

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM
3.48
(ID # 8457)

MEETING DATE:

Tuesday, December 11, 2018

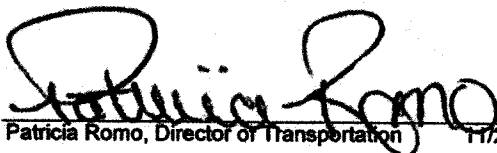
FROM : TLMA-TRANSPORTATION:

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/ TRANSPORTATION:
Intent to Adopt a Final Initial Study/Mitigated Negative Declaration and Approve
the Mission Boulevard Bridge At Santa Ana River Project within the Cities of
Jurupa Valley and Riverside, County of Riverside. 2nd District; [\$0]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Adopt a Final Initial Study with Mitigated Negative Declaration and adopt a Mitigation Monitoring and Reporting Program based on the findings in the Initial Study and the conclusion that the project will not have a significant effect on the environment;
2. Approve the Mission Boulevard Bridge At Santa Ana River Project; and
3. Direct the Clerk of the Board to file the Notice of Determination with the County Clerk for posting within five (5) working days.

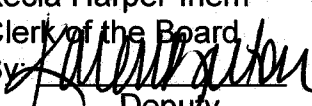
ACTION: Policy


Patricia Romo, Director of Transportation 11/26/2018

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Tavaglione, seconded by Supervisor Jeffries and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Tavaglione, Washington, Perez and Ashley
Nays: None
Absent: None
Date: December 11, 2018
xc: Transp., Recorder

Kecia Harper-Ihem
Clerk of the Board
By: 
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$0	\$0	\$ 0	\$ 0
NET COUNTY COST	\$0	\$0	\$ 0	\$ 0
SOURCE OF FUNDS: N/A			Budget Adjustment: No	
			For Fiscal Year: 18/19	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The County of Riverside (County), on behalf of the City of Riverside and the City of Jurupa Valley, proposes to replace the existing Mission Boulevard Bridge (State Bridge Number 56C-0071) over the Santa Ana River. The bridge is within the jurisdictional boundaries of both cities, and the County is the lead agency responsible for managing the project. The proposed project includes necessary approach roadway work, restriping, and utility relocation in addition to the replacement of the bridge. The project area includes segments of Mission Boulevard, Crestmore Road, and the Santa Ana River Trail.

The existing Mission Boulevard Bridge carries four lanes of traffic over the Santa Ana River (two lanes in each direction) and is approximately 1,104 feet long and 61 feet wide. There is no designated bicycle path or bicycle lane on the existing bridge. There is a 5-foot wide sidewalk on the south side of the bridge. The Mission Boulevard Bridge was slated for seismic retrofitting; however, a subsequent study found that replacement was a more prudent and feasible retrofit strategy. Therefore, Caltrans approved the total replacement of the bridge. The bridge is included on the eligible bridge list for the Local Seismic Safety Retrofit Program (LSSRP). The proposed project is programmed to receive federal Highway Bridge Program (HBP) funds and qualifies for matching seismic State 1B bond funds.

The proposed project will accommodate four lanes of traffic with dedicated space for pedestrians and bicyclists. A 12-foot-wide multi-purpose trail with barrier separation from vehicular traffic will be located along the south side of the bridge in lieu of standard sidewalks on each side. The new bridge will be approximately 88 feet wide and 1,100 feet long.

The County of Riverside is the lead agency for CEQA, and based on delegation by the Federal Highway Administration, the California Department of Transportation (Caltrans) is the lead agency for NEPA. As the lead agency under CEQA, the County prepared an Initial Study (IS) with proposed Mitigated Negative Declaration (MND) in order to analyze the proposed Project's impacts to the environment.

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

The Draft IS/MND was circulated for a 30-day public review period from August 13, 2018 to September 12, 2018. An open house was held during the public circulation period; a total of 8 comments were received during public circulation. Public and agency comments were addressed and incorporated into the Final IS/MND. Based on study findings, the County has determined that the proposed Project will not have a significant effect on the environment because potential effects would be mitigated to less than significant levels through the incorporation of mitigation measures.

The adoption of the Final IS/MND and the Mitigation Monitoring and Reporting Program (MMRP) for the Project will complete the CEQA environmental documentation for the Project. Caltrans, as the NEPA lead will issue a Categorical Exclusion.

Final design will begin after approval of the Final IS/MND and will be completed by July 2020. Construction is expected to begin in early 2021.

Project No.: B30528, Federal Project No. BRLSZ 5956 (192), Mission Boulevard Bridge Over Santa Ana River Bridge Replacement Project

Impact on Residents and Businesses

The Mission Boulevard Bridge crosses the Santa Ana River and currently carries 17,600 vehicles per day between the City of Jurupa Valley and the City of Riverside. The bridge replacement project will benefit commuters by providing a reliable connection over the Santa Ana River that meets the latest engineering standards and seismic design criteria. The replacement bridge will be designed in accordance with the latest state of the art seismic design criteria. The replacement bridge will be designed to incorporate the historical aesthetic elements on the current structure.

SUPPLEMENTAL:

Additional Fiscal Information

The Board's approval of the CEQA documents will facilitate the Project moving forward to seek construction funding. The Project will be funded using Federal Highway Bridge Program funds (88.53%) with 11.47% matching funds from the City of Jurupa and the City of Riverside funding sources (City of Jurupa Valley 4.93% and City of Riverside 6.54%, respectively). No General Funds will be used on this Project.

ATTACHMENTS:

Vicinity Map
Final IS/MND with MMRP
NOA/NOI to Adopt MND
Notice of Determination
Journal Voucher for CDFW & County Clerk Fee

SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA


Scott Bruckner 12/2/2018



Original Negative Declaration/Notice of Determination was routed to County Clerks for posting on.

12/11/18
Date

via Frances *Regina*
Initial

NOTICE OF DETERMINATION COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT

EA No. _____

SCH# 2018081028

PROJECT NAME: Mission Boulevard Bridge Replacement at Santa Ana River

DESCRIPTION AND LOCATION: The County of Riverside, in cooperation with the Cities of Riverside and Jurupa Valley, proposes to replace the existing Mission Boulevard Bridge over the Santa Ana River near Mount Rubidoux in Riverside County. The proposed project will accommodate two 12-ft lanes, two 14-ft lanes, two 8-ft shoulders and a 4-ft median. A 12-ft multipurpose trail with barrier separation from vehicular traffic will be located along the south side of the bridge in lieu of standard sidewalks on each side. The new bridge will be approximately 88 ft wide and 1,100 ft long. The replacement bridge profile will be raised slightly to accommodate current standards for the roadway design. At mid-span, the profile will be approximately 4-6 ft higher than the existing bridge.

- 1. The project [will will not] have a significant effect on the environment.
- 2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
- 3. A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
- 4. Mitigation measures [were were not] made a condition of the approval of this project.
- 5. A Mitigation Monitoring plan [was was not] adopted.
- 6. A statement of Overriding Considerations [was was not] adopted for this project.

The project will not have a significant effect on the environment and a Mitigated Negative Declaration has been adopted pursuant to CEQA and may be examined, along with administrative record, at the Riverside County Transportation Department, 3525 14th Street, Riverside, 92501 and <http://rcprojects.org/missionblvd/>

The Final EIR may be examined, along with administrative record, at the Transportation Department, 4080 Lemon Street, 8th fl, Riverside, California 92501.

Mary Zambon Title Environmental Div. Manager Date 11/7/18
Mary Zambon

Patricia Romo Title Director of Transportation Date 11/7/2018

HEARING BODY OR OFFICER

XX Board of Supervisors
_____ Planning Commission

ACTION ON PROJECT

X Approval
_____ Disapproval

Date: 12/11/18

Karen M. Gatten Title: Board Assistant Date: 12/11/18
Verifying: _____

For County Clerk Use

12/11/18 340

**RIVERSIDE COUNTY CLERK & RECORDER
AUTHORIZATION
TO BILL
BY JOURNAL VOUCHER**

-TO BE FILLED IN BY SUBMITTING AGENCY-

537280-20000-3130500000 -ZB30528- Z1530.

AUTHORIZATIONNUMBER: W.O.#ZB30528C , Task Code Z1530

AMOUNT: \$2,330.75 (\$50.00 County Clerk Processing Fee + \$2,280.75 CDFW MND Filing Fee)

DATE: November 7, 2018

AGENCY: Riverside County Transportation Department

THIS AUTHORIZES THE COUNTY CLERK & RECORDER TO ISSUE A VOUCHER FOR PAYMENT OF ALL FILING AND HANDLING FEES FOR THE ACCOMPANYING DOCUMENT(S).

NUMBER OF DOCUMENTS INCLUDED: One (1)

AUTHORIZED BY: Mary Zambon, Environmental Division Manager

Signature: *Mary Zambon*

PRESENTED BY: Frances Segovia, Senior Transportation Planner

-TO BE FILLED IN BY COUNTY CLERK-

ACCEPTED BY: _____

DATE: _____

RECEIPT # (S) _____

FINAL

**INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION**

**MISSION BOULEVARD BRIDGE REPLACEMENT AT SANTA ANA RIVER
RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT**

Prepared for:

County of Riverside
3525 14th Street
Riverside, California 92501

Prepared by:

LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507
Contact: Carl Winter, Associate/Senior Environmental Planner
(951) 781-9310

LSA Project No. KFD1503A

November 2018

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 - C1: NATURAL ENVIRONMENT STUDY (INCLUDES AS APPENDICES JURISDICTIONAL DELINEATION, FOCUSED SPECIES SURVEYS, MULTI-SPECIES HABITAT CONSERVATION PLAN (MSHCP) CONSISTENCY ANALYSIS AND NOISE ANALYSIS FOR PILE DRIVING EFFECTS TO LEAST BELL'S VIREO)
 - C2: DETERMINATION OF BIOLOGICALLY EQUIVALENT OR SUPERIOR PRESERVATION (DBESP) REPORT
- D: HISTORIC PROPERTY SURVEY REPORT/ARCHEOLOGICAL SURVEY REPORT/HISTORIC RESOURCES EVALUATION REPORT (NOT FOR PUBLIC DISTRIBUTION)
- E: PALEONTOLOGICAL RESOURCES ASSESSMENT
- F: GEOTECHNICAL REPORTS
 - F1: PRELIMINARY FOUNDATION REPORT UPDATE
 - F2: ADDENDUM TO PRELIMINARY FOUNDATION REPORT UPDATE
 - F3: PRELIMINARY GEOTECHNICAL DESIGN REPORT
- G: WATER QUALITY ASSESSMENT REPORT
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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
AB 52	Assembly Bill 52
ACM	Asbestos-Containing Materials
ADA	Americans With Disabilities Act
ADL	Aerially Deposited Lead
ALUC	Airport Land Use Commission
Amsl	Mean Sea Level
APE	Area of Potential Effects
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	Aboveground Storage Tank
Basin	South Coast Air Basin
BEP	Bond Expenditure Plan
bgs	Below Ground Surface
BMP	Best Management Practice
BSA	The Biological Study Area
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish And Wildlife
CEQA	California Environmental Quality Act
CERCLIS	Liability Information System
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIDH	Cast-in-Drilled-Hole
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
COPCs	Contaminants of Potential Concern
County	County of Riverside
CRECs	Controlled Recognized Environmental Conditions
CWA	Clean Water Act
DMA	Drainage Management System
DTSC	Department of Toxic Substance Control
EIC	Eastern Information Center

EIR	Environmental Impact Report
EnviroStor	Site Mitigation and Brownfield Reuse Program
ERNS	Emergency Response and Notification System
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FINDS	Facility Index System
Gabrieleño	Gabrieleño Band of Mission Indians-Kizh Nation
GHG	Greenhouse Gas
HA	Hydrologic Areas
HCM	Highway Capacity Manual
HMMP	Habitat Mitigation and Monitoring Plan
HPB	Highway Bridge Program
HRECs	Historical Recognized Environmental Conditions
HWT	Hazardous Waste Transporters
IS	Initial Study
ISA	Initial Site Assessment
JUSD	Jurupa Unified School District
LACM	Natural History Museum of Los Angeles County
LBP	Lead-Based Paint
LBV	Least Bell's Vireo
LID	Low Impact Development
L_{eq}	Equivalent Noise Level
L_{max}	Maximum Noise Level
LOS	Level of Service
LSSRP	Local Seismic Safety Retrofit Program
LSTs	Local Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MRZ-2	Mineral Resource Zone
MSHCP	Multiple Species Habitat Conservation Plan
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NCCP	Natural Communities Conservation Plan

ND	Negative Declaration
NEPA	National Environmental Policy Act
NFRAP	No Further Remedial Action Planned
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
OBMP	Optimum Basin Management Program
OHWM	Ordinary High Water Mark
PAHs	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene
POTW	Publically-Owned Treatment Works
PRDs	Permit Registration Documents
PRIMP	Paleontological Resources Impact Mitigation Program
RCFC&WCD	Riverside County Flood Control and Water Conservation District
RCRA	Resources Conservation and Recovery Act
RCRA-CESQG	RCRA-Conditionally Exempt Small Quantity Generator
RCRA-LQG	RCRA-Large Quantity Generator
RCRA-TSDF	Hazardous Waste Treatment, Storage, or Disposal Facilities
RECs	Recognized Environmental Conditions
RLSS	Right-Lateral Strike-Slip
RPW	Relatively Permanent Water
RUSD	Riverside Unified School District
RWQCB	Regional Water Quality Control Board
Santa Ana RWQCB	Santa Ana Regional Water Quality Control Board
SART	Santa Ana River Trail
SAS	Santa Ana Sucker
SAWA	Santa Ana Watershed Authority
SBBM	San Bernardino Baseline and Meridian
SCAQMD	South Coast Air Quality Management District
SFER	Summary Floodplain Encroachment Report
SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigation and Cleanup
SMARTS	Stormwater Multiple Application and Report Tracking System
SOI	Sphere of Influence
SVOCs	Semi-Volatile Organic Compounds

SVP	Society of Vertebrate Paleontology
SWF/LF	Solid Waste Disposal Facilities and Landfills
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWRCY	Solid Waste Recycling Facilities
TCE	Temporary Construction Easements
TPHs	Total Petroleum Hydrocarbons
TRB	Transportation Research Board
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USTs	Underground Storage Tanks
VCP	Voluntary Cleanup Program
VHDR	Very High Density Residential
VOCs	Volatile Organic Compounds
WDID	Waste Discharge Identification Number
WDS	Waste Discharge System
WMUDS/SWAT	Waste Management Unit Database System

1.0 INTRODUCTION AND PURPOSE

1.1 INTRODUCTION

Section 1.0 of this Initial Study (IS) describes the purpose, environmental authorization, the intended uses of the IS, documents incorporated by reference, and the processes and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the *State of California Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines)*, the County of Riverside (County) is the Lead Agency under the California Environmental Quality Act (CEQA). The County has primary responsibility for compliance with CEQA and consideration of the Mission Boulevard Bridge Replacement at Santa Ana River Project (project or proposed project.)

The Initial Study is organized as follows:

- Section 1.0 Introduction and Purpose* provides a discussion of the IS's purpose, focus, legal requirements.
- Section 2.0 Project Description* provides a detailed description of the proposed project.
- Section 3.0 Environmental Checklist* includes a checklist and accompanying analyses of the project's effect on the environment. For each environmental issue, the analysis identifies the level of project's environmental impact.
- Section 4.0 Preparers* identifies persons involved in the preparation and review of the IS.
- Section 5.0 References* details the references cited throughout the document.
- Appendices* Include the technical material prepared to support the analyses contained in the IS.

1.2 PURPOSE

CEQA requires that the proposed project be reviewed to determine the environmental effects that would result if the project is approved and implemented. The County is the Lead Agency and has the responsibility for preparing and adopting the associated environmental document prior to consideration of the approval of the proposed project. The County has the authority to make decisions regarding discretionary actions relating to implementation of the proposed project.

This IS has been prepared in accordance with the relevant provisions of CEQA (California Public Resources Code Section 21000 et seq.); the *CEQA Guidelines*,¹ and the rules, regulations, and procedures for implementing CEQA. The objective of the Initial Study is to inform County decision-makers, representatives of other affected/responsible agencies, the public, and interested parties of the potential environmental consequences of the project.

As established in *CEQA Guidelines* Section 15063(c), the purposes of an IS are to:

¹ California Code of Regulations, Title 14, Chapter 3, Sections 15000 through 15387.

- Provide the Lead Agency (County) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND);
- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an ND or MND;
- Assist in the preparation of an EIR, if one is required;
- Facilitate environmental assessment early in the design of a project;
- Provide a factual basis for finding in an ND or MND that a project will not have a significant effect on the environment;
- Eliminate unnecessary EIRs; and
- Determine whether a previously prepared EIR could be used with the project.

1.3 INTENDED USE OF THIS INITIAL STUDY

As identified in the following analyses, project impacts related to various environmental issues either do not occur, are less than significant (when measured against established significance thresholds), or have been rendered less than significant through implementation of mitigation measures. Based on these analytical conclusions, this IS supports adoption of an MND for the proposed project.

CEQA¹ permits the incorporation by reference of all or portions of other documents that are generally available to the public. The IS has been prepared utilizing information from planning and environmental documents from the County and the Cities of Riverside and Jurupa Valley (Cities), technical studies specifically prepared for the project, and other publicly available data. The documents utilized in the IS are identified in Section 5.0 and are hereby incorporated by reference.

1.4 PUBLIC REVIEW OF THE INITIAL STUDY

A copy of this Initial Study as well as the technical studies is available for review during normal business hours at the following locations:

Riverside County Transportation Department
3525 14th Street, 2nd Floor
Riverside, California 92501

City of Riverside
Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522

¹ CEQA Guidelines Section 15150.

City of Jurupa Valley
Planning Department
8930 Limonite Avenue
Jurupa Valley, California 92509

An electronic copy of the Initial Study and its appendices may also be viewed online at the following site: <http://rcprojects.org/missionblvd>.

A 30-day public circulation period will begin Monday, August 13, 2018 and ends Wednesday, September 12, 2018. Written comments relating to this IS should be addressed to:

Riverside County Transportation Department- Environmental Division
Attn: Frances Segovia, Senior Transportation Planner
3525 14th Street, 2nd Floor
Riverside, California 92501

Submit comments via email no later than Wednesday, September 12, 2018 to: fsegovia@rivco.org.

After the public circulation period, consideration of comments raised during the public review period will be taken into account and addressed prior to adoption of the MND by the County.

1.5 RESPONSE TO PUBLIC COMMENTS

CEQA requires that the Project decision makers consider the comments received during the public review of the Initial Study/Mitigated Negative Declaration prior to carrying out or approving the project (*CEQA Guidelines* Section 15074[b]). As previously stated in section 1.4, the Initial Study/Mitigated Negative Declaration (State Clearinghouse No. 2018081028) was circulated to the public and public agencies for a 30-day public review from August 13, 2018 through September 12, 2018. Eight (8) comments on the project were received, refer to Appendix N.

Based on the comments received, only four (4) revisions to the Draft IS/MND were required; revisions to the IS/MMD are identified by double underline text in the document.

In response to the Riverside Airport Land Use Commission, Table A (Required Permits and Approvals) of the IS/MND has been revised to recognize the requirement for FAA approval of the Part 77 notification.

In response to the Riverside County Flood Control and Water Conservation Distriict (RCFCWCD), Mitigation Measures BIO-16 was revised to provide additional coordination prior to dispersal of collected Santa Ana River woollystar seed and revegetation activites. This mitigation measure now reads:

BIO-16 Half of the collected seed and soil will be dispersed outside of the project footprint subsequent to seed collection and the other half of the collected seed and soil will be retained by a seed collection company (such as S&S Seed) for site restoration following project completion. Prior to seed dispersal, the location of the seed dispersal and revegetation activities shall be coordinated with representatives of the Riverside County Flood Control and Water Conservation District.

In response to the RCFCWCD, Mitigation Measure BIO-24 was revised to allow coordination during the identification of compensatory mitigation areas. This mitigation measures now reads:

BIO-24 Compensatory mitigation for riparian/riverine areas will occur such that the project will be equivalent or superior to existing conditions. The identification of proposed compensatory mitigation areas shall be coordinated with representatives of the Riverside County Flood Control and Water Conservation District. On-site and off-site mitigation shall be provided based on the following:

- New shade effects within additional bridge footprint will be mitigated by weeding and revegetating at a 2:1 ratio off-site;
- Temporary effects beneath existing bridge footprint within existing shaded areas (excluding areas of open water and concrete) will be mitigated by on-site weeding only at a 1:1 ratio; and
- Temporary effects to riparian/riverine areas adjacent to bridge footprint will occur at a 1.25:1 ratio on site and off site.

In response to the RCFCWCD, Mitigation Measure BIO-26 was added to allow coordination prior to any revegetation activities in areas controlled by the RCFCWCD.

BIO-26 Coordination with the Riverside County Flood Control and Water Conservation District shall occur prior to any revegetation activity that may take place within any RCFCWCD property.

The Mitigation Monitoring and Reporting Program (MMRP) has also been revised to reflect these revisions.

Neither the comments, responses to comments or the stated revisions constitute "significant new information" (CEQA Guidelines Section 15073.5) that would require recirculation of the Mitigated Negative Declaration or the preparation of an Environmental Impact Report (EIR). The comments and responses are provided in Appendix N.

2.0 PROJECT DESCRIPTION

The County of Riverside, in cooperation with the Cities of Riverside and Jurupa Valley, proposes to replace the existing Mission Boulevard Bridge (State Bridge Number 56C-0071) over the Santa Ana River near Mount Rubidoux in Riverside County (Figure 1). The purpose of the proposed project is to seismically strengthen the structure of the bridge under the Local Agency Seismic Retrofit Program and to accommodate more space for pedestrians and bicyclists (in accordance with current federal, State, and applicable local geometric standards) by replacing the Mission Boulevard Bridge at the Santa Ana River.

The County of Riverside General Plan Classification for Mission Boulevard is "Arterial Highway," with a specified right-of-way width of 128 feet accommodating a four-lane typical section width of 106 feet. The Mission Boulevard Bridge was slated for seismic retrofitting by the County in cooperation with Caltrans under the Local Agency Seismic Retrofit Program. An as-built seismic assessment of the existing bridge was performed and a retrofit strategy was developed to seismically strengthen the structure in 1997. However, a subsequent study in 2011 confirmed that replacement was a more prudent and feasible retrofit strategy. In 2012, Caltrans approved the total replacement of the bridge. The bridge is included on the eligible bridge list for the Local Seismic Safety Retrofit Program (LSSRP). The proposed project is programmed to receive federal Highway Bridge Program (HBP) funds and qualifies for matching seismic 1B bond funds.

2.1 PROJECT LOCATION

The project is located along Mission Boulevard where it crosses the Santa Ana River between the Cities of Riverside and Jurupa Valley. The project footprint is an unsectioned portion of Township 2 South, Range 5 West, as shown on the *Riverside West, California* 7.5-minute series U.S. Geological Survey (USGS) topographic map.

2.2 ENVIRONMENTAL SETTING

Land Use

Existing land uses in the project area include mobile home residences, vacant land, a park, and trails as summarized below (refer to Checklist Question 20 for further detail):

- North of Mission Boulevard, between Crestmore Road and Santa Ana River: Land use in this area includes vacant land and area ranges from approximately 1 to 19 feet lower in elevation than Mission Boulevard.
- South of Mission Boulevard, between Crestmore Road and Santa Ana River: Land uses in this area include residences at the Old Plantation Mobile Home Park and vacant land. This area ranges from approximately 3 to 24 feet lower in elevation than Mission Boulevard.
- North of Mission Boulevard, east of Santa Ana River: Land uses in this area include the Santa Ana River Trail and City of Riverside-owned open space. The Santa Ana River Trail is a paved 50.3-mile long trail that extends across San Bernardino, Riverside, and Orange Counties. It is 12

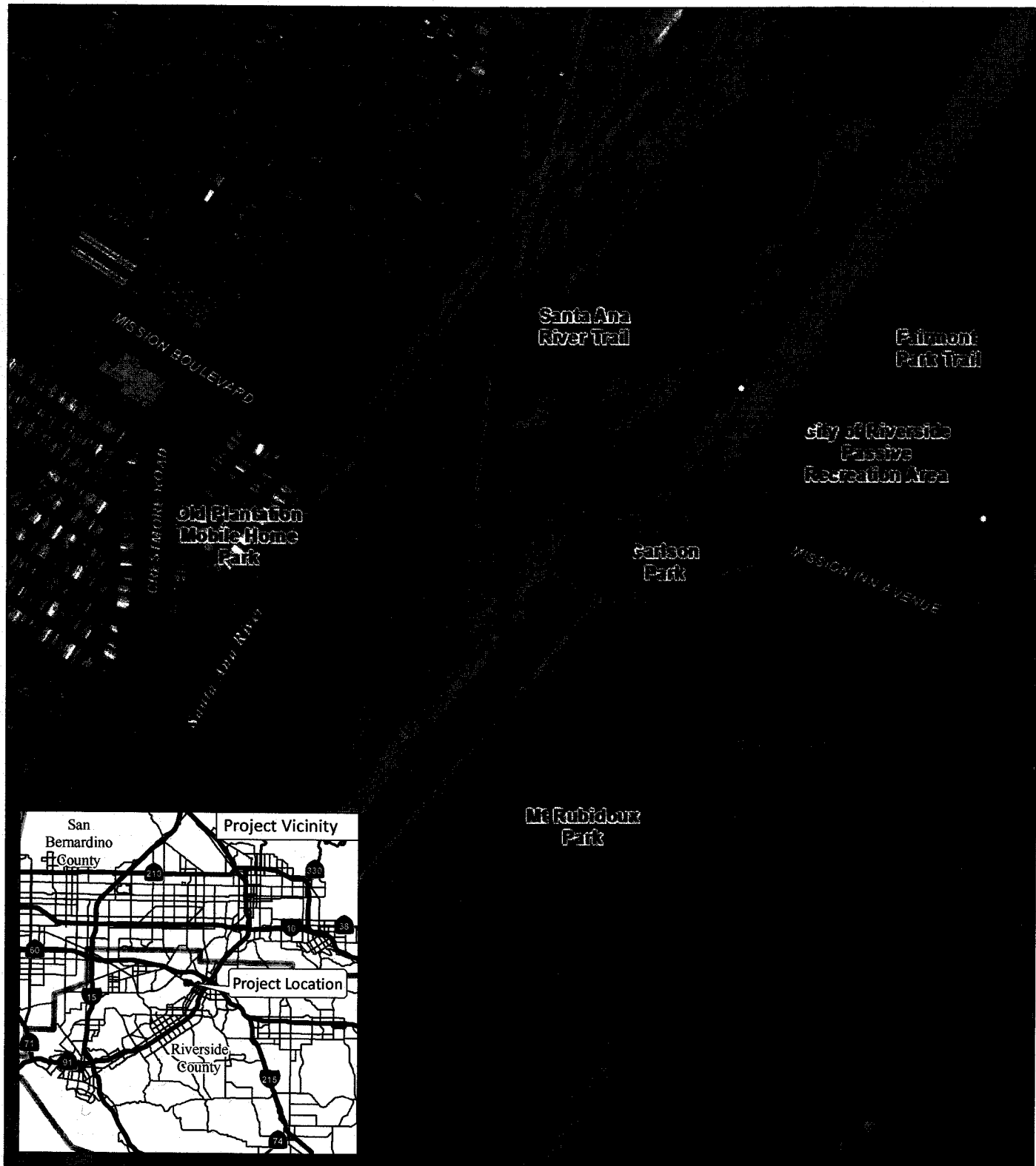


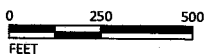


FIGURE 1

LEGEND

-  Project Footprint
-  City Boundaries



Source: Bing Aerial, 2015

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Mission Boulevard Bridge Replacement at Santa Ana River

Regional and Project Location

State Bridge No. 56C-0071

feet wide with a yellow-lined center divider for two-way traffic. The trail is used by both pedestrians and bicyclists. The City of Riverside-owned Passive Recreation Area is an approximately 90-acre park featuring natural landscape and walking trails. It is directly north of Mission Inn Avenue on the east side of the Santa Ana River. Fairmount Park Trail is a paved path from Fairmount Park, north of the project area, which connects to the Santa Ana River Trail (refer to Checklist Question 29 for further detail).

- South of Mission Boulevard, east of Santa Ana River: Land uses in this area include Carlson Park and Mt. Rubidoux Park and Trail. Carlson Park is a dog park offering gated areas landscaped with grass and trees (refer to Checklist Question 29 for further detail).
- Buena Vista Drive and Park, City of Riverside Landmark #14 is completely within the public right-of-way and partially within the project area in Carlson Park and along the eastern bridge approach. It includes the east towers of the old Rubidoux Bridge; the St. Francis Shrine/waterfall (now defunct); a drinking fountain; both sides of the historic alignment of Buena Vista Drive including raincross streetlights and balustrades, terraced stone walls, walkways, and concrete railings; Carlson Park, and the Buena Vista Bridge over Mission Inn Avenue (refer to Checklist Question 7 for further detail).

Topography and Natural Communities

The natural topography within the project area is relatively flat and historically consists of the alluvial floodplain of the Santa Ana River and adjacent banks and upland areas. The elevation of the river floodplain within the project area is approximately 775 feet above mean sea level. The Santa Ana River is the major hydrologic feature within the study area.

The project footprint¹ is primarily occupied by the existing Mission Boulevard Bridge and associated roadway infrastructure. Native vegetation within the Santa Ana River provides habitat for both common wildlife species and special-status species known to exist within the project area. Surrounding areas are developed by existing transportation corridors, residential and commercial development, and urban parks, as well as adjacent native habitats within the Santa Ana River.

The biological study area (BSA)² currently contains six vegetation communities and land use categories: riparian forest, riparian scrub, developed and ornamental landscaping, non-native grasslands, open water, and unvegetated riverbed. The predominant natural plant communities (riparian forest and riparian scrub) are limited to the river floodplain. Areas outside the levees are mostly developed, barren, or support ornamental vegetation dominated by non-native species (refer to Checklist Question 6 for further detail).

¹ The project footprint includes portions of Mission Boulevard, Crestmore Road, Carlson Park, the Santa Ana River Trail and the Santa Ana River itself where project activities will occur. The project area includes the project footprint as well as areas outside the project footprint located within the Cities of Riverside and Jurupa Valley. The term "project area" is generally more expansive and typically extends beyond the project footprint or the more narrowly delineated survey/study areas identified in project-specific technical assessments (i.e., biological, cultural or hazardous materials reports.).

² The Biological Study Area (BSA) includes the proposed project footprint and an approximately 50-foot buffer within which potential effects to biological resources were evaluated. The BSA extends along the entire length of the Mission Boulevard Bridge at the Santa Ana River and includes adjoining portions of Crestmore Road and the levees along the river channel. Much of the surrounding landscape outside the river channel is urban development including parks with ornamental plants. Mount Rubidoux Park, just south of the BSA, supports undeveloped land dominated by non-native grassland.

2.3 PROPOSED PROJECT

The proposed project (Figure 2) includes necessary approach roadway work, restriping, and utility relocation. The replacement bridge profile will be raised slightly to accommodate current standards for the roadway design. At mid-span, the profile will be approximately 4 to 6 feet higher than the existing bridge.

The proposed project will accommodate four lanes of vehicular traffic with dedicated space for pedestrians and bicyclists in accordance with current federal, State, and applicable local geometric standards. The proposed project will include two 12-foot lanes, two 14-foot lanes, two 8-foot shoulders, and a 4-foot median. A 12-foot multipurpose trail with barrier separation from vehicular traffic will be located along the south side of the bridge in lieu of standard sidewalks on each side. The new bridge will be approximately 88 feet wide and 1,100 feet long. The southern edge of the new bridge deck is expected to remain at its current position. The northern edge will extend past the current location to accommodate standard shoulders and the multipurpose trail. The replacement bridge profile will be raised slightly to accommodate current standards for the roadway design. At mid-span, the profile will be approximately 4 to 6 feet higher than the existing bridge.

Deep foundations will be used to support the bridge. These may include large diameter cast-in-drilled-hole concrete piles, cast-in-steel-shell piles, or driven piles embedded 85 to 100 feet below the existing riverbed. The number of supports may vary depending on the bridge and foundation type selected, but could include 15 to 30 eight-foot diameter piles at the bents and approximately 40 three-foot diameter piles at the abutments. Foundation construction may require dewatering and/or drilling slurry. Ground improvements near the abutments may be required to address seismically induced liquefaction and lateral spreading. These improvements may include soil mixing, compaction grouting, and stone columns.

The proposed project is non-capacity increasing with the same number of traffic lanes; however, the replacement bridge and the approach roadways will be wider than the existing facilities to accommodate current roadway standards. The widening will extend to the north side of the bridge in order to minimize potential impacts to Carlson Park, facilitate the approach roadway geometrics, and allow for staged construction. Additional right-of-way, if needed, will be along the north side of the project area. Additional approach roadway work and restriping will be necessary in order to tie in with the revised geometry for the traffic lanes, shoulders, bike lanes, and sidewalks. This work will be conducted westward to approximately 200 feet beyond the Mission Boulevard/Crestmore Road intersection, 1,000 feet along Crestmore Road (north and south of Mission Boulevard), and 1,000 feet east of the existing bridge abutment in the City of Riverside. The proposed project also includes the potential relocation of utilities, including existing sewer, water, gas, electric, communication, and overhead electrical lines.

The existing Santa Ana River Bike Trail will remain open during and after the new bridge construction in its current location. The proposed multipurpose trail will maintain pedestrian and recreational cycling connectivity along the south side of new Mission Boulevard Bridge to the Santa Ana River Trail through Carlson Park. An existing sidewalk along the south side of Mission Boulevard starts at Crestmore Road on the west end in the City of Jurupa Valley and ends 500 feet past the

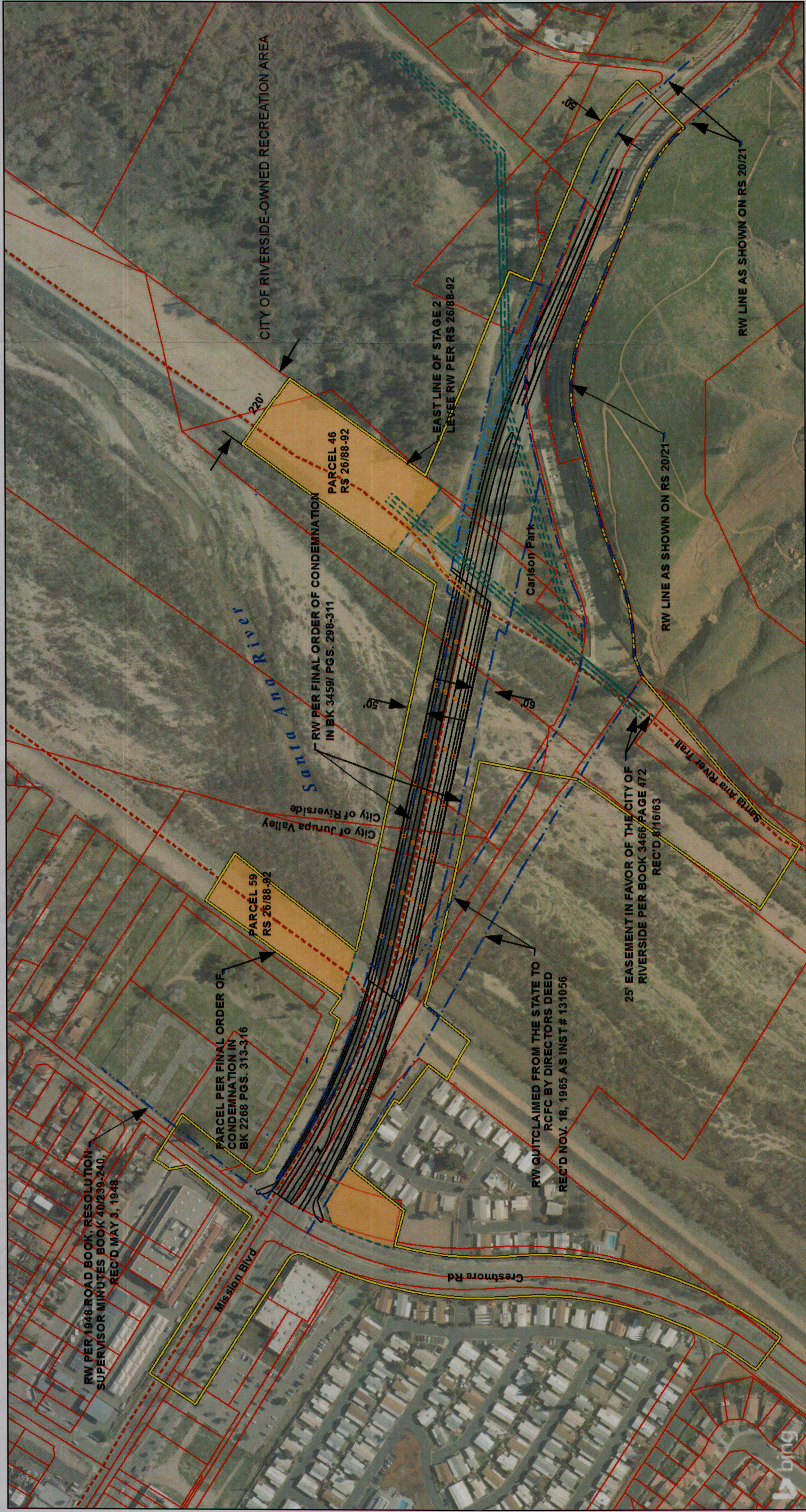


FIGURE 2A

Mission Boulevard Bridge Replacement at Santa Ana River
Project Features

State Bridge No. 56C-0071

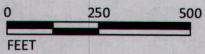
*Based on Ultimate County of Riverside Roadway Width for determining project study area(s).



FIGURE 2B

LEGEND

- Project Footprint
- City Boundaries



Source: Bing Aerial, 2015

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Mission Boulevard Bridge Replacement at Santa Ana River

Land Uses

State Bridge No. 56C-0071

east end of the existing bridge in the City of Riverside. No sidewalk connectivity currently exists along the north side of Mission Boulevard within the project limits. Providing a new sidewalk on the north side of the bridge would create safety concerns due to the fact that there are no future plans to continue the pedestrian path west or east of the bridge along the north side. Therefore, the proposed multipurpose trail will improve the current patterns by allowing both directions of pedestrian and recreational bike travel on the south side of the bridge only, beginning at the intersection of Crestmore Road and Mission Boulevard and terminating at Carlson Park.

Improvements to the Santa Ana River and the uncertified levees are not anticipated except to restore the channel and levee berms to pre-existing conditions after construction. Appropriate water quality drainage features will be incorporated into the proposed project to meet current standards. Some of the drainage features may extend into the Carlson Park area with temporary impacts.

The proposed project may require a few short-term (partial day) closures to facilitate the project staging and construction. Construction will occur in stages to allow for continued traffic flow during construction. Depending on the results of the Traffic Analysis, two, three, or four lanes of traffic with pedestrian access will remain open at all times. Stage 1 construction will build the northerly half of the new bridge along the north edge of the existing structure while traffic is maintained on the existing bridge. Stage 2 will shift the traffic to the newly constructed bridge, while the existing bridge is demolished and the remainder of the new bridge is constructed to the south. If more than three lanes of traffic are required during construction, a third stage may be added to complete the proposed project. The details of the final construction methods addressing these issues will be developed during the project design phase. Potential staging areas have been identified north of the existing bridge on either side of the Santa Ana River and south of the bridge at the intersection of Mission Boulevard and Crestmore Road.

2.4 METHODOLOGY

The environmental analysis in this IS/MND provides an environmental review of the project pursuant to CEQA. The details of this proposed project and associated actions have been characterized in this section and are also addressed in detail throughout Section 3.0 of this IS/MND. If the project is approved, the proposed project would be allowed without further discretionary approval, so long as the development complies with the County's regulations and project-specific mitigation measures and conditions of approval.

Compliance with provisions of the National Environmental Policy Act (NEPA) is required when a federal agency's actions, including financing, assisting, conducting, or approving projects or programs; agency rules, regulations, plans, policies, or procedures; and legislative proposals is undertaken. NEPA Assignment streamlines the federal environmental review and approval process by eliminating the Federal Highway Administration's (FHWA's) project-specific review and approval. In reviewing and approving projects under NEPA, the California Department of Transportation (Caltrans) Caltrans is responsible for complying with all applicable federal environmental laws and with FHWA NEPA regulations, policies, and guidance, and is legally responsible and liable for the environmental decisions made on NEPA projects. NEPA assignment does not change federal environmental protection standards. While the review of technical studies and environmental

document required under NEPA has occurred separately from the CEQA process, this IS/MND relies heavily on the project data and studies reviewed and approved by Caltrans during the NEPA process.

2.5 REQUIRED PERMITS AND APPROVALS

The "Service Agreement by and Between the County of Riverside, the City of Jurupa Valley and the City of Riverside for the Mission Boulevard Bridge Improvements at Santa Ana River" (Service Agreement) (September 1, 2015) recognizes that while the project is located within the jurisdictional boundaries of the cities of Riverside and Jurupa Valley, the County of Riverside has been designated as the Lead Agency for the project due to its experience in the development and implementation of bridge projects involving federal and State agencies. The Service Agreement further states the County of Riverside will work with regulatory agencies to review, circulate and approve the environmental document and to obtain the necessary construction permits from the regulatory agencies. The Service Agreement establishes the County of Riverside will award and administer a public works contract for the construction of the project.

CEQA Guidelines (Section 15381) defines "Responsible Agency" as public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. The County of Riverside will act as the Lead Agency, obtain necessary authorizations and permits (including MSHCP compliance) and will carry out the project. Neither City is required to approve further discretionary action(s), nor contract, administer or carry out construction activities; therefore, they will not act as a "Responsible Agency" for the project.

Permits, approvals or agreements from the agencies and organizations listed in Table A would be required prior to the commencement of project activities:

Table A Required Permits, Approvals and Agreements

Agency	Permit/Action
Santa Ana Regional Water Control Board	Section 401 Water Quality Certification for any discharge to waters of the United States
U.S. Army Corps of Engineers	Nationwide Permit for the discharge of dredge or fill material into waters of the United States
California Department of Fish and Wildlife	California Fish and Game Code Section 1602 Streambed Alteration Agreement
U.S. Army Corps of Engineers	Section 408 Permit for work on existing Santa Ana River levees
State Water Resources Control Board	Notice of Intent to Comply with General Construction Activity NPDES Permit
Cities of Riverside and Jurupa Valley	Temporary Construction Easements
Riverside County Flood Control and Water Conservation District	Encroachment Permit
<u>Federal Aviation Administration</u>	<u>Part 77 Notification</u>

3.0 INITIAL STUDY CHECKLIST

1. Project Title:

Mission Boulevard Bridge Replacement at Santa Ana River

2. Lead Agency Name and Address:

County of Riverside Transportation Department
3525 14th Street, 2nd Floor
Riverside, California 92501

3. Contact Person and Phone Number:

Frances Segovia, Senior Transportation Planner
Riverside County Transportation Department, Environmental Division
(951) 955-1646
fsegovia@rivco.org

4. Project Location:

The project is located along Mission Boulevard where it crosses the Santa Ana River between the Cities of Riverside and Jurupa Valley. The project footprint is an unsectioned portion of Township 2 South, Range 5 West, as shown on the *Riverside West, California* 7.5-minute series USGS topographic map.

5. General Plan Designation:

General Plan land use designation in the City of Riverside includes Public Park (P) south of Mission Boulevard and Open Space (OS/Natural) north of the roadway. In the City of Jurupa Valley, General Plan land use designations include Water (OS-W), Very High Density Residential (VHDR), and Commercial Retail (CR).

6. Zoning:

The project area is within the Cities of Riverside and Jurupa Valley. The portion of the project area within the City of Riverside is zoned PF (Public Facilities). The portion of the project area located within the City of Jurupa Valley is zoned W-1 (Watercourse, watershed or conservation area), R-VC (Rubidoux Commercial Village), and C-1/C-P (General Commercial).

7. Description of Property:

Refer to Section 2.2.

8. Surrounding Land Uses and Setting:

Refer to Section 2.2.

9. Other Public Agencies whose Approval is Required:

Refer to Table A in Section 2.5.

10. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Yes. Refer to Checklist Section 3.17.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (Refer to Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

3.2 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Mary Zambon Date: 8/8/18

Name and Title: Mary Zambon, Environmental Division Manager

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a specific physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. **Supporting Information Sources:** A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

Aesthetics

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Scenic Resources				
a. Have a substantial effect upon a on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source(s): *Visual Impact Assessment Memorandum, Mission Boulevard Bridge Replacement at Santa Ana River, June 7, 2017 (Appendix A); Figure 5.1-1, Recirculated Draft Program Environmental Impact Report, City of Riverside General Plan 2025 Program, November 2007; Figures LU-2 and LU-3, City of Riverside General Plan 2025, November 2007; Figure 4-23, City of Jurupa Valley General Plan, September 2017; and Caltrans, Officially Designated State Scenic Highways and Historic Parkways.*

Findings of Fact:

a) Less than Significant Impact. A scenic vista can be categorized as either containing a panoramic view or a focal view. Panoramic views are typically associated with publicly-accessible vantage points that provide a sweeping geographic orientation not commonly available (for example, skylines, valleys, mountain ranges, or large bodies of water). Focal views are typically associated with views of natural landforms, public art/signs, and visually important structures, such as historic buildings.

The Santa Ana River provides, "... a place of natural beauty offering distant vistas and close-up textures. It is a place of significant natural habitat for many species of birds." The City of Riverside's General Plan identifies the Santa Ana River, Fairmont Park, and Mount Rubidoux as features that provide a "visual backdrop" to City residents and motorists alike. The City of Jurupa Valley identifies the Santa Ana River as providing a scenic vista to local residents.

The project improvements will be constructed within the existing roadway right-of-way and on the same alignment as the existing bridge. The replacement bridge will be slightly higher (4-6 feet) at mid-span. Views to the Santa Ana River, Mount Rubidoux, and adjacent areas would be maintained and not substantially altered or blocked due to the construction of the replacement bridge. In the absence of any substantial blockage of existing views, no significant impact to scenic vistas would result from the proposed project. No mitigation is required.

b-c) Less than Significant Impact. The project area is located in an area with views to the Santa Ana River and Mount Rubidoux. Per Caltrans,¹ the project is not located on or near a designated or eligible scenic highway. Within the project limits, the City of Riverside has designated Mission

¹ http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, site accessed May 17, 2017.

Boulevard¹ a “Scenic Boulevard.”² The City of Riverside’s General Plan EIR identifies the Santa Ana River watercourse and riverbed as a scenic resource for the City and Mount Rubidoux as a prominent natural feature. Although not specifically mentioned, the City of Jurupa Valley General Plan (Figure 4-23) has designated Mission Boulevard and Crestmore Road south of Mission Boulevard as scenic roadways.

A Visual Impact Assessment Memorandum (Appendix A) was prepared for the project to assess existing visual resources in the project area and to determine how these resources would be affected by the proposed bridge replacement project. This assessment discussed existing visual conditions from six points near the bridge. The assessment points were located at four corners of Mission Boulevard Bridge adjacent to the Santa Ana River and at the east and west roadway approaches. Potential viewers within the vicinity of the bridge replacement were grouped into three categories: residential, recreation, and roadway. The east and west approaches of Mission Boulevard Bridge fall under the roadway category, with viewers consisting of drivers, passengers, and pedestrians. The northwest corner location is a vacant lot with no users or inhabitants and, thus, no current viewers. The southwest corner location is a mobile home park with residential viewers. The southeast corner location is Carlson Park with recreation viewers consisting of park users. The northeast corner location is the Santa Ana River Bike Trail with recreation viewers consisting of cyclists and pedestrians.

The level of visual impact was determined by analyzing the visual resource changes and then the potential viewer response to those changes. To determine potential visual impacts, key locations were chosen that best represented the views toward the proposed project area (refer to Figures 3A and 3B).

The project improvements will take place entirely within the existing roadway right-of-way and on the same alignment as the existing roadway. Due to the similar size and location of the proposed replacement bridge, changes to visual conditions in the project area would not be significant. The resultant visual character of the project area would be substantially similar to that which currently exists. Views to Mount Rubidoux, the Santa Ana River, and low mountains in the distance would not be significantly altered. Though temporary changes in vegetation within the Santa Ana River would occur to accommodate construction, the project requires the replacement/revegetation of areas within the river channel upon completion of bridge construction.

Furthermore, in cooperation with the County, the Cities of Riverside and Jurupa Valley have participated in discussions to establish the aesthetic treatment that will be incorporated into the final bridge design. These discussions have identified potential architectural elements, colors, textures, and features that can be incorporated into the design of the bridge. The purpose of this coordination was to develop an aesthetic treatment for the bridge that represents the visual

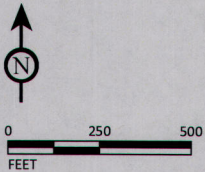
¹ The bridge is located on the border between the Cities of Riverside and Jurupa Valley. Within the City of Jurupa Valley, the roadway is designated “Mission Boulevard,” while across the Santa Ana River in the City of Riverside, the roadway is identified as “Mission Inn Avenue.” To maintain consistency in the IS/MND and supporting studies, “Mission Boulevard” refers to the segment of roadway within both jurisdictions.

² Figure 5.1-1, *Recirculated Draft Program Environmental Impact Report City of Riverside General Plan 2025 Program*, November 2007.



FIGURE 3A

- Legend**
- Project Footprint
 - Viewpoint (6 Locations)



Mission Boulevard Bridge Replacement at Santa Ana River

Viewpoint Key Map

State Bridge Number: 56C-0071



Viewpoint 1: Northwest corner of existing bridge looking southwest toward the bridge. Photograph taken October 21, 2016.



Viewpoint 2: Intersection of Mission Boulevard and Crestmore Road, looking east. Photograph taken October 21, 2016.



Viewpoint 3: Southwest corner of existing bridge within Old Plantation Mobile Home Park, looking northeast. Photograph taken October 16, 2016.



Viewpoint 4: Carlson Park, view northwest toward Mission Boulevard. Photograph taken October 21, 2016.



Viewpoint 5: Santa Ana River Trail, view southwest to existing bridge. Photograph taken October 21, 2016.



Viewpoint 6: Mission Boulevard, view east (Carlson Park on the left). Photograph taken October 21, 2016.

FIGURE 3B

objectives of each City and to respect the natural conditions of the project area. Upon construction, the incorporation of the aesthetic treatments will ensure the replacement bridge will be visually compatible with the project area.

Due to the substantial similarity in size, location, and scale of the existing and proposed replacement bridge and because the replacement bridge will incorporate a cohesive aesthetic treatment respectful of the natural and built condition(s) in either City, the proposed project would not significantly damage any identified scenic resource or create an aesthetically offensive site open to public view. No mitigation is required.

Mitigation: No mitigation measures are required.

Monitoring: No monitoring measures are required.

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. Other Lighting Issues				
a. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Field visits; project plans

Findings of Fact:

a) **No Impact.** Existing lighting sources in the project area include street lighting, residential lighting, traffic signals, and vehicle lighting. Currently, streetlights are located along Mission Boulevard, including on the existing bridge. There is also street lighting along Crestmore Road. The project includes the installation/replacement of street lighting on Mission Boulevard and the bridge. Any such lighting fixtures would be of a size, type, intensity, and location substantially similar to current lighting in the project area and would not represent a new source of light that would adversely affect or alter daytime or nighttime views in the project area. Furthermore, the proposed bridge, bridge approaches and bridge features do not include reflective materials that would generate glare onto adjacent properties. Adherence to applicable standards and requirements related to the placement, operation, and maintenance of lighting fixtures will ensure no significant lighting impact results from the construction or operation of the proposed project.

Mitigation: No mitigation measures are required.

Monitoring: No monitoring measures are required.

Agriculture				
<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Agriculture				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Department of Conservation, Farmland Mapping and Monitoring Program (2014); *City of Riverside Zoning Map*; *City of Riverside Zoning Code*, Chapter 19.140; *City of Jurupa Valley Zoning Map*; *City of Riverside Municipal Code*, Chapters 17.72, 17.92 and 17.160; and Riverside County Williamson Act FY 2015/2016 (Sheet 1 of 3), California Department of Conservation, Division of Land Resource Protection.

Findings of Fact:

a) No Impact. The California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. The maps are generally updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California’s agricultural land resources.

For Prime Farmland or Farmland of Statewide Importance, the soil must meet the physical land chemical criteria as determined by the United State Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). For CEQA purposes, Prime Farmland, Farmland of Statewide Importance and Unique Farmland are collectively defined as “Important Farmland.”

On the north side of the project site, Mission Boulevard is bounded by undeveloped land and residential and commercial uses. Open space and park uses are located south of the project. According to the 2014 California Department of Conservation FMMP, the proposed bridge replacement site and associated roadway improvements are located on land designated as “Urban and Built-Up Land,” “Other Land,” or “Farmland of Local Importance.” No portion of the project site or adjacent areas is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland); therefore, no conversion of farmland to a non-agricultural use would occur.

b) No Impact. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides

incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses. CEQA requires the review of projects that would convert land with a Williamson Act Contract to non-agricultural uses.

The project footprint lies between the Cities of Riverside and Jurupa Valley. The portion of the project area within the City of Riverside is zoned PF (Public Facilities).¹ The portion of the project area located within the City of Jurupa Valley is zoned² W-1 (Watercourse, watershed or conservation area), R-VC (Rubidoux Commercial Village) and C-1/C-P (General Commercial). No portion of the project area is assigned as an agricultural zone.

No Williamson Act Contract is in effect in the project area, nor is the site located within a Riverside County Agricultural Preserve. In the absence of any agricultural zoning of Williamson Act contract or preserve within the project area, no impact would occur and no mitigation would be required.

c) No Impact. The project footprint and adjacent area does not consist of "Farmland" or agricultural use and would not result in the conversion of Farmland to a non-agricultural use. No impact would occur and no mitigation is required.

Mitigation: No mitigation measures are required.

Monitoring: No monitoring measures are required.

¹ The Public Facilities Zone (PF) zone is established to create and preserve areas for official and public uses of property and related activities.

² https://www.municode.com/library/ca/riverside_county/codes/code_of_ordinances?nodetid=TIT17ZO_CH17.72GECOZO, site accessed May 18, 2017.

Forest Resources

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Forest				
a. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: *City of Riverside Zoning Map; City of Riverside Zoning Code, Chapter 19.140; City of Jurupa Valley Zoning Map; and City of Riverside Municipal Code, Chapters 17.72, 17.92 and 17.160.*

Findings of Fact:

a) No Impact. The project footprint and adjacent areas are zoned as PF within the City of Riverside and W-1, C-1/CP or R-VC within the City of Jurupa Valley. These areas are not located within the boundaries of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned for Timberland Production (as defined by Govt. Code Section 51104(g)). The construction and use of the Mission Boulevard Bridge replacement would not result in the conversion of land designated or zoned for timberland production; therefore, no impact would occur and no mitigation is required.

b) No Impact. North of Mission Boulevard, the project footprint is bounded by undeveloped land and residential and commercial uses. Open space and park uses are located to the south. Implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur and no mitigation is required.

c) No Impact. As the project footprint is neither designated nor utilized for forest or timberland uses, no conversion of forest land to non-forest use would occur. In the absence of any such conversion, no impact would occur and no mitigation is required.

Mitigation: No mitigation measures required.

Monitoring: No monitoring measures are required.

Air Quality				
<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Air Quality Impacts				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source: *Air Quality Assessment Report, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, October 2016 (Appendix B).*

Findings of Fact:

a) No Impact. The proposed project is located in the Cities of Riverside and Jurupa Valley within the County of Riverside. The study area is within the South Coast Air Basin (Basin), which encompasses the southern half of Los Angeles County, the southwestern tip of San Bernardino County, all of Orange County and the western half of Riverside County. This part of Basin is currently under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

Basin-wide air pollution levels are monitored by the SCAQMD through the 2016 Air Quality Management Plan (AQMP), which describes air pollution control strategies to be implemented by counties or regions classified as nonattainment areas. The AQMP's main purpose is to bring the area into compliance with the requirements of federal and State air quality standards. The AQMP uses the assumptions and projections by local planning agencies to determine control strategies for regional compliance status. Therefore, any projects causing a significant impact on air quality would impede the progress of the AQMP. For a project in the Basin to be consistent with the AQMP, the pollutants emitted from the project must not exceed the SCAQMD significance threshold or cause a significant impact on air quality. If feasible mitigation measures can be implemented to reduce a project's impact level from significant to less than significant under CEQA, that project is considered to be consistent with the AQMP.

A consistency analysis determination plays an essential role in local agency project review by linking local planning and unique individual projects to the AQMP in the following ways: the analysis fulfills

the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a planning stage early enough to ensure that air quality concerns are fully addressed, and provides the local agency with ongoing information, assuring local decision-makers that they are making real contributions to clean air goals defined in the most current AQMP (adopted in 2003 and updated in 2012). Because the AQMP is based on projections from local General Plans, projects consistent with the local General Plan are considered consistent with the AQMP.

Air quality models are used to demonstrate that a project's emissions will not contribute to the deterioration of or impede the progress of air quality goals stated in the AQMP. The air quality models use project-specific data to estimate the quantity of pollutants generated from the implementation of a project. The results for the no project and the proposed project scenarios in the horizon year are compared to the AQMP's air quality projections.

Currently, the entire Basin is in attainment/maintenance for the federal and State standards for carbon monoxide (CO), nitrous oxide (NO_x), and sulfur dioxide (SO₂). The Riverside County portion of the Basin is in attainment for State and national lead standards. The Basin is a nonattainment area for both the federal and State ozone (O₃) standards. At the Rubidoux Air Quality Monitoring Station¹, the federal 24-hour PM₁₀ standard was not exceeded in the last 3 years. The State 24-hour PM₁₀ standard was exceeded 30 to 125 times per year in the last 3 years of monitored data. The State annual average was exceeded in all of the past 3 years within the Basin. The federal 24-hour PM_{2.5} standard was exceeded 5 to 9 times annually in the past 3 years.

The Air Quality Element of the City of Riverside's General Plan emphasizes a number of approaches to improving air quality within the city. The City of Jurupa Valley has recently completed its General Plan. The current bridge (including existing and future traffic it may carry) has been accounted for in the circulation elements of the Cities of Riverside and Jurupa Valley General Plans. The project does not include the expansion of use that would itself generate growth in the project area. The project does not include the extension of new infrastructure into an area where new growth would occur. The project is the replacement of an existing bridge on the same alignment, with the same number of travel lanes and will serve the same purpose; therefore, the project is consistent with both General Plans.

Because the proposed project would not change the number of vehicle trips or their operational characteristics, no change in the volume of vehicular emissions would occur; therefore, the project would not substantially contribute to or cause deterioration of existing air quality. Consequently, emissions associated with the proposed project would not hinder the air quality improvement goals outlined in either City's Air Quality Element and are considered consistent SCAG forecasts. No inconsistency with the AQMP would occur. No mitigation is warranted.

b) Less than Significant Impact.

Short-Term Construction Impact: During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and

¹ 5888 Mission Boulevard in Riverside, CA.

other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO_x, VOCs, directly-emitted particulate matter (PM_{2.5} and PM₁₀), and toxic air contaminants (e.g., diesel exhaust particulate matter).

Site preparation and roadway/bridge construction would involve clearing, cut and fill activities, grading, and paving roadway surfaces. The construction-related effects on air quality from most roadway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate PM₁₀, PM_{2.5}, CO, SO₂, NO_x, and VOCs.

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

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs, and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off road diesel fuel meeting federal standards can contain up to 5,000 ppm of sulfur, whereas on road diesel is restricted to less than 15 ppm of sulfur. However, under California law and California Air Resources Board (ARB) regulations, off-road diesel fuel used in California must meet the same sulfur and additional standards as on-road diesel fuel. Accordingly, SO₂-related issues due to diesel exhaust during construction would be minimal.

A project would normally be considered to have a significant effect on air quality if it violated ambient air quality standards (AAQS), contributed substantially to an existing air quality violation, exposed sensitive receptors to substantial pollutants concentrations, or conflicted with adopted environmental plans and the goals of the community in which the project is located. The emissions thresholds were established based on the attainment status of the air basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and are considered protective to human health.

Table B identifies the CEQA significance thresholds that have been established for the Basin.

Table B: SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
CO	550 lbs/day	550 lbs/day
NOx	100 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
ROCs	75 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day

Source: SCAQMD, 2016.

CO = carbon monoxide
 lbs/day = pounds per day

NOx = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

ROCs = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

SOx = sulfur oxides

The emissions presented in Table C are based on the best information available at the time of calculations and specify that the schedule for all improvements is anticipated to take approximately 24 months, beginning in 2021 and would be complete in 2022. Caltrans Standard Specifications for construction (Section 14-9 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plant Emissions]) will be adhered to in order to reduce emissions generated by construction equipment.

Table C: Maximum Project Peak-Day Construction Emissions (lbs/day)

Construction Year	ROG	NOx	CO	Total PM ₁₀ ¹	Total PM _{2.5}
2021	8	79	69	5	5
2022	7	69	68	7	4
Maximum Daily Emissions	8	79	69	7	5
SCAQMD CEQA Significance Thresholds	75	100	550	150	55
Exceeds Thresholds?	No	No	No	No	No

Source: LSA (October 2016).

¹ A 50 percent reduction in fugitive dust emissions was assumed for PM₁₀ due to required dust suppression measures as per SCAQMD Rule 403.

CEQA = California Environmental Quality Act

CO = carbon monoxide

lbs/day = pounds per day

NOx = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

ROG = reactive organic gases

The project is required to comply with other regional rules that assist in reducing short-term air pollutant emissions. Adherence to the standard control measures is required for all development activity within the Basin. These measures include, but are not limited to the following:

- **SCAQMD Rule 403:** Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance offsite. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation

(and thus, the PM10 component). Compliance with these rules would reduce impacts on nearby sensitive receptors (SCAQMD Rule 403).¹ The applicable Rule 403 measures include:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meter (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Pave construction access roads at least 30 meters (100 feet) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- **SCAQMD Rule 431.2:** Rule 431.2 limits the release of SO₂ into the atmosphere from the burning of fuel.
- **SCAQMD Rules 1186 and 1186.1:** Rules 1186 and 1186.1 relate to PM₁₀ emissions reductions from paved/unpaved roads and use of lower polluting street sweepers, respectively, to reduce the release of criteria pollutant emissions into the atmosphere during construction.
- **ARB In-Use Off-Road Diesel Vehicle Regulation:** The ARB has adopted a regulation to reduce diesel particulate matter (DPM) and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The appropriate standard measures are as follows:
 - The project applicants are required to implement, by contract specifications, that all heavy-duty, diesel-powered construction equipment used at the project site during the following phases be powered by ARB-certified Tier 3 engines or higher and install a minimum of Level 1 diesel particulate filter on all equipment exhaust system. Contract specifications shall be included in project construction documents, which shall be reviewed by the County prior to issuance of a grading permit. This measure applies to all construction phases.
 - The project applicants are required to implement, by contract specifications, that construction equipment engines be maintained in good condition and in proper tune per the manufacturer's specification for the duration of construction. Contract specifications shall be included in project construction documents, which shall be reviewed by the County to issuance of a grading permit.
- **California Code of Regulations, Title 13, Division 3, Chapter 1, Article 4.5, Section 2025:** The purpose of this regulation is to reduce emissions of DPM, NO_x, and other criteria pollutants from in-use diesel-fueled vehicles. It applies to any person, business, federal government agency, school district, or school transportation provider that owns or operates, leases, or rents affected vehicles that operate in California.

¹ South Coast Air Quality Management District (SCAQMD). Rule 403. Website: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf> (accessed May 2017).

The best available control measures, as specified in SCAQMD Rule 403, are required for any project in the Basin. As detailed in Table B, project-related construction emissions would not exceed SCAQMD's significance thresholds for construction activities. As such, no significant air quality impacts would occur from the construction phase of the proposed project.

Long-Term Regional Vehicle Emission Impact: Based on the traffic data provided by Kimley-Horn and Associates, Inc. (August 2016), the proposed project would not increase the traffic volumes in the project area because it is not a traffic-generating project. Existing year 2016, project opening year 2022 and future year 2042 conditions were analyzed for levels of service at four intersections. The project was found to not generate traffic that would reduce the level of service at the analyzed intersections. Therefore, the project would cause no long-term change in regional vehicle air emission than would occur with the existing bridge. As no changes in emissions for the operations phase of the project would occur, no significant air quality impacts would occur.

c) Less than Significant Impact. Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from vehicular traffic that can travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and, when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for a project's air quality analysis must be regional by nature.

The proposed project is a transportation improvement and not a direct generator of new vehicle trips in the Basin. Construction and operation of cumulative projects would further degrade the local air quality, as well as the air quality of the Basin. Air quality would be temporarily degraded during construction activities that occur separately or simultaneously. However, the greatest potential for a cumulative impact on the regional air quality would be the incremental addition of pollutants from increased traffic from residential, commercial, industrial development and the use of heavy equipment and trucks associated with construction of these projects.

With respect to operational emissions that may contribute to exceeding State and federal standards, a CO and PM_{2.5}/PM₁₀ screening level analysis was conducted for the project. The proposed project is located within an attainment area for the federal PM_{2.5} standards and within a nonattainment area for the federal PM₁₀ standards. The project does not qualify as a project of air quality concern for the following reasons:

- The proposed project will replace the existing Mission Boulevard Bridge at Santa Ana River with a new bridge. Based on the traffic data provided by Kimley-Horn and Associates, Inc. (August 2016), the proposed project would improve future forecast traffic flow without increasing the traffic volumes in the project area.
- The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. Based on the traffic data provided by Kimley-Horn and Associates, Inc. (August 2016), the proposed project would neither improve nor worsen future forecast traffic flow without increasing the traffic volumes in the project area. Therefore, the LOS at local intersections would remain the same after construction of the proposed project.
- The proposed project does not include the construction of a new bus or rail terminal.

- The proposed project does not expand an existing bus or rail terminal.
- The proposed project is not in and does not affect locations, areas, or categories of sites that are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.
- The proposed project would not create a new PM₁₀ or PM_{2.5} violation or worsen an existing PM₁₀ or PM_{2.5} violation.

The project was identified to be exempt from emissions analysis and would not violate air quality standards and, therefore, does not present an adverse cumulative impact. The construction emissions attributable to the proposed project were also found to be under SCAQMD's significance thresholds and would not result in a significant impact. The SCAQMD does not consider projects that result in less than significant project level air quality impacts to be cumulatively considerable and, consequently, the project would not result in cumulative air quality impacts.

d) **No Impact.** Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive receptors located adjacent to the project study area include residences along Mission Boulevard west of the Mission Boulevard Bridge.

SCAQMD has issued guidance on applying California Emissions Estimator Model (CalEEMod) modeling results to localized impacts analyses. SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003, recommending that a localized air quality analysis evaluate potential impacts on the air quality of nearby sensitive receptors.

Localized significance thresholds (LSTs) represent the maximum emissions from a project site that are not expected to result in an exceedance of the national or State AAQS. Table D states the construction emission rates would not exceed the LSTs for the existing sensitive uses (i.e., residences along Mission Boulevard) proximate to the project boundary and further identifies the emissions of the pollutants on the peak day of construction will result in concentrations of pollutants at these nearest sensitive uses (residential uses) that are all below SCAQMD thresholds of significance.

Table D: Construction Localized Impacts Analysis (lbs/day)

Emissions Sources	NOx	CO	PM ₁₀	PM _{2.5}
Maximum On-Site Emissions	78	65	4	4
LST Thresholds	190	1,454	24	7
Significant Emissions?	No	No	No	No

Source: LSA (October 2016).

Note: The source receptor area is Metropolitan Riverside County, 1 acre, receptors at 83 meters (272 feet).

CO = carbon monoxide

NOx = nitrogen oxides

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = local significance threshold

PM₁₀ = particulate matter less than 10 microns in size

e) No Impact. The proposed project would not involve the construction of a sensitive receptor (residences, schools, hospitals, etc.) and therefore would not result in the placement of a sensitive receptor within one mile of an existing substantial point source air pollution emitter. No impact would occur and no mitigation is required.

f) Less than Significant Impact. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any uses identified by SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment, primarily from the equipment exhaust and the application of asphalt during construction. Construction-related odors would be short-term in nature and cease upon project completion. Any impacts to existing adjacent land uses would be short-term and are less than significant and no mitigation would be required.

Mitigation: The mitigation measures are required.

Monitoring: No monitoring measures are required.

Biological Resources

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Wildlife & Vegetation				
a. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: *Natural Environment Study, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, December 2017 (Appendix C1); Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Mission Boulevard Bridge Replacement at San Ana River Project, LSA, December 2017 (included in Appendix C1); Jurisdictional Delineation, Mission Boulevard Bridge Replacement at Santa Ana River Project, LSA, July 2017 (included in Appendix C1); Determination of Biological Equivalent or Superior Preservation, LSA, March 2018 (Appendix C2); and Noise Analysis for Pile Driving Effects to Least Bell's Vireo, LSA, November 2017 (included in Appendix C1).*

Findings of Fact:

a) Less than Significant with Mitigation Incorporated. The Project's Biological Study Area (BSA; Figure 4) consists of the proposed project footprint plus an approximately 50-foot buffer to include

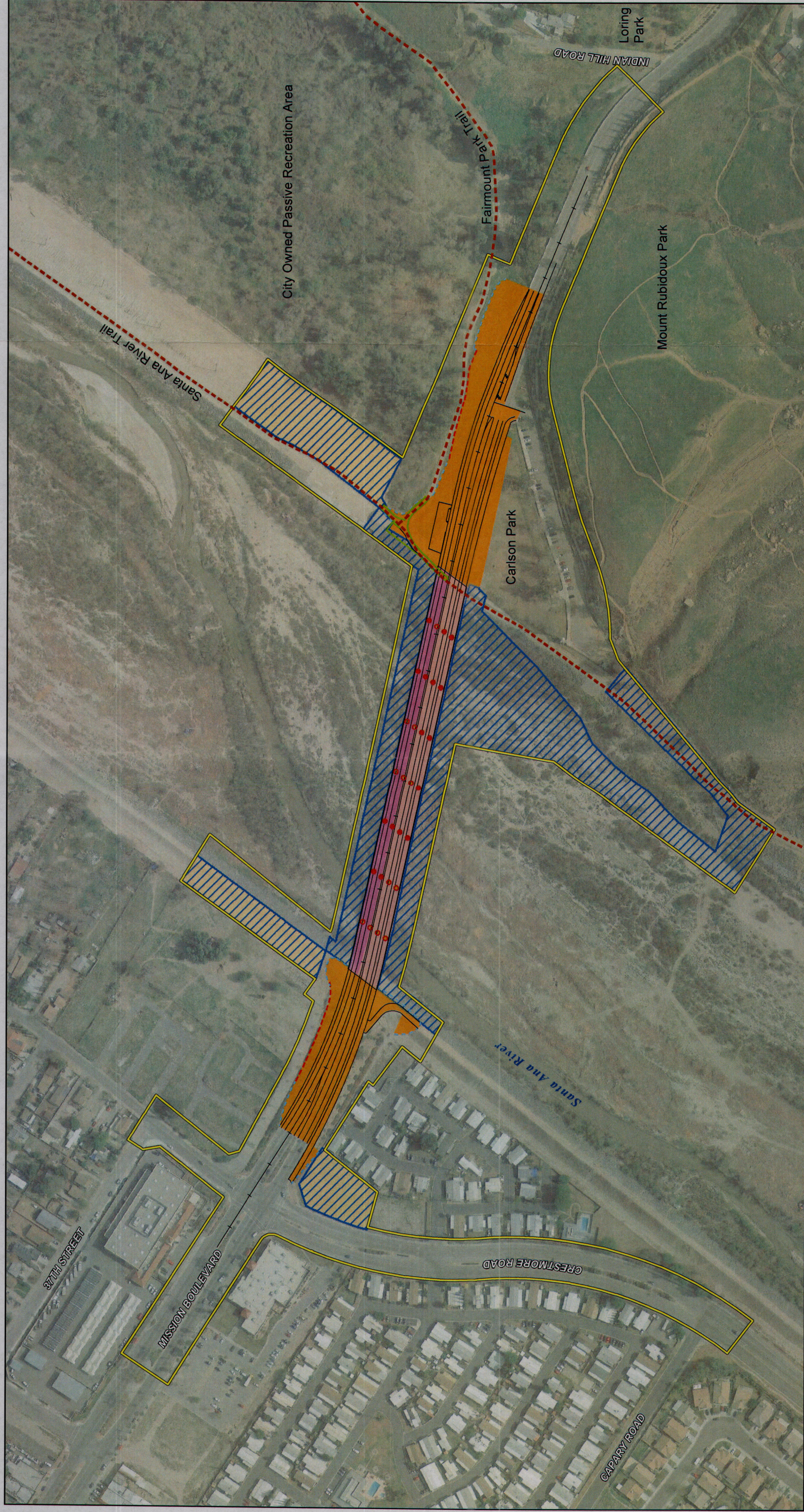
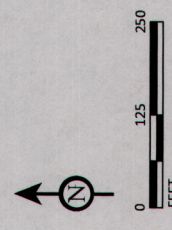


FIGURE 4

Mission Boulevard Bridge Replacement at Santa Ana River
 Biological Study Area and Project Impacts

State Bridge No. 56C-0071

- Biological Study Area
- o New Pier Locations
- Trail Realignment
- Potential Staging Area
- Proposed Bridge and Roadway Width
- Grading Limits
- Retaining Walls
- Permanent Impact
- Existing Shade Impact
- New Shade Impact
- Temporary Impact



SOURCE: Google Earth, 2016; Kimley Horn, 2016.

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all areas of permanent and temporary construction-related effects. The BSA extends along the entire length of the Mission Boulevard Bridge at the Santa Ana River and includes adjoining portions of Crestmore Road and the levees along the river channel. Much of the surrounding landscape outside the river channel is urban development including parks with ornamental plants. Mount Rubidoux Park, just south of the BSA, supports undeveloped land dominated by non-native grassland.

The project area is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP was adopted by the County of Riverside in June 2003. As a Permittee, the County has the responsibility to implement and adhere to the provisions of the MSHCP as well as to the MSHCP Implementing Agreement.

The MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan and Natural Communities Conservation Plan (NCCP) for the conservation of species and their associated habitats in western Riverside County. The MSHCP provides authorization for take of listed plant and animal species to Permittees for otherwise lawful activities consistent with MSHCP requirements and terms and conditions. Take of threatened, endangered, and rare species is authorized by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), collectively referred to as the Wildlife Agencies. The Wildlife Agencies provide incidental take authorization through the MSHCP for otherwise lawful actions (i.e., public and private projects) in exchange for compliance with provisions of the MSHCP.

The BSA is within the MSHCP Jurupa Area Plan and the Cities of Riverside/Norco Area Plan. The BSA is not within the Criteria Area¹ but is within existing Public/Quasi-Public Lands, which are conserved as part of Existing Core A.² Core A consists of Prado Basin and the Santa Ana River. This southwest-to-northeast trending swath of land is composed largely of lands owned by a variety of entities, but it also contains a small number of privately-owned lands. Core A also functions as a Linkage, connecting Orange County to the west with San Bernardino County to the north. This linkage is constrained by existing urban development and agricultural use. The linkage provides high quality riparian habitat. Project effects to the functions and values of riparian habitat and riverine areas within Core A and Public/Quasi-Public Lands will be avoided, minimized, and mitigated as described in the response to Checklist Question 7e below.

Through implementation of Mitigation Measures BIO-1 through BIO-25, the project is consistent with the following MSHCP requirements:

- Section 6.1.2, Riparian/Riverine Areas and Vernal Pools;
- Section 6.1.3, Narrow Endemic Plant Species;
- Section 6.1.4, Urban/Wildlands Interface Guidelines;

¹ "Criteria Area" is habitat adjoining the Core Areas, Non-contiguous Habitat Blocks, and Linkages. Species either live there or travel through when moving from one area of conserved habitat to another. Acreage needed to meet the MSHCP's goal of a half-million acres of reserves comes from this area.

² "Core Areas" have the right resources to provide live-in habitat and support the life history requirements of one or more species covered by the MSHCP. Some of the Core Areas were part of the 347,000 acres of public or quasi-public lands that formed initial reserves.

- Section 6.3.2, Additional Survey Needs and Procedures;
- Section 7.2.1, Covered Activities Within Existing Public/Quasi-Public Lands;
- Section 7.5.3, Construction Guidelines; and
- Appendix C, Standard Best Management Practices.

b) Less than Significant with Mitigation Incorporated. Habitats are considered to be of special concern based on (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) whether they support the habitat requirements of special-status plants or animals. The vegetation communities within the BSA include riparian forest and riparian scrub, developed and ornamental landscaping, non-native grassland, open water and unvegetated stream channel (Figure 5). Riparian forest is identified by the CNDDDB as a sensitive natural community. Riparian scrub within the BSA is also considered important by federal, State, and/or local agencies in some cases.¹

On-site field investigations were conducted in 2012, 2013, 2016, and 2017 to identify vegetation communities, habitats for special-status species, potential jurisdictional waters, and other biological resources (Table E).

Table E: Survey Data

Survey Type	Survey Date(s)
Rare Plant Survey	April 26, and June 6, 2012; March 22 and June 13, 2013; April 14, May 25, July 15, 2016 and March 27, 2017.
Santa Ana Sucker Habitat Assessment	April 14, 2016
Riparian Birds Survey	April 23, May 3, 17, June 8, 18, 28, July 12, and 30, 2012
Burrowing Owl Habitat Assessment and Focused Survey	August 6, 2012; June 28, July 1, 6, and 15, 2016
Bat Habitat Assessment and Nighttime Survey	May 25 and June 15, 2016
Jurisdictional Delineation	April 14, 2016

Source: Table A, *Natural Environment Study*, LSA, December 2017

The BSA contains suitable habitat for three federally and/or state-listed species: Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), Santa Ana sucker (*Catostomus santaanae*), and least Bell's vireo (*Vireo belli pusillus*). The BSA also contains federally designated critical habitat for Santa Ana sucker. These species are covered species, for which take² is provided under the MSHCP. While suitable habitat is also present within the BSA for the Santa Ana River woollystar, this species

¹ The project will remove the existing 10 pier walls (2 feet by 33 feet at grade), which total 0.02 acre and replace them with up to 28 new piers consisting of a smaller (6-foot diameter) footprint, thereby reducing the total footprint in the riverbed. Changes in the size of existing pier walls are considered a temporary effect. Any reduction in the concrete footprint within the riverbed would be considered a beneficial effect, as suggested by Regulatory Agency staff during the August 8, 2017 Pre-Application meeting and email correspondence between James Mace (USACE) and Wendy Davis (LSA), November 1, 2017.

² From Section 3(18) of the Federal Endangered Species Act: The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

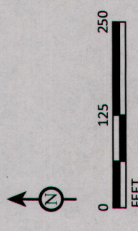


FIGURE 5

Mission Boulevard Bridge Replacement at Santa Ana River
Land Cover Types

(State Bridge Number 56C-0071)

Biological Study Area		Land Cover Types			
[Yellow Outline]	Biological Study Area	[Grey]	Developed/Ornamental (23.45 Ac)	[Light Green]	Riparian Scrub (5.20 Ac)
[Orange]	Non-native Grassland (3.60 Ac)	[Brown]	Unvegetated Riverbed (1.26 Ac)	[Dark Green]	Riparian Forest (2.12 Ac)
[Blue]	Water (0.31 Ac)				



SOURCE: Google Earth, 2016; Kimley Horn, 2016.
I:\KFD1503A\Reports\VS_MIND\LandCover.mxd (6/11/2018)

is considered absent from the BSA at this time. The least Bell's vireo is considered present. The status of the Santa Ana sucker in the BSA is variable over time and depends on hydrological conditions and the status of the species elsewhere along the river. Therefore, its status at any particular point in time is not predictable.

The project's impacts to vegetation communities within the BSA are detailed in Table F.

Table F: Impacts to Vegetation Communities and Land Covers within the BSA (acres)

Riparian/Riverine Areas	Total Area within BSA	Existing Bridge Footprint/Shade ¹	Effects		
			Temporary ²	New Shade ³	Permanent ⁴
Riparian forest	2.12	0.00	1.26	0.33	0
Riparian scrub	5.20	0.00	3.85	0.35	0
Unvegetated Riverbed	1.26	1.24	0.00	0.00	0
Open Water	0.31	0.09	0.15	0.04	0
Developed and Ornamental Landscaping	23.45	0	3.8	0.07	3.33
Non-native Grassland	3.60	0.00	0.68	0.00	1.08
Total	35.94	1.33	9.74	0.79	4.41

Source: Table E, Natural Environment Study Mission Boulevard Bridge Replacement at Santa Ana River, LSA, December 2017.

¹ Effects within the existing bridge footprint are all within existing shade/unvegetated areas and no habitat will be removed. Therefore, these areas are categorized separately even though there will be temporary effects associated with construction access and water diversion activities in the existing bridge footprint.

² Temporary effects include areas within the project footprint in the riverbed and outside the existing bridge footprint.

³ New shade effects are additional areas beneath the new bridge footprint. New shade effects are categorized separately from the permanent effects because the earthen riverbed will not be altered to a different land type.

⁴ Permanent effects are those associated with urban development, hardscape, and ornamental landscaping.

Least Bell's Vireo: The least Bell's vireo (LBV) is federally/State listed as endangered and is a covered species under the MSHCP for which take of habitat is covered. Riparian forest and riparian scrub habitats within the BSA provide suitable habitat for this species. The 2012 focused survey identified one least Bell's vireo territory within the northern portion of the BSA and four additional territories within a 500-foot buffer of the BSA. The Santa Ana Watershed Association (SAWA) conducted LBV surveys along this portion of the Santa Ana River in 2017, mapping two LBV territories within the BSA (one territory north of the bridge and one south of the bridge, both on the eastern side). Table G identifies the project's effects to LBV vireo habitat within the BSA.

Table G: Impact to Least Bell's Vireo Habitat

Least Bell's Vireo Habitat	New Shade Impact	Temporary Impact (Removal of Riparian Habitat)	Permanent Impact	Total Impact
Riparian Forest and Riparian Scrub	0.68	5.11	0	5.79

Source: Table D, Determination Biological Equivalent or Superior Preservation, LSA, March 2018.

Note that if pile driving activities occur during nesting season, there could potentially be additional effects to nesting least Bell's vireo.

Construction of the replacement bridge will temporarily affect 5.11 acres of LBV habitat. Upon completion, the project will result in 0.68 acre of new shade impact within LBV (riparian scrub and

riparian forest) habitat. No permanent impact to LBV habitat would result from project development. Until restoration is complete and vegetation returns to pre-project conditions, the removal of vegetation supporting two vireo territories constitutes a temporal loss of occupied least Bell's vireo habitat.

Temporary impacts to the species include construction noise (specifically pile driving necessary for falsework construction). Pile driving operations will produce the highest level of noise and may temporarily affect LBV if pile driving occurs during nesting season for this species (March 15 through July 15).¹ The results of the LBV noise analysis² indicated that the 60 dBA L_{eq} noise contour (in any given hour) would extend approximately 1,991 linear feet both upstream and downstream of the bridge. An additional 73.0 acres of riparian habitat suitable for LBV is located in this area. Based on SAWA's 2017 surveys for least Bell's vireo, up to 15 nesting territories are located within this area. It was assumed that pile driving activities would occur for approximately 30 minutes in a typical hour. It is expected the total duration of pile driving, assuming an 8-hour daytime workday, could be 30 days. These temporary effects may occur over two construction phases, which may occur during a portion of the least Bell's vireo active nesting seasons over two years or may avoid both nesting seasons altogether. If pile driving occurs during the nesting season, it could temporarily negatively affect the reproductive output of the least Bell's vireo, which could result in a potentially significant impact requiring mitigation.

The project will mitigate for 0.68 acre of new shade impacts at a 2:1 ratio as part of the overall riparian/riverine mitigation requirements (refer to Mitigation Measures BIO-23 through BIO-25), which will address project impact to riparian/riverine resources and will benefit the least Bell's vireo. To further avoid, minimize and mitigate project impacts to the least Bell's vireo, Mitigation Measure BIO-1 has been identified to reduce impacts to LBV habitat and LBV to a less than significant level.

Santa Ana Sucker: The Santa Ana sucker (SAS) is federally listed and a covered species under the MSHCP. The CNDDDB has recorded the Santa Ana sucker within the BSA since 2010 and the BSA is within critical habitat designated for the species. Running water in the low-flow channel contains suitable habitat for this species. The presence of water in the low-flow channel, coarse substrates such as boulders, cobbles, and gravels as well as fine silts and sands, in addition to riparian vegetation, indicate the potential presence of suitable habitat for all SAS sucker life stages. Other portions of the Santa Ana River floodplain within the BSA provide suitable habitat BSA when flows occur during large storm events.

¹ The pile driving activities would only occur during the two stages of falsework construction and will not be required for other bridge construction.

² The Noise Analysis for Pile Driving Effects to Least Bell's Vireo was prepared even though the MSHCP does not require any mitigation for construction noise effects. MSHCP Section 6.1.4, Guidelines Pertaining to the Urban Wildlands Interface, is the only place in the MSHCP that specifies noise limitations. The limitation states "wildlife in the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards" for operational activities and build-out conditions. These residential standards for construction include time of day restrictions, but do not include noise level restrictions. Further residential noise standard levels are based on operational activities (which would be continuous and permanent) as opposed to temporary construction activities.

The project will temporarily affect 8.50 acres of Santa Ana sucker critical habitat.¹ Should the project affect the low-flow channel or any areas with running water in the BSA, a direct impact to the species would occur. Pile driving during spawning season could potentially affect the species. Underwater noise monitoring would be conducted as discussed in Mitigation Measure BIO-11 to gather data that may be used to minimize future construction activities according to the USFWS. However, the monitoring would not result in additional restrictions for the current project.

Mitigation Measures BIO-2 through BIO-11 have been identified to reduce impacts to the SAS and SAS critical habitat to a less than significant level.

Santa Ana River Woollystar: Santa Ana River woollystar is federally listed as endangered and is a covered species under the MSHCP for which take is not fully covered.² Santa Ana River woollystar was found to be present during the 2012 and 2013 focused rare plant survey, but none was identified within the BSA during the 2016 focused plant survey or the spring 2017 botanical clearance survey conducted for the project's geotechnical investigation. In 2012 and 2013, a few individual Santa Ana River woollystars were identified within the northern boundary of the BSA, within Public/Quasi-Public lands owned by the City of Riverside. Additional Santa Ana River woollystar locations were identified outside the northern BSA boundary within Public/Quasi-Public lands.³

While the Santa Ana River woollystar is considered absent from the BSA at this time, because the species was observed in 2012 and 2013, there is a potential this species can reestablish within the BSA prior to project construction. Pre-construction surveys will be conducted within suitable habitat within any Public/Quasi-Public lands.

Mitigation Measures BIO-12 through BIO-17 have been identified to reduce impacts to the Santa Ana River woollystar to a less than significant level.

c) Less than Significant with Mitigation Incorporated. The BSA contains habitat for several non-listed special-status species. Two special-status bird species, yellow warbler (*Setophaga petechial*) and yellow-breasted chat (*Icteria virens*) were found to be present in the BSA. These two bird species are not federally or State listed as endangered or threatened; they are identified as a California Species of Special Concern, referring to animals with vulnerable or seriously declining populations. These two bird species are further covered under the MSHCP and occupy the same riparian habitat as the least Bell's vireo. Project implementation of least Bell's vireo avoidance and

¹ The temporary impacts to critical habitat include all land covers of the project footprint as well as all areas of existing bridge footprint and new shade effects. Acreage is neither based on the actual extent of riverine habitat nor whether it meets all of the primary constituent elements of the Santa Ana sucker. In addition, the project may result in temporary indirect construction-related effects.

² Take of this species is covered outside Public/Quasi-Public lands, but not within Public/Quasi-Public lands (personal communication between Laurie Correa [RCA] and Wendy Davis [LSA] on July 17, 2017, and Heather Pert [CDFW] and Wendy Davis on August 7, 2017).

³ The fee-title right-of-way for Mission Boulevard is located at the historic bridge location and this right-of-way was excluded from MSHCP Public/Quasi-Public Land designation. The existing bridge alignment is located within Public/Quasi-Public Lands and the designated MSHCP Conservation Area. It has been agreed to redesignate the old bridge right-of-way to Public/Quasi-Public Land in exchange for the widened bridge alignment to be excluded from Public/Quasi-Public designation. After the exchange, the new bridge alignment easement will be excluded from Public/Quasi-Public designation.

minimization measures will reduce the project effects to these two bird species as well. Protocol surveys for burrowing owls (*Athene cunicularia*), a California Species of Special Concern, indicated the species was absent from the BSA. Six species of bats protected under California Fish and Game Code were detected in the BSA using acoustic detectors and visual nighttime surveys, one of these, the western mastiff bat (*Eumops perotis*), is a California Species of Special Concern, and another, Yuma myotis (*Myotis yumaensis*), is a California Special Animal.

Burrowing Owl: The BSA provides potentially suitable habitat for burrowing owl, a California special-status species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. The burrowing owl is also an MSHCP covered species. The portions of the BSA vegetated by non-native grasslands and unpaved sparsely vegetated developed areas were found to provide suitable habitat for burrowing owl.

A focused survey for burrowing owl was conducted in 2016 in suitable habitat areas. The focused surveys determined that burrowing owl was absent from the BSA at the time of the survey. However, burrowing owl is a highly mobile species with the potential to move onto the proposed project site prior to construction. To comply with the MSHCP, California Fish and Game Code, and the MBTA, a pre-construction survey for this species will be required prior to project clearing of potential burrowing owl habitat to avoid potential project-related effects. Project-related effects to the burrowing owl may be direct (e.g., loss of occupied burrows with nests, eggs, or young) or indirect (e.g., construction noise).

Mitigation Measures BIO-18 and BIO-19 have been identified to reduce impacts to the burrowing owl to a less than significant level.

Bats: Numerous species of bats were observed within the BSA. Six bat species were detected within the BSA during the 2016 nighttime survey. The western mastiff bat is a California Species of Special Concern while the Yuma myotis is a California Special Animal. Neither species is covered under the MSHCP. Suitable roosting habitat is not present in the BSA for the western mastiff bat, but this species was acoustically detected foraging within the BSA. The Yuma myotis was detected emerging from the Mission Boulevard Bridge structure and foraging within the BSA, which provides roosting habitat for this species. The other non-special status bat species detected in the BSA are protected under California Fish and Game Code.

Due to the presence of maternity-roosting bats in the pier expansion joints, the Mission Boulevard Bridge is considered a native wildlife nursery site. Mitigation Measures BIO-20 and BIO-21 have been identified to avoid and minimize adverse effects to maternity-roosting, night-roosting, and foraging bats that occur or have the potential to occur within the project footprint. Implementation of these measures would reduce impacts to the bat species to a less than significant level.

d) Less than Significant with Mitigation Incorporated. The BSA is located in an urbanized area that surrounds the Santa Ana River. Areas on the west side of the Santa Ana River high-flow channel (bounded by levees) no longer contain much natural habitat due to being largely developed. Areas on the east side of the channel are less developed and include Carlson and Mount Rubidoux Parks, but these parks themselves are isolated within an extensive urban landscape. However, the Santa Ana River acts as one of the major wildlife corridors within the region and provides habitat to

support several special-status plant and wildlife species. Regionally, the Santa Ana River serves as a linkage between wildlife habitats from its origins in the San Bernardino Mountains, through the Prado Dam areas, and into Orange County.

The BSA provides nesting habitat for migratory birds, including the special status-species discussed in the responses to Checklist questions 6b and 6c. Other nesting birds, including white-throated swift and cliff swallow, were observed nesting in the Mission Boulevard Bridge structure during the 2012 focused riparian bird surveys as well as other biological studies conducted during the nesting season. Potentially significant project impacts to nesting raptors, special-status birds, and other migratory bird species may occur during the bird breeding season (typically February 15 through August 31). Project-related effects to the nesting birds may be direct (e.g., loss of nests, eggs, or young) or indirect (e.g., construction noise). These potential impacts can be avoided by conducting a pre-construction survey for nesting birds prior to removal of trees and/or by removing vegetation outside of the bird breeding season and/or the use of exclusionary buffers and/or devices if nests are found. Mitigation Measure BIO-22 has been identified to reduce potential impacts to nesting birds to a less than significant level.

The nighttime survey identified day-roosting bats in the pier expansion joints of the Mission Boulevard Bridge. The number and concentration of bats emerging from the expansion joints during the summer season suggests that these bats utilize the bridge for maternity roosting. Extensive foraging was observed in the vicinity of the Mission Boulevard Bridge during the survey and night roosting is expected to occur in suitable areas throughout the bridge. Due to the presence of maternity-roosting bats in the pier expansion joints, the Mission Boulevard Bridge is considered a native wildlife nursery site.

The following measures are recommended as a means of avoiding and minimizing adverse effects to maternity-roosting, night-roosting, and foraging bats that occur or have the potential to occur within the project footprint. Previously identified Mitigation Measures BIO-20 and BIO-21 have been identified to reduce impacts to bat maternity/roosting sites to a less than significant level.

e) Less than Significant with Mitigation Incorporated. Vegetation within the BSA has been affected by wildfires in the Santa Ana River, which occurred in October 2015 and December 2017. Dense riparian forest along the western levee was burned and the affected area was cleared by the fire department. The BSA contains six vegetation communities: riparian forest, riparian scrub, developed and ornamental landscaping, non-native grasslands, open water, and unvegetated riverbed. These plant communities include sandy openings that are devoid of vegetation or that support scattered native and non-native annuals. Areas outside the levees are mostly developed, barren, or support ornamental vegetation dominated by non-native species. Table H identifies the acreage of each vegetation type and Table I details impacts to vegetation communities and land cover within the BSA. Impacts to each vegetation type are detailed in previously referenced Table F (Checklist response 6b).

Developed and ornamental landscaping and non-native grassland are not identified as sensitive natural communities; therefore, project impacts within these areas are not considered significant and no mitigation is required. Riparian forest is identified by the CNDDDB as a sensitive natural

community. In some cases, riparian scrub within the BSA may also be considered important by federal, State, and/or local agencies.

Table H: Vegetation within the BSA

Vegetation Community	Total Acres
Riparian forest	2.12
Riparian scrub	5.20
Developed and Ornamental Landscaping	23.45
Non-native Grassland	3.60
Open Water	0.31
Unvegetated Riverbed	1.26
Total	35.94

Source: Table C, *Natural Environment Study*, LSA, December 2017.

Table I: Impacts to MSHCP Riparian/Riverine Areas and Proposed Mitigation

Temporary Impacts Beneath Existing Bridge Footprint		Temporary Impacts to Open Water	Temporary Impacts Adjacent to Bridge Footprint		New Shade Impacts within Additional Bridge Footprint		Total
Riparian/Riverine Areas	1.24 acres	0.15 acre	5.11 acres		0.68 acre		7.18 acres
Mitigation Ratio	1:1 on-site weeding only	1:1 on-site redivert/recontour channel flow	1:1 on-site	0.25:1 off-site	1:1 on-site weeding only	1:1 off-site	N/A
Mitigation Acreage	1.24 acres on site	0.15 acre	5.11 acres on-site	1.28 off-site	0.68 acre on-site	0.68 acre off-site	9.14 acres

Source: Table E, *Determination Biological Equivalent of Superior Preservation*, LSA, March 2018.

The project will remove the existing 10 pier walls (2 feet by 33 feet at grade), which total 0.02 acre and replace them with up to 28 new smaller piers consisting of a smaller (6-foot diameter) footprint at grade; thereby, reducing the total footprint in the riverbed. Changes in the size of existing pier walls are considered a temporary effect. Any reduction in the concrete footprint within the riverbed would be considered a beneficial effect.¹

Riparian Forest: The BSA contains 2.12 acres of riparian forest in the central portion of the Santa Ana River floodplain within the BSA. The riparian forest canopy is dominated by Fremont cottonwood, Goodding's willow, and arroyo willow with narrowleaf willow and mule fat occurring in openings and along edges. Project impacts to riparian forest include 1.26 acres of temporary indirect impacts associated with temporary construction easements, temporary equipment access areas, and temporary staging areas, and 0.33 acre of new shade effects beneath the additional bridge footprint. No permanent effects will result from paving or other land alteration.

¹ Per James Mace (USACE) at the August 8, 2017, Pre-Application Meeting and via email correspondence with Wendy Davis (LSA) on November 1, 2017.

Mitigation Measures BIO-23 through BIO-25 have been identified to reduce impact to riparian forest within the BSA to a less than significant level.

Riparian Scrub: The BSA contains 5.20 acres of riparian scrub that occur primarily in the southwesterly portion of the Santa Ana River floodplain within the BSA. The riparian scrub canopy is dominated by mule fat, narrowleaf willow, shortpod mustard (*Hirschfeldia incana*), and non-native grasses. As detailed in previously referenced Table F, project impacts to riparian scrub include 3.85 acres of temporary indirect effects associated with temporary construction easements, temporary equipment access areas, and temporary staging areas and 0.35 acre of new shade effects beneath the additional bridge footprint.

Mitigation Measures BIO-23 through BIO-25 have been identified to reduce impacts to riparian scrub within the BSA to a less than significant level.

MSHCP Riparian/Riverine Habitat: Section 6.1.2 of the MSHCP describes the process through which the protection of Riparian/Riverine areas and Vernal Pools is intended to occur within the MSHCP area. The MSHCP defines Riparian/Riverine areas as "lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." The definition of Riparian/Riverine habitats is based on potential for the habitat to support Riparian/Riverine Covered Species. The MSHCP requires an assessment of the riparian/riverine resources, the functions and values (including species) of these resources, and the project's impact on the resource. The species associated with Riparian/Riverine areas and Vernal Pools, as listed in Section 6.1.2 of the MSHCP were assessed for the probability of occurring within and adjacent to the BSA.

The BSA does not contain vegetative, hydrologic, or soil characteristics associated with vernal pool habitats. Of the species listed in Section 6.1.2 of the MSHCP, the least Bell's vireo was found to be present within the BSA. Suitable habitat was found to be present within the BSA for the Santa Ana sucker and the BSA is within federally designated critical habitat for this species. Suitable habitat is also present within the BSA for the Santa Ana River woollystar. Impacts to these species were previously addressed in the response to Checklist Question 7b. The following mitigation has previously been identified to address impacts to these species.

- Least Bell's vireo, Mitigation Measure BIO-1.
- Santa Ana sucker, Mitigation Measures BIO-2 through BIO-11.
- Santa Ana River woollystar, Mitigation Measures BIO-12 through BIO-17.

The project will not permanently affect MSHCP riparian/riverine habitat. The MSHCP riparian/riverine impact area encompasses riparian forest/scrub (refer to discussion above) as well as unvegetated riverbed and open water (refer to previously referenced Table F.) The project will temporarily affect 5.26 acres of riparian/riverine habitat in the BSA that provide habitat for species identified in the response to Checklist Questions 7b through 7d. Although the new bridge will be higher and allow more sunlight to reach the riverbed under the bridge, the widened bridge footprint will result in 0.68 acre of new shade impact. Additionally, temporary impacts would occur within

5.26 acres of habitat (5.11 acres of riparian forest/scrub habitat and 0.15 acre of open water) adjacent to the bridge (due to necessary clearing of vegetation during construction). Impacts within the existing bridge footprint would occur to 1.24 acres of unvegetated streambed (refer to previously referenced Table I).

Combined, a total of 7.18 acres of MSHCP riparian/riverine habitat within the BSA would be affected by the proposed project. Mitigation Measures BIO-23 through BIO-25 have been identified to reduce impacts to riparian forest/scrub habitat within the BSA. This mitigation, as well as the species-specific mitigation identified in response to Checklist Question 7b, will reduce impacts to MSHCP riparian/riverine areas to a less than significant level.

Mitigation requirements for project impacts to MSHCP riparian/riverine areas are identified in Table I. Through the implementation of the Mitigation Measures BIO-23 through BIO-25, the project will be consistent with MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools). With the implementation of on-site and off-site enhancement and habitat restoration required in these measures, it has been determined the project will be biologically superior to the existing condition.

f) Less than Significant with Mitigation Incorporated. Two potential jurisdictional areas were identified within the BSA during the field reviews (Figures 6A and 6B). The reach of the Santa Ana River within the BSA is a slow-flowing perennial stream; the river within the BSA is also subject to high flows immediately following larger storm events. Such flows can scour out vegetation outside the low-flow channel. The channel within the BSA is unvegetated and flows over a sandy/gravelly bottom.

Santa Ana River: The Santa Ana River within the BSA is broad with a low gradient. The river is leveed and contains a low-flow, open water channel along the easterly levee. Therefore, the Santa Ana River is considered perennial within the BSA. Vegetation within the river consists of riparian forest and riparian scrub. A narrow strip, approximately 1 to 3 feet wide, along the banks of the open water channel was classified as United States Army Corps of Engineers (USACE) wetlands. The remainder of the river was classified as USACE non-wetland waters. The Santa Ana River will likely meet the USACE definition of a relatively permanent water (RPW) body and meet USACE significance nexus criteria. Thus, the river is considered a potential jurisdictional water regulated by the USACE. CDFW jurisdictional limits typically include streams and lakes, any riparian habitat (e.g., willows, mule fat, and other vegetation typically associated with the banks of a stream or lake shorelines) and may not coincide exactly with USACE definitions. Defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas and may include additional areas that do not meet USACE criteria. The Regional Water Quality Control Boards (RWQCBs) are responsible for the administration of Section 401 of the CWA. Typically, the areas subject to RWQCB jurisdiction coincide with those of the USACE (i.e., waters of the U.S., including any wetlands). The RWQCB may also assert authority over waters of the State under waste discharge requirements pursuant to the Porter-Cologne Act of 2014.



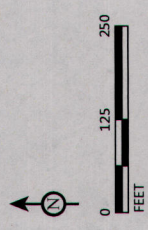
FIGURE 6A

Mission Boulevard Bridge
Replacement at Santa Ana River
USACE Jurisdictional Waters of the U.S
(State Bridge Number 56C-0071)

Potential Jurisdictional Waters
 USACE Wetland Waters
 USACE Non-wetland Waters

*RWQCB jurisdictional areas coincide with USACE jurisdictional areas

Biological Study Area (BSA)
 Sample Point



SOURCE: Google Earth, 2016; Kimley Horn, 2016.

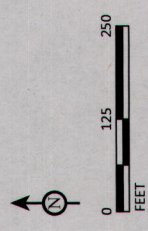
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FIGURE 6B

Biological Study Area (BSA)
 CDFW Riparian Streambed
 CDFW Non-riparian Streambed

Mission Boulevard Bridge
 Replacement at Santa Ana River
 CDFW Jurisdictional Areas
 (State Bridge Number 56C-0071)



SOURCE: Google Earth, 2016; Kimley Horn, 2016.
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Drainage A: Drainage A is an ephemeral, non-natural earthen drainage that shows evidence of an ordinary high water mark (OHWM) and streambed and banks. Drainage A conveys localized runoff and enters the southwesterly portion of the BSA. This drainage runs southwesterly for approximately 200 feet between Carlson Park and the Santa Ana River Trail, and then flows under the Santa Ana River Trail via an approximately 3-foot diameter corrugated metal pipe, and into the Santa Ana River. Drainage A is devoid of vegetation until it runs into the Santa Ana River where it is vegetated by eucalyptus trees and non-native grasslands and ruderal species. Therefore, Drainage A was not classified as USACE wetlands or riparian habitat regulated by the CDFW. This drainage is a non-natural drainage feature excavated on dry land and is typically not regulated by the USACE. Thus, this tributary is not considered to be a USACE-regulated drainage and would not meet significance nexus criteria. However, based on the presence of streambed bed and bank, this tributary is subject to the regulatory authority of the CDFW.

The extent of areas determined to be subject to jurisdiction by the USACE, CDFW and/or RWQCB is summarized in Table J.

Table J: Potential Jurisdictional Areas within the BSA

Drainage	US Army Corps of Engineers/RWQCB		California Department of Fish and Wildlife	
	Potential Wetland Waters(acres)	Potential Non-Wetland Waters(acres)	Potential Non-Riparian Streambed (acres)	Potential Riparian Streambed (acres)
Santa Ana River	0.03	9.25	4.63	6.89
Drainage A*	—	—	0.01	—
Subtotal	0.03	9.25	4.64	6.89
Total	9.28		11.53	

* Drainage A is not considered to be a potential jurisdictional water regulated by the USACE.

Source: Table B, *Jurisdictional Delineation Mission Boulevard Bridge Replace at Santa Ana River*, LSA, July 2017.

U.S. Army Corps of Engineers and Regional Water Quality Control Board Jurisdiction: A Jurisdictional Delineation was prepared for the project in January 2017. The USACE maintains regulatory authority of potential jurisdictional areas within the Santa Ana River. If the areas delineated as jurisdictional waters in this report are assumed to be waters of the U.S., then an abbreviated Preliminary Jurisdictional Determination process is applicable.

As identified in Table J, the Santa Ana River contains 0.03 acre of wetlands and 9.25 acres of non-wetland waters for a total of 9.28 acres regulated by the USACE. Drainage A is not considered to be subject to USACE regulatory authority.

As Table K shows, the project would temporarily affect 7.42 and 0.02 acre of USACE non-wetland and wetlands waters, respectively. No permanent impacts to USACE jurisdictional areas would result from the project. Temporary impacts include temporary construction easements, temporary equipment access areas, and temporary staging areas. Shade impacts are not of concern to the USACE; therefore, areas within the existing bridge footprint (existing shade) and new shade are considered temporary impacts. Temporary fill associated with the construction, as well as the replacement fill for the new piers would be authorized by a non-notifying Nationwide Permit No. 3

(NWP 3), for Maintenance. Provided that the General and Regional Conditions for this permit are adhered to, no Pre-Construction Notification would be required.¹

Table K: USACE and RWQCB Impacts

	Non-Wetland Water				Wetlands			
	Temporary Impacts			Permanent Impacts	Temporary Impacts			Permanent Impacts
	Existing Shade Impacts	New Shade Impacts	Temporary Impacts		Existing Shade Impacts	New Shade Impact	Temporary Impacts	
Acreage	1.32	0.73	5.34	0	0.01	0.00	0.01	0.00
Total	7.42			0.00	0.02			

Source: Table G, *Natural Environment Study*, LSA, December 2017.

Since there is no public guidance on determining RWQCB jurisdictional areas, jurisdiction was determined based on the federal definition of wetlands (three-parameter) and other waters of the U.S. (OHWM) as recommended by the September 2004 Workplan.² Since there are areas within the project area subject to USACE and CDFW jurisdiction, RWQCB jurisdiction in this case coincides with USACE jurisdiction for purposes of Section 401 certification. Of the total area of potential RWQCB jurisdiction (9.29 acres), 7.42 acres would be affected by the project. The waters determined to be regulated by the USACE above would be subject to RWQCB jurisdiction under Section 401 of the Clean Water Act.

California Department of Fish and Wildlife Jurisdiction: Within the BSA, a total of 11.53 acres within the Santa Ana River would be regulated by the CDFW. This includes 4.63 acres of non-riparian streambed and 6.89 acres of riparian streambed. Drainage A contains 0.01 acre of non-riparian streambed regulated by CDFW.

Table L summarizes project impacts to the CDFW jurisdictional areas (riparian streambed and non-riparian streambed). A California Fish and Game Code 1602 Streambed Alteration Agreement will be required from the CDFW for these effects.

Table L: CDFW Riparian and non-Riparian Impacts

	Existing Shade Impacts	New Shade Impacts	Permanent Impacts	Temporary Impacts	Total
Non-Riparian Streambed	1.43	0.10	0	0.88	2.44
Riparian Streambed	0.00	0.68	0	5.11	5.80
Total CDFW Riparian and Non-Riparian Streambed	1.43	0.78	0	5.99	8.24

Source: Table H, *Natural Environment Study*, LSA, December 2017.

Note: CDFW jurisdictional areas are greater than riparian/riverine areas because CDFW jurisdiction includes the concrete-lined levee slopes.

¹ Personal communication with James Mace (USACE) to Wendy Davis (LSA), November 1, 2017.

² The Regional Water Quality Control Board September 2004 Workplan was developed by State Water Board to address the waters of the State that are no longer protected under the Clean Water Act. This Workplan specified the need to adopt a State wetland definition to "provide a standard metric to help determine compensatory mitigation requirements and compliance with [the] 'no net loss' policy. The Workplan included developing a statewide policy for wetland protection "at least as protective as the federal requirements."

Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by the USACE, the CDFW, and the RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or "waters of the United States and State" will be consistent with the USACE *Compensatory Mitigation for Losses of Aquatic Resources* (USACE 2008), also known as the USACE Compensatory Mitigation Rule. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such effects ultimately is subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.

g) No Impact. The Cities of Riverside and Jurupa Valley are Permittees under the MSHCP.

Additionally, the City of Riverside's Urban Forestry Policy Manual documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The City of Jurupa Valley General Plan includes policies¹ to "... protect, preserve, and create the conditions that will promote the preservation of significant trees and other vegetation, particularly native California species." Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. Particularly, California native trees should be protected. The removal or modification to any tree would be required to conform to applicable City or Riverside and/or City of Jurupa Valley policy.

The BSA is within the MSHCP Jurupa Area Plan and the Cities of Riverside/Norco Area Plan. The BSA is not within the Criteria Area but is within existing Public/Quasi-Public Lands conserved as part of Existing Core A; therefore, the project is required to implement applicable measures from Section 6.1.4 Urban/Wildlands Interface Guidelines, Section 7.5.3, and Best Management Practices and Appendix C of the MSHCP. Furthermore, MSHCP Section 6.1.2 requires all projects to provide project-specific mapping of riparian/riverine and vernal pool habitat, and to assess potentially significant effects on riparian/riverine habitat and vernal pools to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained.²

As required under the MSHCP, biological resource and species focused surveys were conducted in the BSA. In accordance with the MSHCP requirements, an MSHCP Consistency Report and Determination of Biological Equivalent or Superior Preservation (DBESP) Report were prepared to, 1) identify impacts to covered species and, 2) develop appropriate mitigation to offset any project impacts to covered species. The project biologists coordinated extensively with County of Riverside, Wildlife Agencies and the Western Riverside County Regional Conservation Authority staff to develop, refine and finalize project mitigation.

¹ Conservation and Open Space Policy COS-1.2

² In addition to compliance with Sections 6.1.2 (Riparian/Riverine and Vernal Pools), 6.1.3 (Narrow Endemics), 6.1.4 (Urban Wildlands Interface), 6.3.2 (Additional Surveys), and 7.5 (Guidelines for Facilities within the Criteria Area and Public/Quasi-Public Lands), Section 12.2.2 of the MSHCP Implementing Agreement requires MSHCP Permittee regional infrastructure projects to contribute funding to MSHCP implementation. The RCA Board of Directors adopted a policy regarding public project funding contributions to the MSHCP that requires City and County roadways covered by the MSHCP to contribute 5 percent of project construction costs of any new or capacity enhancing/widening project, excluding Transportation Uniform Mitigation Fee (TUMF) and Measure A sales tax fund sources. Also, contingent on approval of Federal Highway Administration, any federally funded portion of the project's construction would be subject to the MSHCP fee contribution. The 5 percent contribution, like the Local Development Mitigation Fee payment by private projects, is a requirement of MSHCP participation.

As part of the MSHCP process, the USFWS and CDFW have reviewed the DBESP and MSHCP Consistency Reports for the project. These documents were prepared to provide analysis of impacts to resources and documentation of implementation of the MSHCP including: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools Policy (MSHCP Section 6.1.2); Protection of Narrow Endemic Plant Species Survey Areas (MSHCP Section 6.1.3.); Additional Survey Needs and Procedures (Section 6.3.2); Urban-Wildlands Interface Guidelines (Section 6.1.4.); Siting and Design Criteria (Section 7.5.1 and 7.5.2); Best Management Practices (BMPs, Sections 7.5.3 and Appendix C of the MSHCP Implementing Agreement (Section 13.7[A])). Comments from the Agencies on the DBESP were received on May 21, 2018. The DBESP (including mitigation as identified in this IS/MND) was revised (June 2018) to address appropriate comments from the Wildlife Agencies. With the acceptance of these comments, USFWS and CDFW review of the MSHCP process for the project is complete.

In summary, the project will affect riparian/riverine resources including riparian vegetation communities, Santa Ana River sucker and its critical habitat, least Bell's vireo, and Santa Ana River woollystar. Impacts to the Santa Ana sucker and its critical habitat, least Bell's vireo, and Santa Ana River woollystar will be avoided and minimized through implementation of the mitigation cooperatively developed by the County, USFWS, CDFW, and RCA as follows:

- Least Bell's vireo, Mitigation Measure BIO-1.
- Santa Ana sucker, Mitigation Measures BIO-2 through BIO-11.
- Santa Ana River woollystar, Mitigation Measures BIO-12 through BIO-17.

The significance of impacts to riparian/riverine resources is reduced through implementation of Mitigation Measures BIO-23 through BIO-25. Completion of the required focused surveys, the identification of appropriate mitigation, and acceptance of the MSHCP Consistency and DBESP reports by the Wildlife Agencies demonstrate that the project has complied with existing guidelines and is in compliance with the MSHCP.

The project-specific Mitigation Monitoring and Reporting Program details the manner in which mitigation will be implemented. Upon implementation of the mitigation identified in this document, the project is consistent with the MSHCP requirements.

Mitigation:

Least Bell's Vireo

BIO-1 The project shall mitigate for 0.68 acre of new shade impacts at a 2:1 ratio as part of the overall riparian/riverine mitigation requirements (refer to Mitigation Measures BIO-23 and BIO-24). In addition to the measures addressing riparian/riverine resources, which will benefit the least Bell's vireo, the project will further avoid, minimize, and mitigate effects to the least Bell's vireo with implementation of measures described below.

- To avoid and minimize effects to the least Bell's vireo, removal of riparian vegetation prior to construction shall occur between September 1 and February 14 to avoid least Bell's vireo breeding season, as well as the general breeding season

for other nesting birds. If vegetation removal must occur during nesting season, a nest survey shall be conducted by a qualified biologist within three days prior to vegetation removal activities to ensure that no active nests are present. If nests are present, no vegetation removal shall occur within 50 feet of the active nest until the young have fledged or the nest is determined to be inactive.

- Prior to the onset of project activities, to offset the temporal loss of occupied least Bell's vireo habitat, the project sponsor(s) shall pursue off-site mitigation. If pre-project mitigation is ultimately infeasible, coordination of alternative mitigation strategies shall be conducted with the Wildlife Agencies.
- If pile driving activities occur during nesting season, the following measures shall be implemented:
 - The project shall sponsor placement of two cowbird traps for each nesting season that pile driving activities occur. This measure would improve the productivity of least Bell's vireo during nesting season, to compensate for the potential temporary loss in reproductive output for any pile driving-related noise effects during nesting season.
 - Throughout the duration that pile driving activities occur during the least Bell's vireo nesting season (March 15 through July 15), a biological monitor shall conduct daily site visits to document how pile driving activities affect nesting least Bell's vireo. The purpose of this monitoring is to gather information related to LBV activity during pile driving activities to inform future decisions regarding noise minimization. Coordination with the Wildlife Agencies will be conducted prior to monitoring to discuss the information to be collected. This data collection will not impose additional restrictions on this project.

Santa Ana Sucker

- BIO-2** Short-term stream diversions may be required to build the permanent bridge and provide temporary access to the construction area near the low-flow channel and within the defined project footprint. As required, these diversions shall be placed to facilitate temporary access within the low-flow channel and to build bridging elements. The temporary diversions would be in place for a month or less during the erection and removal process.
- BIO-3** For temporary construction access, impacts shall be minimized to the low-flow channel of the Santa Ana River and the Santa Ana sucker by installing a trestle or large-diameter corrugated metal pipes over the low-flow river crossing at each construction stage. The trestle or pipes shall be located over the river under the new bridge and along the adjacent construction access area. In order to build and remove the supports for the trestle or install the pipes, the flows shall be diverted, which will occur outside of spawning season (approximately February 15 to July 31).
- BIO-4** If water diversion is not required, highly visible barriers (such as orange construction fencing) shall be installed around the low-flow channel and other areas of running water, and designated as an Environmentally Sensitive Area (ESA) to be avoided. Silt

fence barriers shall be installed at the ESA boundary to prevent accidental deposition of fill material in areas of flowing water.

BIO-5 If water diversion activities are necessary, the County will submit a Fish Protection Plan that includes sound monitoring and diversion information to the Wildlife Agencies for review and approval. The plan shall be finalized prior to the initiation of water diversion activities in or adjacent to the active channel.

If water diversion activities are necessary, a Wildlife Agency qualified biologist shall conduct a preliminary underwater survey of the affected area noting habitat and any fish present prior to water diversion. Water diversions shall be conducted outside of the spawning season for the species (approximately February 15 to July 31). If the Santa Ana sucker is found to be present, a relocation program shall be implemented. The pre-construction survey and relocation program shall require approval from the United States Fish and Wildlife Service (USFWS). Names and qualification statement(s) of prospective qualified biologist(s) shall be submitted for review and approval prior to the installation of any water diversion feature.

BIO-6 If Santa Ana sucker are found to be present, then exclusion nets shall be placed around the work area. Once diversion of flow is complete, exclusion nets shall be removed. Seining shall then be conducted inside the exclusion area to remove and relocate Santa Ana Sucker prior to the commencement of diversion activities. As the diversion of flow is taking place, the biologist(s) shall patrol the dewatering area in order to capture stranded fish. A combination of seining, dip netting, and hand capture shall be utilized.

BIO-7 All captured Santa Ana sucker shall be placed into coolers filled with river water. Fish shall remain in coolers for the shortest time necessary. Air pumps shall be used to maintain oxygenated water supply. The coolers shall be kept shaded at all times. The water temperature in the coolers and condition of captured Santa Ana sucker shall be closely monitored. Ice (or frozen water bottles) shall be used, as necessary, to maintain cool water (similar to ambient or <85 degrees Fahrenheit). Any Santa Ana suckers removed from the site shall be relocated upstream or downstream of the project area, as determined appropriate by the qualified biologist, in consultation with the USFWS. A summary report shall be provided to the USFWS for all diversions resulting in relocation of Santa Ana sucker.

BIO-8 If capture and relocation of Santa Ana sucker is necessary, it shall be achieved through one or more of the following methods: the use of fine mesh [2–4 mm (0.08–0.16 in)], knotless seine nets; fine mesh [4–6 mm (0.16–0.24 in)] knotless hoop nets, modified hoop nets, or similar traps; or dip nets of 0.5 mm (0.20 in) or finer mesh for survey of larval Santa Ana sucker. The survey methods shall be selected to minimize the potential injury or mortality to Santa Ana suckers and potential disturbance or damage to breeding areas. If seines are used, particular care shall be taken to avoid incidental injury or mortality to Santa Ana sucker that may be caught and suffocated in algal mats or sand. Care should also be taken to keep Santa Ana sucker in water as much as possible. Larval fishes should be kept submerged in a dip net until species is identified and released at the point of capture. Use of non-conventional sampling gear shall be approved by the USFWS.

- BIO-9** Prior to activities that may involve handling Santa Ana sucker, the qualified biologist shall ensure that all participants' hands are free of sunscreen, lotion, or insect repellent.
- BIO-10** At the end of the relocation (or as otherwise stated in the Relocation Plan approved by the USFWS), the qualified biologist shall submit a report to the USFWS identifying the number of any native fish species that were relocated and any other measures that were taken to minimize effects to Santa Ana sucker.
- BIO-11** If pile driving activities occur during spawning season (February 15 to July 31), underwater sound monitoring shall be conducted within the project footprint to gather data that may be used by the Wildlife Agencies in making appropriate recommendations for future construction activities. The data collection shall not impose any additional restrictions on this project. At the end of the underwater sound monitoring, a brief report summarizing the results of the monitoring shall be provided to Wildlife Agencies.

Santa Ana River Woollystar

- BIO-12** Focused surveys shall be conducted to identify locations of Santa Ana River woollystar in the months of June and July preceding vegetation clearing or other grading activities.
- BIO-13** If Santa Ana River woollystar is found, highly visible barriers (such as orange construction fencing) shall be installed around the occupied areas and designated as Environmentally Sensitive Areas (ESAs) to be avoided.
- BIO-14** No construction activities, materials, or equipment shall be allowed within the ESAs, unless unforeseen circumstances require an alteration of the ESA boundaries. All construction equipment shall 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, shall be allowed within these protected zones.
- BIO-15** If it is not feasible to avoid effects to the Santa Ana River woollystar within the Public/Quasi-Public Lands, seed shall be collected during the summer and fall prior to vegetation clearing or other grading activities. Seed shall be collected once the plants have matured and seeds senesce. Additionally, soil shall be collected in a one-foot radius to a depth of one-inch around each plant. In the event effects to the Santa Ana River woollystar within Public/Quasi-Public lands are avoided Mitigation Measure Bio-16 shall not be required.
- BIO-16** If it is determined that seed collection is required (refer to Mitigation Measure BIO-15), half of the collected seed and soil will be dispersed outside of the project footprint subsequent to seed collection and the other half of the collected seed and soil will be retained by a seed collection company (such as S&S Seed) for site restoration following project completion. Prior to seed dispersal, the location of the seed dispersal and revegetation activities shall be coordinated with representatives of the Riverside County Flood Control and Water Conservation District.
- BIO-17** A biologist shall monitor construction within the vicinity of riparian and riverine areas for the duration of the project construction and to ensure that vegetation removal, Best Management Practices (BMPs), ESAs, and all avoidance and minimization measures are properly constructed and followed.

Burrowing Owl

BIO-18 A pre-construction burrowing owl survey shall be conducted within three days prior to the beginning of project construction to determine if the project site contains suitable burrowing owl habitat and to avoid any potential impacts to the species. The survey shall include 100 percent coverage of the project site. If the survey reveals no suitable habitat for burrowing owl is present, no additional action for this species is required.

If active burrowing owl burrows are determined to be present, the burrow(s) shall be flagged and an appropriate buffer (up to 500 feet) shall be created in accordance with MSHCP Species Conservation Guidelines. The buffer limits may vary depending on burrow location and burrowing owl sensitivity to human activity. Any relocation efforts must be coordinated with California Department of Fish and Wildlife (CDFW). In the event a buffer is not feasible, Mitigation Measure BIO-19 shall apply.

BIO-19 In the event it is not feasible for the project to avoid work within buffer identified for an active burrow; prior to the commencement of ground-disturbing activities, a burrowing owl relocation plan shall be prepared and submitted to the Wildlife Agencies (USFWS and CDFW) for review and approval.

Relocation of any burrowing owls within construction area shall be completed pursuant to the relocation plan prior to the commencement of ground-disturbing activities.

Bats

BIO-20 During the project design phase, the following measures shall be implemented:

- Alternative bat roosting habitat shall be incorporated into the design of the new bridge to replace crevice habitat lost due to removal of the existing Mission Boulevard Bridge. The specifications for this replacement habitat should be designed in consultation with a qualified bat biologist.
- Due to presence of maternity-roosting habitat and potential vibratory impacts if pile driving occurs during maternity roosting season, alternative bat roosting habitat structures should be installed at a nearby structure prior to the complete eviction/exclusion of bats from the existing bridge structure. The design, numbers, and locations of these roost structures should be determined in consultation with a qualified bat biologist.

BIO-21 The following measures shall be implemented during the project construction phase:

- To avoid direct mortality, humane evictions and exclusions of roosting bats shall be performed under the supervision of a qualified bat biologist in the fall (September or October) prior to bridge demolition activities. Eviction/exclusion may be implemented in one or two phases at the discretion of the qualified bat biologist and in coordination with the project design team. To avoid potential mortality of flightless juvenile bats, evictions and exclusions of bats shall not be performed during the general bat maternity season (April 1–August 31). Winter months (generally November through February, but specifically periods in which nighttime temperatures are consistently less than 50 degrees Fahrenheit) are also inappropriate for bat eviction because not all individuals in a roost will emerge on

any given night. In addition, long-distance movements to other roost sites are more difficult during the winter when prey availability is scarce, resulting in high mortality rates of evicted bats.

- Demolition should be performed outside of the general bat maternity season (April 1–August 31) to the greatest extent feasible.
- Should nighttime work for project construction be required, night lighting shall be used only on the portion of the structure actively being worked on and focused on the direct area of work. Airspace access to and from the roost features of the structure shall not be obstructed except in direct work areas.
- Following the construction of the replacement bridge, street lighting at the new bridge shall be directed away from the Santa Ana River to the greatest extent feasible.
- The removal of mature trees and snags shall be minimized to the greatest extent practicable.
- If trimming or removal of mature trees and snags is necessary for project construction, tree trimming/removal activities should be performed outside of the general bat maternity season, which occurs from April 1 through August 31, to avoid direct effects to nonvolant (flightless) young that may roost in trees within the study area. This period also coincides with the bird nesting season of February 15 through August 31.
- If trimming or removal of trees during the general bat maternity season (April 1 through August 31) cannot be avoided, a qualified biologist will monitor tree removal unless nighttime surveys conducted within one week of removal indicate no tree-roosting bat activity within the study area.

Nesting Birds

BIO-22 To avoid potential effects to fully protected raptors, special-status bird species, and other nesting birds protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, the following measures shall be implemented:

- If feasible, project construction and vegetation removal shall be completed outside of bird breeding season (typically set as February 15 through August 31).
- In the event that vegetation removal cannot be conducted outside the bird breeding season, focused surveys shall be conducted by a qualified biologist three days prior to vegetation removal activities. Should nesting birds be found, an exclusionary buffer shall be established by a qualified biologist and documented in a Nesting Bird Monitoring Plan. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found and how it is addressed in the Nesting Bird Monitoring Plan. This buffer shall be clearly marked in the field by construction personnel under guidance of the qualified biologist, and construction or clearing shall not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active.

- If nesting birds are found within the Mission Boulevard Bridge structure, exclusionary devices and nest prevention methods, designed to prevent birds from utilizing the bridge, shall be identified and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15) and before any bridge demolition and other bridge construction activities begin.
- Nesting bird habitat within the BSA shall be resurveyed during bird breeding season if there is a lapse in construction activities longer than seven days.

Habitat Modification/Riparian-Riverine

BIO-23 The following avoidance, minimization, and mitigation measures will be incorporated for effects to riparian/riverine resources:

- Prior to clearing or construction, highly visible barriers (such as orange construction fencing) shall be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs).
- No construction activities, materials, or equipment shall be allowed within the ESAs, unless unforeseen circumstances require an alteration of ESA boundaries. All construction equipment shall be operated in a manner to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, shall be allowed within these protected zones. Silt fence barriers shall be installed on either side of the low-flow channel to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities.
- Bridge lighting will be shielded and will illuminate only the bridge facility.
- All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities shall occur in developed or designated non-sensitive upland habitat areas. The designated upland areas shall be located in such a manner as to prevent any spill runoff from entering waters of the U.S.
- Weed abatement measures shall be implemented to minimize the importation of non-native plant material during and after construction. Eradication strategies shall be employed should an invasion occur.
- Sediment and erosion control devices will be made of biodegradable materials to prevent a wildlife entanglement hazard. Fiber rolls will be specified to contain straw, coir, or other biodegradable materials bound into a tight tubular roll wrapped by photodegradable netting. Specific BMPs such as Biodegradable Erosion Control Matting and Compost Filter Sock perimeter controls will also be included in the specifications.
- A biologist shall monitor construction within the vicinity of riparian and riverine areas for the duration of the project construction and to ensure that vegetation removal, Best Management Practices (BMPs), ESAs, and all avoidance and minimization measures are properly constructed and followed.

- The portions of the Santa Ana River bottom temporarily affected by the project shall be recontoured to their original grades upon completion of construction.

BIO-24 Compensatory mitigation for riparian/riverine areas will occur such that the project will be equivalent or superior to existing conditions. The identification of proposed compensatory mitigation areas shall be coordinated with representatives of the Riverside County Flood Control and Water Conservation District. On-site and off-site mitigation shall be provided based on the following:

- New shade effects within additional bridge footprint will be mitigated by weeding and revegetating at a 2:1 ratio off-site;
- Temporary effects beneath existing bridge footprint within existing shaded areas (excluding areas of open water and concrete) will be mitigated by on-site weeding only at a 1:1 ratio; and
- Temporary effects to riparian/riverine areas adjacent to bridge footprint will occur at a 1.25:1 ratio on site and off site.

BIO-25 A Habitat Mitigation and Monitoring Plan (HMMP) will be prepared to monitor the proposed on-site and off-site mitigation. The mitigation area shall be maintained until performance standards are satisfied, which is anticipated to be approximately five years (though the standard may be achieved earlier). If a major storm washes away more than 30 percent of the plantings, the project shall continue to sponsor weeding for a total of five years; however, plants will not be replanted and monitored. Off-site mitigation will be implemented within one year of approval of environmental document in order to compensate in advance for the temporal loss of riparian habitat during construction.

BIO-26 Coordination with the Riverside County Flood Control and Water Conservation District shall occur prior to any revegetation activity that may take place within any RCFCWCD property.

Monitoring:

Monitoring for Mitigation Measures BIO-1 through BIO-26~~5~~ shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

Cultural Resources

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Historic and Paleontological Resources				
a. Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: *Historic Resources Evaluation Report, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, May 2017 (Appendix D¹); Archaeological Survey Report, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, May 2017 (Appendix D); and Paleontological Resources Assessment, Mission Boulevard Bridge at Santa Ana River Project, LSA, October 2016 (Appendix E).*

Note: The discussion of Native American consultation and Tribal Cultural Resources is addressed separately (refer to Checklist Question 8).

Findings of Fact:

a) **No Impact.** The Area of Potential Effects (APE)² for the project is bound on the north and west by the river, undeveloped land, and the City of Jurupa Valley; on the east by the City of Riverside; and on the south by Mount Rubidoux. A records search and literature review was conducted on February 23, 2016, at the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS), located at the University of California, Riverside. Data from the EIC indicated 70 historic built environment resources have been recorded within one mile of the APE, including 47 residential properties, 12 commercial properties, and three churches and public use/institutional properties, which include an opera house, a YMCA, Mt. Rubidoux, a park, a historic site marker, a government laboratory, and two water conveyance utilities (a pumping station and sewer). Several properties outside of the project's APE have been listed in or determined eligible for inclusion in the National Register of Historic Places (National Register) and three are California Historical Points of Interest.

¹ Appendix D consists of the project's Historic Property Survey Report (HPSR), which includes the Archaeological Survey Report (ASR), Historic Resources Evaluation Report (HRER) and associated attachments. Selected portions of the HPSR (as included in Appendix D) have been withheld from public review to ensure the confidentiality of resources.

² The APE is the area within which a project may directly or indirectly cause changes in the character or use of historic properties, should any be present. Effects to be considered can be both direct and indirect. They may include direct effects such as physical damage to or destruction of a property, alterations, or moving or realigning a historic property; or they may include indirect effects such as isolating a property from its setting; visual, audible, or atmospheric intrusions; shadow effects; vibrations; or change in access or use.

Architectural field surveys were conducted on July 26 and November 9, 2016. During the surveys, one historic-period (50 years of age or older) resource requiring evaluation was identified within the project APE. This resource is 1930–1932 Buena Vista Drive and Park, which was designated as City of Riverside Landmark #14 in January 1971.

City Landmark #14 consists of approximately 2,300 linear feet (0.4 mile) of City right-of-way that makes up the truncated remnant of the former eastern approach to the no longer extant Rubidoux Bridge. It includes the St. Francis Shrine/waterfall (1916), two Mission Revival-style towers (1923), raincross streetlights and balustrades (1923 and 1932 with later replacements/repairs), stone curbing (likely 1931–32), terraced stone walls and walkways with concrete covered pole railings (1931), a stone drinking fountain (1932), the Buena Vista Bridge (1931), and Carlson Park (1958, officially dedicated 1968, extensively improved 2007). Some of the more significant alterations include removal of the Rubidoux Bridge, removal of 200 feet of the raincross balustrade, construction of a cul-de-sac near the Santa Ana River Trail, construction of the area that became Carlson Park, and realignment of the road at the intersection of Mission Inn Avenue and the parking lot. Modern intrusions include sidewalks, curbs, fencing, parking, concrete stairs, lighting, and the Carlson Park entry statement with small towers, gate, signage, and landscaping. The St. Francis Shrine/waterfall is defunct and in ruins and the drinking fountain does not appear to be in working order. Throughout the years, many of the raincross streetlights have been repaired or replaced, as has the concrete railing along the terraced walkways. Most of the historic-period landscaping between Mission Boulevard and the two towers has died or been removed.

The primary feature of the resource was the bridge because all of the other elements of the resource were built in support of either the 1916 or 1922/1932 bridges. With the exception of the St. Francis Shrine/waterfall (1916), the other extant structures (walkways, walls, lights, etc.) were constructed in support of the Rubidoux Bridge (1922/1932) as part of the enhanced western gateway to the City. Because the resource is missing its most important, and arguably its most stunning feature, namely the Rubidoux Bridge, its overall integrity has been significantly compromised.

City Landmark #14 was surveyed and evaluated and was determined not eligible for listing in the National Register primarily due to integrity considerations. Under CEQA, "historical resources" include a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; a resource included in a local register of historical resources or identified as significant in a historical resource survey; and/or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. With its designation by the City of Riverside as City Landmark #14, it is a historical resource for purposes of CEQA.

The project does not require the acquisition of right-of-way. The proposed widening will be to the north of the existing alignment of Mission Boulevard. Upon completion, the proposed project will serve a similar use, will be constructed within the same alignment and within the existing right-of-way, and will not remove or alter other features included in City Landmark #14; therefore, no

substantial adverse change to this resource would occur. The State Historic Preservation Officer (SHPO) concurred with this finding on August 11, 2017.

b) Less than Significant with Mitigation Incorporated. On February 23, 2016, a records search and literature review were conducted at the EIC. The following historical resources files, inventories, and listings were consulted:

- 2013. Archaeological Determinations of Eligibility.
- 2013. National Register of Historic Places.
- 2013. California Register of Historical Resources.
- 2013. California Inventory of Historic Resources.
- 2013. California Historical Landmarks.
- 2013. California Points of Historical Interest.

Data from the EIC indicate that there have been 33 previous cultural resources studies conducted within the one-mile cultural resource study area,¹ one of which (Hampson et al. 1988) includes portions of the APE. Four prehistoric sites (one habitation site; milling features and artifact scatter; and two bedrock milling features) and 10 historic period archaeological resources (Spring Rancheria site; Historic Chinatown site; three foundation remnants; three refuse deposits; and two water conveyance systems comprising a reservoir and ditch) have been recorded within the one-mile search radius. The nearest is the prehistoric habitation, which is within 500 meters (approximately 0.25 mile) of the APE.

A review of historic period maps, aerials, and newspaper archives indicated that the historic period Boy Scout facility known as Camp Evans was formerly located partially within the northeastern portion of the APE. Established in 1924 on 70 acres granted by the City of Riverside, a lodge may have been constructed on Assessor's Parcel Number (APN) 207-190-003 across the street from what is now Mt. Rubidoux Park. The camp was used until the late 1970s when the lodge burned down and the facility was subsequently abandoned. No further historical information on this feature has been identified.

An intensive pedestrian field survey of the APE was conducted on November 16, 2016. The pedestrian survey was conducted by walking transects spaced by 10–15 meters where possible, with particular attention given to undeveloped areas with exposed soil. Visibility was poor at approximately 30 percent, with substantial obstruction by roadway, development, and vegetation. No archaeological resources were identified within the APE.

While no archeological resources were located within or near the APE during the records search or archaeological field surveys, potential exists that such a resource could be inadvertently discovered during project-related construction operations; therefore, Mitigation Measures CUL-1 through CUL-

¹ The cultural resource study area encompasses the area within one mile of the project footprint. The cultural resources records search includes the review of databases to determine the absence/presence of recorded cultural resources that may be located within the one-mile study area but still located outside the project's APE.

5 has been identified to reduce potential impacts associated with such an inadvertent discovery to a less than significant level.

c) Less than Significant with Mitigation Incorporated. A literature review of the project area—including an examination of geologic maps of the project site and a review of relevant geological and paleontological literature to determine what geologic units are present within the project site and whether fossils have been recovered from those geologic units elsewhere—was conducted in July and August 2016. As geologic units may extend over large geographic areas and contain similar lithologies and fossils, the literature review includes areas beyond the project site. The results of this literature review include an overview of the geology of the project site and a determination of the paleontological sensitivity (or potential) of the geologic units within the project site.

In July 2016, a locality search was conducted through the Natural History Museum of Los Angeles County (LACM). The locality search was conducted through the LACM because this institution has been in existence longer than any other local or regional natural history museum in Southern California. As such, it has the largest and most complete fossil collection and fossil locality database for this region. The majority of the project site contains younger Quaternary Alluvium (i.e., Very Young Wash Deposits, Undivided and Unit 3 and Young Axial Channel Deposits), which is likely underlain by older Quaternary Alluvium (i.e., Old Alluvial Fan Deposits, Unit 3) as well as a small area of Mesozoic igneous rocks (i.e., Granite of Mount Rubidoux and Granite of the Riverside Area) in the southeastern portion of the project site. Because the Granite of Mount Rubidoux and the Riverside area formed from magma below the surface, it will not contain fossils. Therefore, these rocks have no paleontological sensitivity.

Younger Alluvium is assigned no paleontological sensitivity above a depth of less than 10 feet and a high sensitivity at depths more than 10 feet. Old Alluvial Fan Deposits formed during the late to middle Pleistocene (11,700–781,000 years ago) from sediments that were eroded off the mountains and carried to lower elevations by the Santa Ana River and its tributaries. These deposits are composed of moderately to well consolidated mixtures of sand, gravel, and silt. They have been dissected by erosional gullies and show some soil development. In the vicinity of the project, three units are recognized based on the degree of dissection, level of soil development, and relative position. These deposits span the latest two North American Land Mammal Ages: the Irvingtonian (1.8 million to 240,000 years ago) and the Rancholabrean (11,000–240,000 years ago) (Alroy 2000). Fossils are known in similar Irvingtonian and Rancholabrean deposits from excavations for roads, housing developments, and quarries, as well as scientific investigations within Southern California. These fossils include mammoths, mastodons, horses, bison, camels, saber-toothed cats, coyotes, deer, and sloths, as well as smaller animals like rodents, rabbits, birds, reptiles, and fish. As such, these deposits are considered to have high paleontological sensitivity.

Records of fossil localities from older Quaternary alluvium have been located near the project site. The closest vertebrate fossil locality in similar older Quaternary deposits is approximately 10 miles southwest of the project site along Sumner Avenue west of Mira Loma. This locality produced a specimen of whipsnake (*Masticophis*) at a depth of 9 to 11 feet below the surface. Farther to the south between Corona and Norco, approximately 11 miles from the project site, a specimen of deer (*Odocoileus*) was located in similar deposits.

Excavation within the igneous rocks in the southeastern part of the project site will not produce any fossils. Excavation activities for roadway approach work and trenching in deposits with high paleontological sensitivity (Young Axial Channel Deposits beginning at a depth of more than 10 feet bgs and Old Alluvial Fan Deposits, Unit 3) have the potential to affect paleontological resources and require paleontological monitoring. Drilling for piles for the bridge foundations precludes the identification and recovery of fossil remains. Therefore, no paleontological mitigation is recommended for drilling for piles for the bridge foundations. However, fossil identification and recovery may be possible during ground-disturbing activities that involve traditional excavation methods and equipment (e.g., excavating with scrapers, trackhoes, and bulldozers), which are expected to be employed for the roadway approach work and utility trenching. Mitigation Measure PALEO-1 has been identified to reduce potential paleontological impacts to a less than significant level.

d) No Impact. Based on the archival research, there is no evidence that the project area has been used for human burials. No evidence of human burials was observed during the pedestrian surveys of the APE. Due to the lack of formal cemeteries or informal burial plots within APE, there is a very low potential that human remains would be uncovered during grading and other construction activities.

In the unlikely event human remains are discovered, compliance with State law (Health and Safety Code § 7050.5) (HSC § 7050.5) would be required. These requirements state that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made.

Human remains from other ethnic/cultural groups with recognized historical associations to the project area shall also be subject to consultation between appropriate representatives from that group and the County. This is a standard condition required of any project undertaken in the State.

Mitigation:

- CUL-1** Prior the commencement of construction activities, the construction Contractor(s) shall provide evidence to the County for review and approval that on-site work crews have been informed of the procedures to follow in the event an identified cultural resource is unearthed during construction, including contact information for the County and the qualified archaeologist.
- CUL-2** Prior to the commencement of construction activities, the Construction Contractor shall provide evidence to the County for review and approval that a qualified archaeologist who meets Secretary of the Interior Standards has been retained to provide as-needed monitoring or investigation of ground-disturbing activities. In the event no such resource is identified during project-related construction activities, no further mitigation is required. If a potential or suspected cultural resource is encountered, Mitigation Measures CUL-3 through CUL-5 shall be required.
- CUL-3** In the event previously unidentified cultural resources are unearthed during construction, all work within a minimum of 100 feet of the discovery shall cease and the County and the qualified archaeologist shall be contacted within 24 hours. Construction activities outside the exclusion area shall be permitted to continue.

- CUL-4** Any potential cultural/archaeological resource unearthed by project construction activities shall be evaluated to determine eligibility for the California Register of Historical Resources or qualification as unique archaeological resources pursuant to CEQA. If the resource is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to *CEQA Guidelines Section 15064.5(a)* or has a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Construction Contractor and the County to develop a formal treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with *CEQA Guidelines Section 15064.5(f)* for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any non-Native American historic cultural/archaeological resource shall be curated at a public, non-profit institution with a research interest in the materials.
- CUL-5** The qualified archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation (DPR) site forms at the conclusion of treatment and/or following archaeological construction monitoring. The report shall include a description of resources unearthed, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources. The report and the site forms shall be submitted by the Applicant to the County, the South Central Coastal Information Center and representatives of other appropriate agencies.
- PALEO-1** A paleontologist from the Riverside County List of Certified Paleontologists shall be retained to prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP should be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) and include, but not be limited to, the following:
1. The paleontologist or his/her representative shall attend a pre-construction meeting.
 2. Excavation and grading activities for roadway approach work and trenching in deposits with high paleontological sensitivity (Young Axial Channel Deposits beginning at a depth of more than 10 feet below the ground surface and Old Alluvial Fan Deposits, Unit 3) shall be monitored by a paleontological monitor in accordance with the PRIMP.
 3. No monitoring measures are required for drilling the piles or for excavations in rocks with no paleontological sensitivity (Artificial Fill; Very Young Wash Deposits, Undivided; Very Young Wash Deposits, Unit 3; Young Axial Channel Deposits from the surface to a depth of 10 feet; Granite of Mount Rubidoux; and Granite of the Riverside Area).
 4. If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily

redirect construction away from the area of the find in order to assess its significance.

5. Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a scientific institution. A determination of the appropriate institution shall be made if scientifically significant fossils are recovered.

Monitoring:

Monitoring for **Mitigation Measures CUL-1 through CUL-5 and PALEO-1** shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Tribal Cultural Resources				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source: Assembly Bill 52 (AB 52) Native American Consultation Record; Section 106 Native American Consultation Record; and *Archaeological Survey Report, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, May 2017 (Appendix D).*

Findings of Fact:

a) **Less than Significant Impact.** Architectural field surveys were conducted on July 26 and November 9, 2016. During the surveys, one historic-period (50 years of age or older) resource requiring evaluation was identified within the project APE. This resource is the 1930–1932 Buena Vista Drive and Park, which was designated as City of Riverside Landmark #14 in January 1971. City Landmark #14 consists of approximately 2,300 linear feet (0.4 mile) of City right-of-way that makes up the truncated remnant of the former eastern approach to the no longer extant Rubidoux Bridge. The primary feature of the resource was the bridge because all of the other elements of the resource were built in support of either the 1916 or 1922/1932 bridges. With the exception of the St. Francis Shrine/waterfall (1916), the other extant structures (walkways, walls, lights, etc.) were constructed in support of the Rubidoux Bridge (1922/1932) as part of the enhanced western gateway to the City. Because the resource is missing its most important and arguably its most stunning feature, namely the Rubidoux Bridge, its overall integrity has been significantly compromised.

City Landmark #14 was surveyed and evaluated and was determined not eligible for listing in the National Register primarily due to integrity considerations. The State Historic Preservation Office (SHPO) concurred with this determination on August 11, 2017. No Native American feature,

landscape, sacred place, or object within the APE has been identified, listed, or deemed eligible for listing in the California Register of Historic Resources or a local register of historic resources.

b) Less than Significant with Mitigation Incorporated. Native American groups were consulted by Caltrans during the Section 106 process required under NEPA and the County during the AB 52 process required under CEQA.¹ The Native American Heritage Commission (NAHC) was contacted on June 16, 2016, to request a Sacred Lands File (SLF) search and a consultation list. The NAHC responded on June 17, 2016, with negative results for the SLF search and a list of 22 Native American contacts designated for consultation.

Caltrans, having been delegated NEPA Section 106 consultation responsibilities by the Federal Highway Administration (FHWA), contacted 22 individuals representing 20 Native American groups via certified mail and email in June 2016. Letters were followed up by email, mail, and telephone calls during September and October 2016. With the exception of the Gabrieleño Band of Mission Indians-Kizh Nation (Gabrieleño) and Soboba Band of Luiseño Indians (Soboba), the contacted tribes indicated the project site was outside their historic boundaries, territories, or traditional use areas and either had no comment or deferred to other tribes closer to the project site. A summary of the Section 106 consultation with the two remaining tribes is provided below:

- Gabrieleño Band of Mission Indians Kizh -Nation requested Native American monitoring of ground-disturbing activities by a Gabrieleño representative.
- Soboba Band of Luiseño Indians indicated the project area is regarded as culturally sensitive by the Soboba and requested Native American monitoring of the project by a Soboba representative, continuity of consultation, initiation of consultation with the project proponent and lead agency, transmittal of information in the event of new developments, that all ceremonial items and artifacts be returned to the Tribe by the developer, that proper procedures be taken, and that proper procedures be taken and requests of the tribe be honored.

Due to the project not meeting any of the conditions indicated in the 2003 Gary R. Winters (Caltrans Chief of Environmental Analysis) memo regarding Native American monitoring (archaeological excavations, adjacent archaeological or cultural resources/defined Environmentally Sensitive Areas, or geomorphological sensitivity) Caltrans declined support for Native American monitoring of the project.

It should be noted that while Native American monitoring of the project may not be required pursuant to Caltrans' criteria, the County as the CEQA Lead Agency is required to consult with interested Tribal governments based on the outcome of its AB 52 consultation efforts. In accordance with AB 52, the County sent notification letters² to 15 Native American groups to provide

¹ While both the Section 106 conducted by Caltrans and the AB 52 consultation conducted by the County involve consultation with Native American interests, the processes and requirements of each process differ substantially. In the interest of disclosure as to the level of contact, this IS/MND provides a summary of the Section 106 process undertaken through Caltrans for the project.

² AB 52 Notification Letters were mailed to 13 tribes on October 4, 2016. Two tribes were added to the notification list after the initial letters were mailed in October 2016. Thus, a notification letter was mailed to Twenty-Nine Palms Band of Mission Indians on October 22 and to the Santa Rosa Band of Mission Indians on December 8, 2016.

information on the proposed project and begin consultation with tribes that wished to consult. Eight tribes did not respond. Four tribes¹ indicated the project site was outside their historic boundaries, territories, or traditional use areas or deferred to other tribes closer to the project site. A summary of the AB 52 consultation for the remaining three tribes is provided below:

- The Gabrieleño Band of Mission Indians-Kizh Nation stated² that the project lies within the tribe's ancestral territory and is located within a highly sensitive area that may cause, "... a substantial adverse change in the significance of our tribal cultural resources." The tribe added that a negative records search does not alter this fact. The tribe requested a certified Native American monitor be present on site during all ground-disturbing activities to "... protect any cultural resource which may be affected during construction or development." The tribe further concluded that while the project site may be located in an area that has previously been developed, the potential for "... unknown, yet significant cultural resources will be encountered during ground disturbance activities."

Following the consultation request, the County contacted the Tribe on several occasions to engage in consultation. During consultation, the Tribe provided the County information on tribal history/connection to the project area and presented mapping that detailed historic village sites and traditional tribal boundaries. The Tribe provided justification for its request to monitor, especially in areas in proximity to historic village sites and identified potential resources that could be inadvertently discovered during ground disturbance. The Tribe emphasized that impacts to potential tribal resources could be minimized through tribal monitoring of ground disturbance. The Tribe emphasized the sharing of information with the County would allow the full consideration of the Tribe's interests in the project area. Subsequent communication addressed and verified proposed mitigation for the project and formally closed consultation with the County.

- The Soboba Band of Luiseño Indians stated while the project area is "... outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in proximity to known sites, is a shared use area that was used in ongoing trade between the tribes, and is considered to be culturally sensitive by the people of Soboba." Representatives of the tribe accompanied the project archaeologist during a field survey of the project site. No cultural resources were identified during the field survey. The tribe requested and was provided a copy of the cultural study prepared for the project. The Tribe reviewed the report and identified precautionary measures to address the issue of inadvertent discoveries of cultural resources during project construction. Further communication between the County and the Tribe resulted in revised mitigation related to the curation of Native American resources. Upon the finalization of mitigation, the County and Tribe formally closed the consultation effort.
- The Pechanga Band of Luiseño Mission Indians asserted the project area is part of the Tribe's aboriginal territory and further stated the area is culturally sensitive and affiliated with the tribe because of its cultural ties to the area as well as its extensive history with the County. The Tribe requested further consultation. The County discussed the project with the Tribe and the

¹ Agua Caliente Band of Mission Indians, San Manuel Band of Mission Indians, Rincon Band of Luiseño Indians, and Twenty-Nine Palms Band of Mission Indians.

² October 30, 2016, and June 1, 2017 Consultation Letters: Gabrieleño Band of Mission Indians-Kizh Nation to Frances Segovia, County of Riverside Transportation Department.

potential impacts that it may have on tribal cultural resources on numerous occasions via consultation letters, emails, and in-person meetings. The County provided the Tribe draft mitigation measures to address potential Native American cultural resource impacts. The Tribe commented on the suggested mitigation measures. Upon the finalization of the measures, the County and the Tribe formally closed consultation efforts.

Mitigation Measures TCR-1 through TCR-3 have been identified to reduce potential impacts to Native American cultural resources to a less than significant level.

Mitigation:

TCR-1 Tribal Monitoring: At least 30 days prior to the commencement of ground-disturbing activity, the Construction Contractor shall provide a Native American Monitoring Agreement with the Gabrieleño Band of Mission Indians-Kizh Nation to the County for review and approval. The Native American monitoring agreement shall be developed in consultation with appropriate Native American tribal contact(s). The Native American monitoring agreement shall identify (but not be limited to) the following:

- The professional qualification(s) and/or approval of Native American monitor(s);
- The professional standards and procedures to be followed during archaeological excavation and/or monitoring;
- The construction schedule and term/schedule of on-site Native American monitor(s) and the extent of areas and activities to be monitored;
- The responsibilities of Native American monitor(s), including any requirement for the completion of daily monitoring logs and end-of-monitoring reporting;
- The authority of Native American monitor(s) to redirect construction activity in the vicinity of any inadvertent discovery;
- The method and/or terms of compensation (if any) for Native American monitor(s); and
- Any insurance, specialized training or safety requirement necessary for Native American monitor(s) working within the proposed construction area.

TCR-2 Treatment and Final Disposition of Cultural Resources: Any archaeological resource unearthed during construction activities shall be evaluated by the Qualified Archaeologist and Native American Monitor(s). If the resource is determined to be Native American in origin, any such resource (including sacred items, burial goods, and all archaeological artifacts and non-human remains) shall be addressed through one or more of the following methods:

- Preservation in place by accommodating on-site reburial of the discovered items with the consulting Native American tribe(s). This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging and recordation efforts have been completed.

- A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.
- If more than one Native American Tribe or band is involved with the project, consensus needs to be reached amongst all Tribes involved regarding the repository. If consensus cannot be reached, the County of Riverside will select an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR 79.

TCR-3

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered within the construction areas, all activity within 100 feet of the find shall be immediately halted. Any discovery of human remains shall be immediately reported by the Qualified Archaeologist and Native American monitor(s) to the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), who shall appoint a Most Likely Descendant (MLD) in accordance with California Public Resources Code 5097.98.

Funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains shall also be considered as associated funerary objects. Any such funerary objects shall be treated in the same manner as bone fragments.

The discovery of any Native American human remains and/or funerary objects shall be kept confidential and secure to prevent any further disturbance. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains and associated funerary objects, sacred objects and/or objects of cultural patrimony shall be covered with an opaque material or placed in opaque cloth bags. A physical barrier (e.g., metal plate, concrete slab that can be moved by heavy equipment) shall be placed over the excavation opening to protect the remains until examination by the MLD can occur. If this type of protective barrier is not available, a 24-hour guard shall be posted outside of working hours.

The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD shall identify and direct the most appropriate means of treating the human remains and any associated funerary object(s). As determined through consultation with the County, the MLD shall make recommendations that allow the burial to remain in situ and protected.

In the event the burial must be removed, the MLD shall work closely with the Qualified Archaeologist to ensure the removal of human remains and associated funerary object(s) is conducted carefully, ethically, and respectfully. Cremations shall either be removed in bulk or by a means to ensure completely recovery of all material. As

approved by the MLD, data recovery documentation shall be taken, which includes at a minimum detailed descriptive notes and sketches. As approved by the MLD, additional types of documentation shall be permitted for data recovery purposes.

Human remains and associated funerary objects shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site at a location at a site to be protected in perpetuity identified by the MLD and the County.

In the event the discovery includes six or more burials, the location shall be considered a cemetery pursuant to California Health and Safety Code (§ 7003) and a treatment plan shall be prepared. The construction Contractor shall consult with the MLD regarding avoidance of all such cemetery sites.

Once complete, a final report of all activities associated with or resulting from the discovery of human remains shall be submitted to the NAHC.

Monitoring:

Monitoring for Mitigation Measures TCR-1 through TCR-3 shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

Geology and Soils

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Alquist-Priolo Special Studies Zone or Fault Hazard Zones				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?				
i. Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Be subject to strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Be subject to seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: *Preliminary Geotechnical Design Report, Mission Boulevard Bridge at Santa Ana River, Kleinfelder, August 25, 2016 (Appendix F3); Figure 5.6.2, City of Riverside General Plan and Supporting Documents EIR, November 2007; Preliminary Foundation Report Update Mission Boulevard Bridge Replacement at Santa Ana River, Kleinfelder, August 29, 2016 (Appendix F1); Addendum 1 to Preliminary Foundation Report Update Mission Boulevard Bridge Replacement at Santa Ana River, Kleinfelder, July 19, 2017 (Appendix F2); Preliminary Geotechnical Design Report, Mission Boulevard Bridge at Santa Ana River, Kleinfelder, August 25, 2016 (Appendix F3); Figure 5.6.3, City of Riverside General Plan and Supporting Documents EIR, November 2007; and Figure 4.6.3, City of Jurupa Valley General Plan Environmental Impact Report, September 2017.*

Findings of Fact:

a-i) No Impact. The site does not lie within an Alquist-Priolo Special Studies Zone. The closest fault to the project is the San Jacinto Fault (San Bernardino Section) located approximately 6.3 miles northeast of the project site. In the absence of identified faults or fault hazard areas in the project area, no substantial adverse effect to persons or structures from fault rupture would occur. No mitigation is required.

a-ii) Less than Significant with Mitigation Incorporated. The site is located in a seismically active region of southern California that is subject to significant hazards from moderate to large earthquakes. Ground shaking due to nearby and distant earthquakes should be anticipated during the life of the structure. The controlling fault for this project is the San Jacinto Fault (San Bernardino Section), which is located approximately 6.3 miles to the northeast of the site. This fault (section) is a right-lateral strike-slip (RLSS) fault dipping 90 degrees, which is capable of generating earthquakes with a maximum magnitude of 7.7. With its relatively large magnitude and close proximity to the project site, the San Jacinto Fault (San Bernardino Section) governs the deterministic seismic hazard at the site.

As appropriate, final design plans for the project will identify recommendations and requirements to reduce the significance (Mitigation Measure GEO-1) related to potential ground shaking hazards at the bridge site.

a-iii) Less than Significant with Mitigation Incorporated. Liquefaction occurs when shallow, loose, unconsolidated, fine to medium-grained sediments saturated with water are subjected to shaking as a result of an earthquake. The possibility of liquefaction occurring at any one site is dependent upon the occurrence of a significant earthquake in the vicinity, sufficient groundwater to cause high pore pressures (i.e., the pressure of groundwater held within a soil or rock), and on the grain size, plasticity, relative density, and confining pressures of the soils at the project site. Liquefaction usually occurs when the underlying groundwater table is 50 feet or less below the surface.

No habitable structures that could be affected by liquefaction are proposed as part of the project. Both the Cities of Riverside and Jurupa Valley identify areas along the Santa Ana River (including the project site) as having a "very high" potential for liquefaction.

Preliminary geotechnical investigations have been prepared to support the bridge design. These reports include an evaluation of liquefaction potential at the site. A design groundwater elevation of 770 feet amsl was assumed, which correlates to the elevation of the existing riverbed. In general, the liquefiable layers in the riverbed were between depths of approximately 0 to 16 feet and 20 to 25 feet bgs, with a few scattered thin layers throughout the depth of borings. In general, the liquefiable layers at the bridge abutments were scattered between depths of approximately 21 and 46 feet bgs. These depths correlate to elevations between 770 and 745 feet amsl.¹

The calculated post-liquefaction settlements ranged from 2 to 4 inches. This level of liquefaction described above would reduce the axial and lateral capacity of bridge piles. This hazard can be mitigated by designing the piles to be adequately embedded into the underlying non-liquefiable soils. As appropriate, final design plans for the project will identify recommendations and requirements to reduce the significance (Mitigation Measure GEO-1) related to potential liquefaction at the bridge site.

Mitigation:

GEO-1 Prior the commencement of construction activities, the County shall review and approve final design and construction plans to ensure all appropriate recommendations/requirements addressing site-specific geotechnical issues have been fully incorporated into the proposed bridge design.

Monitoring:

Monitoring for Mitigation Measure GEO-1 shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

¹ These results are considered preliminary since they only pertain to the depths explored and will be updated following subsequent exploration.

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Landslide Risk				
a. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: *Preliminary Geotechnical Design Report, Mission Boulevard Bridge at Santa Ana River, Kleinfelder, August 25, 2016 (Appendix F3); Figure 5.612, City of Riverside General Plan and Supporting Documents EIR, November 2007; and Figure 4.6.5, City of Jurupa Valley General Plan Environmental Impact Report, September 2017.*

Findings of Fact:

a) **Less Than Significant Impact.** The approach embankments along Mission Boulevard consist of fill material that appears to be constructed at inclinations which are typically stable. Field investigation of site conditions and the subsequent placement of any material within the embankments will be subject to engineering specifications to maintain the stability of any embankments. The project site is not located in a location identified as susceptible to landslide risk. No significant slope stability impact would result from implementation of the proposed project.

Mitigation: No mitigation is required.

Monitoring: No monitoring measures are required.

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Ground Subsidence				
a. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: Figure 5.6.5, *City of Riverside General Plan and Supporting Documents EIR*, November 2007; and Figure 4.6.4, *City of Jurupa Valley General Plan Environmental Impact Report*, September 2017.

Findings of Fact:

a) Less than Significant with Mitigation Incorporated. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which includes, but is not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction.

While the project site is located in an area susceptible to subsidence, it does not include the withdrawal of gas, oil, or groundwater that would directly cause subsidence. No underground mines are located within the project limits. Settlement of unsaturated sands present in abutment fills may densify and settle during strong earthquake shaking. Due to the semi-dense nature of these materials, any such seismically induced settlement is expected. As appropriate, final design plans for the project will identify recommendations and requirements to reduce the significance (Mitigation Measure GEO-1) related to potential subsidence at the bridge site.

Mitigation:

Refer to Mitigation Measure GEO-1.

Monitoring:

Monitoring for Mitigation Measure GEO-1 shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Soils				
a. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: *Preliminary Geotechnical Design Report, Mission Boulevard Bridge at Santa Ana River, Kleinfelder, August 25, 2016 (Appendix F3); USDA Soil Conservation Service Soil Surveys; Jurisdictional Delineation, Mission Boulevard Bridge Replacement at Santa Ana River Project, LSA, July 2017; and Water Quality Assessment Report Mission Boulevard Bridge at Santa Ana River, LSA, January 2017 (Appendix H).*

Findings of Fact:

a) Less than Significant with Mitigation Incorporated. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (www.websoilsurvey.sc.egov.usda.gov) soils in the project area include Dello loamy sand, poorly drained 0 to 2 percent slopes; Dello loamy fine sand, 0 to 2 percent slopes, Grangeville loamy fine sand, drained, 0 to 5 percent slopes; Grangeville fine sandy loam, poorly drained, saline-alkali; Riverwash; Tujunga loamy sand, channeled, 0 to 8 percent slopes; Tujunga gravelly loamy sand, 0 to 8 percent slopes; and Vista coarse sandy loam, 15 to 35 percent slopes, eroded. The soils in the project area are characterized by moderate erodibility.¹

During grading, excavation, removal of the existing bridge, construction of the new bridge, and modifications to the roadway approaches, land and vegetation would be cleared, thereby exposing soil to the potential for erosion. When soil erodes, the sediments/suspended particulates can enter surface waters and increase turbidity (water cloudiness). In addition, suspended particulates can also be generated from vehicles operating on a roadway during construction activities. The total disturbed area (topsoil) during construction would be approximately 7.04 acres. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the Construction General Permit (CGP).

¹ Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water, transportability of the sediment, and the amount and rate of runoff given a particular rainfall input as measured under a standard condition. K Values range from 0.02 to 0.69. The project site soils have K factors that range from 0.2 to 0.32. The lowest value is found in the riverwash soils and the highest in the Dello loamy sands. The levee fill material ranges in K factor from 0.27 to 0.48.

A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented during construction as required by the National Pollutant Discharge Elimination System (NPDES).¹ Operators of regulated construction sites are required to develop SWPPPs; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP). The construction SWPPP would identify the specific Best Management Practices (BMPs) to be implemented during construction so as not to cause or contribute to an exceedance of any applicable water quality standard included in the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) Basin Plan. These construction BMPs would be designed to meet the technology requirement stipulated in the CGP. Additionally, the City of Riverside Municipal Code requires preparation of an Erosion Control Plan that describes the methods for the control of runoff, erosion, and sediment movement during project construction. Finally, Mitigation Measures HWQ-1 through HWQ-3 have been identified to reduce impacts related to soil erosion and the loss of topsoil to a less than significant level.

b) No Impact. Expansive soils generally have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. The occurrence of these soils is often associated with geologic units having marginal stability.

Based on review of previous explorations, the near-surface soils are anticipated to consist of silty sand and sandy silt. These soils are considered to be non-expansive or have a low potential for expansion; therefore, no impact related to expansive soils would result from implementation of the project.

c) No Impact. The project does not include the installation of sewer or septic systems. No impact related to this issue would occur.

Mitigation:

Refer to Mitigation Measures HWQ-1 through HWQ-3.

Monitoring:

Monitoring for Mitigation Measures HWQ-1 through HWQ-3 shall be subject to the timing detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

¹ General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [CGP], Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ; NPDES No. CAS000002).

Greenhouse Gas Emissions

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Greenhouse Gas Emissions				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: *Air Quality Assessment Report, Mission Boulevard Bridge Replacement at Santa Ana River, LSA, October 2016 (Appendix B); City of Riverside Economic Prosperity Action Plan and Climate Action Plan, January 2016; City of Jurupa Valley General Plan Final Environmental Impact Report, September 2017; Figure CCM-4, City of Riverside General Plan 2025 Program, November 2007; and Figure 3-9; City of Jurupa Valley General Plan, September 2017.*

Findings of Fact:

a) Less than Significant Impact. Greenhouse gas (GHG) emissions for transportation projects can be divided into those produced during construction and those produced during operations. Changes in the level of service or additional traffic generation would potentially increase GHG emissions; however, based on the traffic data provided by Kimley-Horn and Associates, Inc. (August 2016), the proposed project would not increase traffic volumes or degrade the level of service in the project area. Because the proposed project would not affect mobile sources of emissions (traffic) or appreciably change stationary sources of emissions (lighting), it would not substantially alter the long-term GHG emissions.

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

The SCAQMD has not adopted a significance threshold for GHG emissions from transportation projects.¹ However, it has published the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, which lists proposed significance thresholds for industrial, commercial, and residential uses. A threshold of 3,000 metric tons per year was recommended for residential and commercial projects. This threshold is the lowest identified for all the land uses in this document and provides a conservative threshold for the evaluation potential impacts related to climate change.

Greenhouse gas emissions for projects are typically calculated from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. Since

¹ SCAQMD adopted a significance threshold for industrial sources of 10,000 metric tons of CO₂e per year on December 5, 2008. A proposed significance threshold of 3,000 metric tons

the proposed project is a replacement of an existing bridge, this analysis focuses on the GHG emissions generated during project-related construction activities. No increase in the number of lanes would occur, nor does the project include the development of any residential, commercial, or industrial use that would generate additional traffic; therefore, compared to the pre-construction condition, the project is not expected to result in an increase in long-term emissions.

Table M identifies GHG emissions resulting from the proposed project at opening year 2022. Because the operations phase of the project would not result in changes in GHG emissions, only GHG emissions from the construction phase of the project are accounted for. The project will result in an increase of 29 metric tons of carbon dioxide equivalent per year (MT CO₂e/yr), which is substantially below the SCAQMD's GHG significance threshold of 3,000 metric tons per year. This amounts to 0.000029 million metric tons of carbon dioxide equivalent per year (MMT CO₂e/yr). In comparison, the existing emissions from the entire SCAG region and entire State are estimated to be approximately 176.79 and 448 MMT CO₂e/yr, respectively.

Table M: Long-Term Operational Greenhouse Gas Emissions

Source	CO ₂ e Emissions (MT/yr)
Construction emissions amortized over 75 years	29
Change in Operational Emissions	0
Total Project Emissions	29
SCAQMD Significance Threshold	3,000
Significant?	No

Source: Table 5.4, Air Quality Assessment Report Mission Boulevard Bridge Replacement at Santa Ana River, LSA, October 2016. (Appendix B).

CO₂e = carbon dioxide equivalent

MT/yr = metric tons per year

SCAQMD = South Coast Air Quality Management District

As the project will not create a new permanent source of GHG emissions, it will not have a significant contribution to cumulative GHG emissions.

Due to the relatively small contribution of the project during the construction phase and its lack of any new permanent sources of GHG emissions, it will have a less than significant impact on the environment.

Mitigation: No mitigation is required.

Monitoring: No monitoring measures are required.

b) No Impact. In 2014, the Cities of Riverside and Jurupa Valley participated in a collaborative effort with other cities and the Western Riverside Council of Governments (WRCOG) to develop a Subregional Climate Action Plan (CAP). The WRCOG Subregional CAP established community-wide emission reduction targets of 15 percent below 2010 levels which follows guidance from the California Air Resources Board (CARB) and the Governor's Office of Planning and Research (OPR). The City of Jurupa Valley's General Plan (September 2017) contains measures to reduce GHG

emissions and was found to be consistent with the WRCOG Subregional CAP. Building on this CAP, the City of Riverside's Climate Action Plan focuses on four sectors of use:

- **Energy.** Increase energy efficiency and the use of renewable energy use,
- **Transportation and Land Use.** Reduce single-occupancy vehicle travel, increase non-motorized travel, improve public transit access, increase motor vehicle efficiency, encourage alternative fuel vehicles and promote sustainable growth patterns.
- **Water.** Conserve potable water and reduce water demand by the community and municipal operations.
- **Solid Waste.** Reduce solid generated by the community and municipal operations.

The project provides four lanes of travel, which is consistent with the "Arterial" roadway classification for Mission Boulevard in the General Plans of the Cities of Riverside and Jurupa Valley. The project is the replacement of an existing bridge on the same alignment, with the same number of travel lanes and will serve the same purpose. The project does not include the expansion of a use that would itself generate growth in the project area, nor does the project include the extension of new infrastructure into an area where new growth would occur; therefore, it is not expected to generate new long-term greenhouse gas emissions that have not been previously considered in local or regional GHG gas analyses.

Changes in the level of service or additional traffic generation would potentially increase GHG emissions; however, as stated in the project-specific Traffic Operations Analysis, the project would not affect traffic operations; therefore, the project would not substantially alter the long-term GHG emissions identified in an current local or regional CAP. In the absence of any meaningful level of project-related GHG emissions, the project would have no effect on or otherwise conflict with the implementation of any local or regional CAP.

Hazards and Hazardous Materials

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Hazards and Hazardous Materials				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source: *Phase 1 Initial Site Assessment, Mission Boulevard Bridge Replacement at Santa Ana River, Diaz-Yourman, October 25, 2016 (Appendix H); Google Streetview, 2017; Figures PS-8 and LU-3, City of Riverside General Plan 2025, November 2007; and Long Range Facilities Master Plan, Riverside Unified School District, 2016.*

Findings of Fact:

a) Less than Significant Impact. The act of regulating the transport of hazardous materials on State highways is governed by the United States Department of Transportation (USDOT), as described in Title 49 (Subtitle B, Chapter 1) of the Code of Federal Regulations (CFR) and by Title 13 (Chapter 2, Division 6) of the California Code of Regulations (CCR). The State Office of Hazardous Materials Safety enforces regulations for the safe transportation of hazardous materials. It is likely that hazardous materials such as fuels, lubricants, solvents, coatings will be transported to, stored and/or used during the period of construction. The volume of any such material transported to the project is limited to that required for construction activities. Use of these substances is typical for construction activities and would be handled, stored, and disposed in accordance with existing regulations and would not pose a significant hazard to the public or environment. Upon completion of the proposed construction, no ongoing or routine transport of hazardous materials to the site would be required.

During construction there is a limited risk of accidental release of hazardous material such as gasoline, oil, or other fluids used in the operation and maintenance of construction equipment. Any hazardous waste produced on site would be subject to requirements associated with accumulation time limits, proper storage locations and containers, and proper labeling. Compliance with

applicable regulations would ensure impacts associated with the use, and/or disposal of hazardous materials used during construction are less than significant. No mitigation is required.

b) Less than Significant with Mitigation Incorporated. The bearing pad and the hinge and joint seal materials on the existing bridge may contain asbestos-containing materials (ACM). While potential lead-based paint (LBP) was not observed during the hazardous materials field investigation(s) (March 25 and July 15, 2016), much of the project area was developed prior to the prohibition of vehicular leaded fuels. Therefore, soils adjacent to paved areas within the project footprint may contain aerially deposited lead (ADL) from vehicle exhaust. Lead and other heavy metals, such as chromium, may be present within yellow thermoplastic paint markings on the pavement. Construction activities on the existing bridge, removal of existing materials from the bridge and existing roadways and the disturbance of soils in the project footprint could potentially introduce asbestos, lead, or other pollutants into the environment. Mitigation Measures HAZ-1 through HAZ-3 have been identified to reduce this potential impact to a less than significant level.

c) Less than Significant Impact. Mission Boulevard is designated by the City of Riverside as an evacuation route. The project will facilitate continued access across the Santa Ana River along Mission Boulevard. Construction will occur in stages to allow for continued traffic flow during construction. Depending on the results of the Traffic Analysis, two, three, or four lanes of traffic with pedestrian access will remain open at all times. Stage 1 construction will build the northerly half of the new bridge along the north edge of the existing structure while traffic is maintained on the existing bridge. Stage 2 will shift the traffic to the newly constructed bridge, while the existing bridge is demolished and the remainder of the new bridge is constructed to the south. If more than three lanes of traffic are required during construction, a third stage may be added to complete the proposed project. As a minimum of two travel lanes will be maintained at all times during construction, temporary construction activities would not substantially affect emergency response/evacuation operations; therefore, no significant impact related to this issue would occur.

d) No Impact. Bryant Elementary School and Ina Arbuckle Elementary School are located approximately 0.50 mile east and northwest of the project footprint, respectively. No new schools are proposed within one-quarter mile of the proposed project. No hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing schools or proposed school would occur; therefore, no impact related to this issue would result from the proposed project.

e) Less than Significant with Mitigation Incorporated. A Phase 1 Initial Site Assessment (ISA) (Appendix H) was prepared to evaluate potential hazardous waste impacts that may occur during construction and to identify recognized environmental conditions (RECs),¹ historical recognized environmental conditions (HRECs),² and controlled recognized environmental conditions (CRECs)¹

¹ RECs are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

² An HREC is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

within the project area. The ISA is based upon interviews; questionnaires; a review of regulatory agency records and databases; a review of current and previous plans in the project area; the review of historic land use and historic aerial photographs of the project area; a research of historic databases; and thorough field investigations (March 25 and July 15, 2016) of the project area.

Historic Review: A review of historic aerial photographs from as early as 1938 indicates Mission Boulevard crossing the Santa Ana River south of the existing bridge and the proposed project alignment. Crestmore Road had yet to be constructed south of Mission Boulevard. Adjacent areas were largely undeveloped or used for the production of row crops. From approximately 1940 through at least 1955, a gasoline service station was located at 5070 Mission Boulevard immediately to the south of the project area near the southeast corner of the intersection of Crestmore Road and Mission Boulevard. The service station was removed during the channelization and widening of the Santa Ana River and construction of the existing Mission Boulevard Bridge.

Database Review: A search radius of up to one mile beyond the project footprint was used to identify nearby sites registered under hazardous waste databases that could potentially affect the project. To screen the listings, the search radius for each database was based on the distance at which listings could potentially affect the project (i.e., databases with larger search radii are generally associated with hazardous material releases that affect larger areas and databases with smaller search radii are generally associated with hazardous material releases that affect smaller areas).

The project footprint itself was not listed as a site within the database search areas documented in the ISA. The results of the database review follows:

- The National Priority List (NPL), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), and CERCLIS-No Further Remedial Action Planned (NFRAP). No NPL, CERCLIS, or CERCLIS-NFRAP sites were listed on the database within the one mile search radius.
 - *(Federal) Resources Conservation and Recovery Act Facilities (RCRA):* No RCRA-Non Generator (Non-Gen) facilities were located within the one-mile search radius. No RCRA-Hazardous waste treatment, storage, or disposal facilities (RCRA-TSDF), RCRA-Large Quantity Generator (RCRA-LQG), or RCRA-Conditionally Exempt Small Quantity Generator (RCRA-CESQG) was identified within the 0.25 mile search area.
 - *(Federal) Institutional and Engineering Controls Registries (US ENG and US INST):* No sites listed in the US ENG and US INST registries were identified within the 0.5-mile search radius.
 - *(Federal) Emergency Response and Notification System (ERNS):* No sites listed in the ERNS database were found within the search radius.

¹ A CREC is defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- *(State) Spills, Leaks, Investigation and Cleanup (SLIC)*: One SLIC site was listed within the 0.5-mile search radius. Based on a review records for the property, which is located at 5567 Mission Boulevard in Riverside, a release of perchloroethylene (PCE) and associated degradation products occurred at the property as a result of dry cleaning activities. However, a Phase II Site Investigation conducted in 2013 determined the impact to soil and groundwater was minimal. The property is located cross-gradient from the project site, and soil and groundwater impacts have been delineated at the dry cleaner property. Based on this information, this property is not considered an REC to the project
- *The (State) Department of Toxic Substance Control (DTSC) and Regional Water Quality Control Board maintain the following databases:*
 - *Bond Expenditure Plan (BEP) list of Hazardous Substance Cleanup Bond sites with funding:* No BEP sites were identified by the database search within the 0.5 mile search radius.
 - No historic Cal-Sites were listed within the one mile search radius.
 - Site Mitigation and Brownfield Reuse Program (EnviroStor) provides a database of sites that have known contamination or sites for which there may be reasons to investigate further.
- Four *EnviroStor* sites were identified within the one-mile search radius. Three of the four sites were located at distances greater than 0.5 mile from the project site and are not considered RECs. The remaining site is the proposed K-8 site (located at 2950 Wallace Street) is approximately 0.75 mile north of the project site. Based on a 2006 Environmental Site Assessment (ESA), the property most recently operated as a racehorse training facility and had also been used previously for residential dwellings and/or agricultural land. Based on the 2006 ESA, PAHs were detected in soil with one sample greater than the California background concentrations. The hazard thresholds for copper, cadmium, zinc, total petroleum hydrocarbons (TPHs), PAHs, and semi-volatile organic compounds (SVOCs) exceeded the respective threshold values. The 2006 ESA recommended removal and disposal of all affected areas of the property. No evidence of this removal was identified during the course of this assessment. The proposed K-8 site is located upstream from the project site. Based on a review of drainage patterns, surface water from the proposed K-8 site drained to the south into a storm channel that led to the Santa Ana River. While a storm event large enough to transport on-site contaminants of potential concern (COPCs) to the project footprint would most likely dilute concentrations to non-detectable levels, the potential for deposition of PAHs, SVOCs, metals, and lead within the project footprint is possible. Therefore, based on the upstream location and surface soil contamination with no control of off-site flow at the K-8 site, this property represents an REC to the project site.
- *Voluntary Cleanup Program (VCP)* tracks sites of low threat level properties, with either confirmed or unconfirmed releases. No VCP sites were identified within the 0.5-mile search radius.
- *The California Hazardous Waste Transporters (HWT) database* is compiled by the DTSC for companies that transport hazardous materials. No HWT sites were identified within the 0.25-mile search radius.