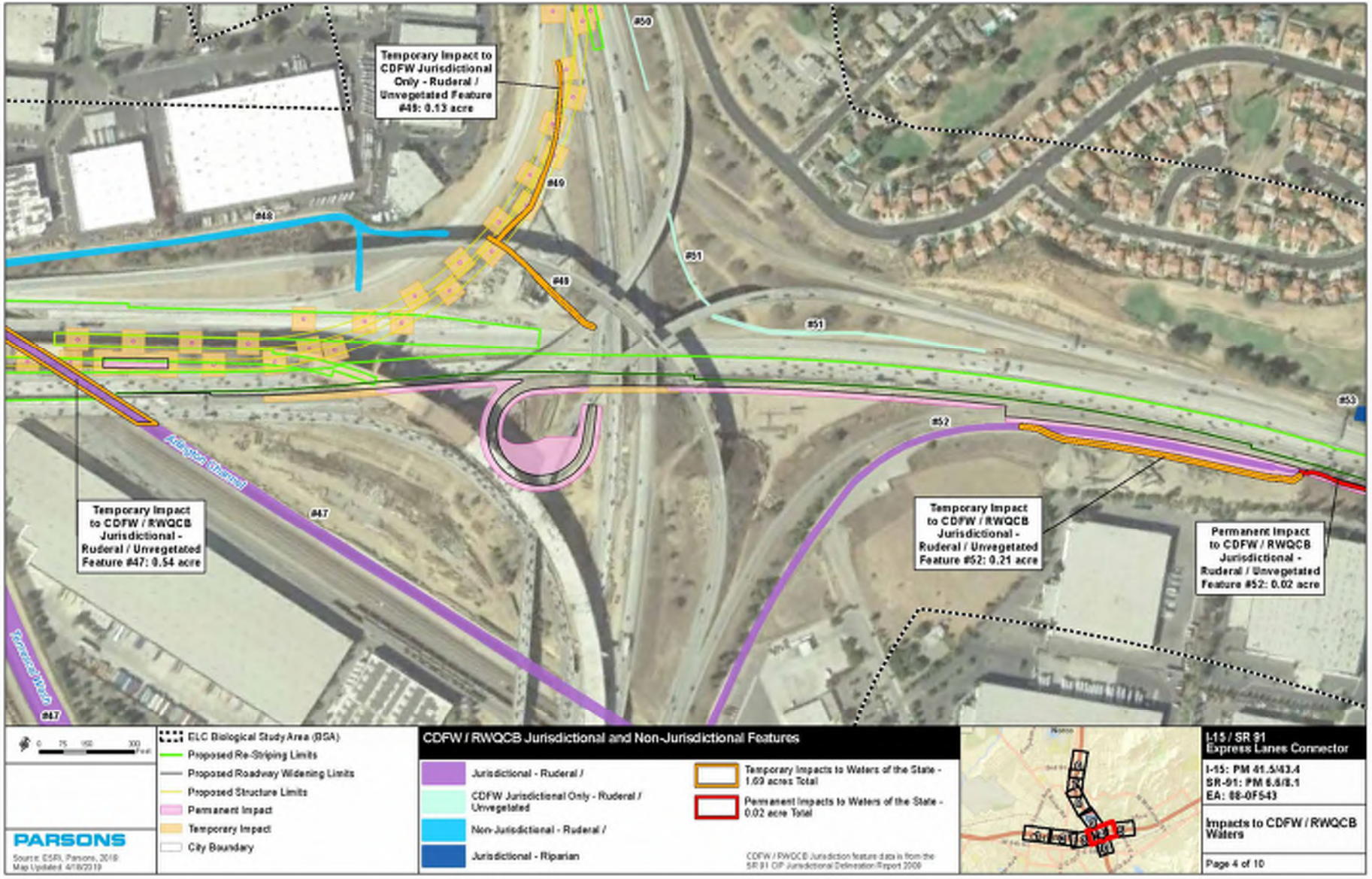
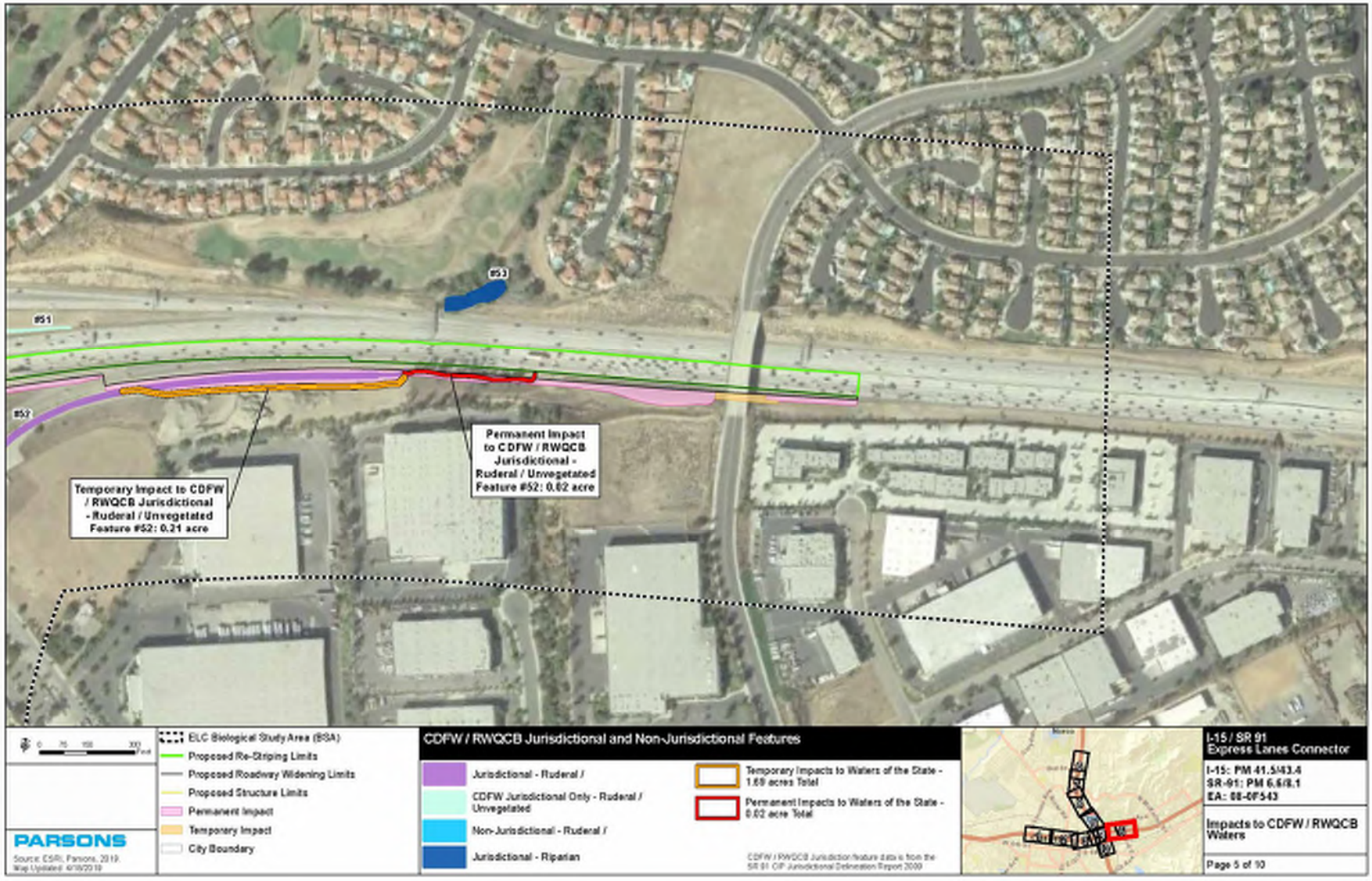

Temporary Impact to CDFW Jurisdictional Only - Ruderal / Unvegetated Feature #49: 0.13 acre
Temporary Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #47: 0.54 acre
Temporary Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #52: 0.21 acre
Permanent Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #52: 0.02 acre
#47
#48
#49
#50
#51
#52
#53
Arroyo Seco Channel
Tujunga Wash
0 75 150 300 Feet
ELC Biological Study Area (BSA)
Proposed Re-Striping Limits
Proposed Roadway Widening Limits
Proposed Structure Limits
Permanent Impact
Temporary Impact
City Boundary
PARSONS
Source: ESRI, Parsons, 2019
Map Updated: 4/18/2019
CDFW / RWQCB Jurisdictional and Non-Jurisdictional Features
Jurisdictional - Ruderal /
CDFW Jurisdictional Only - Ruderal / Unvegetated
Non-Jurisdictional - Ruderal /
Jurisdictional - Riparian
Temporary Impacts to Waters of the State - 1.03 acres Total
Permanent Impacts to Waters of the State - 0.02 acre Total
CDFW / RWQCB Jurisdiction feature data is from the SR 91 OP Jurisdictional Delineation Report 2009
I-15 / SR 91 Express Lanes Connector
I-15: PM 41.5/43.4
SR-91: PM 6.6/8.1
EA: 08-0F543
Impacts to CDFW / RWQCB Waters
Page 4 of 10


#53
#51
#52
Permanent Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #52: 0.02 acre
Temporary Impact to CDFW / RWQCB Jurisdictional - Ruderal / Unvegetated Feature #52: 0.21 acre
ELC Biological Study Area (BSA)
Proposed Re-Striping Limits
Proposed Roadway Widening Limits
Proposed Structure Limits
Permanent Impact
Temporary Impact
City Boundary
PARSONS
Source: ESRI, Parsons, 2019
Map Updated: 6/18/2019
CDFW / RWQCB Jurisdictional and Non-Jurisdictional Features
Jurisdictional - Ruderal /
CDFW Jurisdictional Only - Ruderal / Unvegetated
Non-Jurisdictional - Ruderal /
Jurisdictional - Riparian
Temporary Impacts to Waters of the State - 1.69 acres Total
Permanent Impacts to Waters of the State - 0.02 acre Total
CDFW / RWQCB Jurisdiction feature data is from the SR 91 CIP Jurisdictional Delineation Report 2009
I-15 / SR 91 Express Lanes Connector
I-15: PM 41.5/43.4
SR-91: PM 6.6/8.1
EA: 08-0F543
Impacts to CDFW / RWQCB Waters
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ATTACHMENT 9
Initial Phase
Environmental Commitments Record

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
LU-1	If a Build Alternative is selected for implementation, the Riverside County Transportation Commission (RCTC) will request the County of Riverside, the County of Orange, and the cities along the alignments of State Route 91 (SR 91) and Interstate 15 (I-15) to amend their respective General Plans to reflect the selected SR-91 Corridor Improvement Project (CIP) alternative and the modification of land use designations for properties that would be acquired for the project which are not currently designated for transportation uses.	Final EIR/EIS	RCTC		The City of Corona will include 91 CIP land use changes in their regular General Plan Update. City of Corona has provided written verification. A meeting was held with the County of Riverside on 2/28/2018. County of Riverside does not have an official designation for "transportation use" and does not need to amend the General Plan for that purpose. Land use changes for remnant parcels will occur during standard entitlement process as properties have already been sold for private development. Please see meeting minutes.	10/23/17; 2/28/18	AT; JLS	100% complete for Initial Phase	X	
PR-1	During final design/construction of the Initial Phase, RCTC will contribute $100,000 to the planning and implementation of improvements in that area that would support and expand regional trail connectivity.	Final EIR/EIS	RCTC	Final design/ construction	RCTC paid CDPR in January 2014	8/21/2015	SB	100% complete for Initial Phase	X	
PR-2	During final design/construction of the Initial Phase, RCTC will coordinate with State Parks on the aesthetic features that will be included in the project specifications for the proposed retaining wall facing CHSP between SR-71 and the westbound Green River Road off-ramp, consistent with the aesthetic and features required in Measure V 2. The aesthetic treatment will include a texture to simulate a natural type appearance such as a soil or rock surface, or equivalent.	Final EIR/EIS	RCTC/Design Builder	Final design/ construction	RCTC submitted design concept and renderings in December 2014. CDPR concurs in February 2015. Final design still needs to be reviewed prior to construction of aesthetic and entrance features.	12/2/2016	AT	100% complete for Initial Phase	X	
PR-3	To minimize nighttime noise impacts to Chino Hills State Park (CHSP): 1. RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction in CHSP to daylight hours (7:00 a.m. to 7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operational reasons. Operational reasons may include the desire to conduct certain construction activities; such as closing multiple ramps or travel lanes, during night hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.	Final EIR/EIS	Design Builder	During Construction	RCTC submitted the wildlife noise and lighting plan to CDFW for review and approval in August 2014. CDFW concurred in October 2014. A variance was approved by the City of Corona to allow night time work within the city limits.	11/16/2017	AT	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
CI-2	Where property acquisition and relocation are unavoidable, RCTC's Right-of-Way Agents will follow the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs. Appendix D in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) provides a summary of the RCTC Relocation Assistance Program for implementing the Uniform Act. For properties where a partial acquisition results in the removal of some or all of the parking for the property, RCTC's Right-of-Way Agents will conduct parking studies to investigate the use of adjacent acquisitions for replacement parking, reconfiguring the remaining parking spaces and lots on the property, restriping parking spaces, enlarging parking lots, and reconfiguring driveways and/or delivery locations to reduce the project effects on the property.	Final EIR/EIS	RCTC	Prior to construction; during construction	All permanent relocations have occurred. OPC has documentation. RCTC is at 85% completion of ROW acquisition and has followed applicable guidelines. (but Attachment 4 in the Reval says "RCTC has followed applicable guidelines")	9/30/2016	AT	100% complete for Initial Phase	X	
CI-3	Where possible during final design, RCTC's Right-of-Way Agents and the Project Engineer will work with owners of commercial, agricultural, and industrial uses subject to partial property acquisitions to reconfigure those uses on site consistent with applicable local codes and ordinances in such a manner as to enable them to remain in operation. If a commercial or industrial partial acquisition cannot be reconfigured to allow for continued operation, RCTC's Right-of-Way Agents will work with the property owners to either relocate that use to land designated for that given land use, preferably within the boundaries of the study area or to provide compensation for the land pursuant to the provisions of the Uniform Act. If an agricultural use cannot be reconfigured to allow for its continued operation, the property owner will be compensated pursuant to the provisions of the Uniform Act as required in Measure CI-2 and the agricultural use will be discontinued.	Final EIR/EIS	RCTC	Prior to construction	RCTC is at 85% (reval says 100%) completion of ROW acquisition and has followed applicable guidelines.	8/1/2015	SB	100% complete for Initial Phase	X	
CI-4	During final design and property acquisition, the RCTC Project Engineer and Right-of-Way Agents will work with billboard/property owners, the City of Corona, and the California Department of Transportation's (Department) Outdoor Advertising Unit to find locations for relocating	Final EIR/EIS	RCTC	Final design/ construction	Billboard relocations have been identified and are being implemented.	8/1/2016	SB	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	the affected billboards, within the existing sites where the billboards are currently located or other sites in the City where billboards are allowed. The Right-of-Way Agents will work with the City and the Department's Outdoor Advertising Unit to ensure that the sites for the relocated billboards comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. The Right-of-Way Agents will also work with the billboard/property owners to develop Billboard Relocation Agreements with the City of Corona.									
UES-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will prepare utility relocation plans in consultation with the affected utility providers/owners for those utility facilities anticipated to be relocated, removed, and protected in-place. Final design will focus on avoiding utility relocations. If relocation is necessary, final design will focus on relocating utilities within the State right-of-way or within other existing public rights-of-way and/or easements. If relocation outside of existing or the additional public rights-of-way and/or easements required for the project is necessary, final design will focus on relocating those facilities in such a manner as to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. The utility relocation plans will be included in the project specifications. Prior to and during construction, the RCTC Resident Engineer will ensure that the components of the utility relocation plans provided in the project specifications are properly implemented by the design/build contractor.	Final EIR/EIS	Design Builder/RCTC	Prior to construction; during construction	Coordination has been occurring between design and environmental regarding final relocation of utilities. Two remaining RFC plans will be completed by Nov. 2015. ReValidation 2 - Approved 9/17/13 ReValidation 10 - Approved 9/21/15 Remaining RFC plans are completed. Last utility (sewer at Yorba St and Pleasantview Ave) completed first week of Sept. 2017.	2/3/17; 9/12/17	AT; AT	100% complete for Initial Phase	X	
UES-2	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to coordinate all temporary ramp and lane closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times as part of the Final Transportation Management Plan (TMP) and Final Ramp Closure Study required in Measures T-1 and T-2, including the identification of alternative routes and routes across the construction areas for emergency vehicles developed in coordination with the affected agencies.	Final EIR/EIS	Design Builder	Prior to construction; during construction	TMP: Final TMP has been completed and signed. City of Corona approved proposed haul routes using city streets. Caltrans approved the September 2015 Ramp Closure Study October 16, 2015. Amendment #1 to the Ramp Closure Study/Reval 24 approved on 08/29/16.	11/3/2016	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
					Amendment #2 to the Ramp Closure Study/Reval 26 approved on 10/10/2016					
UES-3	Prior to and during any construction activities, the RCTC Project Engineer will require the design/build contractor to implement the following to minimize the risk of fires during construction: Coordinate with the applicable local fire department to identify and maintain defensible spaces around active construction areas.; Coordinate with the applicable local fire department to identify and maintain firefighting equipment (extinguishers, shovels, water tankers) in active construction areas.; Prohibit the use of mechanized equipment or equipment that could throw off sparks in areas adjacent to open space or undeveloped land, including areas adjacent to CHSP.; Post emergency services phone numbers (fire, emergency medical, police) in visible locations in all active construction areas.	Final EIR/EIS	Design Builder	Prior to construction; during construction	Design Builder has prepared and currently implements a safety plan and crisis management plan.	2/2/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
UES-4	The final design of the SR-91 CIP Build Alternatives will include closing gaps so there is the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to SR-241, as follows: 2. Ultimate Project: Close gaps to provide an equivalent continuous barrier 30 to 36 inches high on the edge of shoulder on SR-91 in both directions between Green River Road and SR-241 meeting Department standards applicable at the time.	Final EIR/EIS	RCTC	Prior to construction	3 foot barrier is identified on pkg B plans from SR 71 to Orange County line. Installation of the 3-foot barrier completed on the westbound side of SR-91; the eastbound barrier will be installed during the Ultimate Phase.	9/11/2017	AT	100% complete for Initial Phase	X	
T-1	Transportation Management Plan. During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer direct a qualified traffic engineer to prepare the Final Traffic Management Plan (TMP), which will be based on the Preliminary TMP developed for the Project Report, to address specific short-term traffic impacts during construction of the project. The objectives of the Final TMP are to: Maintain traffic safety during construction Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction Minimize traffic delays and facilitate reduction of overall duration of construction activities Minimize detours and impacts to pedestrians and bicyclists Foster public awareness of the project and related impacts Achieve public acceptance of construction of the project and the Final TMP measures.	Final EIR/EIS	RCTC/Design Builder	Prior to construction	TMP being implemented. Public outreach plan being implemented. RCTC and design builder hold management of ramp closure study, traffic and public outreach task force meeting to deal with traffic management issues. Public outreach is documented in the monthly Construction Progress Report to RCTC. Caltrans approved the September 2015 Ramp Closure Study October 16, 2015. Amendment #1 to the Ramp Closure	8/1/15; 11/6/15	SB; AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	RCTC will submit the Final TMP to the California Department of Transportation (Department) for review and approval during final design and prior to any construction activities. The existing Preliminary TMP and Ramp Closure Study contains the following elements intended to reduce traveler delay and enhance traveler safety. These elements will be refined during final design and incorporated in the Final TMP for implementation during project construction. Public Information/Public Awareness Campaign (PAC). The primary goal of the PAC is to educate motorists, business owners/operators, residents, elected officials, and government agencies about construction activities and associated impacts. The PAC is an important tool for reaching target audiences with important construction project information and will include, but not be limited to: Rideshare information Brochures and mailers Media releases Paid advertising Public meetings Broadcast fax and email services Telephone hotline Notification to targeted groups Commercial traffic reporters/feeds Project website Visual information Local cable television and news Internet postings Traveler Information Strategies. The effective implementation of a traveler information system during construction is crucial for enabling motorists to make informed decisions about their travel plans and options with real-time traffic information. That real-time traffic information will include information on lane closures, detours, delays, access to adjacent land uses, “businesses are open” signing, and other signing and information to assist travelers in navigating through and in construction areas. Key components of this system will include, but not be limited to: Fixed changeable message signs Portable changeable message signs Ground-mounted signs Automated work zone information systems Highway advisory radio Lane closure website Department highway information network Bicycle and pedestrian information Commute Smart website Incident Management. Effective incident management will ensure that incidents in construction areas are cleared quickly and do not lead to substantial delays for the traveling public through work zones. Incident management includes, but is not limited to: Construction				Study/Reval 24 approved on 08/29/16. Amendment #2 to the Ramp Closure Study/Reval 26 approved on 10/10/2016.					

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	Zone Enhanced Enforcement Program (COZEEP) Freeway service patrol for construction Traffic surveillance stations Transportation Management Center Unit 370 Traffic management team Towing services Construction Strategies. The Final TMP will include procedures to lessen the effect of typical construction activities and will include, but not be limited to, consideration of the following: Conflicts with other projects and special events Construction staging alternatives Mainline lane closures Local road closures Ramp/connector closures Pedestrian and bicycle detours and facility closures Traffic control improvements Coordination with other projects Project phasing Traffic screens Truck traffic restrictions Demand Management. Temporarily reducing the overall traffic volumes on the project segments of State Route 91 (SR-91) and Interstate 15 (I-15) could reduce the short-term adverse effects of construction on traffic operations. The Final TMP will include, but not be limited to, the following strategies that could reduce vehicular demand in the study area during project construction: Rideshare incentives Transit services Shuttle services Variable work hours/telecommuting High-occupancy vehicle (HOV) lanes/ramps Park-and-ride lots Alternate Route Strategies. The Final TMP will provide strategies for notifying motorists, pedestrians, and bicyclists, especially interregional commuters, of planned construction activities. This notification will allow travelers to make informed decisions about their travel plans, including the consideration of possible alternate routes. The Final TMP will consider the development of alternate routes for motorists to address the following: Mainline lane closures Ramp/connector closures Local road closures Temporary highway or shoulder use Local street improvements Temporary detours and closures of bicycle and pedestrian facilities Traffic signal coordination RCTC's Resident Engineer will ensure that the measures in the Final TMP are properly implemented by the design/build contractor prior to and during construction.								
T-2	Management of Ramp Closures. During final design, RCTC's Project Engineer will direct a qualified environmental planner to develop the Final Ramp Closure Study to address specific short-term impacts	Final EIR/EIS	Design Builder	Final design/ construction	Draft Ramp Closure Study completed by Parsons Brinkerhoff in January of 2010, and is being utilized by the Design Builder as final.	11/6/2016	AT	Overall 95% Complete and will remain so until project	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	associated with ramp closures longer than 10 days during construction. The objectives of the Final Ramp Closure Study will be to: Minimize inconvenience to the traveling public.; Minimize closures.; Avoid or minimize concurrently multiple closures where possible.; Coordinate closures as needed with other projects and activities. Prior to and during construction, RCTC's Resident Engineer will ensure that the measures included in the Final Ramp Closure Study are properly implemented by the design/build contractor.				Per RCT-AWJ-LTR-0139, Caltrans and RCTC granted the DB permission to use the draft report only if the DB provides a memorandum stating that ramp closures in the draft study will remain unchanged. If any changes do occur, the Design Builder will provide a new Ramp Closure Study. ReValidation 13 - Approved 7/6/15 Caltrans approved the September 2015 Ramp Closure Study October 16, 2015. Amendment #1 to the Ramp Closure Study/Reval 24 approved on 08/29/16. Amendment #2 to the Ramp Closure Study/Reval 26 approved on 10/10/2016.			completion; however, 100% complete for Initial Phase		
T-3	Fair Share Contributions. RCTC's Project Manager will ensure that RCTC pays the fair share contribution for the project-related impacts at area intersections. Those fair shares are shown by intersection in Table T-3.1. The recommended improvements include additional turn and through lanes. Summaries of the improved intersection delays and levels of service (LOS) are provided in Tables T-3.2, T-3.3, and T-3.4 for 2015 with the Initial Phase of Alternative 2, Design Year 2035 with Alternative 1, and Design Year 2035 with Alternative 2 conditions, respectively.	Final EIR/EIS	RCTC	During Construction	For the initial phase, local street improvements are included as part of RFC plans. Co-op agreement with the City of Corona, for project improvements, has been executed.	11/16/17; 1/31/28	AT; JLS	100% complete for Initial Phase	X	
T-4	During final design, the RCTC Project Engineer will ensure that the final design and project specifications for the widened areas in the undercrossings on SR-91 and I-15 include appropriate lighting for vehicles and pedestrians. The RCTC Project Engineer will also assess the need for additional lighting in the original parts of the undercrossings in the event the longer undercrossings result in the need for additional lighting in	Final EIR/EIS	RCTC/Design Builder	Final design/ construction	Lighting measures associated with this commitment are incorporated in all final design packages. Coordination with the City of Corona further supports compliance. On 2/3/17 Nelson confirmed all their concerns regarding lighting at	2/3/17; 7/10/17	AT; AT	100% complete for Initial Phase	X	

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	those areas. That additional lighting, if any, will also be shown in the project specifications. The RCTC Project Engineer will have any lighting considered at Coal Canyon reviewed and approved by the Project Biologist prior to incorporation in the project specifications to ensure the lighting does not affect the use of Coal Canyon as a wildlife crossing. During construction, the RCTC Resident Engineer will require the design/build contractor to implement the lighting in undercrossings as shown in the project specifications.				undercrossings have been resolved. Additional lighting was installed at both E. Grand and 91/71 undercrossings.					
V-1	Structure Elements. To address adverse impacts of the project structures, the Project Engineer will direct a qualified landscape architect to ensure that the final project design incorporates the mitigation and minimization elements A–D, below, and that these enhancements to structures are incorporated in the design and construction of sound walls, retaining walls, and bridge elements and will not be “follow-up” enhancements. During construction, RCTC’s Resident Engineer will ensure that the design/build contractor constructs the retaining and sound walls, medians, bridges, and other structures consistent with aesthetic and design features included in the project specifications. RCTC’s Resident Engineer will ensure that those aesthetic and design features are constructed during the construction phase when the impact occurs. A. Sound walls in low-density, developed areas or those fronting private property will be heavily textured (i.e. split-face or fractured rib) and integrally colored to minimize reflected glare and visual mass. Sound walls facing public-use areas (parks, streets, etc.) will incorporate textures and color as above plus site-specific aesthetic features (local or historical references) to minimize/mitigate impacts to community character and to restore a “sense of place.” Specific color selection for sound walls will be determined by the 215/91 Corridor Master Plan. B. Retaining walls (including walls associated with bridge structures) will be heavily textured (i.e., split-face or fractured rib) to minimize glare and visual mass. Retaining walls facing public use areas (parks, streets, etc.) over 9 feet (ft) high will be heavily textured (i.e., split-face or fractured rib) and include site-specific	Final EIR/EIS	RCTC/Design Builder	During construction	Draft PALM approved in February 2015 and aesthetic concepts are being implemented in Final Design Plans. Design packages approved as follows: Package A - 3/9/2015 Package B - 3/3/2015 Package C - 2/24/2015 Package D - 3/2/2015 Package E - 2/28/2015 Package F - 12/5/2014 Package G - 12/19/2014 Design packages final approvals: Package A - 1/18/16 Package B - 5/16/17 Package C - 5/17/17 Package D - 5/17/17 Package E - 5/17/17 Package F - 5/18/17 Package G - 5/18/17 Vines were incorporated where possible - Wall M-1a on Frontage Road and Wall W-1 at the Main Street eastbound on-ramp. Vines were not possible at all sound wall locations because : 1. Paving associated with the wall, either the wall was sitting above a	2/9/2017	AT	Overall 90% Complete; however, 100% complete for Initial Phase	X	

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	aesthetic features (local or historical references). Color (integral or applied) is not required for retaining walls. C. In addition to texture and color as described in A and B, above, sound walls and retaining walls with low-density development or recreational viewer groups will include planting of trees or trees and shrubs, and vines at the base of the walls (non-motorist side) to minimize loss of visual unity. Plantings will be local native species or ornamental species that require no irrigation after establishment. These plantings will not require permanent irrigation. D. Slope paving in all areas with bicyclist and pedestrian viewers will include texture (i.e. stamped slate). In urban areas, slope paving will direct a qualified landscape architect to incorporate site-specific aesthetic features in addition to texture. Texture and pattern will be used to minimize the visual impacts of increased hard surface, and reinforce community identify, offsetting reduced community connectivity associated with increased bridge widths.				retaining wall, barrier, or adjacent to paving. 2. Lack of maintenance access, mostly to the back side of walls that were on grade. 3. Inability to get irrigation to the walls (along the properties along the Frontage Road). 4. Other project structures interfered with the planting area. Reval 29 approved 12/14/2017					
V-2	Highway Planting: RCTC's Project Engineer will direct a qualified landscape architect to ensure that replacement planting to mitigate the loss of existing landscaping is included in the final design. Replacement planting will be funded with the project's construction and will include no less than 3 years of plant establishment. All planting must be reviewed and approved by the Caltrans District 8 Landscape Architect. RCTC's Project Engineer will ensure that the replacement planting is under construction within 2 years of acceptance of the highway contract that damaged or removed the existing planting. RCTC's Project Engineer will direct a qualified landscape architect to ensure the project plans show that where plantable right-of-way is reduced (as at Main Street), replacement planting will be trees, shrubs, vines, ground cover, permanent irrigation, and enhanced structural elements. Enhanced structural elements will minimize the impact of reduced planting areas. Enhanced structural elements will include enhanced pedestrian facilities (such as pavement treatments, graphics, or above-standard decorative pedestrian lighting) and may incorporate community entry features into the structures.	Final EIR/EIS	Design Builder	During construction	Draft PALM approved by RCTC in February 2015. Design plans include highway replacement planting. Additional aesthetic structural features are being added to project areas where plantable right of way is reduced (Corona gateway areas). Trees will be planted after landscaping plans are approved. Design packages final approvals: Package A - 1/18/16 Package B - 5/16/17 Package C - 5/17/17 Package D - 5/17/17 Package E - 5/17/17 Package F - 5/18/17 Package G - 5/18/17	5/22/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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	RCTC's Project Engineer will direct a qualified landscape architect to ensure that the project plans show that where plantable right-of-way is eliminated (as at residential areas on both sides of State Route 91 [SR-91] between just east of Lincoln Boulevard to approximately 400 ft west of East Grand Boulevard), the loss will be mitigated by off-site planting. Planting of street trees or other approved planting such as vines with permanent irrigation in City right-of-way such as at the base of retaining walls at Bollero Place and the 600 to 700 block of West Second Street will minimize the loss of existing landscape. The off-site tree planting will minimize the visual presence of the widened adjacent mainline. Replacement of existing trees by new street trees will be at a 1:1 (new tree to existing tree) ratio. To minimize the visual loss of the mature existing trees, these mitigating/replacement street trees will be planted at no less than 36 in box size. RCTC's Project Engineer will direct a qualified landscape architect to ensure that where plantable right-of-way is eliminated without the prospect of site-adjacent mitigation (as at the industrial areas just east of East Grand Boulevard or the above residential areas if street planting is not accepted by the City), the loss will be mitigated by planting within the project limits. This planting will be at a 4:1 (new tree to existing tree) ratio. If vehicle recovery distances prohibit tree planting in any selected area, mitigation planting may be achieved at a ratio of 10 new shrubs to 1 existing tree. For this mitigation planting, all trees will be no less than 15-gallon size and all shrubs will be no less than 5-gallon size. RCTC's Project Engineer will direct a qualified landscape architect to ensure that the project plans show that all mitigation planting within the State right-of-way, where appropriate, will include native tree, shrub, and vine species, and include temporary irrigation for establishment. Replacement planting will include permanent irrigation. The Project Engineer will refer to the Project Development Procedures Manual (PDPM) for the California Department of Transportation's (Department) policy regarding planting, and Measures V-2 and V-3 above. RCTC's Resident Engineer will ensure that the design/build contractor properly implements the									

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	landscaping and structural treatment components described in Measures V-1 through V-4.									
V-3	Light and Glare. To reduce glare, RCTC's Project Engineer will ensure that the project plans specify lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the right-of-way. The lighting plans will require the review and approval of the Department and applicable cities and counties before construction to assure compliance with their applicable policies regarding public street lighting. RCTC's Project Engineer will coordinate with the City of Corona and other applicable cities and counties to ensure that sufficient lighting is provided as part of the improvements to local streets within the project limits, consistent with applicable local policies and street lighting codes. Increased glare from walls, structures and pavement will be minimized by measures identified in V-2 and V-3. RCTC's Resident Engineer will ensure that the project lighting plan included in the project specifications is implemented by the design/build contractor during construction.	Final EIR/EIS	Design Builder	During construction	Final design plans include placement/specifications of lighting that is compliant Caltrans and local standards/policies. Approved as of April 2015 as part of RFC packages.	12/1/2016	AT	100% complete for Initial Phase	X	
V-4	Graffiti Reduction, Removal and Control. During final design, the RCTC Project Engineer will incorporate vine planting on all sound barriers in the project specifications to reduce the potential for graffiti and to soften the appearance of those walls, consistent with the Highway Design Manual, Index 902.3(5). After the construction of each sound barrier, the RCTC Resident Engineer will require the design/build contractor to install vine planting consistent with the project specifications and the planting requirements in Measure V-3. The Department and the City of Corona have existing ongoing maintenance programs for the control and removal of graffiti. Those programs would apply to all new and modified structures in Alternatives 1 and 2, on public and private property, as appropriate. Key components of those programs are: Department Program. Chapter D1, Litter, Debris, and Graffiti (July 2006), in the Caltrans Maintenance Manual (Volume I, January 2011) describes the Department's maintenance program for the control and removal of graffiti. Key program components applicable to the project features in Alternatives 1 and 2 are: Use of recycled paint for	Final EIR/EIS	Design Builder/RCTC	Final design/ construction	PALM approved on February 2015. Design Builder including plantings on sound walls as part of Landscape Plans. Vines were incorporated where possible - Wall M-1a on Frontage Road and Wall W-1 at the Main Street eastbound on-ramp. Vines were not possible at all sound wall locations because : 1. Paving associated with the wall, either the wall was sitting above a retaining wall, barrier, or adjacent to paving. 2. Lack of maintenance access, mostly to the back side of walls that were on grade. 3. Inability to get irrigation to the walls (along the properties along the Frontage Road).	8/25/17; 9/15/17; 12/14/17	AT; AT; JLS	100% complete for Initial Phase	X	

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	various structures and matching paint used to cover graffiti with the original paint color on the structure. Use of physical devices such as rat guards, sign hoods, razor wire, and glare screen patches to limit access to facilities targeted by taggers. Replacement of ground-mounted signs with signs that have protective coatings or application of protective coatings to signs. City of Corona Program. Chapter 9.30, Graffiti Abatement Procedure, in the Corona Municipal Code, describes the City's procedures related to the prohibition of graffiti in the City and the graffiti removal process. Methods for the removal of graffiti include power washing, gel removers, and painting.				4. Other project structures interfered with the planting area. Revalidation 29 approved 12/14/2017					
V-5	Construction Plan. To address adverse impacts associated with views of construction access and staging areas, the Riverside County Transportation Commission's (RCTC) Resident Engineer will require the design/build contractor to construct the project in accordance with California Department of Transportation (Caltrans) Standard Construction Specifications, including appropriate measures to address visual impacts during construction.	Final EIR/EIS	RCTC/Design Builder	During construction	Visual mitigation measures are being implemented, and will continue to be implemented until project completion.	12/1/2016	AT	100% complete for Initial Phase	X	
CR-1	Replacement of Trees in the Grand Boulevard Historic District. The requirements of Measure V-3 related to highway planting would apply to the replacement of the 18 trees in the Grand Boulevard Historic District. In addition, the following will be implemented during the design/build phase regarding the removal and replacement of the 18 trees in the Grand Boulevard Historic District: The RCTC Project Engineer will require the design/build contractor to replace all trees removed from the Historic District at a ratio of 1:1. The RCTC Project Engineer will require the design/build contractor to install replacement trees that are compatible with the existing plantings in the Grand Boulevard Historic District and with the overall character of the Historic District, and that the replacement trees be identified in consultation with the City of Corona, the California Department of Transportation (Department) District Landscape Architect, and a Professional Qualified Staff Architectural Historian from the District. The RCTC Project Engineer will require the construction contractor to install all replacement trees no later than the completion of	Final EIR/EIS	RCTC	Final design/ construction	23 trees have been identified as contributing to the historic district that will be replaced per coordination with City of Corona and as applicable RCTC and Caltrans. June 2014 memo and location map satisfactorily documents which trees will be removed. Coordination will occur for identifying location and type of replacement trees within City of Corona ROW. Additional trees were removed due to design change and utility relocations. Two queen palms have been added (May 2017) to the Package E plan set. Three California Fan Palms were added to the Historic District to complete replacement requirements.	5/19/17; 9/12/17; 10/6/17	AT; AT; AT	100% complete for Initial Phase	X	

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	construction activities in the Grand Boulevard Historic District.				To meet the City's/Historical Society's request for larger trees, RCTC directed 20-25' of clear brown trunk to be planted on E. Grand Ave, between 2nd and 3rd Street. The three additional trees were planted 9/27/17.					
CR-2	Discovery of Cultural Materials. If cultural materials are discovered during construction, the RCTC Project Engineer will require the design/build contractor to divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find.	Final EIR/EIS	RCTC	During construction	Currently being implemented for pre-construction ground disturbance activities.	11/3/2016	AT	100% complete for Initial Phase	X	
CR-3	Discovery of Human Remains. If human remains are discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains and the County Coroner shall be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendant (MLD). At that time, the Department's District 8 Environmental Branch Chief or the District 8 Native American Coordinator (Gary Jones, [909] 383-7505) will be contacted so 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.	Final EIR/EIS	RCTC/Design Builder	During construction	To date, human remains have not been encountered on the project site.	11/3/2016	AT	100% complete for Initial Phase	X	
CR-4	During final design, the RCTC Project Manager and Department Cultural 1) Resources Professionally Qualified Staff will coordinate with representatives from the Pechanga Band of Mission Indians to identify areas in the project disturbance limits considered sensitive to the Tribe. 2) During final design, the RCTC Project Engineer will identify on the project plans all areas that require monitoring by a Native American Monitor during site preparation, disturbance, and grading. 3) During all site preparation, disturbance, and grading, the RCTC Resident Engineer will require the design/build contractor to have a Native American monitor present and conducting monitoring activities in all areas identified by	Final EIR/EIS	RCTC/Design Builder	Final design	At the June 2014 Environmental Task Force it was identified that Pechanga lands were outside of the project area. No monitoring is necessary.	8/1/2015	SB	100% complete for Initial Phase	X	

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	the Pechanga Band of Mission Indians as sensitive, as shown in the project specifications.									
CR-5	Condition for the Grand Boulevard Historic District: Acorn-Style Streetlights. The following condition will be implemented during the project design/build phase regarding the removal, temporary storage, and relocation of up to seven existing acorn-style streetlights within the project disturbance limits in the Grand Boulevard Historic District: - The Riverside County Transportation Commission (RCTC) Project Engineer will require the design/build contractor to clearly indicate on the final plans the locations of up to seven acorn-style streetlights in the project disturbance limits that are to be removed at the beginning of construction in those areas and to identify the locations where the removed streetlights would be reinstalled. - The RCTC Resident Engineer will require the design/build contractor to remove and, as necessary, dismantle the affected acorn-style streetlights and to place them in containers appropriate for storing those fixtures during the project construction period. - The RCTC Resident Engineer will require the design/build contractor to store the containers holding the acorn-style streetlights in a secure location protected from public access and weather. - The RCTC Project Engineer will require the design/build contractor to verify that the locations identified for the reinstallation of the affected streetlights are acceptable to the City of Corona and consistent with the City's requirements for the siting of streetlights. - The RCTC Resident Engineer will require the design/build contractor to reinstall the acorn-style streetlights at the locations designated in the final plans when no further construction/disruption will occur at those locations, as follows: - The streetlights will be reinstalled as close to their original locations as possible, based on the project design and available space, in a manner consistent with the other acorn-style streetlights in the Grand Boulevard Historic District and with the City of Corona requirements for the siting of streetlights. - If any of the acorn-style streetlights cannot be reinstalled at or near their original locations, they will be	Final EIR/EIS	Design Builder	Final design/ construction	During July 2014, ten (10) acorn-style street lights were satisfactorily removed from within the planned project limits. AWJV is storing 5 poles and has transferred 5 poles to City of Corona. Documentation is on file for compliance verification with this portion of this measure. On October 29, 2015 Andrew Walters, Caltrans Principal Architectural Historian, approved the Acorn-Style Decorative Light Design Plan. As of Dec. 2016, 5 poles had been re-installed. The City will return the remaining 5 poles and direct location for RCTC/Contractor to install. Acorn-style light replicas (5) were installed at the East Grand Ave undercrossing the first week of July 2017. On 7/7/17, a site visit with Andrew Walters was performed. On 7/18/17 an e-mail addressed to Andrew Walters was sent to document the installation and location of those lights.	2/3/17; 7/31/17	AT; AT	100% complete for Initial Phase	X	

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	reinstalled elsewhere within the boundaries of the Grand Boulevard Historic District, focusing on locations where acorn-style lights have previously been removed as long as those locations are consistent with the historic spatial relationships of the Historic District and with the City of Corona requirements for the siting of streetlights; and - If the lights cannot be reinstalled as described above, the RCTC Project Engineer will consult with the City of Corona to identify alternative locations. - The RCTC Resident Engineer will require the construction contractor to have an architectural historian on site during the removal, dismantling, and reinstallation of the acorn-style streetlights									
WQ-1	Prior to and during construction, Riverside County Transportation Commission's (RCTC) Resident Engineer will require the design/build contractor to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent permit, as they relate to the project construction activities. This will include submission of the Permit Registration Documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (SWRCB) at least 14 days prior to the start of construction activity. The SWPPP will meet the requirements of the Construction General Permit and will identify potential pollutant sources associated with construction activities; identify non-storm water discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants associated with the construction site. The BMPs identified in the SWPPP will be implemented during project construction. A Notice of Termination (NOT) will be submitted to the SWRCB on the completion of construction and the stabilization of the site. RCTC's Resident Engineer will also require the design/build contractor to implement SWRCB Resolution No. 2001-046 requiring sampling and analysis during project construction.	Final EIR/EIS	RCTC	Prior to construction; during construction	SWPPP completed in November 2013 and NOI sent to RWQCB in December 2013. Design Builder implementing BMP and completing reporting as needed. NOI Approval received 11/25/13	1/2/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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WQ-2	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to comply with the provisions of the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimums) Threat to Water Quality, Order No. R8-2009-0003, NPDES No. CAG998001, as they relate to discharge of non-storm-water dewatering wastes for the project. This will include submitting to the Santa Ana Regional Water Quality Control Board (RWQCB) an NOI at least 60 days prior to the start of construction, notification of discharge at least 5 days prior to any planned discharges, and monitoring reports by the 30th day of each month following the monitoring period.	Final EIR/EIS	RCTC/Design Builder	Prior to construction; during construction		8/10/2015	SB	100% complete for Initial Phase	X	
WQ-3	Prior to dewatering activities, RCTC's Resident Engineer will provide the design/build contractor with a copy of the discharge authorization letter issued by the RWQCB Executive Director.	Final EIR/EIS	RCTC	Prior to construction		9/30/2016	AT	100% complete for Initial Phase	X	
WQ-4	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to follow the procedures outlined in the California Department of Transportation (Caltrans) Storm Water Quality Handbooks, Project Planning and Design Guide (July 2010 or subsequent issuance) for implementing Design Pollution Prevention and Treatment BMPs for the project. This will include coordination with the Santa Ana RWQCB with respect to the feasibility, maintenance, and monitoring of Treatment BMPs as set forth in the Department's Statewide Storm Water Management Plan (SWMP, May 2003 or subsequent issuance). RCTC's Resident Engineer will also require the design/build contractor to comply with other provisions identified in the NPDES Permit, Statewide Storm Water Permit, and Waste Discharge Requirements for the State of California, Department of Transportation (Order No. 99-06-DWQ, NPDES No. CAS000003). RCTC's Resident Engineer will also require the design/build contractor to comply with other provisions identified in the NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of	Final EIR/EIS	Design Builder	Prior to construction; during construction	Permanent Stormwater BMPs are included as part of the Final Design Plans. RFC packages were completed by April 2015.	1/2/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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	Riverside, and the incorporated cities of Riverside County within the Santa Ana Region (Order No. R8-2010-0033, NPDES No. CAS618033); and for the County of Orange, Orange County Flood Control District, and the incorporated cities of Orange County within the Santa Ana Region (Order No. R8-2009-0030), as applicable.									
GEO-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer or a Project Geotechnical Engineer or Project Geologist under contract to RCTC will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards such as slope instability, settlement, liquefaction, or related secondary seismic impacts that may be present along the project segments of State Route 91 (SR-91) and Interstate 15 (I-15). This report will require review and approval by the California Department of Transportation (Department). The performance standard for this report will be the geotechnical design standards of the State of California and the Department, as they apply to the project features and structures. RCTC will submit the design-level geotechnical report to the Department for review and approval during final design. The report will include but not be limited to: Evaluation of expansive soils and recommendations regarding construction procedures and/or design criteria to minimize the effect of these soils on the construction of the project and to minimize effects related to expansive soils on project facilities in the long term. Identification of potential liquefiable areas within the project limits and recommendations for mitigation. Evaluation of the corrosion potential of soils along those segments of the project alignment not previously tested (i.e., areas along I-15 and the westbound side of SR-91). Demonstration that no retaining walls or excavations will occur in the existing landslide areas, or that landslide stabilization measures independent of the retaining wall design are included in the final project design. Demonstration that the design of all retaining walls is geotechnically suitable for project area soils, and verification that project design has considered and addressed the possibility of scour associated with the Santa Ana River. Demonstration that side slopes can be designed and graded so that surface erosion of the	Final EIR/EIS	Design Builder	Final design	Geotechnical Execution Plan prepared by DB and approved 11/12/2014. Design level geotechnical reports have been prepared for bridges, walls, and roadway packages by the Design Builder Geotechnical Engineer.	9/30/2016	AT	100% complete for Initial Phase	X	

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	engineered fill is not increased compared to existing, natural conditions. RCTC's Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications. RCTC's Resident Engineer will require the design/build contractor to implement the measures recommended in the design-level geotechnical report as included in the project specifications.									
GEO-2	RCTC'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 RCTC prior to and during construction to confirm that the geotechnical/geologic recommendations from the design-level geotechnical report and standard design and construction practices are fulfilled by the design/build contractor, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will submit weekly reports to RCTC and the Department during all project-related grading, excavation, and construction activities.	Final EIR/EIS	Design Builder	During construction	A Quality Management Plan has been prepared and approved by RCTC on October 17, 2013. Amendments are completed on an ongoing basis.	10/9/2017	AT	100% complete for Initial Phase	X	
GEO-3	During final design, if blasting is required, RCTC's Project Engineer will require the design/build contractor to prepare a blasting plan to minimize potential 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 will include, but are not limited to, the following: hours of blasting activity, notification to adjacent property owners, noise and vibration, and dust control. RCTC's Resident Engineer will require the design/build contractor to implement the blasting plan prior to and during any blasting during construction.	Final EIR/EIS	Design Builder	Final design	No blasting is required for the project.	8/1/2015	SB	100% complete for Initial Phase	X	
PAL-1	Following preparation of suitable construction drawings and elevations and during final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will require the Designated Principal Paleontologist under contract to RCTC to prepare a Paleontological Mitigation Plan (PMP). The PMP will provide guidance for developing and implementing	Final EIR/EIS	RCTC/Design Builder	Final design/ construction	Paleontological Resource Monitoring/Mitigation Plan approved July 3, 2014.	8/1/2015	SB	100% complete for Initial Phase	X	

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	paleontological mitigation efforts, including field work, laboratory methods, and curation. This PMP will be consistent with guidelines provided in the Department's Standard Environmental Reference (SER), Environmental Handbook, Volume I, Chapter 8, Paleontology, the Counties of Riverside and Orange, and the Society of Vertebrate Paleontology (SVP), and will be specifically tailored to the resources and sedimentary formations in the disturbance limits. The part of the PMP that covers excavation will include but not be limited to: Prior to any ground disturbance, RCTC's Designated Principal Paleontologist or his/her representative will attend a meeting with the design/build contractor to explain the likelihood for encountering paleontological resources during construction, what resources may be discovered, and the methods that will be employed if anything is discovered.									
PAL-1 (cont'd)	RCTC's Principal Paleontologist will conduct a preconstruction field survey in areas identified as having high paleontological sensitivity after vegetation and any pavement are removed, followed by salvage of any observed surface paleontological resources prior to the beginning of additional ground-disturbing activities. The survey will be conducted by the Principal Paleontologist or their representative who is qualified to identify vertebrate, invertebrate, and plant fossils. During ground disturbance, grading, and excavation, RCTC's Project Engineer will require the design/build contractor to retain a Principal Paleontologist. The Principal Paleontologist will provide a Paleontological Monitor who is qualified to recognize and professionally collect vertebrate, invertebrate, and plant fossils. The qualified Paleontological Monitor will initially be present on site on a full-time basis whenever these types of construction activities occur in sediments that have a high paleontological sensitivity rating and also on a spot-check basis in sediments that have a low sensitivity rating. Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating. Any reduction or modification in scheduling of monitoring will be determined by the Principal Paleontologist and RCTC's Resident Engineer.	Final EIR/EIS	Design Builder	Prior to construction	Principal Paleontologist, Joe Stewart, was retained. His contact information is: URS Corporation 999 Town and Country Road Orange, CA 92868 (626) 710-7817 Fossil Discovery #1 Area 3, USACE Lic 3 cut slope - fossil discovery and recovery. August 24 through September 6, 2014. Discovery comprised three vertebrae, three ribs, and small portion of skull of a bison. Material exposed and covered with plaster cast and removed from the cut slope. Specimens were retrieved from RCTC in April 2017 by Principal Paleontologist for preparation. The Paleontological Mitigation Report: SR-91 CIP, Section 3 discusses how the requirements contained in this measure were met.	10/3/17; 10/17/17	AT; AT	100% complete for Initial Phase	X	

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	The qualified Paleontological Monitor will inspect fresh cuts and/or spoils piles to recover paleontological resources. That monitor will be empowered to temporarily divert construction equipment away from the immediate area of the discovery. The monitor will be equipped to rapidly stabilize and remove fossils to avoid prolonged delays to construction schedules.				Paleontological Mitigation Report was submitted to Caltrans 10/4/17. Concurrence was received on 10/17/17 (from both Marie Petry and Bahram Karimi)					
PAL-1 (cont'd)	If large mammal fossils or large concentrations of fossils are encountered, RCTC's Resident Engineer will require the design/build contractor to make heavy equipment available to assist in the removal and collection of large materials. Localized concentrations of small (or micro-) vertebrates may be found in all native sediments. Therefore, the qualified Paleontological Monitor will occasionally spot-screen native sediments through one-eighth- to one-twentieth-inch mesh screens to determine whether microfossils are present. If microfossils are encountered, a standard sediment sample (up to 3 cubic yards or 6,000 pounds) will be collected and processed through one-twentieth-inch mesh screens to recover additional fossils. Processing of large bulk samples is best accomplished at a designated location within the project limits that will be accessible throughout the duration of construction but will also be away from any cut or fill areas or active construction areas. Processing is usually completed concurrently with construction and with the intent to have all processing completed before, or just after, project completion. A small corner of a staging or equipment parking area is an ideal location for this activity. If water is not available, the location should be accessible for a water truck to occasionally fill containers with water.	Final EIR/EIS	Design Builder	During construction	Equipment and resources were made available to assist in the removal of resources. Area 3, USACE Lic 3 cut slope - fossil discovery and recovery. August 24 through September 6, 2014. Discovery comprised three vertebrae, three ribs, and small portion of skull of a bison. Material exposed and covered with plaster cast and removed from the cut slope. The Paleontological Mitigation Report: SR-91 CIP, Section 6 discusses how the requirements contained in this measure were met. Paleontological Mitigation Report was submitted to Caltrans 10/4/17. Concurrence was received on 10/17/17 (from both Marie Petry and Bahram Karimi)	10/3/17; 10/17/17	AT; AT	100% complete for Initial Phase	X	
PAL-1 5th sub-point	RCTC's Project Engineer will require the Principal Paleontologist or their representative to prepare any recovered specimens to the point of identification and permanent preservation. This includes sorting any washed mass samples to recover small invertebrate and vertebrate fossils, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and storage cost, and the addition of approved chemical hardeners/stabilizers to fragile specimens. This is best accomplished at a	Final EIR/EIS	RCTC	During construction	Paleontologist to prepare specimen prior to curation in museum - Western Science Center in Hemet, CA. Specimens were obtained from RCTC in April 2017 by Principal Paleontologist for preparation. Preparation was completed in September of 2017 and processing	10/4/17; 10/17/17	AT; AT	100% complete for Initial Phase	X	

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	designated laboratory with access to fossil preparation tools, magnifying equipment, storage boxes and vials, and chemical hardeners. Processing of fossils through the lab is best accomplished concurrently with construction, especially if numerous fossils are being collected.				of the deed of gift began in October of 2017. Paleontological Mitigation Report was submitted to Caltrans 10/4/17. Concurrence was received on 10/17/17 (from both Marie Petry and Bahram Karimi)					
PAL-1 6th sub-point	Specimens will be identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage. Repository institutions usually charge a one-time fee based on volume, so removing surplus sediment is important. The repository institution may be a local museum or university that has a curator who can retrieve the specimens on request. RCTC's Project Manager and the California Department of Transportation (Department) will require that a draft curation agreement be in place between the Principal Paleontologist and an approved curation facility prior to the initiation of paleontological monitoring and mitigation activities for the project. RCTC's Resident Engineer will require the design/build contractor to comply with the provisions of the PMP during all ground disturbance, grading, and excavation activities. This will include appropriate coordination with RCTC's Designated Principal Paleontologist and the provision of qualified paleontological monitors consistent with the provisions of the PMP. After the completion of all ground disturbance and grading, RCTC's Project Manager will require the design/build contractor to have the design/build contractor's Designated Principal Paleontologist to prepare a Final Paleontological Mitigation Report (PMR) that summarizes the project area investigated, the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the scientific significance of the curated collection. RCTC's Project Manager will retain a copy of the report for the RCTC project files and will provide a copy of the report to the Department.	Final EIR/EIS	RCTC/Design Builder	During construction	Specimens were obtained from RCTC in April 2017 by Principal Paleontologist for preparation. Curation Agreement with the Hemet Western Science Center and Deed of Gift were signed by Caltrans (Bahram Karimi) on July 17, 2017. Preparation was completed in September of 2017 and processing of the deed of gift began in October of 2017. Paleontological Mitigation Report was submitted to Caltrans 10/4/17. Concurrence was received on 10/17/17 (from both Marie Petry and Bahram Karimi)	10/4/17; 10/17/17	AT; AT	100% complete for Initial Phase	X	
HW-1 First Sub-point	A Phase I ESA was conducted for the Mobil No. 18-FLM site (616 Paseo Grande Street, Corona, California), and a Phase I ESA and Phase II Site Investigation were	Final EIR/EIS	Design Builder	Final design; prior to disturbance	Additional investigation completed. The Mobile No. 18-FLM site memo revised on November 2014 is in	9/13/2017	AT	100% complete for Initial Phase	X	

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	conducted for the Honda Cars of Corona site (231 South Lincoln Avenue, Corona, California) as part of the DSI, in accordance with ASTM Standard E 1527-05. The DSI identified Recognized Environmental Conditions (RECs) associated with on-site releases. Based on the results of the DSI, the following measures will be implemented for these two sites of potential environmental concern: Honda Cars of Corona Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to consult with regulators, confirm that the final confirmation sampling has been completed at the site, and that contaminant investigation for the site has received regulatory site closure. In addition, prior to the completion of final design, the RCTC Resident Engineer will require the design build/build contractor to properly abandon all monitoring wells and vapor extraction wells on the site in accordance with regulatory requirements.				compliance with measure HW-1. Honda Cars of Corona: approved July 2014. Mobil Site: approved December 2014. Recommendations provided on managing of hazardous waste soil. Attachments 3 & 6 of Final Draft 06.17.14 document coordination with agencies and closure/well-abondenment in accordance with regulatory requirements.					
HW-1 Second Sub-point	Mobil No. 18-FLM Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to conduct further investigation on contaminants in soils on site after a work plan is prepared and additional information is available.	Final EIR/EIS	RCTC	Final design; prior to disturbance	Additional investigation completed. Mobil Site: approved December 2014. Recommendations provided on managing of hazardous waste soil.	2/3/2017	AT	100% complete for Initial Phase	X	
HW-2	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to conduct site investigations for any new release sites that are within the project right-of-way. RCTC's Resident Engineer will require the design/build contractor to conduct these site investigations in compliance with applicable federal, State, and local regulations and in accordance with ASTM Standard E 1527-05. If contaminants are determined to be present during the site investigation, RCTC's Resident Engineer may require the design/build contractor to prepare one or more of the following specialized reports: Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report.	Final EIR/EIS	Design Builder	Final design; prior to disturbance		11/1/2016	AT	100% complete for Initial Phase	X	
HW-3	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to conduct an aerially deposited lead (ADL) study for soil if excavation will exceed 3 feet (ft) below ground surface (bgs) in unpaved locations	Final EIR/EIS	Design Builder	Final design; prior to disturbance	At the June 2014 Environmental Task Force it was identified that Pechanga lands were outside of the project area. No monitoring is necessary.			100% complete for Initial Phase	X	

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	adjacent to the State right-of-way between Gypsum Canyon Road and Magnolia Avenue, or 5 ft bgs in unpaved locations in areas where there would be fiber-optic signage along eastbound State Route 91 (SR-91) starting east of the Weir Canyon Road undercrossing and extending east of the Gypsum Canyon Road undercrossing. During construction, if soils within the project disturbance limits along SR-91 are removed off site, RCTC's Resident Engineer will require the design/build contractor to treat the soils as State hazardous waste and to properly dispose of those soils at an appropriate State-certified landfill facility. In addition, during construction, RCTC's Resident Engineer will require the design/build contractor to test all soils imported on site as fill. RCTC's Resident Engineer will require the design/build contractor to use only clean soils as imported fill on site.				Information to DTSC, including the excavation and transportation plan, has been forwarded. E-mail correspondence dated 2/23/2018 (91 CIP - ADL ECR) reconfirms measure compliance has been completed.					
HW-4	1. Predemolition asbestos and/or LBP surveys were conducted for 21 road structures that will be renovated or demolished during project construction.	Final EIR/EIS	Design Builder	Prior to construction	Surveys were completed as part of the Final environmental documents. Additional hazards testing was conducted for Temescal Wash Bridge and East 6th Street Undercrossing. Leighton Report completed.	2/23/2017	AT	100% complete for Initial Phase	X	
HW-4	2. Based on the results of the ACM surveys of the 21 freeway structures, the SR-91/State Route 71 (SR-71) Separation (Bridge No. 56-0587), East SR-91/North SR-71 Connector Separation (Bridge No. 56-0635), Prado Overhead (Bridge No. 56-0637), West Grand Boulevard Undercrossing (UC) (Bridge No. 56-0445 L/R), El Cerrito Road UC (Bridge No. 56-0558 L/R), and Serfas Club Drive UC (Bridge No. 56-0368 L/R) contain ACMs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's Resident Engineer will require the design/build contractor to have a licensed asbestos contractor properly remove and dispose of asbestos-containing railing brace pads from these structures.	Final EIR/EIS	Design Builder	Prior to construction	Asbestos Abatement Plan completed. 1403 Permit (SCAQMD) obtained August 2014. ACM abatement measures implemented in the field during demolition of listed bridges. Notification to SCAQMD, prior to construction, was provided. Logs attached to AW Memorandum which was transmitted 1/31/18. Documentation was reviewed during 2/5/2018 ECR meeting and it was determined compliance with this measure is complete.	2/5/2017	JLS	100% complete for Initial Phase	X	
HW-4	3. Based on the results of the LBP surveys of the 21 freeway structures, the Main Street UC (Bridge No. 56-0448 L/R), McKinley Street UC (Bridge No. 56-0365),	Final EIR/EIS	Design Builder	Prior to construction	The Leighton Report informs the design/build contractor of the presence of LBPs in structures.	9/13/2017	AT	100% complete for Initial Phase	X	

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	and Buchanan Street Overcrossing (Bridge No. 56-0368) contain LBPs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's Resident Engineer will inform the design/build contractor of the presence of LBPs in those structures. RCTC's Resident Engineer will require the design/build contractor to protect construction workers from exposure to lead dust when disturbing LBP during bridge renovation or demolition activities.				The ERSI Lead Based Paint Removal - Exposure Assessment Plan and Submittal ERSI0016 QA Response #201 detail how construction workers will be protected. LBP measures were implemented in the field during demolition of listed bridges.					
HW-4	4. In addition, a hazardous materials survey identified two areas with potential hazardous materials. Based on the results of the visual hazardous materials survey of the bridges, light fixture components and possible lead metal railing braces may pose an additional concern. These components include: - Light fixtures (some flush-mounted) on the undersides of many of the bridges. At a few of the bridges that cross over the freeway, there are light posts. The light bulbs in these fixtures may contain mercury. - The Temescal Wash Bridge overhead has some metal braces and wire tension cable at joint locations on the underside of the bridge. While no suspected ACMs were observed or sampled at these locations, the presence of metal washers and spacers, which may contain lead, was noted. - Soft metal railing brace pads that may be composed of lead metal were observed at the following bridges: Pierce Street UC (Bridge No. 56-0369 L/R) and Buchanan Street Overcrossing (Bridge No. 56-0368)	Final EIR/EIS	Design Builder	During construction	Locations have been included in hazardous materials survey. Approved Specifications include measures to manage the removal of light fixtures, metal braces, and metal railing brace pads.	11/4/2016	AT	100% complete for Initial Phase	X	
HW-4	5. Therefore, during final design and prior to any disturbance of these facilities and materials, RCTC's Resident Engineer will inform the design/build contractor of the presence and location of the hazardous materials in the freeway structures described above.	Final EIR/EIS	RCTC	Final design; prior to disturbance	RCTC provided Design Builder information regarding the presence of hazardous waste in potential structures. This includes the Phase I and Phase IIs that have been completed by the FED and procurement.	8/21/2015	SB	100% complete for Initial Phase	X	
HW-4	6. Prior to the disturbance of freeway structures, RCTC's Resident Engineer will require the design/build contractor to have asbestos-containing railing brace pads removed and disposed of by a licensed asbestos abatement contractor. If abated, RCTC's Resident Engineer will	Final EIR/EIS	Design Builder	During construction	Design Builder is currently implementing measures for management of ACM during demolition of bridges.	9/30/2016	AT	100% complete for Initial Phase	X	

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	require the design/build contractor to remove non-friable ACMs in accordance with Category II asbestos abatement procedures as defined in Federal Occupational Safety and Health Administration (Fed-OSHA) 29 Code of Federal Regulations (CFR) 1926.1101. However, if mechanical means are utilized for abatement of ACMs, RCTC's Resident Engineer will require the design/build contractor to convert these non-friable materials into a friable state during removal activities and manage these materials under Class I asbestos abatement procedures.									
HW-4	7. Prior to disturbance of freeway structures, RCTC's Resident Engineer will require the design/build contractor to properly test any areas that have not been previously tested, and remove and dispose of any materials from these structures that exceed California Health and Safety Code criteria for hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	Design Builder	Prior to construction	All proposed bridges have been tested for potential hazardous wastes and measures are currently being implemented for management of these wastes.	2/23/2017	AT	100% complete for Initial Phase	X	
HW-4	8. During final design and prior to any ground disturbance, demolition, or renovation activities, RCTC's Project Engineer will require the design/build contractor to conduct predemolition asbestos, LBP, polychlorinated biphenyl (PCB), and/or mercury surveys of any buildings that will be renovated or demolished.	Final EIR/EIS	RCTC	Final design; prior to disturbance	RCTC has completed the Phase I and II for all buildings on acquired properties.	1/6/2017	AT	100% complete for Initial Phase	X	
HW-4	9. During construction, RCTC's Resident Engineer will require the design/build contractor to properly remove and dispose of any materials from these structures that exceed California Health and Safety Code criteria for hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	RCTC	During construction	RCTC's right of way contractor is conducting management and disposal of all ACM and LBP on demolished projects.	1/6/2017	AT	100% complete for Initial Phase	X	
HW-5, Part 1	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to conduct inspections for potential PCBs in utility pole-mounted transformers that will be relocated or removed as part of the project	Final EIR/EIS	Design Builder	Final design; prior to construction	Standard specifications include measures for PCBs. Design Builder is completing inspections of pole mounted transformers for proper handling.	11/4/2016	AT	100% complete for Initial Phase	X	
HW-5, Part 2	RCTC's Resident Engineer will require the design/build contractor to consider leaking transformers a PCB hazard unless tested and confirmed otherwise, and to handle them accordingly.	Final EIR/EIS	Design Builder	Prior to construction	Standard specifications include management of PCBs found within the project site. According to PCM Project Engineer, no leaking transformers have been identified.	11/4/2016	AT	100% complete for Initial Phase	X	

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HW-6	During construction, RCTC's Resident Engineer will require the design/build contractor to test, remove, and dispose of any yellow traffic striping and pavement marking materials in accordance with the California Department of Transportation (Department) Construction Manual, Chapter 7, Section 106.	Final EIR/EIS	Design Builder	During construction	Calstripe submitted lead based striping paint removal work and safety plans. Plans were approved. Striping removal in progress during July. Testing determined grindings comprised lead above threshold. Material will be treated as hazardous waste.	12/1/2016	AT	100% complete for Initial Phase	X	
HW-7	During final design and prior to any dewatering activities, RCTC's Resident Engineer will require the design/build contractor to conduct additional coordination with the Riverside County Department of Environmental Health when groundwater dewatering will occur in the vicinity of contaminated soils or contaminated groundwater sites.	Final EIR/EIS	Design Builder	Final design	Currently, no dewatering activities have been required. Groundwater discharge is regulated by RWQCB. No ground water discharge is currently planned.	9/9/2016	AT	100% complete for Initial Phase	X	
HW-8	During final design and prior to any ground disturbance activities, RCTC's Project Engineer will require the design/build contractor to sample soil adjacent to the Burlington Northern Santa Fe (BNSF) railroad tracks that will be disturbed during construction for the presence of petroleum hydrocarbons, metals, solvents, and other potential contaminants (e.g., polynuclear aromatic hydrocarbons [PNAs], kerosene, ACMs, chlorinated hydrocarbons, pesticides, and herbicides). That testing will determine whether the soils require special handling and disposal during construction. During construction, RCTC's Resident Engineer will require the design/build contractor to properly dispose of all soils exceeding the criteria for State or federal hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	Design Builder	Final design; prior to disturbance	RCTC conducted BNSF ROW soil testing for specified hazardous materials (May, 2014). AWJV submitted evaluation technical memo of BNSF ROW soil testing (July 21, 2014). RCTC - approved as noted, August 8, 2014.	1/25/17; 12/4/17	AT; AT	100% complete for Initial Phase	X	
HW-9	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a site-specific Health and Safety Plan (HASP) by a certified industrial hygienist. The HASP will be based on evaluation of proposed construction activities, the potential hazards identified in the Phase I Environmental Site Assessment and Phase II testing, and any future assessments prepared for the project. The HASP will outline specific procedures for encountering expected and unexpected contaminants. It will include safe work practices, contaminant monitoring, the need for personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties working on site. The HASP will	Final EIR/EIS	Design Builder	Prior to construction	Health and Safety Plan: Completed and approved on October 17, 2013. Implementing plan is ongoing.	12/1/2016	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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	be in compliance with the requirements of 29 CFR 1910 and 1926 and all other applicable federal, State, and local regulations and requirements. During construction, RCTC's Resident Engineer will require the design/build contractor to implement the requirements in the HASP.									
HW-10	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a soils and groundwater Contaminant Management Plan (CMP). The CMP will include procedures for contaminant monitoring and identification as well as temporary storage, handling, treatment, and disposal of hazardous waste and materials in accordance with applicable federal, State, and local regulations and requirements. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to implement the soils and groundwater CMP.	Final EIR/EIS	Design Builder	Prior to construction	Section 5 Health and Safety Plan, of the Project Management Plan (PMP), details procedures for hazardous material handling (start on page 154). Hazardous waste water is discussed on page 231.	10/9/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
HW-11	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a Construction Contingency Plan (CCP) in accordance with the Department's Unknown Hazards Procedures for Construction. The CCP will include provisions for emergency response in the event that unidentified underground storage tanks (USTs), hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The CCP will address UST decommissioning, field screening, contaminant materials testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. RCTC's Resident Engineer will require the design/build contractor to implement the CCP during all construction activities. During construction, RCTC's Resident Engineer will require the design/build contractor to cease work immediately if an unexpected release of hazardous substances is found in reportable quantities. If an unexpected release of hazardous substances is found in reportable quantities, RCTC's Resident Engineer will require the design/build contractor to notify the National Response Center by calling 1-800-424-8802. RCTC's	Final EIR/EIS	Design Builder	Prior to construction; during construction	Project management plan includes elements of the Construction Contingency Plan. The Project Management Plan was approved September 2013. Being implemented in construction.	1/6/2017	AT	100% complete for Initial Phase	X	

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	Resident Engineer will require the design/build contractor to perform cleanup of unexpected releases under the appropriate federal, State, or local agency oversight.									
HW-12	RCTC's Resident Engineer will require the design/build contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the project disturbance limits identify the locations of underground transmission lines and facilities.	Final EIR/EIS	Design Builder	Prior to construction	Design Builder is contacting underground service alert prior to ground disturbance.	12/1/2016	AT	100% complete for Initial Phase	X	
HW-13	RCTC's Resident Engineer will require the design/build contractor to submit the fees to the South Coast Air Quality Management District (SCAQMD) at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403). RCTC's Resident Engineer will require the design/build contractor to adhere to the requirements of SCAQMD Rule 1403 during renovation and demolition activities.	Final EIR/EIS	Design Builder	During construction	AWJV submitted notification of demolition and fee to SCAQMD on August 27, 2014. Rule 1403 form was attached to AW Memorandum which was transmitted 1/31/18. Documentation was reviewed during 1/29/2018 ECR meeting and it was determined compliance with this measure is complete with receipt of the AW memorandum and attachment.	1/31/2018	JLS	100% complete for Initial Phase	X	
HW-14	During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to test all wooden utility poles, railroad ties, and other treated wood waste material that will be removed and disposed of as part of the project are tested for wood treatments/preservatives. RCTC's Resident Engineer will also require the design/build contractor to test soils surrounding railroad ties for wood treatments/preservatives. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly dispose of all treated wood waste as required in Alternative Management Standards for Wood Treated Waste in Section 67386.6(a)(2)(B)(3) of the California Code of Regulations (CCR). Alternative Management Standards for Wood Treated Waste. In addition, RCTC's Resident Engineer will require the design/build contractor to require any personnel who come in contact with treated wood waste or contaminated soils to follow all applicable requirements under Section 67386.6(a)(2)(B)(3) of the CCR and to be trained in the proper identification,	Final EIR/EIS	Design Builder	Final design; prior to disturbance	SSP 14-11.09 addresses Treated Waste Wood; Removal along I 15 corridor completed. TWW satisfactorily hauled to an approved landfill (El Sobrante) - September 2014. All wood was assumed to be treated and handled in accordance with the CCR. AW Memorandum, with Treated Wood Waste Disposal Manifests, was transmitted 2/6/2018. This Documentation was reviewed during the 2/12/2018 ECR meeting and it was determined compliance with this measure is complete.	2/12/2018	JLS	100% complete for Initial Phase	X	

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	disposal, and safe handling of treated wood waste and contaminated soils.									
SC-1	Development of a Construction Emissions Mitigation Plan. Prior to any site preparation, grading and/or construction activities, the Riverside County Transportation Commission (RCTC) Project Engineer will require the design/build contractor to develop a Construction Emissions Mitigation Plan. That plan will specifically incorporate measures for controlling particulate and other emissions during construction from the following sources: California Department of Transportation (Department) Standard Specifications Sections 10 and 18 (Dust Control) Department's Standard Specifications Section 39-3.06 (Asphalt Concrete Plant Emissions) South Coast Air Quality Management District (SCAQMD) Rule 403, including control measures from Tables 1, 2, and 3 in that rule The plan will also include the following measures: Control of ozone precursor emissions from construction equipment vehicles by maintaining equipment engines in good condition and in proper tune per the manufacturers' specifications. Control of material on all trucks hauling excavated or graded material from the site by compliance with State 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.	Final EIR/EIS	Design Builder	Prior to construction	Air Quality and Emissions Mitigation Plan approved September 2014. SCAQMD was notified of Large Construction under Rule 403, and SCAQMD approved notification May 2014.	8/21/2015	SB	100% complete for Initial Phase	X	
SC-2	Implementation of the Construction Emissions Mitigation Plan. During all site preparation, grading, construction, clean-up, and other activities during construction, RCTC's Resident Engineer will require the design/build contractor to comply with the measures in the Construction Emissions Mitigation Plan. RCTC's Resident Engineer will conduct site inspections at least once a month to ensure that the design/build contractor is complying with the provisions of the Construction Emissions Mitigation Plan.	Final EIR/EIS	Design Builder		Design Builder has quality team to ensure emissions are staying within regulated levels.	9/15/2017	AT	100% complete for Initial Phase	X	
SC-3	Prior to any construction activities, RCTC's Project Engineer will ensure that the grading plans and project specifications show the anticipated duration of	Final EIR/EIS	Design Builder	Prior to construction	Grading plans and specifications and associated schedules have been completed. All durations are shown in the approved baseline schedule.	2/2/17; 8/31/17	AT AT	100% complete for Initial Phase	X	

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	construction in individual construction areas along the project alignment.									
SC-4	During final design and prior to any ground disturbance, RCTC's Project Geologist will conduct appropriate testing to determine whether there are asbestos-containing materials (ACMs) present in the project disturbance limits.	Final EIR/EIS	Design Builder	Final design; prior to disturbance	ACM studies were completed for the project as part of the Environmental document and during the right of way process.	7/10/2017	AT	100% complete for Initial Phase	X	
SC-5	If RCTC's Project Geologist determines that ACMs are present in the project disturbance limits during that final preconstruction inspection, RCTC's Resident Engineer will require the design/build contractor to properly remove and dispose of those ACMs.	Final EIR/EIS	Design Builder	Prior to construction	ACM abatement measures will be implemented as part of demolition activities. AW Memorandum, with Disposal Manifests from Environmental Remediation Services Inc (CA License No 964573), was transmitted 1/31/2018. This Documentation was reviewed during the 2/5/2018 ECR meeting and it was determined compliance with this measure is complete.	2/25/2018	JLS	100% complete for Initial Phase	X	
N-1	Based on studies completed to date, Riverside County Transportation Commission (RCTC) intends to incorporate noise abatement in the form of reasonable and feasible barriers at 15 to 16 locations, depending on the selected alternative, ranging in height from 8 feet (ft) to 14 ft, depending on the alternative and the design variations. Calculations based on preliminary design data indicate that the barriers will reduce noise levels by 5 to 15 A-weighted decibels (dBA) for 333 to 419 homes and the Green River Golf Club, depending on the design variation. If during final design conditions have substantially changed, noise abatement at some of these locations may not be necessary. The final decision on noise abatement will be made on completion of the project design and the public involvement processes for the environmental document. RCTC's Resident Engineer will require the design/build contractor to construct the noise abatement measures included in the final design and project specifications.	Final EIR/EIS	Design Builder	During construction	Noise barriers deemed reasonable and feasible have been incorporated into the project design. Construction of all noise walls (K1-A being the last) was completed in Nov. 2017. ReValidation 4, approved 07/13/2014. ReValidation 5, approved 12/04/2014. Revalidation 7, approved 01/20/15 Revalidation 9, approved 10/27/14 Revalidation 11, approved 06/04/15 Revalidation 12, approved 09/09/16 Revalidation 14, approved 04/18/16 Revalidation 17, approved 09/01/16	1/25/17; 7/10/17; 7/31/17; 11/20/17	AT AT AT AT	100% complete for Initial Phase	X	
N-2	RCTC's Resident Engineer will require the design/build contractor to control noise from construction activity consistent with the California Department of Transportation's (Department's) Standard Specifications,	Final EIR/EIS	Design Builder	During construction	During July 2014, City of Corona reviewed and approved a variance to the noise ordinance to allow night time work. Monitored noise levels	2/3/17; 7/10/17; 7/31/17	AT AT AT	Overall 95% Complete and will remain so until project	X	

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	Section 14-8.02, “Noise Control,” and Standard Special Provisions (SSP) S5-310. RCTC’s Resident Engineer will require the design/build contractor to ensure that noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. not exceed 86 dBA at a distance of 50 ft. The noise level requirement will apply to the equipment on the job site or related to the job, including, but not limited to trucks, transit mixers, or transient equipment that may or may not be owned by the contractor. RCTC’s Resident Engineer will require the design/build contractor to use an alternative warning method instead of a sound signal unless required by safety laws. In addition, RCTC’s Resident Engineer will require the design/build contractor to equip all internal combustion engines with the manufacturer-recommended mufflers and not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by RCTC’s Resident Engineer, the design/build contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.				adjacent to residences or as identified by complaint. ReValidation 15 - Temporary Sound Barrier at Chino Hills State Park for Green River residents.			completion; however, 100% complete for Initial Phase		
N-3	In accordance with the Municipal Codes of the Cities of Anaheim, Corona, Riverside, and Norco, RCTC’s Resident Engineer will require the design/build contractor to limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays. If construction is needed outside those hours or days, RCTC’s Resident Engineer will require the design/build contractor to coordinate with the affected local jurisdiction. In addition to Measure N-3, Measure GEO-3 specifically addresses potential noise control in the event blasting is necessary during construction along State Route 91 (SR-91) east of Interstate 15 (I-15).	Final EIR/EIS	Design Builder	During construction	During July 2014, City of Corona reviewed and approved a variance to the noise ordinance to allow night time work. Monitor noise levels adjacent to residences or as identified by complaint.	1/25/2017	AT	100% complete for Initial Phase	X	
N-4	If noise barriers proposed for I-15 (with the exception of Noise Barrier [NB] K1-A), as part of a separate project, are not constructed within 5 years of the completion of the construction the SR-91 Corridor Improvement Project	Final EIR/EIS	RCTC	During construction	I-15 Tolled Express Lanes Final Env Document approved - will construct N-4 soundwalls.	11/4/2016	AT	100% complete for Initial Phase	X	

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	(CIP), the RCTC will initiate a separate project to construct those walls.									
N-5	1. Residences that would experience a severe traffic noise impact of 75 dBA equivalent continuous sound level (Leq) or higher would qualify for consideration of unusual and extraordinary abatement under Alternative 2f. NBs M-1, M-2, M-3, and D1-B are considered unusual and extraordinary noise abatement. 2. During the design/build phase, RCTC will contract with a qualified acoustical specialist to conduct interior noise analyses at residences projected to experience severe traffic noise impacts. Interior noise abatement for each of those homes will be evaluated on a case-by-case basis per FHWA guidance and noise protocol.	Final EIR/EIS	RCTC	Final design	Interior and exterior noise readings, conducted in August 2017, conclude no interior noise impact. Responses to comments on the interior noise analysis was submitted to Caltrans on 3/1/2018.	8/25/17; 3/1/20	AT JLS	Overall 90% Complete; however, 100% complete for Initial Phase	X	
Compensatory Mitigation (1)	Compensatory Mitigation: 1.) Compensatory mitigation for the effects to coastal sage scrub (CSS) vegetation within Riverside County will be achieved through project consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Permanent effects to CSS vegetation in Orange County occupied by coastal California gnatcatcher (CAGN) or within CAGN-designated critical habitat will be mitigated as described in the Biological Opinion received from the United States Fish and Wildlife Service (USFWS) on November 30, 2011. Specifically, 16.03 acres (ac) of habitat (e.g., CSS) suitable for CAGN breeding, dispersal, and foraging will be restored in Chino Hills State Park (CHSP) (or another off-site area approved by the USFWS) during construction of the Initial Phases under Alternatives 1 and 2. This will increase the amount of conserved habitat available for CAGN in the area.	Final EIR/EIS	RCTC	During construction	Compensatory Mitigation Plans for CAGN and LBV were approved in September of 2014. In September 2015, RCTC secured the Inland Empire RCD to implement the mitigation plan. In October 2015, RCTC has executed an agreement with CDPR to implement the mitigation plan within Chino Hill state Park. Currently IERCD is obtaining right of entry into Chino Hills State Park.	10/23/2017	AT	100% complete for Initial Phase	X	
Compensatory Mitigation (2 & 3)	2.) Temporarily impacted coastal sage scrub (CSS) and other vegetation communities used by California gnatcatcher (CAGN) for dispersal and foraging will be restored with in-kind or better vegetation during and after construction as the construction in each disturbed area is completed (e.g., after each phase of construction). Measures TE-1 through TE-17, provided later in the Environmental Commitments Record (ECR), were developed from the Biological Opinion. 3.) The plant palette used for restored areas in the project limits and CHSP (or other areas approved by the	Final EIR/EIS	RCTC/Design Builder	During construction	2) AWJV to submit for RCTC and Caltrans review the week of 8/1/16. Expected submittal date to USFWS and CDFW is 8/15/16. Anticipated restoration will start 10/1/16. 3) The designated biologist (John Parent) approved the seed mix for hydroseed on the disturbed slopes between Green River Road and Bridge 6/7. The hydroseed is	2/5/18; 2/12/18	JLS JLS	100% complete for Initial Phase	X	

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	USFWS) will be approved by the District Biologist at each location. The District Biologist may consult with local responsible agencies (e.g., local fire agencies) regarding the plant palettes if the District Biologist determines that such consultation would be appropriate.				currently being used on these areas as erosion control until the restoration plan will be implemented. 3. (AT) Note Caltrans Biologist approval date in this field. After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan.					
Compensatory Mitigation (4)	4. Compensatory mitigation for riparian communities in both counties will be required for United States Army Corps of Engineers (Corps) Section 404 and California Department of Fish and Game (CDFG) Section 1600 permitting. Typically, riparian habitat subject to Corps and CDFG jurisdiction is mitigated at a minimum mitigation-to-effect ratio of 2:1 for permanent effects and 1:1 for temporary effects, which is consistent with Corps and CDFG policies for no net loss of riparian/riverine habitat (e.g., wetlands) standards. Mitigation for permanent effects will be conducted in advance during the Initial Phases in the form of habitat restoration and/or enhancement in on- or off-site areas where similar riparian habitat exists. Temporary effects to riparian communities will be mitigated at a minimum mitigation ratio of 1:1 to be replaced on site in kind after the temporary impact has occurred. Final details for	Final EIR/EIS	RCTC/Design Builder	During construction	For permanent impacts, CDFW 1602 requires 3.0 acres of rehabilitation credits and the USACE 404 permit requires 1.06 acres of compensatory mitigation from a mitigation bank. Permanent impacts: RCRCD in lieu fee agreement completed in September 2014. Temporary impacts: on-going due to current construction. A restoration plan will be submitted to Caltrans and RCTC the week of 8/1/16. After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher	7/31/17; 2/12/18; 2/23/18	AT JLS JLS	Overall 90% Complete; however, 100% complete for Initial Phase	X	

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	compensatory mitigation will be coordinated and environmental clearance will be obtained (if necessary) through coordination among the Riverside County Transportation Commission (RCTC), the California Department of Transportation (Department), the resource agencies, and third-party landowners.				Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan. This measure is also addressed in the 1602 permit amendment submitted on 2/23/2018.					
Compensatory Mitigation (5)	5. Prior to beginning construction, a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the Corps, CDFG, and USFWS that ensures no net loss of riparian habitat value or acreage. Final details for compensatory mitigation will be evaluated through coordination among the Department, RCTC, and the resource agencies.	Final EIR/EIS	RCTC	Prior to construction	Compensatory Mitigation Plan (HMMP) approved September 2014. August 2015 CAGN survey memo approved.	2/23/2017	AT	100% complete for Initial Phase	X	
Item 6 under Compensatory Mitigation	6. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies for the project and will include, at a minimum, the following provisions: Permanent impacts to riparian/riverine areas will be replaced on or off site at a minimum ratio of 3:1 with in-kind habitat. Permanent effects to native habitat will be replaced on or off site at a minimum 2:1 ratio with in-kind habitat. Temporary effects to native vegetation will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the project area. If off-site restoration is conducted, it will be done within the same watershed as the project. The HMMP will identify a success criterion of at least 80 percent cover of native riparian vegetation or composition structure similar to existing adjacent high-	Final EIR/EIS	RCTC	During construction; after construction	Compensatory Mitigation Plan (HMMP) approved September 2014. Agreement with Inland Empire RCD executed October 2015; first annual report to be submitted in March 2017. Oak trees are being planted within Chino Hills State Park under the IERCD agreement to manage the restoration effort.	2/23/2017	AT	100% complete for Initial Phase	X	

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	quality riparian vegetation. Further criteria specified in the HMMP will include an establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to the Corps, CDFG, and USFWS documenting the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions. Compensatory mitigation for effects to oak trees (excluding California scrub oaks) with trunk sizes above 8 inches in diameter at breast height (dbh) will involve replacement at a mitigation-to-effect ratio of 3:1. Heritage oaks (oaks with a greater than 36-inch dbh) will be replaced at a mitigation-to-effect ratio of 10:1, if feasible.									
Item 6 under Compensatory Mitigation (cont'd)	If the replacement trees cannot be planted in the immediate vicinity of where the previous trees were located, they may be planted elsewhere in the project area, subject to approval by the Department Landscape Architect and the affected local jurisdiction, if any. All compensatory mitigation for the entire project, both the Initial Phases and Ultimate Projects, will be provided in the Initial Phases of the SR-91 CIP Build Alternatives. RCTC will provide appropriate funds, to be maintained in a non-wasting endowment, to Chino Hills State Park to provide for the long-term maintenance and management of the restored areas within the park to support gnatcatcher habitat in perpetuity.	Final EIR/EIS	RCTC	During construction	RCRCD agreement includes tree plantings within Temescal Wash.	3/13/17; 5/18/17	AT AT	100% complete for Initial Phase	X	
NC-1	1. During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to delineate all environmentally sensitive areas (ESAs) within the project footprint and the immediately surrounding areas in the project specifications. ESAs include CSS, chaparral, and riparian/riverine vegetation; the protected zone of any oak tree (5 feet [ft]) outside the dripline or 15 ft from the trunk of the tree, whichever is greater) or oak habitat; and designated critical habitat (with constituent elements). 2. In addition, all restoration and mitigation areas at Coal Canyon adjacent to the project footprint will be designated ESAs on the project plans. 3. Prior to clearing or construction, RCTC's Resident	Final EIR/EIS	Design Builder	Final design/ construction	ESA fencing plan approved July 2014. ESA fencing installed in areas of active work as of August 2014. Yellow wire replaced orange snow fence in select areas. Installation and maintenance status (including site photos) of ESA fencing can be found in accompanying locations.	1/6/2017	AT	Overall 95% Complete; however, 100% complete for Initial Phase	X	

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	Engineer will require the design/build contractor to install highly visible barriers (such as orange construction fencing) around all designated ESAs. No grading or fill activity of any type will be permitted within the ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so 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 the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities.									
NC-2	RCTC's Resident Engineer will require the design/build contractor to have a Designated Qualified Biologist under contract. The Designated Qualified Biologist will monitor construction in the vicinity of the ESAs for the duration of construction to flush any wildlife species present prior to construction and to ensure that all vegetation removal, best management practices (BMPs), ESAs, and all avoidance and minimization measures are properly implemented.	Final EIR/EIS	Design Builder	During construction	Qualified biologist(s) selected. All resumes on file.	9/9/2016	AT	100% complete for Initial Phase	X	
NC-3	To avoid effects to nesting birds, RCTC's Resident Engineer will require the design/build contractor to conduct any native or exotic vegetation removal or tree trimming activities outside of the nesting bird season (i.e., February 15–September 15). In the event that vegetation clearing is necessary during the nesting season, RCTC's Resident Engineer will require the design/build contractor to have the Designated Qualified Biologist conduct a preconstruction survey within 300 ft of construction areas no more than 7 days prior to construction to identify the locations of nests. Should nesting birds be found, an exclusionary buffer of 300 ft will be established by the Designated Biologist around each nest site. This buffer will be clearly marked in the field by construction personnel under guidance of the design/build contractor's Designated Qualified Biologist, and construction or clearing will not be conducted within this zone until the Designated Qualified Biologist determines that the young have fledged or the nest is no longer active. In the event that construction must occur	Final EIR/EIS	Design Builder	Prior to construction; during construction	Bird Biologists (Miller, URS; Thompson, URS; Parent, Aecom) were approved on 11/05/13. Surveys were conducted as necessary during August - Nesting season was completed as of August 31 due to seasonal conditions. Surveys were continued in 2015 from February to September and monitoring reports were regularly submitted to RCTC. As of May 2015, monitoring reports are submitted on a weekly basis.	1/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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	within the 300 ft buffer, the Designated Biologist will take steps to ensure that construction activities do not disturb or disrupt nesting activities. If the Designated Biologist determines that construction activities are disturbing or disrupting nesting activities, the Designated Biologist will notify the Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, and/or working in other areas until the young have fledged.									
NC-4	When work is conducted during the fire season (as identified by the Orange County Fire Authority [OCFA], Riverside County Fire Department [RCFD], City of Norco Fire Department, and/or the City of Corona Fire Department) adjacent to any vegetated open space, RCTC's Resident Engineer will require the design/build contractor to ensure that appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) is available on site during all phases of project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire-preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities. If a responsible fire agency (OCFA, RCFD, City of Norco Fire Department, or City of Corona Fire Department) requires the RCTC to clear defensible spaces during construction, the RCTC's Resident Engineer, the design/build contractor, and the design/build contractor's Designated Qualified Biologist will coordinate with the USFWS prior to this clearing effort. In the event there are resources in the areas identified for defensible clearing, RCTC's Resident Engineer and the Designated Qualified Biologist will coordinate with any applicable permitting agencies regarding possible effects to those resources prior to approving the defensible clearing of any areas by the contractor. During all Red Flag Warning periods as issued by the National Weather Service, the design/build contractor will	Final EIR/EIS	Design Builder	During construction	Safety Plan covers all potential hazards and measures to be implemented during fire season. Design Builder implementing these measures near natural habitat areas (Bridge 2).	6/2/2017	AT	100% complete for Initial Phase	X	

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	not be allowed to operate mechanized equipment or equipment that could throw off sparks or potentially start fires in any areas of natural open space in CHSP or other areas.									
NC-5	During final design, the Project Engineer will coordinate with the Designated Qualified Biologist to identify developed or nonsensitive upland habitat areas appropriate for use during construction for equipment maintenance, staging, dispensing of fuel and oil, or any other such activities and will delineate and identify those areas on the project specifications. The Designated Qualified Biologist will specifically identify developed or nonsensitive upland habitat areas to prevent any spill runoff on those sites from entering waters of the United States. During construction, RCTC's Resident Engineer will require the design/build contractor to ensure that all equipment maintenance, staging, dispensing of fuel and oil, or any other such activities occur in developed or designated nonsensitive upland habitat areas designated in the project specifications for those uses.	Final EIR/EIS	Design Builder	Final design; during construction	ESA exhibit was prepared in August 2013 and is being implemented in the field. Exhibit shows where staging and maintenance areas can be placed.	2/23/17; 5/18/17	AT	100% complete for Initial Phase	X	
NC-6	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify the locations of all existing wildlife fencing and will delineate and identify those areas on the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to install new fencing prior to the removal of any existing wildlife fencing to protect against wildlife-vehicle incidents. The new fencing must be the same or greater height than the previous wildlife fence. The RCTC Resident Engineer will require the design/build contractor to ensure that the fencing is maintained and functional throughout the project construction. The Department will ensure that the fencing is maintained and functional throughout the life of the project to prevent wildlife-vehicle incidents.	Final EIR/EIS	Design Builder	Final design; prior to and during construction	Wildlife fencing as shown in project specifications have been and will continue to be installed in order to delineate and identify environmentally sensitive areas in construction areas. Design team is coordinating with Designated Qualified Biologist. ESA exhibit was prepared in August 2013 and is being implemented in the field. Wildlife corridor plan was reviewed and approved in October 2014.	1/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
NC-7	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify the habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that is anticipated to be disturbed by construction activities and will delineate those areas on the project	Final EIR/EIS	Design Builder	Final design; during construction	Habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash have been identified on project specifications. Restoration for impacts to these areas is in-progress. Include	2/5/18; 2/12/18	JLS JLS	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	specifications. As detailed in the project specifications, RCTC's Resident Engineer will require the design/build contractor to restore habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that was disturbed during construction as construction in the affected areas is completed. That restoration will be provided on a 1:1 ratio, using native vegetation as determined by RCTC and the Department in coordination with the resource agencies.				discussion regarding monitoring at B Canyon, punch through pipe (2016), monitor present After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan. During the 2/5 meeting Caltrans provided concurrence that habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash appeared to be restored.					
NC-8	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to delineate all wildlife corridors within the project footprint and the immediately surrounding areas as Environmentally Sensitive Areas (ESAs) in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to ensure that equipment maintenance, lighting, and staging are limited to designated areas away from wildlife corridor entrances.	Final EIR/EIS	Design Builder	Final design; prior to and during construction	Wildlife corridors within the project footprint have been identified and delineated in project specifications. Equipment maintenance, lighting, and staging limitations are being implemented. After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher	9/9/16; 7/31/17; 2/5/18; 2/12/18; 2/23/18	AT AT JLS JLS JLS	Overall 90% complete; however, 100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
					Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan. This measure is also addressed in the 1602 permit amendment submitted on 2/23/2018.					
NC-9	During final design, RCTC's Project Engineer will develop design and construction management measures to direct temporary construction noise and nighttime construction lighting and permanent facility lighting away from the wildlife corridors, bridges (structures potentially occupied by bats), biologically sensitive areas, Western Riverside County MSHCP Conservation Areas, vegetated drainages, CSS in CAGN-designated critical habitat with long-term conservation value for covered species. Those design measures will be approved by Department District 8 Biology/Environmental prior to the completion of final design. If construction work must be done at night, RCTC's Resident Engineer will require the design/build contractor to properly implement the measures developed during final design to direct noise and direct lighting away from the wildlife corridors, bridges, and biologically sensitive areas during those nighttime construction activities.	Final EIR/EIS	RCTC	Final design; prior to construction	Wildlife Crossing Lighting and Noise Plan approved by RCTC and submitted to CDFW for review and approval. CDFW approved in October 2014	9/9/2016	AT	100% complete for Initial Phase	X	
NC-10	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to keep the wildlife corridors clear of all equipment or structures that could potentially serve as barriers to wildlife passage.	Final EIR/EIS	Design Builder	Prior to and during construction	Design Builder actively ensuring that wildlife corridors are kept clear of equipment and falsework.	9/9/16/16	AT	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
NC-11	During final design, RCTC's Project Engineer will ensure that the existing culvert structures that will be extended or modified by the project are designed so that they are at least as compatible with wildlife usage as the existing culvert structures. Those culverts will be shown on the project specifications. RCTC's Resident Engineer will require the design/build contractor to properly implement these compatible culvert designs during construction.	Final EIR/EIS	Design Builder	Final design	Wildlife Noise and Lighting Plan included description of design characteristics to document compliance. Plan approved by RCTC and submitted to CDFW for review and approval.	8/25/2017	AT	100% complete for Initial Phase	X	
NC-12	Within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction within 1,000 ft of the centerline of each of these crossings to daylight hours (7:00 a.m. to 4:00 p.m.) to ensure continued use of these wildlife corridors during construction, with the exception of limited periods when evening or night work is required for safety or operations reasons.	Final EIR/EIS	Design Builder	During construction	Hours of construction near wildlife crossings have been and will continue to be consistent with commitment NC-12. URS completed both day and night project monitoring to verify compliance.	9/9/2016	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
NC-13	During final design, RCTC's Project Engineer will ensure that the design and construction process for all structures required for bridge and/or culvert work within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, will not block the main underpass at these locations during construction. RCTC's Project Engineer will ensure that the design of the scaffolding and false work is restricted to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities. During construction within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the design/build contractor to ensure that all structures required for bridgework are installed and constructed consistent with the final design specifically to avoid blocking the main underpass during construction and to restrict all scaffolding and false work to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities.	Final EIR/EIS	Design Builder	Final design; during construction	Design of scaffolding and falsework restricts construction in the areas described in NC-13 to minimize impacts to the associated wildlife corridors. Construction in within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash is being completed in compliance with NC-13. Measures to minimize impacts to wildlife corridors are currently being implemented in construction. Include discussion of Caltrans planting at Coal Canyon, John Novack/D12/Chuck Baker coordination.	9/9/2016	AT	100% complete for Initial Phase	X	
NC-14	Minimal equipment staging area is available at the eastbound Coal Canyon off-ramp along the sides of the paved road and will be used for the staging of equipment for Coal Canyon work only. During final design, RCTC's Project Engineer will ensure that the available area for	Final EIR/EIS	Design Builder	Final design; during construction	A Wildlife Crossing Noise and Lighting Plan was approved by RCTC in July 2014 and submitted to CDFW to address construction activities that are required to be	6/2/2017	AT	100% complete for Initial Phase	X	

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	construction staging at the eastbound Coal Canyon off-ramp is delineated on the project specifications. RCTC's Resident Engineer will require the design/build contractor to minimize the use of this area during construction and, where possible, to avoid the area from February 15 to September 1. RCTC's Resident Engineer will require the design/build contractor to ensure that vehicles staged in this area are equipped with security lights.				completed during night time hours. Project Biologist conducted monitoring for night work. The eastbound Coal Canyon off-ramp area was not used for staging (confirmed by Construction Engineer Salim Khalil on 6/2/17).					
NC-15	During construction within Coal Canyon, RCTC's Resident Engineer will require the design/build contractor to keep the Coal Canyon on- and off-ramps open at all times for emergency and police personnel. RCTC's Resident Engineer will require the design/build contractor to ensure that use of the emergency access road as a turnaround or shortcut for any construction or non-emergency traffic is prohibited. That road will only be used during bridge construction and general road construction at Coal Canyon. RCTC's Resident Engineer will also require the design/build contractor to ensure that, in general, no hauling is allowed at night through underpasses and freeway off-ramps.	Final EIR/EIS	Design Builder	During construction	Emergency access via Coal Canyon is being maintained as described in NC-15. AWJV has minimally used the road during construction utilities and other features of the project. Project biologist has conducted monitoring throughout construction of the project to ensure compliance.	5/12/2017	AT	100% complete for Initial Phase	X	
NC-16	During construction in Coal Canyon, RCTC's Resident Engineer will require the design/build contractor to close the gates at Coal Canyon at the end of each construction day. The locations of those gates will be shown on the project specifications.	Final EIR/EIS	Design Builder	During construction	Currently being implemented during construction; RCTC to ensure that gates are closed after every construction day.	1/2/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
NC-17	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify existing and proposed conservation areas within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To reduce impacts where the project interfaces with existing or proposed conservation areas prior to and during construction, RCTC's Project Manager will ensure that the project complies with the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the Western Riverside County MSHCP. The project	Final EIR/EIS	RCTC	Final design	Pending approval of Revalidation 23 to close measure.	1/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

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	specifications will include applicable guidelines from the Western Riverside County MSHCP.									
NC-18	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify existing Criteria Areas within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To reduce impacts where the project is located within the Criteria Area, RCTC's Project Manager will ensure that the project complies with the applicable siting and design criteria and the Construction Guidelines in Section 7.5.2 of the Western Riverside County MSHCP. The project specifications will include applicable guidelines from the Western Riverside County MSHCP.	Final EIR/EIS	Design Builder	Final design	ESA exhibit was prepared in August 2013 and is being implemented in the field. Exhibit reflects where criteria areas are located.	1/6/2017	AT	100% complete for Initial Phase	X	
NC-19	During construction, RCTC's Resident Engineer will require the design/build contractor to comply with guidelines from the Western Riverside County MSHCP included in the project specifications. The SR-91 CIP is a covered project. Therefore, RCTC's Resident Engineer will ensure that the SR-91 CIP complies with all Western Riverside County MSHCP Construction Guidelines and Standard BMPs prior to and during construction.	Final EIR/EIS	Design Builder	During construction	MSHCP construction guidelines and BMPs have been incorporated into project design and applicable project guidelines. Implementation during construction is ongoing.	9/29/2016	AT	100% complete for Initial Phase	X	
WET-1	Riverside County Transportation Commission's (RCTC) Project Manager will ensure that prior to any clearing or construction, a Section 404 Nationwide Permit is obtained through the United States Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA). RCTC's Resident Engineer will retain a copy of the Corps permit at the construction site and will ensure that the conditions in that permit are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction	404 Permit Package approved for affected delineated areas other than Oak St Channel - Approved Sept 2014. Submit 404 application package for Oak St Channel - Approved Feb 2015. Amendments for Oak St. Channel impacts approved Feb. 19. 2015	8/21/2015	SB	100% complete for Initial Phase	X	
WET-2	RCTC's Project Manager will ensure that prior to any clearing or construction, a Streambed Alteration Agreement with California Department of Fish and Game (CDFG) is obtained. RCTC's Resident Engineer will retain a copy of the CDFG agreement at the construction site and will ensure that the conditions in that agreement are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction	The Streambed Alteration Agreement (1602 Agreement) for the SR-91 CIP was secured in August of 2014. Streambed Alteration Agreement: Completed and approved on 08/15/13. ReValidation 6, approved 7/11/14 ReValidation 18, approved 11/2/15 1602 Amendment 1, approved 11/3/15	8/21/2015	SB	100% complete for Initial Phase	X	

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WET-3	RCTC's Project Manager will ensure that prior to any clearing or construction, a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) is obtained. RCTC's Resident Engineer will retain a copy of the Section 401 certification at the construction site and will ensure that the conditions in that certification are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction	401 Permit secured in May of 2014. A copy of the certification is accessible at project construction sites. Implementation of conditions associated with the permit is in-progress.	8/21/2015	SB	100% complete for Initial Phase	X	
PS-1	As part of the SR-91 CUP Habitat Mitigation and Monitoring Plan, trees and shrubs will be planted at appropriate locations, and the species list to be used for those plantings will include Southern California black walnut and Coulter's matilija poppy. At a minimum, 30 Southern California black walnut trees will be planted.	Final EIR/EIS	RCTC's Project Manager	Required for Initial Phase; Timing during the design/build phase	The HMMP approved in September 2014, identifies oak tree plantings and that Coulter's Matilija poppy seedlings. RFC landscape package B (approved November 2014) includes highway planting of Southern California Black walnut trees within the SR 91/71 interchange area. The Cooperative Agreement with State Parks, executed 2/10/16, for mitigation restoration within Chino Hills State Park includes the planting of 50 container Matilija Poppy (pg. 58).	6/2/2017	AT	100% complete for Initial Phase	X	
AS-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will coordinate with the Designated Qualified Biologist to identify all areas of potential burrowing owl (BUOW) habitat within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To ensure that any BUOW that may occupy the site in the future are not affected by construction activities, RCTC's Resident Engineer will require the design/build contractor to have preconstruction BUOW surveys conducted by a Designated Qualified Biologist within 30 days prior to any phase of construction in the areas identified as potential BUOW habitat. These preconstruction surveys are also required to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the federal Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. If any of the preconstruction surveys determine that BUOW are present, one or more of the following mitigation	Final EIR/EIS	Design Builder	Final design	Burrowing Owl Surveys completed in September 2013. Based on BUOW PA&ED reports, habitat indicators were present during the survey to merit preconstruction survey. Seven jurisdictional features with potentially-suitable BUOW habitat were located within the Biological Survey Area (BSA). No BUOW, or their sign, were located within the CDFW jurisdictional features or their buffer during the protocol surveys. All seven drainages contained burrows and habitat that has the potential to support BUOW, but were all impacted by human disturbance and noise and were generally limited to	1/6/2017	AT	100% complete for Initial Phase	X	

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	measures may be required: (1) avoidance of active nests/burrows and surrounding buffer area during construction activities; (2) passive relocation of individual owls; (3) active relocation of individual owls; and				small open areas with limited foraging area necessary to support BUOW.					
	(4) preservation of on-site habitat with long-term conservation value for the owl. The specifics of the required measures will be coordinated among the Department District Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Biologist, and the resource agencies. RCTC's Resident Engineer will ensure that any BUOW measures determined to be required based on the results of the preconstruction surveys and the required coordination are properly implemented by the design/build contractor prior to and during construction in the BUOW areas identified in the surveys.	Final EIR/EIS						100% complete for Initial Phase	X	
AS-2	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify all areas of potential bat habitat within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. RCTC's Project Manager will require the design/build contractor to have a Designated Qualified Bat Biologist survey all potential bat habitat in June, prior to construction, to assess the potential for the presence of maternity roosts because maternity roosts are generally formed in late spring. The Designated Qualified Bat Biologist will also perform preconstruction surveys because bat roosts can change seasonally. The surveys will include a combination of structure inspection, sampling, exit counts, and acoustic surveys.	Final EIR/EIS	Design Builder	Final design	Bat habitat within the project area has been identified on project specifications. The Designated Qualified Bat Biologist has and continues to complete bat surveys per AS-2. Bat Survey Report approved on 12/17/13.	2/2/17; 7/31/17	AT AT	100% complete for Initial Phase	X	
AS-3	To avoid direct mortality to bats roosting in areas subject to effects from construction activities, RCTC's Resident Engineer will require the design/build contractor to ensure that any structure with potential bat habitat will have temporary bat exclusion devices installed under the supervision of the Designated Qualified Bat Biologist prior to construction. The installation of the exclusion devices will be conducted during the fall (September or October) to avoid trapping flightless young inside during	Final EIR/EIS	Design Builder	Prior to construction	Bat exclusionary devices have been installed in structures with potential bat habitat per requirements set forth in AS-3.	8/21/2015	SB	100% complete for Initial Phase	X	

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	the summer months or hibernating individuals during the winter. Such exclusion efforts must be continued to keep the structures free of bats until the completion of construction. Replacement roosting habitat may also be needed to minimize effects to excluded bats. All bat exclusion techniques will be coordinated among the California Department of Transportation (Department) District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Bat Biologist, and the resource agencies.									
AS-4	As required in Measure NC-10, RCTC's Resident Engineer will ensure that all construction work on bridges will take place during the day to the best extent feasible. Limited evening and/or night construction may be required for safety and/or operations reasons. The RCTC Project Engineer will require the design/build contractor to include construction management measures to direct lighting and noise away from bat night roosting areas in the project specifications. The RCTC Resident Engineer will require the design/build contractor to implement those measures during evening and night construction as much as possible while providing for safe facility operations and construction worker safety.	Final EIR/EIS	Design Builder	During construction	A Wildlife Crossing Noise and Lighting Plan was approved by RCTC in July 2014 and submitted to CDFW to address construction activities that are required to be completed during night time hours. Design Builder actively ensuring that wildlife corridors are kept clear of equipment and falsework.	1/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
AS-5	RCTC's Project Engineer will ensure that the final design specifically addresses keeping riparian vegetation delineated on the project specifications that is adjacent to bat roosting sites (which include crevices in bridges, culverts, and overhead structures) intact during construction per measures included in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly implement the measures in the project specifications to keep riparian vegetation adjacent to bat roosting sites intact.	Final EIR/EIS	Design Builder	Prior to and during construction	Riparian vegetation adjacent to bat roosting habitat has been identified on ESA exhibits.	1/25/17; 11/6/17	AT AT	100% complete for Initial Phase	X	
AS-6	To prevent project effects to bridge- and crevice-nesting birds (i.e., swifts and swallows), RCTC's Resident Engineer will require the design/build contractor to ensure that all work on existing bridges with potential habitat that is conducted between February 15 and October 31 includes removal of all bird nests prior to construction under the guidance and observation of the	Final EIR/EIS	Design Builder	During construction	Removal of bird nests, prior to construction in bridge areas with potential habitat, occurred to the extent possible. Exclusionary efforts, as described in AS-6 were implemented with supervision of a designated biologist.	5/12/17; 11/20/17	AT AT	100% complete for Initial Phase	X	

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	Designated Qualified Biologist prior to February 1 of that year, before the swallow colony returns to the nesting site. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by the Designated Qualified Biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the Department District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Biologist, and the resource agencies.				Crevices were filled on Bridge 3 with foam which, while primarily implemented for bats, also excluded white throated swifts from potential roost and nest habitat in this hinge structure (Oct 2014). The study excluded birds/bats from bridges to be demolished during 2015 or 2016. Installed one-way doors and wire mesh at soffit weepholes of affected project bridges (January and February 2015). Exclusion efforts continued through the 2017 nesting season which ended in October.					
AS-7	During final design, RCTC's Project Manager, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will determine whether structural features providing existing bat roosting habitat cannot be permanently retained following construction. If that is the case, RCTC's Project Manager, RCTC's Project Engineer, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will identify alternative roosting habitat to be installed during project construction. The project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly implement the designs and specifications for bat exclusion and habitat replacement structures included in the project specifications. The installation and maintenance of those structures will be monitored by the Designated Qualified Biologist.	Final EIR/EIS	Design Builder	Final design; prior to and during construction	Bat Panel Habitat installation, at Bridge 4, was completed on 01/13/14. Bat panel installation, over Temescal Wash, will be completed in July 2017. Retention of structural features providing bat roosting habitat will be determined following project completion. Installation was completed in July 2017 with bat biologist, Jill Carpenter, present. Details regarding panel installation locations and dates will be discussed in the Post-Construction Monitoring Report; which will be submitted to resource agencies.	7/10/17; 7/31/17	AT AT	100% complete for Initial Phase	X	
AS-8	RCTC's Resident Engineer will require the design/build contractor to install and maintain silt fence barriers at all staging or construction areas at Coal Canyon and areas within Chino Hills State Park (CHSP) to prevent small animals from entering those areas.	Final EIR/EIS	Design Builder	During construction	Silt fence barriers at Coal Canyon and areas within Chino Hills State Park have been installed and will be maintained throughout project construction.	12/29/2016	AT	Overall 95% Complete and will remain so until project completion;	X	

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								however, 100% complete for Initial Phase		
TE-1	Prior to any ground disturbing activities, an individual will be identified as the Designated Biologist. A qualified Designated Biologist must have a Bachelor's degree with an emphasis in ecology, natural resource management, or related science; 3 years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society; previous experience with applying the terms and conditions of a Biological Opinion; and the appropriate permit and/or training if conducting focused or protocol surveys for listed species. The Riverside County Transportation Commission (RCTC) will ensure the Designated Biologist position is filled throughout the construction period. Each successive Designated Biologist (if applicable) will be approved by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (hereafter referred to as the Wildlife Agencies). The Designated Biologist will have the authority to ensure compliance with conservation measures and will be the primary agency contact for the implementation of these measures. The Designated Biologist will have the authority and responsibility to halt activities that are in violation of the conservation measures.	Final EIR/EIS	Design Builder	Prior to disturbance	Designated Qualified Biologists meet all of the criteria set forth in TE-1 and have been approved by each agency listed in commitment TE-1.	8/25/2015	SB	100% complete for Initial Phase	X	
TE-2	To minimize adverse effects from dust during all site disturbance, grading, and construction activities, the design/build contractor will ensure that all active parts of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust. Additionally, the design/build contractor will ensure that all stockpiled material is sufficiently watered or covered to prevent excessive amounts of dust.	Final EIR/EIS	Design Builder	During construction	Design Builder is implementing BMPs to minimize dust during construction. Daily Quality Assurance Inspection Reports would have identified any dust control violations since dust control was a checklist item. No violations were identified during construction.	10/6/2017	AT	Overall 95% Complete; however, 100% complete for Initial Phase	X	
TE-3	All erosion and sediment control devices during project construction and operation, including fiber rolls and bonded fiber matrix, will be made from biodegradable	Final EIR/EIS	Design Builder	During construction	Design Builder is actively implementing BMPs per the NPDES General Construction Permit.	11/20/2017	AT	Overall 95% Complete; however, 100%	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.							complete for Initial Phase		
TE-4	During all site disturbance, grading, and construction activities, the design/build contractor will be required to control noise from construction activity consistent with Caltrans Standard Specifications, Section 14-8.02, "Noise Control," and the California Department of Transportation (Caltrans) Standard Special Provisions S5-310. Noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. will not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet (ft) from the noise source. The noise level requirement will apply to the equipment on the job site or related to the job, including, but not limited to, trucks, transit mixers, or transient equipment that may or may not be owned by the contractor.	Final EIR/EIS	Design Builder	During construction	As documented for Noise Measure N-2, measures to reduce noise from construction activities were implemented throughout construction duration. During July 2014, City of Corona reviewed and approved a variance to the noise ordinance to allow night time work. With regard to Threatened and Endangered Species, the designated Project Biologist monitored for noise violations that had the potential to impact wildlife.	6/5/2017	AT	100% complete for Initial Phase	X	
TE-5	During all site disturbance, grading, and construction activities in and immediately adjacent to biologically sensitive areas, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation Areas, vegetated drainages, and coastal sage scrub (CSS) in coastal California gnatcatcher (CAGN) designated critical habitat, the design/build contractor will be required to control noise from construction activity by using an alternative warning method instead of a sound signal unless required by safety laws. In addition, the contractor will equip all internal combustion engines with the manufacturer-recommended mufflers and will not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by the RCTC Resident Engineer, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	Final EIR/EIS	Design Builder	During construction	Noise control measures were taken during all site disturbance, grading, and construction activities in and immediately adjacent to biologically sensitive areas except for one instance in early 2017 at the NW quadrant of the 91/71 interchange. The PCM biologist paused the activity and advised the construction team on appropriate measures. Documentation is provided in Biological Resource Monitoring Reports. Documentation prepared for Measure N-2 (Noise) details measures taken to keep the public informed about potentially noisy construction activities.	10/6/2017	AT	100% complete for Initial Phase	X	
TE-6	In accordance with the Municipal Codes of the Cities of Anaheim, Corona, Riverside, and Norco, the design/build contractor will be required to limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and	Final EIR/EIS	Design Builder	During construction	During July 2014, City of Corona reviewed and approved a variance to the noise ordinance to allow night time work. A Wildlife Crossing Noise and	1/6/2017	AT	Overall 95% Complete and will remain so until project completion;	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
	holidays. If construction is needed outside those hours or days, the design/build contractor will be required to coordinate with the affected local jurisdiction. If the local jurisdiction approves construction hours that are different from those imposed by this measure, then the design/build contractor will immediately request that RCTC consider a modification to this measure to allow construction during the new hours that the local jurisdiction approved.				Lighting Plan was approved by RCTC in July 2014 and submitted to CDFW to address construction activities that are required to be completed during night time hours.			however, 100% complete for Initial Phase		
TE-7	In the major wildlife movement corridors at, Coal Canyon, Wardlow Wash, and Fresno Canyon, and areas adjacent to least Bell's vireo and CAGN occupied areas (approximately Post Mile [PM] ORA-91-R17.16 to PM ORA-91-R18.74), construction activities will be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Should an exception to this measure be necessary, RCTC and the California Department of Transportation (Department) will consult with the Wildlife Agencies to determine effective measures to avoid and minimize adverse impacts to these species and movement corridors.	Final EIR/EIS	Design Builder	During construction	A Wildlife Crossing Noise and Lighting Plan was approved by RCTC in July 2014 and submitted to CDFW to address construction activities that are required to be completed during night time hours.	1/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
TE-8	Braunton's Milk-vetch Conservation Measures. A pre-construction survey will be conducted prior to ground disturbing activities in the vicinity of the historical occurrence in Coal Canyon in Orange County. This survey will be conducted by a biologist familiar with the species and during the appropriate time of year to optimize detection. Should Braunton's milk-vetch be found during surveys, the Designated Biologist will consult with the USFWS to determine effective measures to avoid and minimize adverse impacts to this species.	Final EIR/EIS	Design Builder	Prior to construction	Report submitted to USFWS in July 2014.	8/28/2015	SB	100% complete for Initial Phase	X	
TE-9	Coastal California Gnatcatcher Conservation and Compensatory Measures. The Designated Biologist (or their designee) will monitor construction within the vicinity of CAGN-designated critical habitat areas prior to and during site preparation, grading, and construction activities, to flush any wildlife species present prior to construction and to ensure that vegetation removal, best management practices (BMPs), Environmentally Sensitive Areas (ESAs), and all avoidance and minimization measures are properly implemented and followed.	Final EIR/EIS	Design Builder	During construction	Carol Thompson (designated biologist) currently monitors CSS area within the project footprint on a weekly basis. She also monitored any construction work near any CSS areas. John Parent became the designated biologist in early 2016.	11/30/2016	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
TE-10	RCTC will offset the permanent loss of 8.42 acres (ac) of occupied CAGN habitat in Orange County, including 6.32 ac of designated critical habitat, by restoring 16.03 ac of habitat suitable for CAGN breeding, dispersal, and foraging in Chino Hills State Park (CHSP) to be conducted during the Initial Phase of the project. If restoration is unable to be conducted in CHSP, another location will be selected on approval of the Wildlife Agencies.	Final EIR/EIS	RCTC	After construction	*Compensatory Mitigation Plans for CAGN and LBV* was approved in September of 2014. Restoration work began in 2015	5/18/2017	AT	100% complete for Initial Phase	X	
TE-11	RCTC will offset the temporary loss of 3.01 ac of occupied CAGN habitat in Orange County, including 2.09 ac of CAGN-designated critical habitat, with in-kind, or better, on-site restoration after the completion of project construction.	Final EIR/EIS	RCTC	After construction	*Compensatory Mitigation Plans for CAGN and LBV* was approved in September of 2014. Restoration work began in 2015	5/18/2017	AT	100% complete for Initial Phase	X	
TE-12	Prior to site preparation, grading or construction activities, a restoration plan will be developed by a qualified biologist for the permanent and temporary impacts to occupied CAGN habitat in Orange County, including designated critical habitat. The plan will be submitted to the USFWS for review and approval. This plan will include, at a minimum, a detailed description of restoration methods, slope stabilization/erosion control, criteria for restoration to be considered successful, and monitoring and reporting protocol(s). The restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial watering has been off for at least 2 years.	Final EIR/EIS	Design Builder	Prior to construction	Compensatory Mitigation Plans for CAGN and LBV was approved in September of 2014. Restoration work will begin in 2015 After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan.	2/5/18; 2/12/18	JLS JLS	Overall 80% Complete; however, 100% complete for Initial Phase	X	
TE-13	During all site preparation, grading, and construction activities in Orange County, the RCTC Resident Engineer, will require the design/build contractor to use	Final EIR/EIS	Design Builder	During construction	Shielded lighting measures are being implemented during nighttime construction in areas adjacent to	11/30/2016	AT	Overall 95% Complete and will remain so	X	

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	shielded lighting for any nighttime construction adjacent to coastal sage scrub in CAGN-designated critical habitat.				coastal sage scrub and CAGN designated critical habitat.			until project completion; however, 100% complete for Initial Phase		
TE-14	Riparian Birds Conservation Measures. During the bird breeding season (i.e., February 15–September 15), the Designated Biologist (or their designee) will monitor riparian and riverine areas within 500 ft of active construction areas for the duration of the construction in those areas to survey for active nests and/or nesting activity to ensure breeding activities are not disrupted and to ensure vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly implemented.	Final EIR/EIS	Design Builder	During construction	Bird monitoring completed for 2014 season. Monitoring continuing for 2015 season. Nest Monitoring is occurring during 2015 nesting season within 500' buffer area at 91/71 interchange; include 2016 buffer variance info.	11/30/2016	AT	100% complete for Initial Phase	X	
TE-15	Measure for Light Intrusion and Wildfires. To minimize adverse effects from light intrusion from vehicle headlights and the potential threat of increased fires from the operation of State Route 91 (SR-91), during final design, the Department and RCTC will work with the USFWS to investigate the possibility of adding features along SR-91 in the vicinity of the Coal Canyon wildlife crossing in Orange County. For example, consideration can be given to the placement of K-rail, concrete walls, and/or hardscaping barriers along the shoulder of SR-91. In investigating these features, consideration must be given to motorist safety, freeway operations, vehicle headlight mitigation and the potential fire threat.	Final EIR/EIS	RCTC	Ultimate Phase	WB 3-foot barrier included in final design between SR 71 and Orange County line. Coordination also occurred with resource agencies to explore possible improvements at the Coal Canyon Wildlife Crossing. To be completed during Ultimate Phase.	7/10/17; 7/31/17; 12/4/17	ATx3	100% complete for Initial Phase	X	
TE-16	Santa Ana Sucker Conservation Measures. The United States Army Corps of Engineers (Corps) is in the process of constructing the Santa Ana River (SAR) Reach 9 Phase 2 Green River Golf Club Embankment Protection Project within the action area. Following completion of the embankment construction, perennial stream habitat for the Santa Ana sucker will be reestablished within the construction footprint. The Department and RCTC will coordinate with the Corps during construction of the SR-91 CIP to ensure these restoration areas will not be temporarily or permanently impacted during construction of the SR-91 CIP.	Final EIR/EIS	Design Builder	During construction	Initial Phase construction does not require widening westbound stretch between SR-71 and SR-241, the area likely to affect releases from Prado Dam. The Ultimate Phase requires the addition of a general purpose lane; which would require coordination with ACOE for potential impacts to the Santa Ana River Canyon Habitat Management Area.	8/25/2017	AT	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
TE-17	The Department and RCTC will coordinate with the Corps during construction to ensure that the SR-91 CIP will not affect releases from Prado Dam or result in a permanent reduction of acreage within the Santa Ana River Canyon Habitat Management Area.	Final EIR/EIS	Design Builder	During construction	Initial Phase construction does not require widening westbound stretch between SR-71 and SR-241, the area likely to affect releases from Prado Dam. The Ultimate Phase requires the addition of a general purpose lane; which would require coordination with ACOE for potential impacts to the Santa Ana River Canyon Habitat Management Area.	8/25/2017	AT	100% complete for Initial Phase	X	
IS-1	During final design, Riverside County Transportation Commission (RCTC) Project Engineer will direct a qualified landscape architect develop a weed abatement program for inclusion in the project specifications. That program will be developed in compliance with Executive Order (EO) 13112 to minimize the potential for intrusion or export of invasive plant species to and from the biological study area (BSA) during project construction. At a minimum, the following will be included in the weed abatement program and implemented prior to and during construction to address potential effects associated with invasive species:	Final EIR/EIS	Design Builder	Final design; prior to construction	Weed Abatement Plan approved in April of 2014 and is being implemented during construction; weed species of concern is *Brassica* and is currently being monitored.	8/25/2015	SB	100% complete for Initial Phase	X	
IS-1a	RCTC's Resident Engineer will require the design/build contractor to inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another. RCTC's Resident Engineer will require the design/build contractor to limit soil and vegetation disturbance to those areas specifically required for the project construction.	Final EIR/EIS	Design Builder	During construction	As part of the NPDES GCP, construction equipment is being inspected. prior to leaving the project site. This measure was closed during the 1/29/2018 ECR Meeting. During the meeting a review of the AW Memorandum transmitted 1/22/2018 determined completion of compliance with this measure. This Memorandum included confirmation of Equipment Inspection and Cleaning as well as a copy of the memorandum submitted for compliance with Measure IS-1b.	1/29/2018	JLS	100% complete for Initial Phase	X	
IS-1b	RCTC's Resident Engineer will require the design/build contractor to obtain soil, gravel, and rock from weed-free sources. RCTC's Resident Engineer will require the design/build	Final EIR/EIS	Design Builder	During construction	The project did not require the import of soil. Gravel and rock were obtained from weed-free sources.	12/4/2017	AT	95% Complete; however, 100%	X	

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	contractor to use only certified weed-free straw, mulch, and/or fiber rolls for erosion control during construction.							complete for Initial Phase		
IS-1c	Prior to the completion of construction, RCTC's Resident Engineer will require the design/build contractor to revegetate affected areas adjacent to native vegetation with plant species that are native to the vicinity and approved by the California Department of Transportation (Department) District 8 and District 12 Biologists.	Final EIR/EIS	Design Builder	During construction	Restoration work for impacts to CSS in Orange County began in Oct. 2017 per contract with IERCD. After both resource agency and Caltrans review, Caltrans accepted DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on Fwd: DESN0392.6 California Gnatcatcher Habitat and Temporary Impacts Restoration Plan on 2/12/2018, constituting closure of this measure. Closure of this measure was reconfirmed during the 2/12/2018 ECR Meeting. During this meeting, it was determined that additional comment from CDFW's Jeff Brandt (unrelated to this measure) will be addressed in the Bat Management Plan. USFWS previously concurred on 2/5 that information regarding bats is not required as part of the restoration plan.	11/15/17; 2/5/18; 2/12/18	AT JLS JLS	100% complete for Initial Phase	X	
IS-1	RCTC's Resident Engineer will require the design/build contractor to not use any species listed in the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory with a high or moderate rating in revegetation.	Final EIR/EIS	Design Builder	During construction	Although included in the approved Landscaping Plans, Washingtonia Robusta (Mexican Fan), was removed from the Historic District in July 2017. Design packages final approvals: Package A - 1/18/16 Package B - 5/16/17 Package C - 5/17/17 Package D - 5/17/17 Package E - 5/17/17 Package F - 5/18/17 Package G - 5/18/17	6/1/2017	AT	100% complete for Initial Phase	X	
IS-1d	After construction, RCTC's Resident Engineer will ensure that erosion control and revegetation sites are monitored until achievement of the performance	Final EIR/EIS	Design Builder	After construction		7/31/2017	AT	Overall 95% Complete; however,	X	

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	standards included in the weed abatement program or for a period of 2 to 3 years after installation to detect nonnative species prior to the establishment of the native vegetation.							100% complete for Initial Phase		
IS-1e	RCTC's Resident Engineer will require the design/build contractor and the post-construction monitors to implement eradication procedures (e.g., spraying and/or hand weeding) should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the Department District 8 and District 12 Biologists during and after project construction.	Final EIR/EIS	Design Builder	During Construction	Perform weed abatement, during construction, as required per the Weed Abatement Plan	12/4/2017	AT	Overall 95% Complete; however, 100% complete for Initial Phase	X	
		Final EIR/EIS		After construction	Restoration Plan includes weed abatement measures.	12/4/2017	AT	Overall 95% Complete; however, 100% complete for Initial Phase	X	
IS-1f	During construction, RCTC's Resident Engineer will require the design/build contractor to reduce indirect impacts of exotic plant infestations and litter by regular roadside maintenance to remove litter and weeds from the right-of-way. Because the Department already conducts regular ongoing maintenance of landscaping in the State right-of-way, no additional project-specific measures for invasive species are required during project operations.	Final EIR/EIS	Design Builder	During construction		11/6/2017	AT	Overall 95% Complete and will remain so until project completion; however, 100% complete for Initial Phase	X	
HW-15	For buildings that would be demolished as part of ROW acquisition and/or construction, Asbestos Containing Material (ACM) and Lead Based Paint (LMP) testing shall be performed after ROW acquisition and prior to building demolition.	Revalidation #2 for Initial Phase	Design Builder	During construction	ACM and LBP testing completed as part of the ROW acquisition process.	1/1/2017	AT	100% complete for Initial Phase	X	
HW-16	Herbicide, pesticide, and fungicide testing shall be performed on the soils within acquired ROW at the Green River Golf Club (5215 Green River Road, Corona, CA).	Revalidation #2 for Initial Phase	Design Builder	During construction	Since recent grading work has already been completed at the Green River Golf Club, no additional testing is necessary.	5/31/2016	AT	100% complete for Initial Phase	X	
HW-17	Prior to demolition, RCTC's Project engineer will require the design/build contractor to conduct pre-demolition asbestos and lead based paint (LBP) surveys at the I-15/6th Street overcrossing and the I-15 southbound connector. Any recommendations resulting from the asbestos and LBP surveys shall be implemented.	"Revalidation Measures"	Design Builder	During construction	Leighton Report completed and submitted as of August 2014.	9/13/2017	AT	100% complete for Initial Phase	X	

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Initial Phase YES / NO	
V-6	Prior to the implementation of the 2:1 slopes in the area between Bridge Nos. 56-0637 Prado OH and 56-0634 West Prado OH, RCTC will ensure that the design/build contractor will minimize the impacts for the loss of visual quality by incorporating V-2 measures as approved by Caltrans and the permitting agencies.	Revalidation #6 for Initial Phase	Design Builder	During construction	Design packages final approval: Package B - 5/16/17	2/23/17; 7/10/17	AT; AT	100% complete for Initial Phase	X	
N-6	ReVal 14a - Since a portion of the proposed sound barrier is outside the State right of way, a permanent easement will be secured for the affected properties to construct and maintain the noise abatement measure – the wall return of barrier P-1A, approximately 150' long. The property owners will enter into a contract with RCTC, on behalf of Caltrans, that specifies their agreement: • To allow RCTC personnel, representatives, and contractors to enter their property for purposes of constructing the noise abatement measure and all other related work. • To allow RCTC personnel and representatives to enter their property with appropriate prior notification for the purpose of periodic inspection or structural repair of the noise abatement measure. • To accept aesthetic maintenance responsibility of their respective portion of the noise abatement measure upon its completion and to perpetuate the noise abatement measure's initial aesthetic qualities. • Not to remove the noise abatement measure without full consent of all other affected property owners and Caltrans.	Revalidation #14 for Initial Phase	RCTC	During construction	RCTC will work with Caltrans to ensure that maintenance of item is completed after substantial completion of project and access is available for purposes of constructing noise abatement measure and all other related work. RCTC (Mark Lancaster) submitted draft Soundwall Maintenance Agreement to Caltrans Project Manager for legal review and approval on 7/18/16. Soundwall Construction and Maintenance Easement recorded 09/29/2016.	11/4/2016	AT	100% complete for Initial Phase	X	
N-7	Reval 12-A: A noise barrier survey, of all property owners affected by the construction of M-1B Option 2, will be conducted to constitute a 51 percent minimum vote in support of this noise barrier. Reval 12-B: A permanent easement will be secured from the affected properties to construct and maintain the noise abatement measure. The contract shall be between the property owner and Caltrans (RCTC will secure all maintenance agreements and record easements on behalf of Caltrans) and the property owner(s) must agree: - To allow Caltrans personnel, representatives, and contractors to enter their property for purposes of constructing the noise abatement measure and all other	Revalidation #14 for Initial Phase	RCTC	During construction	RCTC will work with Caltrans to ensure that maintenance of item is completed after substantial completion of project and access is available for purposes of constructing noise abatement measure and all other related work. A 2/26/2018 memorandum transmitted from RCTC to Caltrans indicated RCTC will accept responsibility for maintenance of walls until the time an agreement is reached with each property owner.	9/13/17; 2/26/18	AT; JLS	100% complete for Initial Phase	X	

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	related work. - To allow Caltrans personnel and representatives to enter their property with appropriate prior to notification for the purpose of periodic inspection or structural repair of the noise abatement measure. - To accept aesthetic maintenance responsibility of their respective portion of the noise abatement measure upon its completion and to perpetuate the noise abatement measure's initial aesthetic qualities. - Not to remove the noise abatement measure without full consent of all other affected property owners and Caltrans. - That the contract provisions will be a permanent burden on the property involved. Caltrans District right of way will determine specific wording that, at a minimum, must include the following provision: "The term of this contract shall be a burden that runs with the land, and shall inure and be binding upon the successors, assignees, or transferees of the property owner." Reval 12-C: RCTC will obtain a variance from the County of Riverside's Planning Department for portions of NB M-1B that exceed allowable wall height.				The RCTC memorandum was accepted as completion of compliance for this measure during the 2/26/2018 ECR meeting.					

ATTACHMENT 10
Environmental Commitments Record for the Ultimate Project

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
LU-1	If a Build Alternative is selected for implementation, the Riverside County Transportation Commission (RCTC) will request the County of Riverside, the County of Orange, and the cities along the alignments of State Route 91 (SR 91) and Interstate 15 (I-15) to amend their respective General Plans to reflect the selected SR-91 Corridor Improvement Project (CIP) alternative and the modification of land use designations for properties that would be acquired for the project which are not currently designated for transportation uses.	Final EIR/EIS	RCTC							
PR-1	During final design/construction of the Initial Phase, RCTC will contribute $100,000 to the planning and implementation of improvements in that area that would support and expand regional trail connectivity.	Final EIR/EIS	RCTC	Final design/ construction						
PR-2	During final design/construction of the Initial Phase, RCTC will coordinate with State Parks on the aesthetic features that will be included in the project specifications for the proposed retaining wall facing CHSP between SR-71 and the westbound Green River Road off-ramp, consistent with the aesthetic and features required in Measure V 2. The aesthetic treatment will include a texture to simulate a natural type appearance such as a soil or rock surface, or equivalent.	Final EIR/EIS	RCTC/Design Builder	Final design/ construction						
PR-3	To minimize nighttime noise impacts to Chino Hills State Park (CHSP): 1. RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction in CHSP to daylight hours (7:00 a.m. to 7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operational reasons. Operational reasons may include the desire to conduct certain construction activities; such as closing multiple ramps or travel lanes, during night hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.	Final EIR/EIS	Design Builder	During Construction						
	2. Other Commitments by RCTC Relevant to Chino Hills State Park. RCTC has committed to an additional action in the Coal Canyon area, as follows. A stand-alone project will be developed to construct barriers on the south and north sides of SR-91 to shield headlight glare and freeway noise. The required barriers are estimated to be approximately 1,500 feet and 1,300 feet long on the south and north	Final EIR/EIS	RCTC	Future Project						

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	sides of SR-91 respectively. The project will follow environmental process requirements and engage subject area experts to establish the specific requirements and effectiveness of the proposed barriers to meet the project purpose as well as ensure safety and structural standards are met. In consideration of and reliance on the needs of State Parks and other open space plans that depend on Chino Hills State Park, and subject to environmental review, RCTC commits to build this barrier in tandem with the completion of the SR-91 widening in this area currently planned for completion in 2035. RCTC intends to work with the Department and other agencies to fund and implement this project.									
CI-2	Where property acquisition and relocation are unavoidable, RCTC's Right-of-Way Agents will follow the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs. Appendix D in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) provides a summary of the RCTC Relocation Assistance Program for implementing the Uniform Act. For properties where a partial acquisition results in the removal of some or all of the parking for the property, RCTC's Right-of-Way Agents will conduct parking studies to investigate the use of adjacent acquisitions for replacement parking, reconfiguring the remaining parking spaces and lots on the property, restriping parking spaces, enlarging parking lots, and reconfiguring driveways and/or delivery locations to reduce the project effects on the property.	Final EIR/EIS	RCTC	Prior to construction; during construction					
CI-3	Where possible during final design, RCTC's Right-of-Way Agents and the Project Engineer will work with owners of commercial, agricultural, and industrial uses subject to partial property acquisitions to reconfigure those uses on site consistent with applicable local codes and ordinances in such a manner as to enable them to remain in operation. If a commercial or industrial partial acquisition cannot be reconfigured to allow for continued operation, RCTC's Right-of-Way Agents will work with the property owners to either relocate that use to land designated for that given land use, preferably within	Final EIR/EIS	RCTC	Prior to construction					

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	the boundaries of the study area or to provide compensation for the land pursuant to the provisions of the Uniform Act. If an agricultural use cannot be reconfigured to allow for its continued operation, the property owner will be compensated pursuant to the provisions of the Uniform Act as required in Measure CI-2 and the agricultural use will be discontinued.									
CI-4	During final design and property acquisition, the RCTC Project Engineer and Right-of-Way Agents will work with billboard/property owners, the City of Corona, and the California Department of Transportation's (Department) Outdoor Advertising Unit to find locations for relocating the affected billboards, within the existing sites where the billboards are currently located or other sites in the City where billboards are allowed. The Right-of-Way Agents will work with the City and the Department's Outdoor Advertising Unit to ensure that the sites for the relocated billboards comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. The Right-of-Way Agents will also work with the billboard/property owners to develop Billboard Relocation Agreements with the City of Corona.	Final EIR/EIS	RCTC	Final design/ construction						
UES-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will prepare utility relocation plans in consultation with the affected utility providers/owners for those utility facilities anticipated to be relocated, removed, and protected in-place. Final design will focus on avoiding utility relocations. If relocation is necessary, final design will focus on relocating utilities within the State right-of-way or within other existing public rights-of-way and/or easements. If relocation outside of existing or the additional public rights-of-way and/or easements required for the project is necessary, final design will focus on relocating those facilities in such a manner as to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. The utility relocation plans will be included in the project specifications. Prior to and during construction, the RCTC Resident Engineer will ensure that the components of the utility relocation plans provided in the project specifications are properly implemented by the design/build contractor.	Final EIR/EIS	Design Builder/RCTC	Prior to construction; during construction						
UES-2	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to	Final EIR/EIS	Design Builder	Prior to construction;						

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	coordinate all temporary ramp and lane closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times as part of the Final Transportation Management Plan (TMP) and Final Ramp Closure Study required in Measures T-1 and T-2, including the identification of alternative routes and routes across the construction areas for emergency vehicles developed in coordination with the affected agencies.			during construction						
UES-3	Prior to and during any construction activities, the RCTC Project Engineer will require the design/build contractor to implement the following to minimize the risk of fires during construction: Coordinate with the applicable local fire department to identify and maintain defensible spaces around active construction areas.; Coordinate with the applicable local fire department to identify and maintain firefighting equipment (extinguishers, shovels, water tankers) in active construction areas.; Prohibit the use of mechanized equipment or equipment that could throw off sparks in areas adjacent to open space or undeveloped land, including areas adjacent to CHSP.; Post emergency services phone numbers (fire, emergency medical, police) in visible locations in all active construction areas.	Final EIR/EIS	Design Builder	Prior to construction; during construction						
UES-4	The final design of the SR-91 CIP Build Alternatives will include closing gaps so there is the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to SR-241, as follows: 2. Ultimate Project: Close gaps to provide an equivalent continuous barrier 30 to 36 inches high on the edge of shoulder on SR-91 in both directions between Green River Road and SR-241 meeting Department standards applicable at the time.	Final EIR/EIS	RCTC	Prior to construction						
T-1	Transportation Management Plan. During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer direct a qualified traffic engineer to prepare the Final Traffic Management Plan (TMP), which will be based on the Preliminary TMP developed for the Project Report, to address specific short-term traffic impacts during construction of the project. The objectives of the Final TMP are to: Maintain traffic safety during construction Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction Minimize traffic delays and facilitate	Final EIR/EIS	RCTC/Design Builder	Prior to construction						

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	reduction of overall duration of construction activities Minimize detours and impacts to pedestrians and bicyclists Foster public awareness of the project and related impacts Achieve public acceptance of construction of the project and the Final TMP measures. RCTC will submit the Final TMP to the California Department of Transportation (Department) for review and approval during final design and prior to any construction activities. The existing Preliminary TMP and Ramp Closure Study contains the following elements intended to reduce traveler delay and enhance traveler safety. These elements will be refined during final design and incorporated in the Final TMP for implementation during project construction. Public Information/Public Awareness Campaign (PAC). The primary goal of the PAC is to educate motorists, business owners/operators, residents, elected officials, and government agencies about construction activities and associated impacts. The PAC is an important tool for reaching target audiences with important construction project information and will include, but not be limited to: Rideshare information Brochures and mailers Media releases Paid advertising Public meetings Broadcast fax and email services Telephone hotline Notification to targeted groups Commercial traffic reporters/feeds Project website Visual information Local cable television and news Internet postings Traveler Information Strategies. The effective implementation of a traveler information system during construction is crucial for enabling motorists to make informed decisions about their travel plans and options with real-time traffic information. That real-time traffic information will include information on lane closures, detours, delays, access to adjacent land uses, “businesses are open” signing, and other signing and information to assist travelers in navigating through and in construction areas. Key components of this system will include, but not be limited to: Fixed changeable message signs Portable changeable message signs Ground-mounted signs Automated work zone information systems Highway advisory radio Lane closure website Department highway information network Bicycle and pedestrian information Commute Smart website Incident Management. Effective incident management will ensure that incidents in									

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	construction areas are cleared quickly and do not lead to substantial delays for the traveling public through work zones. Incident management includes, but is not limited to: Construction Zone Enhanced Enforcement Program (COZEEP) Freeway service patrol for construction Traffic surveillance stations Transportation Management Center Unit 370 Traffic management team Towing services Construction Strategies. The Final TMP will include procedures to lessen the effect of typical construction activities and will include, but not be limited to, consideration of the following: Conflicts with other projects and special events Construction staging alternatives Mainline lane closures Local road closures Ramp/connector closures Pedestrian and bicycle detours and facility closures Traffic control improvements Coordination with other projects Project phasing Traffic screens Truck traffic restrictions Demand Management. Temporarily reducing the overall traffic volumes on the project segments of State Route 91 (SR-91) and Interstate 15 (I-15) could reduce the short-term adverse effects of construction on traffic operations. The Final TMP will include, but not be limited to, the following strategies that could reduce vehicular demand in the study area during project construction: Rideshare incentives Transit services Shuttle services Variable work hours/telecommuting High-occupancy vehicle (HOV) lanes/ramps Park-and-ride lots Alternate Route Strategies. The Final TMP will provide strategies for notifying motorists, pedestrians, and bicyclists, especially interregional commuters, of planned construction activities. This notification will allow travelers to make informed decisions about their travel plans, including the consideration of possible alternate routes. The Final TMP will consider the development of alternate routes for motorists to address the following: Mainline lane closures Ramp/connector closures Local road closures Temporary highway or shoulder use Local street improvements Temporary detours and closures of bicycle and pedestrian facilities Traffic signal coordination RCTC's Resident Engineer will ensure that the measures in the Final TMP are properly implemented by the design/build contractor prior to and during construction.									

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T-2	Management of Ramp Closures. During final design, RCTC's Project Engineer will direct a qualified environmental planner to develop the Final Ramp Closure Study to address specific short-term impacts associated with ramp closures longer than 10 days during construction. The objectives of the Final Ramp Closure Study will be to: Minimize inconvenience to the traveling public.; Minimize closures.; Avoid or minimize concurrently multiple closures where possible.; Coordinate closures as needed with other projects and activities. Prior to and during construction, RCTC's Resident Engineer will ensure that the measures included in the Final Ramp Closure Study are properly implemented by the design/build contractor.	Final EIR/EIS	Design Builder	Final design/ construction						
T-3	Fair Share Contributions. RCTC's Project Manager will ensure that RCTC pays the fair share contribution for the project-related impacts at area intersections. The recommended improvements include additional turn and through lanes. Summaries of the improved intersection delays and levels of service (LOS) are provided in Tables T-3.2, T-3.3, and T-3.4 for 2015 with the Initial Phase of Alternative 2, Design Year 2035 with Alternative 1, and Design Year 2035 with Alternative 2 conditions, respectively.	Final EIR/EIS	RCTC	During Construction						
T-4	During final design, the RCTC Project Engineer will ensure that the final design and project specifications for the widened areas in the undercrossings on SR-91 and I-15 include appropriate lighting for vehicles and pedestrians. The RCTC Project Engineer will also assess the need for additional lighting in the original parts of the undercrossings in the event the longer undercrossings result in the need for additional lighting in those areas. That additional lighting, if any, will also be shown in the project specifications. The RCTC Project Engineer will have any lighting considered at Coal Canyon reviewed and approved by the Project Biologist prior to incorporation in the project specifications to ensure the lighting does not affect the use of Coal Canyon as a wildlife crossing. During construction, the RCTC Resident Engineer will require the design/build contractor to implement the lighting in undercrossings as shown in the project specifications.	Final EIR/EIS	RCTC/Design Builder	Final design/ construction						
V-1	Structure Elements. To address adverse impacts of the project structures, the Project Engineer will direct	Final EIR/EIS	RCTC/Design Builder	During construction						

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	a qualified landscape architect to ensure that the final project design incorporates the mitigation and minimization elements A–D, below, and that these enhancements to structures are incorporated in the design and construction of sound walls, retaining walls, and bridge elements and will not be “follow-up” enhancements. During construction, RCTC’s Resident Engineer will ensure that the design/build contractor constructs the retaining and sound walls, medians, bridges, and other structures consistent with aesthetic and design features included in the project specifications. RCTC’s Resident Engineer will ensure that those aesthetic and design features are constructed during the construction phase when the impact occurs. A. Sound walls in low-density, developed areas or those fronting private property will be heavily textured (i.e. split-face or fractured rib) and integrally colored to minimize reflected glare and visual mass. Sound walls facing public-use areas (parks, streets, etc.) will incorporate textures and color as above plus site-specific aesthetic features (local or historical references) to minimize/mitigate impacts to community character and to restore a “sense of place.” Specific color selection for sound walls will be determined by the 215/91 Corridor Master Plan. B. Retaining walls (including walls associated with bridge structures) will be heavily textured (i.e., split-face or fractured rib) to minimize glare and visual mass. Retaining walls facing public use areas (parks, streets, etc.) over 9 feet (ft) high will be heavily textured (i.e., split-face or fractured rib) and include site-specific aesthetic features (local or historical references). Color (integral or applied) is not required for retaining walls. C. In addition to texture and color as described in A and B, above, sound walls and retaining walls with low-density development or recreational viewer groups will include planting of trees or trees and shrubs, and vines at the base of the walls (non-motorist side) to minimize loss of visual unity. Plantings will be local native species or ornamental species that require no irrigation after establishment. These plantings will not require permanent irrigation. D. Slope paving in all areas with bicyclist and pedestrian viewers will include texture (i.e. stamped slate). In urban areas, slope paving will direct a qualified landscape architect to incorporate site-specific aesthetic features in addition to texture.									

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	Texture and pattern will be used to minimize the visual impacts of increased hard surface, and reinforce community identify, offsetting reduced community connectivity associated with increased bridge widths.									
V-3	Light and Glare. To reduce glare, RCTC's Project Engineer will ensure that the project plans specify lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the right-of-way. The lighting plans will require the review and approval of the Department and applicable cities and counties before construction to assure compliance with their applicable policies regarding public street lighting. RCTC's Project Engineer will coordinate with the City of Corona and other applicable cities and counties to ensure that sufficient lighting is provided as part of the improvements to local streets within the project limits, consistent with applicable local policies and street lighting codes. Increased glare from walls, structures and pavement will be minimized by measures identified in V-2 and V-3. RCTC's Resident Engineer will ensure that the project lighting plan included in the project specifications is implemented by the design/build contractor during construction.	Final EIR/EIS	Design Builder	During construction						
V-4	Graffiti Reduction, Removal and Control. During final design, the RCTC Project Engineer will incorporate vine planting on all sound barriers in the project specifications to reduce the potential for graffiti and to soften the appearance of those walls, consistent with the Highway Design Manual, Index 902.3(5). After the construction of each sound barrier, the RCTC Resident Engineer will require the design/build contractor to install vine planting consistent with the project specifications and the planting requirements in Measure V-3. The Department and the City of Corona have existing ongoing maintenance programs for the control and removal of graffiti. Those programs would apply to all new and modified structures in Alternatives 1 and 2, on public and private property, as appropriate. Key components of those programs are: Department Program. Chapter D1, Litter, Debris, and Graffiti (July 2006), in the Caltrans Maintenance Manual (Volume I, January 2011) describes the Department's maintenance program for the control and removal of graffiti. Key program components applicable to the project features in Alternatives 1 and 2 are: Use of	Final EIR/EIS	Design Builder/RCTC	Final design /construction						

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	recycled paint for various structures and matching paint used to cover graffiti with the original paint color on the structure. Use of physical devices such as rat guards, sign hoods, razor wire, and glare screen patches to limit access to facilities targeted by taggers. Replacement of ground-mounted signs with signs that have protective coatings or application of protective coatings to signs. City of Corona Program. Chapter 9.30, Graffiti Abatement Procedure, in the Corona Municipal Code, describes the City's procedures related to the prohibition of graffiti in the City and the graffiti removal process. Methods for the removal of graffiti include power washing, gel removers, and painting.									
V-5	Construction Plan. To address adverse impacts associated with views of construction access and staging areas, the Riverside County Transportation Commission's (RCTC) Resident Engineer will require the design/build contractor to construct the project in accordance with California Department of Transportation (Caltrans) Standard Construction Specifications, including appropriate measures to address visual impacts during construction.	Final EIR/EIS	RCTC/Design Builder	During construction						
CR-1	Replacement of Trees in the Grand Boulevard Historic District. The requirements of Measure V-3 related to highway planting would apply to the replacement of the 18 trees in the Grand Boulevard Historic District. In addition, the following will be implemented during the design/build phase regarding the removal and replacement of the 18 trees in the Grand Boulevard Historic District: The RCTC Project Engineer will require the design/build contractor to replace all trees removed from the Historic District at a ratio of 1:1. The RCTC Project Engineer will require the design/build contractor to install replacement trees that are compatible with the existing plantings in the Grand Boulevard Historic District and with the overall character of the Historic District, and that the replacement trees be identified in consultation with the City of Corona, the California Department of Transportation (Department) District Landscape Architect, and a Professional Qualified Staff Architectural Historian from the District. The RCTC Project Engineer will require the construction contractor to install all replacement trees no later than the completion of construction activities in the Grand Boulevard Historic District.	Final EIR/EIS	RCTC	Final design/ construction						

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CR-2	Discovery of Cultural Materials. If cultural materials are discovered during construction, the RCTC Project Engineer will require the design/build contractor to divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find.	Final EIR/EIS	RCTC	During construction						
CR-3	Discovery of Human Remains. If human remains are discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains and the County Coroner shall be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendant (MLD). At that time, the Department's District 8 Environmental Branch Chief or the District 8 Native American Coordinator (Gary Jones, [909] 383-7505) will be contacted so 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.	Final EIR/EIS	RCTC/Design Builder	During construction						
CR-4	During final design, the RCTC Project Manager and Department Cultural 1) Resources Professionally Qualified Staff will coordinate with representatives from the Pechanga Band of Mission Indians to identify areas in the project disturbance limits considered sensitive to the Tribe. 2) During final design, the RCTC Project Engineer will identify on the project plans all areas that require monitoring by a Native American Monitor during site preparation, disturbance, and grading. 3) During all site preparation, disturbance, and grading, the RCTC Resident Engineer will require the design/build contractor to have a Native American monitor present and conducting monitoring activities in all areas identified by the Pechanga Band of Mission Indians as sensitive, as shown in the project specifications.	Final EIR/EIS	RCTC/Design Builder	Final design						
CR-5	Condition for the Grand Boulevard Historic District: Acorn-Style Streetlights. The following condition will be implemented during the project design/build phase regarding the removal, temporary storage, and relocation of up to seven existing acorn-style streetlights within the project disturbance limits in the Grand Boulevard Historic District: - The Riverside County Transportation Commission	Final EIR/EIS	Design Builder	Final design/ construction						

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	(RCTC) Project Engineer will require the design/build contractor to clearly indicate on the final plans the locations of up to seven acorn-style streetlights in the project disturbance limits that are to be removed at the beginning of construction in those areas and to identify the locations where the removed streetlights would be reinstalled. - The RCTC Resident Engineer will require the design/build contractor to remove and, as necessary, dismantle the affected acorn-style streetlights and to place them in containers appropriate for storing those fixtures during the project construction period. - The RCTC Resident Engineer will require the design/build contractor to store the containers holding the acorn-style streetlights in a secure location protected from public access and weather. - The RCTC Project Engineer will require the design/build contractor to verify that the locations identified for the reinstallation of the affected streetlights are acceptable to the City of Corona and consistent with the City's requirements for the siting of streetlights. - The RCTC Resident Engineer will require the design/build contractor to reinstall the acorn-style streetlights at the locations designated in the final plans when no further construction/disruption will occur at those locations, as follows: - The streetlights will be reinstalled as close to their original locations as possible, based on the project design and available space, in a manner consistent with the other acorn-style streetlights in the Grand Boulevard Historic District and with the City of Corona requirements for the siting of streetlights. - If any of the acorn-style streetlights cannot be reinstalled at or near their original locations, they will be reinstalled elsewhere within the boundaries of the Grand Boulevard Historic District, focusing on locations where acorn-style lights have previously been removed as long as those locations are consistent with the historic spatial relationships of the Historic District and with the City of Corona requirements for the siting of streetlights; and - If the lights cannot be reinstalled as described above, the RCTC Project Engineer will consult with the City of Corona to identify alternative locations. - The RCTC Resident Engineer will require the construction contractor to have an architectural historian on site during the removal, dismantling, and reinstallation of the acorn-style streetlights									

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WQ-1	Prior to and during construction, Riverside County Transportation Commission's (RCTC) Resident Engineer will require the design/build contractor to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent permit, as they relate to the project construction activities. This will include submission of the Permit Registration Documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (SWRCB) at least 14 days prior to the start of construction activity. The SWPPP will meet the requirements of the Construction General Permit and will identify potential pollutant sources associated with construction activities; identify non-storm water discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants associated with the construction site. The BMPs identified in the SWPPP will be implemented during project construction. A Notice of Termination (NOT) will be submitted to the SWRCB on the completion of construction and the stabilization of the site. RCTC's Resident Engineer will also require the design/build contractor to implement SWRCB Resolution No. 2001-046 requiring sampling and analysis during project construction.	Final EIR/EIS	RCTC	Prior to construction; during construction					
WQ-2	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to comply with the provisions of the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimums) Threat to Water Quality, Order No. R8-2009-0003, NPDES No. CAG998001, as they relate to discharge of non-storm-water dewatering wastes for the project. This will include submitting to the Santa Ana Regional Water Quality Control Board (RWQCB) an NOI at least 60 days prior to the start of construction, notification of discharge at least 5 days prior to any planned discharges, and monitoring reports by the 30th day of each month following the monitoring period.	Final EIR/EIS	RCTC/Design Builder	Prior to construction; during construction					

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WQ-3	Prior to dewatering activities, RCTC's Resident Engineer will provide the design/build contractor with a copy of the discharge authorization letter issued by the RWQCB Executive Director.	Final EIR/EIS	RCTC	Prior to construction						
WQ-4	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to follow the procedures outlined in the California Department of Transportation (Caltrans) Storm Water Quality Handbooks, Project Planning and Design Guide (July 2010 or subsequent issuance) for implementing Design Pollution Prevention and Treatment BMPs for the project. This will include coordination with the Santa Ana RWQCB with respect to the feasibility, maintenance, and monitoring of Treatment BMPs as set forth in the Department's Statewide Storm Water Management Plan (SWMP, May 2003 or subsequent issuance). RCTC's Resident Engineer will also require the design/build contractor to comply with other provisions identified in the NPDES Permit, Statewide Storm Water Permit, and Waste Discharge Requirements for the State of California, Department of Transportation (Order No. 99-06-DWQ, NPDES No. CAS000003). RCTC's Resident Engineer will also require the design/build contractor to comply with other provisions identified in the NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the incorporated cities of Riverside County within the Santa Ana Region (Order No. R8-2010-0033, NPDES No. CAS618033); and for the County of Orange, Orange County Flood Control District, and the incorporated cities of Orange County within the Santa Ana Region (Order No. R8-2009-0030), as applicable.	Final EIR/EIS	Design Builder	Prior to construction; during construction						
GEO-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer or a Project Geotechnical Engineer or Project Geologist under contract to RCTC will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards such as slope instability, settlement, liquefaction, or related secondary seismic impacts that may be present along the project segments of State Route 91 (SR-91) and Interstate 15 (I-15). This	Final EIR/EIS	Design Builder	Final design						

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	report will require review and approval by the California Department of Transportation (Department). The performance standard for this report will be the geotechnical design standards of the State of California and the Department, as they apply to the project features and structures. RCTC will submit the design-level geotechnical report to the Department for review and approval during final design. The report will include but not be limited to: Evaluation of expansive soils and recommendations regarding construction procedures and/or design criteria to minimize the effect of these soils on the construction of the project and to minimize effects related to expansive soils on project facilities in the long term. Identification of potential liquefiable areas within the project limits and recommendations for mitigation. Evaluation of the corrosion potential of soils along those segments of the project alignment not previously tested (i.e., areas along I-15 and the westbound side of SR-91). Demonstration that no retaining walls or excavations will occur in the existing landslide areas, or that landslide stabilization measures independent of the retaining wall design are included in the final project design. Demonstration that the design of all retaining walls is geotechnically suitable for project area soils, and verification that project design has considered and addressed the possibility of scour associated with the Santa Ana River. 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. RCTC's Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications. RCTC's Resident Engineer will require the design/build contractor to implement the measures recommended in the design-level geotechnical report as included in the project specifications.									
GEO-2	RCTC'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 RCTC prior to and during construction to confirm that the geotechnical/geologic recommendations from the design-level geotechnical report and standard design and construction practices are fulfilled by the	Final EIR/EIS	Design Builder	During construction						

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	design/build contractor, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will submit weekly reports to RCTC and the Department during all project-related grading, excavation, and construction activities.									
GEO-3	During final design, if blasting is required, RCTC's Project Engineer will require the design/build contractor to prepare a blasting plan to minimize potential 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 will include, but are not limited to, the following: hours of blasting activity, notification to adjacent property owners, noise and vibration, and dust control. RCTC's Resident Engineer will require the design/build contractor to implement the blasting plan prior to and during any blasting during construction.	Final EIR/EIS	Design Builder	Final design						
PAL-1	Following preparation of suitable construction drawings and elevations and during final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will require the Designated Principal Paleontologist under contract to RCTC to prepare a Paleontological Mitigation Plan (PMP). The PMP will provide guidance for developing and implementing paleontological mitigation efforts, including field work, laboratory methods, and curation. This PMP will be consistent with guidelines provided in the Department's Standard Environmental Reference (SER), Environmental Handbook, Volume I, Chapter 8, Paleontology, the Counties of Riverside and Orange, and the Society of Vertebrate Paleontology (SVP), and will be specifically tailored to the resources and sedimentary formations in the disturbance limits. The part of the PMP that covers excavation will include but not be limited to: Prior to any ground disturbance, RCTC's Designated Principal Paleontologist or his/her representative will attend a meeting with the design/build contractor to explain the likelihood for encountering paleontological resources during construction, what resources may be discovered, and the methods that will be employed if anything is discovered.	Final EIR/EIS	RCTC/Design Builder	Final design/ construction					
PAL-1 (cont'd)	RCTC's Principal Paleontologist will conduct a preconstruction field survey in areas identified as	Final EIR/EIS	Design Builder	Prior to construction						

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	having high paleontological sensitivity after vegetation and any pavement are removed, followed by salvage of any observed surface paleontological resources prior to the beginning of additional ground-disturbing activities. The survey will be conducted by the Principal Paleontologist or their representative who is qualified to identify vertebrate, invertebrate, and plant fossils. During ground disturbance, grading, and excavation, RCTC's Project Engineer will require the design/build contractor to retain a Principal Paleontologist. The Principal Paleontologist will provide a Paleontological Monitor who is qualified to recognize and professionally collect vertebrate, invertebrate, and plant fossils. The qualified Paleontological Monitor will initially be present on site on a full-time basis whenever these types of construction activities occur in sediments that have a high paleontological sensitivity rating and also on a spot-check basis in sediments that have a low sensitivity rating. Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating. Any reduction or modification in scheduling of monitoring will be determined by the Principal Paleontologist and RCTC's Resident Engineer. The qualified Paleontological Monitor will inspect fresh cuts and/or spoils piles to recover paleontological resources. That monitor will be empowered to temporarily divert construction equipment away from the immediate area of the discovery. The monitor will be equipped to rapidly stabilize and remove fossils to avoid prolonged delays to construction schedules.									
PAL-1 (cont'd)	If large mammal fossils or large concentrations of fossils are encountered, RCTC's Resident Engineer will require the design/build contractor to make heavy equipment available to assist in the removal and collection of large materials. Localized concentrations of small (or micro-) vertebrates may be found in all native sediments. Therefore, the qualified Paleontological Monitor will occasionally spot-screen native sediments through one-eighth- to one-twentieth-inch mesh screens to determine whether microfossils are present. If microfossils are encountered, a standard sediment sample (up to 3 cubic yards or 6,000 pounds) will be collected and processed through one-twentieth-inch	Final EIR/EIS	Design Builder	During construction					

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	mesh screens to recover additional fossils. Processing of large bulk samples is best accomplished at a designated location within the project limits that will be accessible throughout the duration of construction but will also be away from any cut or fill areas or active construction areas. Processing is usually completed concurrently with construction and with the intent to have all processing completed before, or just after, project completion. A small corner of a staging or equipment parking area is an ideal location for this activity. If water is not available, the location should be accessible for a water truck to occasionally fill containers with water.									
PAL-1 5th sub-point	RCTC's Project Engineer will require the Principal Paleontologist or their representative to prepare any recovered specimens to the point of identification and permanent preservation. This includes sorting any washed mass samples to recover small invertebrate and vertebrate fossils, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and storage cost, and the addition of approved chemical hardeners/stabilizers to fragile specimens. This is best accomplished at a designated laboratory with access to fossil preparation tools, magnifying equipment, storage boxes and vials, and chemical hardeners. Processing of fossils through the lab is best accomplished concurrently with construction, especially if numerous fossils are being collected.	Final EIR/EIS	RCTC	During construction						
PAL-1 6th sub-point	Specimens will be identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage. Repository institutions usually charge a one-time fee based on volume, so removing surplus sediment is important. The repository institution may be a local museum or university that has a curator who can retrieve the specimens on request. RCTC's Project Manager and the California Department of Transportation (Department) will require that a draft curation agreement be in place between the Principal Paleontologist and an approved curation facility prior to the initiation of paleontological monitoring and mitigation activities for the project. RCTC's Resident Engineer will require the design/build contractor to comply with the provisions of the PMP during all ground disturbance, grading, and excavation activities. This will include appropriate coordination	Final EIR/EIS	RCTC/Design Builder	During construction						

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	with RCTC's Designated Principal Paleontologist and the provision of qualified paleontological monitors consistent with the provisions of the PMP. After the completion of all ground disturbance and grading, RCTC's Project Manager will require the design/build contractor to have the design/build contractor's Designated Principal Paleontologist to prepare a Final Paleontological Mitigation Report (PMR) that summarizes the project area investigated, the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the scientific significance of the curated collection. RCTC's Project Manager will retain a copy of the report for the RCTC project files and will provide a copy of the report to the Department.									
HW-1 First Sub-point	A Phase I ESA was conducted for the Mobil No. 18-FLM site (616 Paseo Grande Street, Corona, California), and a Phase I ESA and Phase II Site Investigation were conducted for the Honda Cars of Corona site (231 South Lincoln Avenue, Corona, California) as part of the DSI, in accordance with ASTM Standard E 1527-05. The DSI identified Recognized Environmental Conditions (RECs) associated with on-site releases. Based on the results of the DSI, the following measures will be implemented for these two sites of potential environmental concern: Honda Cars of Corona Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to consult with regulators, confirm that the final confirmation sampling has been completed at the site, and that contaminant investigation for the site has received regulatory site closure. In addition, prior to the completion of final design, the RCTC Resident Engineer will require the design build/build contractor to properly abandon all monitoring wells and vapor extraction wells on the site in accordance with regulatory requirements.	Final EIR/EIS	Design Builder	Final design; prior to disturbance					
HW-1 Second Sub-point	Mobil No. 18-FLM Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to conduct further investigation on contaminants in soils on site after a work plan is prepared and additional information is available.	Final EIR/EIS	RCTC	Final design; prior to disturbance						
HW-2	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will	Final EIR/EIS	Design Builder	Final design; prior to disturbance						

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	require the design/build contractor to conduct site investigations for any new release sites that are within the project right-of-way. RCTC's Resident Engineer will require the design/build contractor to conduct these site investigations in compliance with applicable federal, State, and local regulations and in accordance with ASTM Standard E 1527-05. If contaminants are determined to be present during the site investigation, RCTC's Resident Engineer may require the design/build contractor to prepare one or more of the following specialized reports: Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report.									
HW-3	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to conduct an aerially deposited lead (ADL) study for soil if excavation will exceed 3 feet (ft) below ground surface (bgs) in unpaved locations adjacent to the State right-of-way between Gypsum Canyon Road and Magnolia Avenue, or 5 ft bgs in unpaved locations in areas where there would be fiber-optic signage along eastbound State Route 91 (SR-91) starting east of the Weir Canyon Road undercrossing and extending east of the Gypsum Canyon Road undercrossing. During construction, if soils within the project disturbance limits along SR-91 are removed off site, RCTC's Resident Engineer will require the design/build contractor to treat the soils as State hazardous waste and to properly dispose of those soils at an appropriate State-certified landfill facility. In addition, during construction, RCTC's Resident Engineer will require the design/build contractor to test all soils imported on site as fill. RCTC's Resident Engineer will require the design/build contractor to use only clean soils as imported fill on site.	Final EIR/EIS	Design Builder	Final design; prior to disturbance						
HW-4	1. Predemolition asbestos and/or LBP surveys were conducted for 21 road structures that will be renovated or demolished during project construction.	Final EIR/EIS	Design Builder	Prior to construction						
HW-4	2. Based on the results of the ACM surveys of the 21 freeway structures, the SR-91/State Route 71 (SR-71) Separation (Bridge No. 56-0587), East SR-91/North SR-71 Connector Separation (Bridge No. 56-0635), Prado Overhead (Bridge No. 56-0637), West Grand Boulevard Undercrossing (UC) (Bridge	Final EIR/EIS	Design Builder	Prior to construction						

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	No. 56-0445 L/R), El Cerrito Road UC (Bridge No. 56-0558 L/R), and Serfas Club Drive UC (Bridge No. 56-0368 L/R) contain ACMs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's Resident Engineer will require the design/build contractor to have a licensed asbestos contractor properly remove and dispose of asbestos-containing railing brace pads from these structures.									
HW-4	3. Based on the results of the LBP surveys of the 21 freeway structures, the Main Street UC (Bridge No. 56-0448 L/R), McKinley Street UC (Bridge No. 56-0365), and Buchanan Street Overcrossing (Bridge No. 56-0368) contain LBPs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's Resident Engineer will inform the design/build contractor of the presence of LBPs in those structures. RCTC's Resident Engineer will require the design/build contractor to protect construction workers from exposure to lead dust when disturbing LBP during bridge renovation or demolition activities.	Final EIR/EIS	Design Builder	Prior to construction						
HW-4	4. In addition, a hazardous materials survey identified two areas with potential hazardous materials. Based on the results of the visual hazardous materials survey of the bridges, light fixture components and possible lead metal railing braces may pose an additional concern. These components include: - Light fixtures (some flush-mounted) on the undersides of many of the bridges. At a few of the bridges that cross over the freeway, there are light posts. The light bulbs in these fixtures may contain mercury. - The Temescal Wash Bridge overhead has some metal braces and wire tension cable at joint locations on the underside of the bridge. While no suspected ACMs were observed or sampled at these locations, the presence of metal washers and spacers, which may contain lead, was noted. - Soft metal railing brace pads that may be composed of lead metal were observed at the following bridges: Pierce Street UC (Bridge No. 56-0369 L/R) and Buchanan Street Overcrossing (Bridge No. 56-0368)	Final EIR/EIS	Design Builder	During construction					
HW-4	5. Therefore, during final design and prior to any disturbance of these facilities and materials, RCTC's Resident Engineer will inform the design/build contractor of the presence and location of the	Final EIR/EIS	RCTC	Final design; prior to disturbance					

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	hazardous materials in the freeway structures described above.									
HW-4	6. Prior to the disturbance of freeway structures, RCTC's Resident Engineer will require the design/build contractor to have asbestos-containing railing brace pads removed and disposed of by a licensed asbestos abatement contractor. If abated, RCTC's Resident Engineer will require the design/build contractor to remove non-friable ACMs in accordance with Category II asbestos abatement procedures as defined in Federal Occupational Safety and Health Administration (Fed-OSHA) 29 Code of Federal Regulations (CFR) 1926.1101. However, if mechanical means are utilized for abatement of ACMs, RCTC's Resident Engineer will require the design/build contractor to convert these non-friable materials into a friable state during removal activities and manage these materials under Class I asbestos abatement procedures.	Final EIR/EIS	Design Builder	During construction						
HW-4	7. Prior to disturbance of freeway structures, RCTC's Resident Engineer will require the design/build contractor to properly test any areas that have not been previously tested, and remove and dispose of any materials from these structures that exceed California Health and Safety Code criteria for hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	Design Builder	Prior to construction						
HW-4	8. During final design and prior to any ground disturbance, demolition, or renovation activities, RCTC's Project Engineer will require the design/build contractor to conduct predemolition asbestos, LBP, polychlorinated biphenyl (PCB), and/or mercury surveys of any buildings that will be renovated or demolished.	Final EIR/EIS	RCTC	Final design; prior to disturbance						
HW-4	9. During construction, RCTC's Resident Engineer will require the design/build contractor to properly remove and dispose of any materials from these structures that exceed California Health and Safety Code criteria for hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	RCTC	During construction						
HW-5, Part 1	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to conduct inspections for potential PCBs in utility pole-mounted transformers that will be relocated or removed as part of the project	Final EIR/EIS	Design Builder	Final design; prior to construction						

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HW-5, Part 2	RCTC's Resident Engineer will require the design/build contractor to consider leaking transformers a PCB hazard unless tested and confirmed otherwise, and to handle them accordingly.	Final EIR/EIS	Design Builder	Prior to construction						
HW-6	During construction, RCTC's Resident Engineer will require the design/build contractor to test, remove, and dispose of any yellow traffic striping and pavement marking materials in accordance with the California Department of Transportation (Department) Construction Manual, Chapter 7, Section 106.	Final EIR/EIS	Design Builder	During construction						
HW-7	During final design and prior to any dewatering activities, RCTC's Resident Engineer will require the design/build contractor to conduct additional coordination with the Riverside County Department of Environmental Health when groundwater dewatering will occur in the vicinity of contaminated soils or contaminated groundwater sites.	Final EIR/EIS	Design Builder	Final design						
HW-8	During final design and prior to any ground disturbance activities, RCTC's Project Engineer will require the design/build contractor to sample soil adjacent to the Burlington Northern Santa Fe (BNSF) railroad tracks that will be disturbed during construction for the presence of petroleum hydrocarbons, metals, solvents, and other potential contaminants (e.g., polynuclear aromatic hydrocarbons [PNAs], kerosene, ACMs, chlorinated hydrocarbons, pesticides, and herbicides). That testing will determine whether the soils require special handling and disposal during construction. During construction, RCTC's Resident Engineer will require the design/build contractor to properly dispose of all soils exceeding the criteria for State or federal hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	Design Builder	Final design; prior to disturbance						
HW-9	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a site-specific Health and Safety Plan (HASP) by a certified industrial hygienist. The HASP will be based on evaluation of proposed construction activities, the potential hazards identified in the Phase I Environmental Site Assessment and Phase II testing, and any future assessments prepared for the project. The HASP will outline specific procedures for encountering expected and unexpected contaminants. It will include safe work practices, contaminant monitoring, the need for personal protective equipment, emergency response	Final EIR/EIS	Design Builder	Prior to construction						

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	procedures, and safety training requirements to protect construction workers and third parties working on site. The HASP will be in compliance with the requirements of 29 CFR 1910 and 1926 and all other applicable federal, State, and local regulations and requirements. During construction, RCTC's Resident Engineer will require the design/build contractor to implement the requirements in the HASP.									
HW-10	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a soils and groundwater Contaminant Management Plan (CMP). The CMP will include procedures for contaminant monitoring and identification as well as temporary storage, handling, treatment, and disposal of hazardous waste and materials in accordance with applicable federal, State, and local regulations and requirements. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to implement the soils and groundwater CMP.	Final EIR/EIS	Design Builder	Prior to construction						
HW-11	Prior to the start of construction, RCTC's Project Engineer will require the design/build contractor to prepare a Construction Contingency Plan (CCP) in accordance with the Department's Unknown Hazards Procedures for Construction. The CCP will include provisions for emergency response in the event that unidentified underground storage tanks (USTs), hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The CCP will address UST decommissioning, field screening, contaminant materials testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. RCTC's Resident Engineer will require the design/build contractor to implement the CCP during all construction activities. During construction, RCTC's Resident Engineer will require the design/build contractor to cease work immediately if an unexpected release of hazardous substances is found in reportable quantities. If an unexpected release of hazardous substances is found in reportable quantities, RCTC's Resident Engineer will require the design/build contractor to notify the National Response Center by calling 1-800-424-8802. RCTC's Resident Engineer will require the design/build contractor to perform cleanup of	Final EIR/EIS	Design Builder	Prior to construction; during construction					

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	unexpected releases under the appropriate federal, State, or local agency oversight.									
HW-12	RCTC's Resident Engineer will require the design/build contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the project disturbance limits identify the locations of underground transmission lines and facilities.	Final EIR/EIS	Design Builder	Prior to construction						
HW-13	RCTC's Resident Engineer will require the design/build contractor to submit the fees to the South Coast Air Quality Management District (SCAQMD) at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403). RCTC's Resident Engineer will require the design/build contractor to adhere to the requirements of SCAQMD Rule 1403 during renovation and demolition activities.	Final EIR/EIS	Design Builder	During construction						
HW-14	During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design/build contractor to test all wooden utility poles, railroad ties, and other treated wood waste material that will be removed and disposed of as part of the project are tested for wood treatments/preservatives. RCTC's Resident Engineer will also require the design/build contractor to test soils surrounding railroad ties for wood treatments/preservatives. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly dispose of all treated wood waste as required in Alternative Management Standards for Wood Treated Waste in Section 67386.6(a)(2)(B)(3) of the California Code of Regulations (CCR). Alternative Management Standards for Wood Treated Waste. In addition, RCTC's Resident Engineer will require the design/build contractor to require any personnel who come in contact with treated wood waste or contaminated soils to follow all applicable requirements under Section 67386.6(a)(2)(B)(3) of the CCR and to be trained in the proper identification, disposal, and safe handling of treated wood waste and contaminated soils.	Final EIR/EIS	Design Builder	Final design; prior to disturbance						
SC-1	Development of a Construction Emissions Mitigation Plan. Prior to any site preparation, grading and/or construction activities, the Riverside County Transportation Commission (RCTC) Project Engineer will require the design/build contractor to develop a Construction Emissions Mitigation Plan. That plan will	Final EIR/EIS	Design Builder	Prior to construction						

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	specifically incorporate measures for controlling particulate and other emissions during construction from the following sources: California Department of Transportation (Department) Standard Specifications Sections 10 and 18 (Dust Control) Department's Standard Specifications Section 39-3.06 (Asphalt Concrete Plant Emissions) South Coast Air Quality Management District (SCAQMD) Rule 403, including control measures from Tables 1, 2, and 3 in that rule The plan will also include the following measures: Control of ozone precursor emissions from construction equipment vehicles by maintaining equipment engines in good condition and in proper tune per the manufacturers' specifications. Control of material on all trucks hauling excavated or graded material from the site by compliance with State 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.									
SC-2	Implementation of the Construction Emissions Mitigation Plan. During all site preparation, grading, construction, clean-up, and other activities during construction, RCTC's Resident Engineer will require the design/build contractor to comply with the measures in the Construction Emissions Mitigation Plan. RCTC's Resident Engineer will conduct site inspections at least once a month to ensure that the design/build contractor is complying with the provisions of the Construction Emissions Mitigation Plan.	Final EIR/EIS	Design Builder							
SC-3	Prior to any construction activities, RCTC's Project Engineer will ensure that the grading plans and project specifications show the anticipated duration of construction in individual construction areas along the project alignment.	Final EIR/EIS	Design Builder	Prior to construction						
SC-4	During final design and prior to any ground disturbance, RCTC's Project Geologist will conduct appropriate testing to determine whether there are asbestos-containing materials (ACMs) present in the project disturbance limits.	Final EIR/EIS	Design Builder	Final design; prior to disturbance						
SC-5	If RCTC's Project Geologist determines that ACMs are present in the project disturbance limits during that final preconstruction inspection, RCTC's Resident Engineer will require the design/build contractor to properly remove and dispose of those ACMs.	Final EIR/EIS	Design Builder	Prior to construction						

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N-1	Based on studies completed to date, Riverside County Transportation Commission (RCTC) intends to incorporate noise abatement in the form of reasonable and feasible barriers at 15 to 16 locations, depending on the selected alternative, ranging in height from 8 feet (ft) to 14 ft, depending on the alternative and the design variations. Calculations based on preliminary design data indicate that the barriers will reduce noise levels by 5 to 15 A-weighted decibels (dBA) for 333 to 419 homes and the Green River Golf Club, depending on the design variation. If during final design conditions have substantially changed, noise abatement at some of these locations may not be necessary. The final decision on noise abatement will be made on completion of the project design and the public involvement processes for the environmental document. RCTC's Resident Engineer will require the design/build contractor to construct the noise abatement measures included in the final design and project specifications.	Final EIR/EIS	Design Builder	During construction						
N-2	RCTC's Resident Engineer will require the design/build contractor to control noise from construction activity consistent with the California Department of Transportation's (Department's) Standard Specifications, Section 14-8.02, "Noise Control," and Standard Special Provisions (SSP) S5-310. RCTC's Resident Engineer will require the design/build contractor to ensure that noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. not exceed 86 dBA at a distance of 50 ft. The noise level requirement will apply to the equipment on the job site or related to the job, including, but not limited to trucks, transit mixers, or transient equipment that may or may not be owned by the contractor. RCTC's Resident Engineer will require the design/build contractor to use an alternative warning method instead of a sound signal unless required by safety laws. In addition, RCTC's Resident Engineer will require the design/build contractor to equip all internal combustion engines with the manufacturer-recommended mufflers and not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by RCTC's Resident Engineer, the design/build contractor will implement appropriate additional noise mitigation measures, including changing the location of	Final EIR/EIS	Design Builder	During construction						

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	stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.									
N-3	In accordance with the Municipal Codes of the Cities of Anaheim, Corona, Riverside, and Norco, RCTC's Resident Engineer will require the design/build contractor to limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays. If construction is needed outside those hours or days, RCTC's Resident Engineer will require the design/build contractor to coordinate with the affected local jurisdiction. In addition to Measure N-3, Measure GEO-3 specifically addresses potential noise control in the event blasting is necessary during construction along State Route 91 (SR-91) east of Interstate 15 (I-15).	Final EIR/EIS	Design Builder	During construction						
N-4	If noise barriers proposed for I-15 (with the exception of Noise Barrier [NB] K1-A), as part of a separate project, are not constructed within 5 years of the completion of the construction the SR-91 Corridor Improvement Project (CIP), the RCTC will initiate a separate project to construct those walls.	Final EIR/EIS	RCTC	During construction						
N-5	1. Residences that would experience a severe traffic noise impact of 75 dBA equivalent continuous sound level (Leq) or higher would qualify for consideration of unusual and extraordinary abatement under Alternative 2f. NBs M-1, M-2, M-3, and D1-B are considered unusual and extraordinary noise abatement. 2. During the design/build phase, RCTC will contract with a qualified acoustical specialist to conduct interior noise analyses at residences projected to experience severe traffic noise impacts. Interior noise abatement for each of those homes will be evaluated on a case-by-case basis per FHWA guidance and noise protocol.	Final EIR/EIS	RCTC	Final design						
Compensatory Mitigation (1)	Compensatory Mitigation: 1.) Compensatory mitigation for the effects to coastal sage scrub (CSS) vegetation within Riverside County will be achieved through project consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Permanent effects to CSS vegetation in Orange County occupied by coastal California gnatcatcher (CAGN) or within CAGN-designated critical habitat will be mitigated as	Final EIR/EIS	RCTC	During construction						

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	described in the Biological Opinion received from the United States Fish and Wildlife Service (USFWS) on November 30, 2011. Specifically, 16.03 acres (ac) of habitat (e.g., CSS) suitable for CAGN breeding, dispersal, and foraging will be restored in Chino Hills State Park (CHSP) (or another off-site area approved by the USFWS) during construction of the Initial Phases under Alternatives 1 and 2. This will increase the amount of conserved habitat available for CAGN in the area.									
Compensatory Mitigation (2 & 3)	2.) Temporarily impacted coastal sage scrub (CSS) and other vegetation communities used by California gnatcatcher (CAGN) for dispersal and foraging will be restored with in-kind or better vegetation during and after construction as the construction in each disturbed area is completed (e.g., after each phase of construction). Measures TE-1 through TE-17, provided later in the Environmental Commitments Record (ECR), were developed from the Biological Opinion. 3.) The plant palette used for restored areas in the project limits and CHSP (or other areas approved by the USFWS) will be approved by the District Biologist at each location. The District Biologist may consult with local responsible agencies (e.g., local fire agencies) regarding the plant palettes if the District Biologist determines that such consultation would be appropriate.	Final EIR/EIS	RCTC/Design Builder	During construction						
Compensatory Mitigation (4)	4. Compensatory mitigation for riparian communities in both counties will be required for United States Army Corps of Engineers (Corps) Section 404 and California Department of Fish and Game (CDFG) Section 1600 permitting. Typically, riparian habitat subject to Corps and CDFG jurisdiction is mitigated at a minimum mitigation-to-effect ratio of 2:1 for permanent effects and 1:1 for temporary effects, which is consistent with Corps and CDFG policies for no net loss of riparian/riverine habitat (e.g., wetlands) standards. Mitigation for permanent effects will be conducted in advance during the Initial Phases in the form of habitat restoration and/or enhancement in on- or off-site areas where similar riparian habitat exists. Temporary effects to riparian communities will be mitigated at a minimum mitigation ratio of 1:1 to be replaced on site in kind after the temporary impact has occurred. Final details for compensatory mitigation will be coordinated and environmental clearance will be obtained (if necessary) through	Final EIR/EIS	RCTC/Design Builder	During construction					

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	coordination among the Riverside County Transportation Commission (RCTC), the California Department of Transportation (Department), the resource agencies, and third-party landowners.									
Compensatory Mitigation (5)	5. Prior to beginning construction, a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the Corps, CDFG, and USFWS that ensures no net loss of riparian habitat value or acreage. Final details for compensatory mitigation will be evaluated through coordination among the Department, RCTC, and the resource agencies.	Final EIR/EIS	RCTC	Prior to construction						
Item 6 under Compensatory Mitigation	6. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies for the project and will include, at a minimum, the following provisions: Permanent impacts to riparian/riverine areas will be replaced on or off site at a minimum ratio of 3:1 with in-kind habitat. Permanent effects to native habitat will be replaced on or off site at a minimum 2:1 ratio with in-kind habitat. Temporary effects to native vegetation will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the project area. If off-site restoration is conducted, it will be done within the same watershed as the project. The HMMP will identify a success criterion of at least 80 percent cover of native riparian vegetation or composition structure similar to existing adjacent high-quality riparian vegetation. Further criteria specified in the HMMP will include an establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to the Corps, CDFG, and USFWS documenting the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions. Compensatory mitigation for effects to oak trees (excluding California scrub oaks) with trunk sizes above 8 inches in diameter at breast height (dbh) will involve replacement at a mitigation-to-effect ratio of 3:1. Heritage oaks (oaks with a greater than 36-inch dbh) will be replaced at a mitigation-to-effect ratio of 10:1, if feasible.	Final EIR/EIS	RCTC	During construction; after construction						
Item 6 under Compensatory	If the replacement trees cannot be planted in the immediate vicinity of where the previous trees were located, they may be planted elsewhere in the project	Final EIR/EIS	RCTC	During construction						

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Mitigation (cont'd)	area, subject to approval by the Department Landscape Architect and the affected local jurisdiction, if any. All compensatory mitigation for the entire project, both the Initial Phases and Ultimate Projects, will be provided in the Initial Phases of the SR-91 CIP Build Alternatives. RCTC will provide appropriate funds, to be maintained in a non-wasting endowment, to Chino Hills State Park to provide for the long-term maintenance and management of the restored areas within the park to support gnatcatcher habitat in perpetuity.									
NC-1	1. During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to delineate all environmentally sensitive areas (ESAs) within the project footprint and the immediately surrounding areas in the project specifications. ESAs include CSS, chaparral, and riparian/riverine vegetation; the protected zone of any oak tree (5 feet [ft]) outside the dripline or 15 ft from the trunk of the tree, whichever is greater) or oak habitat; and designated critical habitat (with constituent elements). 2. In addition, all restoration and mitigation areas at Coal Canyon adjacent to the project footprint will be designated ESAs on the project plans. 3. Prior to clearing or construction, RCTC's Resident Engineer will require the design/build contractor to install highly visible barriers (such as orange construction fencing) around all designated ESAs. No grading or fill activity of any type will be permitted within the ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so 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 the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities.	Final EIR/EIS	Design Builder	Final design/ construction					
NC-2	RCTC's Resident Engineer will require the design/build contractor to have a Designated Qualified Biologist under contract. The Designated Qualified Biologist will monitor construction in the vicinity of the ESAs for the duration of construction to flush any wildlife species present prior to construction and to ensure that all vegetation removal, best	Final EIR/EIS	Design Builder	During construction						

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	management practices (BMPs), ESAs, and all avoidance and minimization measures are properly implemented.									
NC-3	To avoid effects to nesting birds, RCTC's Resident Engineer will require the design/build contractor to conduct any native or exotic vegetation removal or tree trimming activities outside of the nesting bird season (i.e., February 15–September 15). In the event that vegetation clearing is necessary during the nesting season, RCTC's Resident Engineer will require the design/build contractor to have the Designated Qualified Biologist conduct a preconstruction survey within 300 ft of construction areas no more than 7 days prior to construction to identify the locations of nests. Should nesting birds be found, an exclusionary buffer of 300 ft will be established by the Designated Biologist around each nest site. This buffer will be clearly marked in the field by construction personnel under guidance of the design/build contractor's Designated Qualified Biologist, and construction or clearing will not be conducted within this zone until the Designated Qualified Biologist determines that the young have fledged or the nest is no longer active. In the event that construction must occur within the 300 ft buffer, the Designated Biologist will take steps to ensure that construction activities do not disturb or disrupt nesting activities. If the Designated Biologist determines that construction activities are disturbing or disrupting nesting activities, the Designated Biologist will notify the Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, and/or working in other areas until the young have fledged.	Final EIR/EIS	Design Builder	Prior to construction; during construction					
NC-4	When work is conducted during the fire season (as identified by the Orange County Fire Authority [OCFA], Riverside County Fire Department [RCFD], City of Norco Fire Department, and/or the City of Corona Fire Department) adjacent to any vegetated open space, RCTC's Resident Engineer will require the design/build contractor to ensure that appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) is available on site during all phases	Final EIR/EIS	Design Builder	During construction						

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	of project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire-preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities. If a responsible fire agency (OCFA, RCFD, City of Norco Fire Department, or City of Corona Fire Department) requires the RCTC to clear defensible spaces during construction, the RCTC's Resident Engineer, the design/build contractor, and the design/build contractor's Designated Qualified Biologist will coordinate with the USFWS prior to this clearing effort. In the event there are resources in the areas identified for defensible clearing, RCTC's Resident Engineer and the Designated Qualified Biologist will coordinate with any applicable permitting agencies regarding possible effects to those resources prior to approving the defensible clearing of any areas by the contractor. During all Red Flag Warning periods as issued by the National Weather Service, the design/build contractor will not be allowed to operate mechanized equipment or equipment that could throw off sparks or potentially start fires in any areas of natural open space in CHSP or other areas.									
NC-5	During final design, the Project Engineer will coordinate with the Designated Qualified Biologist to identify developed or nonsensitive upland habitat areas appropriate for use during construction for equipment maintenance, staging, dispensing of fuel and oil, or any other such activities and will delineate and identify those areas on the project specifications. The Designated Qualified Biologist will specifically identify developed or nonsensitive upland habitat areas to prevent any spill runoff on those sites from entering waters of the United States. During construction, RCTC's Resident Engineer will require the design/build contractor to ensure that all equipment maintenance, staging, dispensing of fuel and oil, or any other such activities occur in developed or designated nonsensitive upland habitat areas designated in the project specifications for those uses.	Final EIR/EIS	Design Builder	Final design; during construction						
NC-6	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify the locations of all existing wildlife fencing	Final EIR/EIS	Design Builder	Final design; prior to and during construction						

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	and will delineate and identify those areas on the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to install new fencing prior to the removal of any existing wildlife fencing to protect against wildlife-vehicle incidents. The new fencing must be the same or greater height than the previous wildlife fence. The RCTC Resident Engineer will require the design/build contractor to ensure that the fencing is maintained and functional throughout the project construction. The Department will ensure that the fencing is maintained and functional throughout the life of the project to prevent wildlife-vehicle incidents.									
NC-7	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify the habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that is anticipated to be disturbed by construction activities and will delineate those areas on the project specifications. As detailed in the project specifications, RCTC's Resident Engineer will require the design/build contractor to restore habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that was disturbed during construction as construction in the affected areas is completed. That restoration will be provided on a 1:1 ratio, using native vegetation as determined by RCTC and the Department in coordination with the resource agencies.	Final EIR/EIS	Design Builder	Final design; during construction						
NC-8	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to delineate all wildlife corridors within the project footprint and the immediately surrounding areas as Environmentally Sensitive Areas (ESAs) in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to ensure that equipment maintenance, lighting, and staging are limited to designated areas away from wildlife corridor entrances.	Final EIR/EIS	Design Builder	Final design; prior to and during construction						
NC-9	During final design, RCTC's Project Engineer will develop design and construction management measures to direct temporary construction noise and nighttime construction lighting and permanent facility lighting away from the wildlife corridors, bridges (structures potentially occupied by bats), biologically	Final EIR/EIS	RCTC	Final design; prior to construction						

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	sensitive areas, Western Riverside County MSHCP Conservation Areas, vegetated drainages, CSS in CAGN-designated critical habitat with long-term conservation value for covered species. Those design measures will be approved by Department District 8 Biology/Environmental prior to the completion of final design. If construction work must be done at night, RCTC's Resident Engineer will require the design/build contractor to properly implement the measures developed during final design to direct noise and direct lighting away from the wildlife corridors, bridges, and biologically sensitive areas during those nighttime construction activities.									
NC-10	Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to keep the wildlife corridors clear of all equipment or structures that could potentially serve as barriers to wildlife passage.	Final EIR/EIS	Design Builder	Prior to and during construction						
NC-11	During final design, RCTC's Project Engineer will ensure that the existing culvert structures that will be extended or modified by the project are designed so that they are at least as compatible with wildlife usage as the existing culvert structures. Those culverts will be shown on the project specifications. RCTC's Resident Engineer will require the design/build contractor to properly implement these compatible culvert designs during construction.	Final EIR/EIS	Design Builder	Final design						
NC-12	Within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction within 1,000 ft of the centerline of each of these crossings to daylight hours (7:00 a.m. to 4:00 p.m.) to ensure continued use of these wildlife corridors during construction, with the exception of limited periods when evening or night work is required for safety or operations reasons.	Final EIR/EIS	Design Builder	During construction						
NC-13	During final design, RCTC's Project Engineer will ensure that the design and construction process for all structures required for bridge and/or culvert work within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, will not block the main underpass at these locations during construction. RCTC's Project Engineer will ensure that the design of the scaffolding and false work is restricted to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain	Final EIR/EIS	Design Builder	Final design; during construction						

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	the existing width of the wildlife corridor during construction activities. During construction within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the design/build contractor to ensure that all structures required for bridgework are installed and constructed consistent with the final design specifically to avoid blocking the main underpass during construction and to restrict all scaffolding and false work to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities.									
NC-14	Minimal equipment staging area is available at the eastbound Coal Canyon off-ramp along the sides of the paved road and will be used for the staging of equipment for Coal Canyon work only. During final design, RCTC's Project Engineer will ensure that the available area for construction staging at the eastbound Coal Canyon off-ramp is delineated on the project specifications. RCTC's Resident Engineer will require the design/build contractor to minimize the use of this area during construction and, where possible, to avoid the area from February 15 to September 1. RCTC's Resident Engineer will require the design/build contractor to ensure that vehicles staged in this area are equipped with security lights.	Final EIR/EIS	Design Builder	Final design; during construction						
NC-15	During construction within Coal Canyon, RCTC's Resident Engineer will require the design/build contractor to keep the Coal Canyon on- and off-ramps open at all times for emergency and police personnel. RCTC's Resident Engineer will require the design/build contractor to ensure that use of the emergency access road as a turnaround or shortcut for any construction or non-emergency traffic is prohibited. That road will only be used during bridge construction and general road construction at Coal Canyon. RCTC's Resident Engineer will also require the design/build contractor to ensure that, in general, no hauling is allowed at night through underpasses and freeway off-ramps.	Final EIR/EIS	Design Builder	During construction						
NC-16	During construction in Coal Canyon, RCTC's Resident Engineer will require the design/build contractor to close the gates at Coal Canyon at the end of each construction day. The locations of those gates will be shown on the project specifications.	Final EIR/EIS	Design Builder	During construction						

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NC-17	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify existing and proposed conservation areas within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To reduce impacts where the project interfaces with existing or proposed conservation areas prior to and during construction, RCTC's Project Manager will ensure that the project complies with the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the Western Riverside County MSHCP. The project specifications will include applicable guidelines from the Western Riverside County MSHCP.	Final EIR/EIS	RCTC	Final design						
NC-18	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify existing Criteria Areas within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To reduce impacts where the project is located within the Criteria Area, RCTC's Project Manager will ensure that the project complies with the applicable siting and design criteria and the Construction Guidelines in Section 7.5.2 of the Western Riverside County MSHCP. The project specifications will include applicable guidelines from the Western Riverside County MSHCP.	Final EIR/EIS	Design Builder	Final design						
NC-19	During construction, RCTC's Resident Engineer will require the design/build contractor to comply with guidelines from the Western Riverside County MSHCP included in the project specifications. The SR-91 CIP is a covered project. Therefore, RCTC's Resident Engineer will ensure that the SR-91 CIP complies with all Western Riverside County MSHCP Construction Guidelines and Standard BMPs prior to and during construction.	Final EIR/EIS	Design Builder	During construction						
WET-1	Riverside County Transportation Commission's (RCTC) Project Manager will ensure that prior to any clearing or construction, a Section 404 Nationwide Permit is obtained through the United States Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA). RCTC's Resident Engineer will retain a copy of the Corps permit at the construction site and will ensure that the conditions in that permit are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction						

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WET-2	RCTC's Project Manager will ensure that prior to any clearing or construction, a Streambed Alteration Agreement with California Department of Fish and Game (CDFG) is obtained. RCTC's Resident Engineer will retain a copy of the CDFG agreement at the construction site and will ensure that the conditions in that agreement are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction						
WET-3	RCTC's Project Manager will ensure that prior to any clearing or construction, a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) is obtained. RCTC's Resident Engineer will retain a copy of the Section 401 certification at the construction site and will ensure that the conditions in that certification are properly implemented prior to and during construction.	Final EIR/EIS	Design Builder	Prior to construction						
PS-1	As part of the SR-91 CUP Habitat Mitigation and Monitoring Plan, trees and shrubs will be planted at appropriate locations, and the species list to be used for those plantings will include Southern California black walnut and Coulter's matilija poppy. At a minimum, 30 Southern California black walnut trees will be planted.	Final EIR/EIS	RCTC's Project Manager	Required for Initial Phase; Timing during the design/build phase						
AS-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will coordinate with the Designated Qualified Biologist to identify all areas of potential burrowing owl (BUOW) habitat within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To ensure that any BUOW that may occupy the site in the future are not affected by construction activities, RCTC's Resident Engineer will require the design/build contractor to have preconstruction BUOW surveys conducted by a Designated Qualified Biologist within 30 days prior to any phase of construction in the areas identified as potential BUOW habitat. These preconstruction surveys are also required to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the federal Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. If any of the preconstruction surveys determine that BUOW are present, one or more of the following mitigation measures may be required: (1) avoidance of active nests/burrows and surrounding buffer area during construction activities;	Final EIR/EIS	Design Builder	Final design						

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	(2) passive relocation of individual owls; (3) active relocation of individual owls; and									
	(4) preservation of on-site habitat with long-term conservation value for the owl. The specifics of the required measures will be coordinated among the Department District Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Biologist, and the resource agencies. RCTC's Resident Engineer will ensure that any BUOW measures determined to be required based on the results of the preconstruction surveys and the required coordination are properly implemented by the design/build contractor prior to and during construction in the BUOW areas identified in the surveys.	Final EIR/EIS								
AS-2	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify all areas of potential bat habitat within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. RCTC's Project Manager will require the design/build contractor to have a Designated Qualified Bat Biologist survey all potential bat habitat in June, prior to construction, to assess the potential for the presence of maternity roosts because maternity roosts are generally formed in late spring. The Designated Qualified Bat Biologist will also perform preconstruction surveys because bat roosts can change seasonally. The surveys will include a combination of structure inspection, sampling, exit counts, and acoustic surveys.	Final EIR/EIS	Design Builder	Final design						
AS-3	To avoid direct mortality to bats roosting in areas subject to effects from construction activities, RCTC's Resident Engineer will require the design/build contractor to ensure that any structure with potential bat habitat will have temporary bat exclusion devices installed under the supervision of the Designated Qualified Bat Biologist prior to construction. The installation of the exclusion devices will be conducted during the fall (September or October) to avoid trapping flightless young inside during the summer months or hibernating individuals during the winter. Such exclusion efforts must be continued to keep the structures free of bats until the completion of construction. Replacement roosting habitat may also	Final EIR/EIS	Design Builder	Prior to construction						

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	be needed to minimize effects to excluded bats. All bat exclusion techniques will be coordinated among the California Department of Transportation (Department) District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Bat Biologist, and the resource agencies.									
AS-4	As required in Measure NC-10, RCTC's Resident Engineer will ensure that all construction work on bridges will take place during the day to the best extent feasible. Limited evening and/or night construction may be required for safety and/or operations reasons. The RCTC Project Engineer will require the design/build contractor to include construction management measures to direct lighting and noise away from bat night roosting areas in the project specifications. The RCTC Resident Engineer will require the design/build contractor to implement those measures during evening and night construction as much as possible while providing for safe facility operations and construction worker safety.	Final EIR/EIS	Design Builder	During construction						
AS-5	RCTC's Project Engineer will ensure that the final design specifically addresses keeping riparian vegetation delineated on the project specifications that is adjacent to bat roosting sites (which include crevices in bridges, culverts, and overhead structures) intact during construction per measures included in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly implement the measures in the project specifications to keep riparian vegetation adjacent to bat roosting sites intact.	Final EIR/EIS	Design Builder	Prior to and during construction						
AS-6	To prevent project effects to bridge- and crevice-nesting birds (i.e., swifts and swallows), RCTC's Resident Engineer will require the design/build contractor to ensure that all work on existing bridges with potential habitat that is conducted between February 15 and October 31 includes removal of all bird nests prior to construction under the guidance and observation of the Designated Qualified Biologist prior to February 1 of that year, before the swallow colony returns to the nesting site. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed	Final EIR/EIS	Design Builder	During construction						

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	(such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by the Designated Qualified Biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the Department District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the design/build contractor, the design/build contractor's Designated Qualified Biologist, and the resource agencies.									
AS-7	During final design, RCTC's Project Manager, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will determine whether structural features providing existing bat roosting habitat cannot be permanently retained following construction. If that is the case, RCTC's Project Manager, RCTC's Project Engineer, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will identify alternative roosting habitat to be installed during project construction. The project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures. Prior to and during construction, RCTC's Resident Engineer will require the design/build contractor to properly implement the designs and specifications for bat exclusion and habitat replacement structures included in the project specifications. The installation and maintenance of those structures will be monitored by the Designated Qualified Biologist.	Final EIR/EIS	Design Builder	Final design; prior to and during construction					
AS-8	RCTC's Resident Engineer will require the design/build contractor to install and maintain silt fence barriers at all staging or construction areas at Coal Canyon and areas within Chino Hills State Park (CHSP) to prevent small animals from entering those areas.	Final EIR/EIS	Design Builder	During construction						
TE-1	Prior to any ground disturbing activities, an individual will be identified as the Designated Biologist. A qualified Designated Biologist must have a Bachelor's degree with an emphasis in ecology, natural resource management, or related science; 3 years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America	Final EIR/EIS	Design Builder	Prior to disturbance						

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	or The Wildlife Society; previous experience with applying the terms and conditions of a Biological Opinion; and the appropriate permit and/or training if conducting focused or protocol surveys for listed species. The Riverside County Transportation Commission (RCTC) will ensure the Designated Biologist position is filled throughout the construction period. Each successive Designated Biologist (if applicable) will be approved by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (hereafter referred to as the Wildlife Agencies). The Designated Biologist will have the authority to ensure compliance with conservation measures and will be the primary agency contact for the implementation of these measures. The Designated Biologist will have the authority and responsibility to halt activities that are in violation of the conservation measures.									
TE-2	To minimize adverse effects from dust during all site disturbance, grading, and construction activities, the design/build contractor will ensure that all active parts of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust. Additionally, the design/build contractor will ensure that all stockpiled material is sufficiently watered or covered to prevent excessive amounts of dust.	Final EIR/EIS	Design Builder	During construction						
TE-3	All erosion and sediment control devices during project construction and operation, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.	Final EIR/EIS	Design Builder	During construction						
TE-4	During all site disturbance, grading, and construction activities, the design/build contractor will be required to control noise from construction activity consistent with Caltrans Standard Specifications, Section 14-8.02, “Noise Control,” and the California Department of Transportation (Caltrans) Standard Special Provisions S5-310. Noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. will not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet (ft) from the noise source. The noise level requirement will apply to the equipment on the job site or related	Final EIR/EIS	Design Builder	During construction						

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	to the job, including, but not limited to, trucks, transit mixers, or transient equipment that may or may not be owned by the contractor.									
TE-5	During all site disturbance, grading, and construction activities in and immediately adjacent to biologically sensitive areas, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation Areas, vegetated drainages, and coastal sage scrub (CSS) in coastal California gnatcatcher (CAGN) designated critical habitat, the design/build contractor will be required to control noise from construction activity by using an alternative warning method instead of a sound signal unless required by safety laws. In addition, the contractor will equip all internal combustion engines with the manufacturer-recommended mufflers and will not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by the RCTC Resident Engineer, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	Final EIR/EIS	Design Builder	During construction					
TE-6	In accordance with the Municipal Codes of the Cities of Anaheim, Corona, Riverside, and Norco, the design/build contractor will be required to limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays. If construction is needed outside those hours or days, the design/build contractor will be required to coordinate with the affected local jurisdiction. If the local jurisdiction approves construction hours that are different from those imposed by this measure, then the design/build contractor will immediately request that RCTC consider a modification to this measure to allow construction during the new hours that the local jurisdiction approved.	Final EIR/EIS	Design Builder	During construction					
TE-7	In the major wildlife movement corridors at, Coal Canyon, Wardlow Wash, and Fresno Canyon, and areas adjacent to least Bell's vireo and CAGN occupied areas (approximately Post Mile [PM] ORA-91-R17.16 to PM ORA-91-R18.74), construction activities will be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Should	Final EIR/EIS	Design Builder	During construction					

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance for Ultimate Project YES / NO	
	an exception to this measure be necessary, RCTC and the California Department of Transportation (Department) will consult with the Wildlife Agencies to determine effective measures to avoid and minimize adverse impacts to these species and movement corridors.									
TE-8	Braunton's Milk-vetch Conservation Measures. A pre-construction survey will be conducted prior to ground disturbing activities in the vicinity of the historical occurrence in Coal Canyon in Orange County. This survey will be conducted by a biologist familiar with the species and during the appropriate time of year to optimize detection. Should Braunton's milk-vetch be found during surveys, the Designated Biologist will consult with the USFWS to determine effective measures to avoid and minimize adverse impacts to this species.	Final EIR/EIS	Design Builder	Prior to construction						
TE-9	Coastal California Gnatcatcher Conservation and Compensatory Measures. The Designated Biologist (or their designee) will monitor construction within the vicinity of CAGN-designated critical habitat areas prior to and during site preparation, grading, and construction activities, to flush any wildlife species present prior to construction and to ensure that vegetation removal, best management practices (BMPs), Environmentally Sensitive Areas (ESAs), and all avoidance and minimization measures are properly implemented and followed.	Final EIR/EIS	Design Builder	During construction						
TE-10	RCTC will offset the permanent loss of 8.42 acres (ac) of occupied CAGN habitat in Orange County, including 6.32 ac of designated critical habitat, by restoring 16.03 ac of habitat suitable for CAGN breeding, dispersal, and foraging in Chino Hills State Park (CHSP) to be conducted during the Initial Phase of the project. If restoration is unable to be conducted in CHSP, another location will be selected on approval of the Wildlife Agencies.	Final EIR/EIS	RCTC	After construction						
TE-11	RCTC will offset the temporary loss of 3.01 ac of occupied CAGN habitat in Orange County, including 2.09 ac of CAGN-designated critical habitat, with in-kind, or better, on-site restoration after the completion of project construction.	Final EIR/EIS	RCTC	After construction						
TE-12	Prior to site preparation, grading or construction activities, a restoration plan will be developed by a qualified biologist for the permanent and temporary impacts to occupied CAGN habitat in Orange County, including designated critical habitat. The plan will be	Final EIR/EIS	Design Builder	Prior to construction						

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	submitted to the USFWS for review and approval. This plan will include, at a minimum, a detailed description of restoration methods, slope stabilization/erosion control, criteria for restoration to be considered successful, and monitoring and reporting protocol(s). The restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial watering has been off for at least 2 years.									
TE-13	During all site preparation, grading, and construction activities in Orange County, the RCTC Resident Engineer, will require the design/build contractor to use shielded lighting for any nighttime construction adjacent to coastal sage scrub in CAGN-designated critical habitat.	Final EIR/EIS	Design Builder	During construction						
TE-14	Riparian Birds Conservation Measures. During the bird breeding season (i.e., February 15–September 15), the Designated Biologist (or their designee) will monitor riparian and riverine areas within 500 ft of active construction areas for the duration of the construction in those areas to survey for active nests and/or nesting activity to ensure breeding activities are not disrupted and to ensure vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly implemented.	Final EIR/EIS	Design Builder	During construction						
TE-15	Measure for Light Intrusion and Wildfires. To minimize adverse effects from light intrusion from vehicle headlights and the potential threat of increased fires from the operation of State Route 91 (SR-91), during final design, the Department and RCTC will work with the USFWS to investigate the possibility of adding features along SR-91 in the vicinity of the Coal Canyon wildlife crossing in Orange County. For example, consideration can be given to the placement of K-rail, concrete walls, and/or hardscaping barriers along the shoulder of SR-91. In investigating these features, consideration must be given to motorist safety, freeway operations, vehicle headlight mitigation and the potential fire threat.	Final EIR/EIS	RCTC	Ultimate Phase						
TE-16	Santa Ana Sucker Conservation Measures. The United States Army Corps of Engineers (Corps) is in the process of constructing the Santa Ana River (SAR) Reach 9 Phase 2 Green River Golf Club Embankment Protection Project within the action area. Following completion of the embankment construction, perennial stream habitat for the Santa	Final EIR/EIS	Design Builder	During construction						

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	Ana sucker will be reestablished within the construction footprint. The Department and RCTC will coordinate with the Corps during construction of the SR-91 CIP to ensure these restoration areas will not be temporarily or permanently impacted during construction of the SR-91 CIP.									
TE-17	The Department and RCTC will coordinate with the Corps during construction to ensure that the SR-91 CIP will not affect releases from Prado Dam or result in a permanent reduction of acreage within the Santa Ana River Canyon Habitat Management Area.	Final EIR/EIS	Design Builder	During construction						
IS-1	During final design, Riverside County Transportation Commission (RCTC) Project Engineer will direct a qualified landscape architect develop a weed abatement program for inclusion in the project specifications. That program will be developed in compliance with Executive Order (EO) 13112 to minimize the potential for intrusion or export of invasive plant species to and from the biological study area (BSA) during project construction. At a minimum, the following will be included in the weed abatement program and implemented prior to and during construction to address potential effects associated with invasive species:	Final EIR/EIS	Design Builder	Final design; prior to construction						
IS-1a	RCTC's Resident Engineer will require the design/build contractor to inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another. RCTC's Resident Engineer will require the design/build contractor to limit soil and vegetation disturbance to those areas specifically required for the project construction.	Final EIR/EIS	Design Builder	During construction						
IS-1b	RCTC's Resident Engineer will require the design/build contractor to obtain soil, gravel, and rock from weed-free sources. RCTC's Resident Engineer will require the design/build contractor to use only certified weed-free straw, mulch, and/or fiber rolls for erosion control during construction.	Final EIR/EIS	Design Builder	During construction						
IS-1c	Prior to the completion of construction, RCTC's Resident Engineer will require the design/build contractor to revegetate affected areas adjacent to native vegetation with plant species that are native to the vicinity and approved by the California Department of Transportation (Department) District 8 and District 12 Biologists.	Final EIR/EIS	Design Builder	During construction						

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IS-1	RCTC's Resident Engineer will require the design/build contractor to not use any species listed in the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory with a high or moderate rating in revegetation.	Final EIR/EIS	Design Builder	During construction						
IS-1d	After construction, RCTC's Resident Engineer will ensure that erosion control and revegetation sites are monitored until achievement of the performance standards included in the weed abatement program or for a period of 2 to 3 years after installation to detect nonnative species prior to the establishment of the native vegetation.	Final EIR/EIS	Design Builder	After construction						
IS-1e	RCTC's Resident Engineer will require the design/build contractor and the post-construction monitors to implement eradication procedures (e.g., spraying and/or hand weeding) should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the Department District 8 and District 12 Biologists during and after project construction.	Final EIR/EIS	Design Builder	During Construction						
		Final EIR/EIS		After construction						
IS-1f	During construction, RCTC's Resident Engineer will require the design/build contractor to reduce indirect impacts of exotic plant infestations and litter by regular roadside maintenance to remove litter and weeds from the right-of-way. Because the Department already conducts regular ongoing maintenance of landscaping in the State right-of-way, no additional project-specific measures for invasive species are required during project operations.	Final EIR/EIS	Design Builder	During construction						
HW-15	For buildings that would be demolished as part of ROW acquisition and/or construction, Asbestos Containing Material (ACM) and Lead Based Paint (LMP) testing shall be performed after ROW acquisition and prior to building demolition.	Revalidation #2 for Initial Phase	Design Builder	During construction						
HW-16	Herbicide, pesticide, and fungicide testing shall be performed on the soils within acquired ROW at the Green River Golf Club (5215 Green River Road, Corona, CA).	Revalidation #2 for Initial Phase	Design Builder	During construction						