PSR#TD004 Baker Boulevard Bridge Over Mojave River Bridge Replacement

DRAFT INITIAL STUDY /
MITIGATED NEGATIVE DECLARATION

SAN BERNARDINO COUNTY

March 2025

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project

Prepared for:

San Bernardino County
Public Works Department
825 East Third Street,
San Bernardino, California 92415-0835

Prepared by:

Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, California 95630

TABLE OF CONTENTS

List of Figures

List of Tables

Appendices

LIST OF ABBREVIATIONS

AB	Assembly Bill
ACLUP	Airport Comprehensive Land Use Plan
ADL	Aerially Deposited Lead
ADT	Average Daily Traffic
APE	Area of Potential Effects
ACMs	Asbestos Containing Materials
AQMP	Air Quality Management Plan
ARB	Air Resources Board
AULs	Activity and Use Limitations
AVE	Area of Visual Effect
BMPs	Best Management Practices
BRIS	Bridge Inspection Reports
BSA	Biological Study Area
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAG	Community Action Guides
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCA	Federal Clean Air Act
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDF	Coastal Doug Fir
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFD	Community facilities district
CFG	California Fish and Game
CFR	Code of Federal Regulation
CGP	Construction General Permit
CHRIS	California Historical Resources Information System
CH_4	Methane
Corps	U.S. Army Corps of Engineers

CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
COI	Change of Information
CSA	County service areas
CSD	County Special District
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dBA	Decibel A-weighted
DOC	California Department of Conservation
DPM	Diesel Particulate Matter
DSA	Disturbed Soil Area
DT	Desert Turtle
DTSC	California Department of Toxic Substances Control
ECSZ	Eastern California Shear Zone
EDR	Environmental Data Resources
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FCD	Flood Control District
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FHWA	Federal Highways Administration
FRA	Federal Responsibility Area
FTIP	Federal Transportation Improvement Program
GLO	General Land Office
GHG	Greenhouse gases
HFCs	Hydrofluorocarbons
HOT	High-occupancy toll
HOV	High-occupancy vehicle
HSC	California Health and Safety Code Section
IPCC	Intergovernmental Panel on Climate Change

IS	Initial Study
ISA	Initial Site Assessment
Ldn	Day-Night Level
LED	Light Emitting Diode
Leq	Equivalent Continuous Sound Level
Lmax	Maximum Sound Level
LRA	Local Responsibility Area
Lxx	Percentile-Exceeded Sound Level
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MLHP	Measure I Major Local Highway Projects
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer Systems
msl	Mean sea level
MWD	Metropolitan Water District
MDAQMD	Mojave Desert Air Quality Management District
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NALs	Numeric Action Levels
NELs	Numeric Effluent Limits
NEPA	National Environmental Protection Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
N_2O	Nitrous oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NSR	New Source Review
O_3	Ozone
OHP	Office of Historic Preservation

ONRW	Outstanding National Resource Water
OPR	Office of Planning and Research
PCB	Polychlorinated Biphenyl
PCEs	Passenger Car Equivalencies
PFCs	Perfluorocarbons
PM	Particulate Matter
ppm	Parts per Million
PRC	Public Resources Code
PRDs	Project Registration Documents
Project	PSR#TD004 Baker Boulevard Bridge Over Mojave River Channel Bridge Replacement Project
QPEs	Qualifying Precipitation Events
QSD	Qualified Stormwater Pollution Prevention Plan Developer
QSP	Qualified Stormwater Pollution Prevention Plan Practitioner
R	Rainfall Erosivity
RE	Renewable energy
RECs	Recognized Environmental Conditions
ROG	Reactive organic compounds
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RUSLE	Revised Universal Soil Loss Equation
RWQCB	Regional Water Quality Control Board
SBCFPD	San Bernardino County Fire Protection District
SBCTA	San Bernardino County Transportation Authority
SBTAM+	San Bernardino Traffic Analysis Model Plus
SBCFPD	San Bernardino County Fire Protection District
SCCIC	South Central Coastal Information Center
SCS	Connect SoCal
SF6	Sulfur hexafluoride
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARTS	Stormwater Multiple Application and Report Tracking System
SMARA	Surface Mining and Reclamation Act
SO_2	Sulfur Dioxide
SPCCP	Spill Prevention, Control, and Countermeasure Program
SR	State Route
SRA	State Responsibility Area

SSC	Species of Special Concern
STIP	State Transportation Improvement Plan
STP	Surface Transportation Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAG	Traffic Analysis Guidelines
TCM	Transportation control measure
TCE	Temporary construction easement
TCRs	Tribal Cultural Resources
TMDLs	Total Maximum Daily Loads
UMCP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
WDID	Waste discharge Identification
WRA	Wastewater Reclamation Authority

1.0 INTRODUCTION

1.1 Purpose and Background of the Initial Study

This document is an Initial Study (IS) with supporting environmental studies, which provides justification for a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for the PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project (Project).

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed Project. Mitigation measures have also been established that reduce or eliminate any identified significant and/or potentially significant impacts.

The IS/MND is a public document to be used by the San Bernardino County (County), acting as the CEQA lead agency, to determine whether the proposed Project may have a significant effect on the environment, pursuant to CEQA. If the lead agency finds substantial evidence that any aspect of the proposed Project, either individually or cumulatively, may have a significant effect on the environment that cannot be mitigated to a less than significant level, regardless of whether the overall effect of the proposed Project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR), use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR to analyze the Project at hand (Public Resources Code Sections 21080(d), 21082.2(d)).

If the agency finds no substantial evidence that the proposed Project or any of its aspects may cause a significant impact on the environment with mitigation, a MND shall be prepared with a written statement describing the reasons why the proposed Project, which is not exempt from CEQA, would not have a significant effect on the environment, and therefore, why it does not require the preparation of an EIR (State CEQA Guidelines Section 15371).

According to State CEQA Guidelines Section 15070, a Negative Declaration shall be prepared for a project subject to CEQA when either:

1) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*

2) *The initial study identifies potentially significant effects, but:*

    a) *Revisions in the project plans or proposals made by, or agreed to by the applicant before the proposed MND and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*

    b) *There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

This IS/MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., and the State CEQA Guidelines Title 14 California Code of Regulations (CCR) Section 15000 et seq.

1.2 Lead Agency

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051

provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), “The lead agency will normally be the agency with general governmental powers.” The County has initiated preliminary design of the proposed Project and it requires approval from the San Bernardino County Board of Supervisors. Therefore, based on the criteria described above, the lead agency for the proposed Project is the County.

1.3 Technical Studies

Technical studies prepared for the proposed Project and referenced in this IS/MND are listed below. The technical studies are available at the San Bernardino Public Works Department, Environmental Management Division, upon request. Please reach out to Arnold (AJ) Gerber at arnold.gerber@dpw.sbcounty.gov or (909) 387-8109 to request a copy.

- CEQA Cultural Resources Technical Report, Baker Boulevard Bridge (No. 54C0127) over Mojave River Replacement Project San Bernardino County, California, Dokken Engineering (confidential information has been redacted)
- Hazardous Waste Initial Site Assessment, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project, Dokken Engineering
- Historic Property Survey Report/Archaeological Survey Report, PSR#TD004 Baker Boulevard Over Mojave River Replacement Project, Dokken Engineering - Please note that due to the inclusion of sensitive and confidential information, the cultural report is not available to the general public
- Hydrology, Hydraulics, and Scour Analysis, Baker Boulevard Bridge (No. 54C0127) over Mojave River Replacement Project San Bernardino County, California, River Focus, Inc.
- Natural Environment Study, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project, Dokken Engineering
- Noise Study Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project, Dokken Engineering
- Paleontological Letter Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project, Cogstone
- Traffic Memorandum, Baker Bridge Replacement and Travel Demand Forecasting Memo, Fehr and Peers
- Visual Impact Assessment Memorandum, Baker Boulevard over Mojave River Bridge Replacement Project, Dokken Engineering
- Water Quality Assessment Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project, Dokken Engineering

.

2.0 PROJECT DESCRIPTION

2.1 Project Location

The San Bernardino County, Department of Public Works (County) in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing two lane timber bridge on Baker Boulevard, with a new four lane structure located near the unincorporated community of Baker in San Bernardino County, California (**Figure 1. Project Vicinity** and **Figure 2. Project Location**).

2.2 Project Purpose and Objectives

The purpose of the proposed Project is to improve structure safety and operations through replacement of the existing bridge and approach roadways. The proposed Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the project in and of itself will not generate increase traffic volume and/or demand.

2.3 Project Description

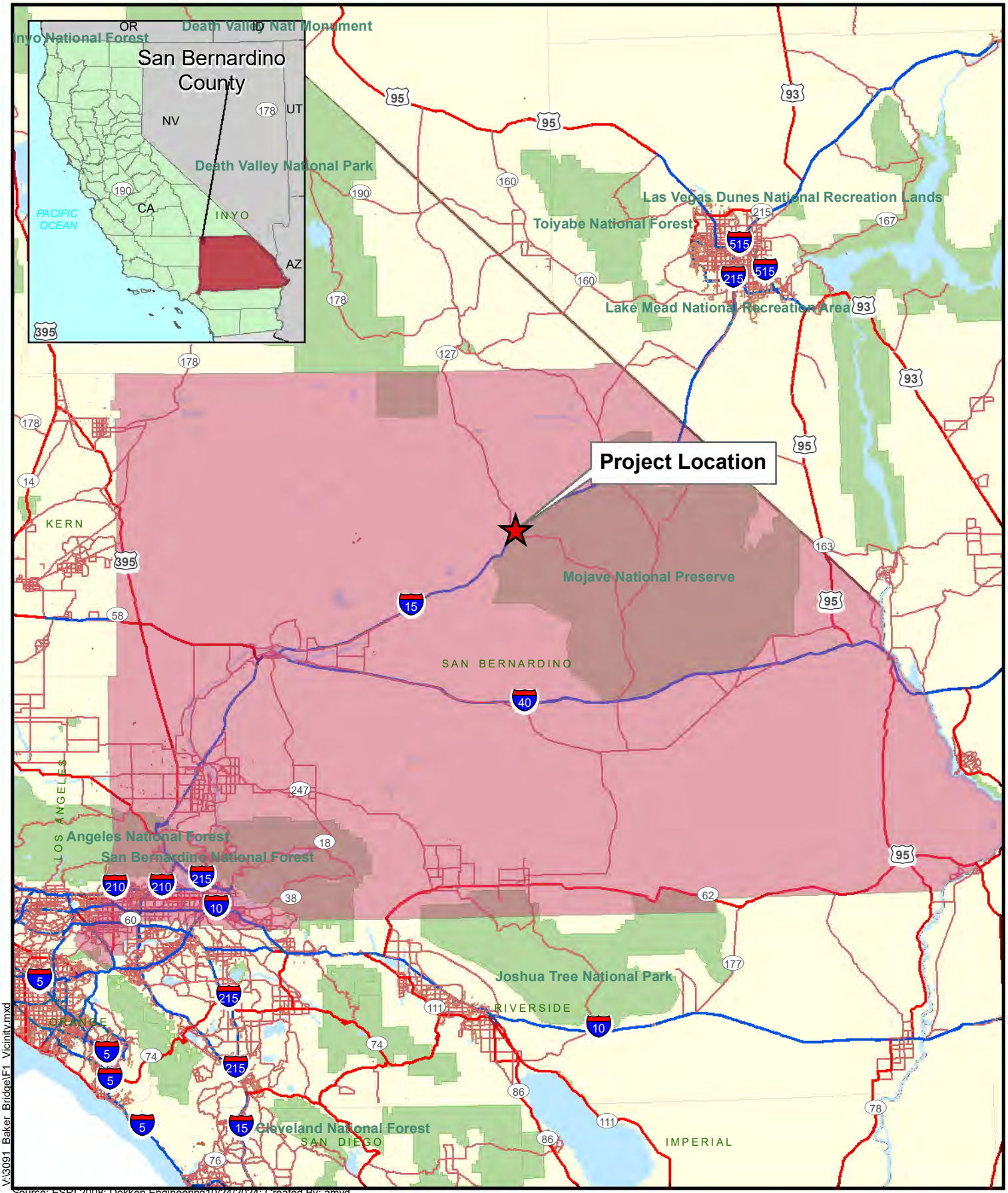
Background

The existing bridge was originally built in 1931 as a 93-foot (plus or minus) 5 span simple-supported stringer timber bridge crossing the Mojave River Channel on Baker Boulevard (formerly US 91 and State Route 31). It was repaired and lengthened in 1938. Repairs conducted in 1938 included replacement of all untreated Douglas Fir timber within the existing bridge with Redwood; the addition of 9 new spans to the west and 8 new spans to the east increasing bridge overall length to 408-feet (plus or minus), and channel excavation for the length of the structure to maintain a minimum clearance of 6-feet below the bottom stringer (soffit) of the bridge. The bridge currently exists as a 22-span simple-supported stringer timber bridge with a 5- to 6-inch-thick continuous cast in place reinforced concrete deck overlain with asphalt concrete and closed end reinforced concrete strutted abutments supported on Coastal Douglas Fir (CDF) timber piles. The bents and abutments are set at a 45-degree skew to accommodate flows within the Mojave River Channel below. Timber railing and plywood planking accommodating an elevated 2-foot-wide walk on both sides of the bridge is worn and deteriorating. Current sufficiency rating per Caltrans biannual bridge inspection reports (BRIS) for the structure is roughly 76.

Build Alternative

The Project includes the demolition of the existing two-lane 22 span simple-supported stringer timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on cast-in-drilled hole piles (CIDH) or driven concrete pile extensions (**Figure 3. Project Features**). This proposed structure will meet and address County and American Association of State Highway and Transportation Officials (AASHTO) standards and criteria, or equivalent. Approximately 1,200 feet of approach roadway work would be required to widen Baker Boulevard to its ultimate width. The design would construct and/or tie into existing, planned and projected ultimate roadway improvements from 0.14 miles west of the existing structure to Death Valley Road (State Highway 127). Additionally, the new bridge will include sidewalks, streetlights, and bridge barrier railing meeting current MASH safety and testing requirements. Existing driveways located within the Project area may require improvements to ensure conformity with the widened bridge and roadway approaches. Further, the existing mid-block pedestrian crossing located approximately 300 feet southwest of the Mojave River Channel may also be removed, including striping and signage.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, pile driving rigs and concrete pumps will be required to rehabilitate and widen the existing road surface and replace the bridge. Temporary and permanent right of way acquisition may be required for construction.



V:\3091_Baker_Bridge\F1_Vicinity.mxd

Source: ESRI 2008; Dokken Engineering10/24/2024; Created By: amyd

0 10 20 30 Miles

FIGURE 1
Project Vicinity

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 10/24/2024; Created By: amyd

0 0.4 0.8 1.2 1.6
Miles

FIGURE 2
Project Location

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

Source: ESRI Maps Online; Dokken Engineering 1/31/2025; Created By: amyd

0 200 400 600 800 1,000 Feet

Figure 3
Project Features

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Both options will keep the new bridge and approach road widenings within existing ROW. The Project will require relocation of overhead utilities, utilities attached to the bridge, and may require relocation of underground utilities along the roadway approaches. Construction may start as early as 2026 and may last 24 months.

The proposed Project may construct a permanent ramp providing access into the San Bernardino County (SBC) Flood Control District (FCD) owned floodway channel north of the bridge along the eastern levee to better facilitate channel maintenance and future bridge inspections.

No Build Alternative

Under the no-build alternative, the existing bridge would not be repaired. The worn and deteriorating 86 plus year old timber bridge would not be improved.

Funding and Responsible Entities

The proposed Project will be utilizing local funds and federal funds from the Federal Highways Administration (FHWA), administered through Caltrans. As such, the proposed Project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for NEPA compliance is Caltrans and the lead agency for CEQA compliance is the County.

The proposed Project is included in the 2023 Federal Transportation Improvement Program (FTIP) and the Regional Transportation Plan/ 2024 Connect SoCal (RTP/SCS). The Project will be primarily using local funds from Measure I Major Local Highway Projects (MLHP). Funding for construction, which needs to be obligated by FY 25/26, will utilize Measure I MLHP along with state and federal funds under the State Transportation Improvement Program (STIP – local) and the Surface Transportation Program (STP), administered by San Bernardino County Transportation Authority (SBCTA).

2.4 Required Project Approvals

To implement the Project, a series of actions and approvals would be required from regulatory and other government agencies. Anticipated Project approvals would include, but are not limited to the following:

Table 1. Required Project Approvals

Agency	Permit/Approval	Status
San Bernardino County Board of Supervisors	Adoption of MND and MMRP	Anticipated 2025
Caltrans	Encroachment Permit	Will be obtained after approval of the final environmental document and prior to construction.
Lahontan Regional Water Quality Control Board	Waste Discharge Requirements	Will be obtained after approval of the final environmental document and prior to construction.
SWRCB	Construction General Permit	Will be Obtained Prior to Construction
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Will be obtained after approval of the final environmental document and prior to construction.
San Bernardino County Flood Control District	Encroachment Permit	Will be Obtained Prior to Construction

3.0 INITIAL STUDY CHECKLIST

A. BACKGROUND

1. Project Title:

PSR#TD004 Baker Boulevard Bridge Over Mojave River Bridge Replacement Project

2. Lead Agency Name and Address:

San Bernardino County
Public Works Department
825 East Third Street,
San Bernardino, California 92415-0835

3. Contact Person Phone Number:

Arnold (AJ) Gerber
Senior Planner
Department of Public Works
Environmental Management Division
825 E. Third Street, Rm. 123
San Bernardino, CA 92415-0835
(909) 387-8109
arnold.gerber@dpw.sbcounty.gov

4. Project Location:

The proposed PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project (Project) is located in the community of Baker, California. The Project area consists of an approximately 15.95 acres and includes segments of Baker Boulevard, the existing two-lane 22 span simple-supported stringer timber bridge, the Mojave River Channel, and approximately 1,200 feet of approach roadway required to widen Baker Boulevard to its ultimate width. The design would construct and/or tie into existing, planned and projected ultimate roadway improvements from 0.14 miles west of the existing structure to Death Valley Road (State Highway 127). (**Figures 1-3**).

5. Project Applicant's Name and Address:

San Bernardino County
Public Works Department
825 East Third Street,
San Bernardino, California 92415-0835

6. General Plan Designation:

Commercial (C), Public Facility (PF) and Limited Industrial (LI)

7. Zoning:

Highway Commercial (CH), Floodway (FW), and Rural Commercial (CR)

8. Description of Project:

The Project includes the demolition of the existing two-lane 22 span simple-supported stringer timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on cast-in-drilled hole piles (CIDH) or driven concrete pile extensions (**Figure 3. Project Features**). This proposed structure will meet and address County and American Association of State Highway and Transportation Officials (AASHTO) standards and criteria, or equivalent. Approximately 1,200 feet of approach roadway work would be required to widen Baker Boulevard to its ultimate width. The design would construct and/or tie into existing, planned and projected ultimate roadway improvements from 0.14 miles west of the existing structure to Death Valley Road (State Highway 127). Additionally, the new bridge will include sidewalks, streetlights, and bridge barrier railing meeting current MASH safety and testing requirements. Existing driveways located within the Project area may require improvements to ensure conformity with the widened bridge and roadway approaches. Further, the existing mid-block pedestrian crossing located approximately 300 feet southwest of the Mojave River Channel may also be removed, including striping and signage.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, pile driving rigs and concrete pumps will be required to rehabilitate and widen the existing road surface and replace the bridge. Temporary and permanent right of way acquisition may be required for construction. The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Both options will keep the new bridge and approach road widenings within existing ROW. The Project will require relocation of overhead utilities, utilities attached to the bridge, and may require relocation of underground utilities along the roadway approaches. Construction may start as early as 2026 and may last 24 months.

The proposed Project may construct a permanent ramp providing access into the San Bernardino County (SBC) Flood Control District (FCD) owned floodway channel north of the bridge along the eastern levee to better facilitate channel maintenance and future bridge inspections.

The proposed Project will be utilizing local funds and federal funds from the Federal Highways Administration (FHWA), administered through Caltrans. As such, the proposed Project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for NEPA compliance is Caltrans and the lead agency for CEQA compliance is the County.

The proposed Project is included in the 2023 Federal Transportation Improvement Program (FTIP) and the Regional Transportation Plan/ 2024 Connect SoCal (RTP/SCS). The Project will be primarily using local funds from Measure I Major Local Highway Projects (MLHP). Funding for construction, which needs to be obligated by FY 25/26, will utilize Measure I MLHP along with state and federal funds under the State Transportation Improvement Program (STIP – local) and the Surface Transportation Program (STP), administered by San Bernardino County Transportation Authority (SBCTA).

9. Surrounding Land Uses and Setting:

The current land uses within the Project area include Commercial (C), Public Facility (PF) and Limited Industrial (LI). The current zoning designations within the Project area include Highway Commercial (CH), Floodway (FW), and Rural Commercial (CR).

The Project area is relatively flat with no major topographic features. The land use in the surrounding area is primarily commercial development. The parcels south of the existing bridge within the Project area are zoned as CH. This land use zoning district provides sites for retail trade and personal services, lodging services, office and professional services, recreation and entertainment services, wholesaling and warehousing, contract/construction services, transportation services, open lot services, and similar and compatible uses. The parcels north of the existing bridge within the Project area are zoned as CR. This land use zoning district provides sites for retail trade and personal services, repair services, lodging services, recreation and entertainment services, transportation services, and similar and compatible uses. Agriculture and residential uses are also allowed but are secondary in importance. A portion of the Mojave River Channel is also present within the Project area and is zoned as FW. The FW land use zoning district provides sites for animal keeping, grazing, crop production, and similar and compatible uses.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below could result in potentially significant impacts if mitigation measures are not implemented. As discussed on the following pages, where potentially significant impacts are identified, feasible mitigation was identified to reduce the impacts to a less than significant level. Therefore, potentially significant impacts that are mitigated to "Less Than Significant" are shown here.

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

C. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions 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.

AJ Gerber

Arnold (AJ) Gerber
Senior Planner
Department of Public Works
Environmental Management Division
San Bernardino County

03.04.25
Date

D. EVALUATION OF ENVIRONMENTAL IMPACTS

Each of the responses in the following environmental checklist considers the whole action involved, including project-level, cumulative, on-site, off-site, indirect, construction, and operational impacts. A brief explanation is provided for all answers and supported by the information sources cited.

1. 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).

2. A “Less Than Significant Impact” applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

3. A “Less Than Significant Impact With Mitigation Incorporated” applies when the proposed project would not result in a substantial and adverse change in the environment after additional mitigation measures are applied.

4. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

I. AESTHETICS

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

REGULATORY SETTING

State

CEQA

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA Public Resources Code Section 21001[b])."

State Scenic Highway

The State Scenic Highway Program was enacted in 1963 to protect and enhance California's natural scenic beauty by identifying sections of the State highway system, in conjunction with adjacent scenic corridors, that require special conservation treatment. A scenic corridor is land that contains scenic and natural features visible from, adjacent to, and outside the highway right-of-way. The boundary of the corridor is determined by topography, vegetation, viewing distance, and/or jurisdictional lines. In addition to adding to the pleasure of residents, the program encourages the growth of recreation and tourism industries as an important sector of the State's economy. Caltrans is responsible for managing the State Scenic Highway Program by providing guidance to local government agencies, community organizations, and citizens that are pursuing the official designation of a State Scenic Highway (Dokken 2025h).

The Aesthetics section of the Draft EIR for the County Policy Plan (2022) describes the County as possessing a variety of unique and important visual resources, including numerous expansive vistas of forests, hillsides, mountains, and desert landscapes." The community of Baker contains "vast stretches of undeveloped desert landscapes that, due to the general lack of development, trees, and other visual obstructions, feature countless panoramic long-range views."

The Draft EIR notes that I-15 is an "Eligible State Scenic Highway – Not Officially Designated" in the North and East Desert Regions. The Draft EIR identifies I-15 as a County Scenic Route and Eligible State Scenic Highway from Baker west towards Barstow. The Draft EIR identifies SR-127 as an Eligible State Scenic Highway.

Local Scenic Resources

The County's Countywide Plan is a collection of planning tools to guide future decisions, investments, and improvements. It includes three components: County Policy Plan which serves as the County's General Plan for the unincorporated areas; County Business Plan containing governance policies and operational metrics used to guide municipal and regional services; and community-specific community action guide (CAG), which summarize unincorporated communities' action plan to identify desired changes and improvements (County 2024a).

The Baker CAG describes Baker as "a family-oriented community with a small-town feel. Baker values the quietness, open space, and views of the desert." Baker's most prominent feature is a 134-foot-tall thermometer along I-15, constructed in 1990 by Willis Herron, to commemorate the hottest temperature ever recorded in the Death Valley area. The community consists of primarily commercial uses including rural and highway commercial. The residential developments have minimum lot sizes from 1/3 acre to 40 acres. The commercial uses are chain stores, restaurants, motels, and gas stations (Dokken 2025h).

ENVIRONMENTAL SETTING

The environmental setting and discussion below are derived from the Visual Impact Assessment Memorandum (Dokken 2025h), which is attached to this Initial Study as Appendix A.

The population of Baker is approximately 442 persons. Baker is on a desert plain with several small mountains nearby. The 1.6-million-acre Mohave National Preserve, managed by the National Park Service, is located south of I-15. The Soda Mountains Wilderness is located approximately 2.75-miles north and east of the community of Baker. The 22,366-acre Hollow Hills Wilderness Area managed by the Bureau of Land Management (BLM) is located to the north.

Baker Boulevard has a southwest to northeast alignment through the community of Baker. I-15 bypasses the community to the south and is approximately 900-feet south of and parallel to Baker Boulevard. The I-15 on- and off-ramps connect to Baker Boulevard east and west of the community. Just east of the Baker Boulevard bridge is the I-15/SR-127 Separation Bridge interchange. Kelbaker Road connects to the interchange from the south then crosses over I-15 where connects to State Route 127, also known as Death Valley Road. The Baker Boulevard Bridge is visible from the I-15/SR-127 Separation Bridge and from I-15 east- and west-bound traffic from viewpoints west of the I-15/SR-127 Separation Bridge.

There are a number of single-story buildings in the community of Baker. Within sight of the bridge are several gas stations and restaurants. There is existing lighting on wood poles approximately 95-feet west of the southern bridge abutment and 210-feet east of the northern bridge abutment. Wooden poles that carry overhead utility lines are located next to the bridge abutments on the south side of the road. Other overhead utility lines cross the Mojave River Channel downstream and upstream of the existing bridge. The existing bridge has wood barrier rails painted white.

Land cover within the Project area consists of urban/barren, disturbed areas, saltbrush scrub, and desert sink scrub habitat (located in the Mojave River Channel). Urban/barren areas are

characterized by urban structures, dirt roads, pavement, landscaping, and other developed areas. Disturbed areas include the undeveloped lots adjacent to Baker Boulevard that lack substantial vegetation and appear to be highly disturbed by human activity. This land cover type also includes the dirt levees, access roads, and graded areas utilized by the County's Flood Control District (FCD) to maintain the Mojave River Channel. South of Baker Boulevard, disturbed land cover occurs in the upland areas directly adjacent to the Mojave River Channel. Saltbush scrub habitat in the study area is highly fragmented and occurs along the margins of developed or highly disturbed areas.

The Mojave River Channel has been classified as desert sink scrub habitat as its situated between two low-lying playas, Soda Lake (Dry Lake) and Silver Lake (Dry Lake). The channel primarily flows underground, and surface water is only present immediately following rain events or during historic wet years. Vegetation within the channel is similar to adjacent upland habitat and consists of stands of big saltbush and saltcedar. In addition, bush seepweed (Suaeda nigra) is frequently observed along the banks of the delineated channel.

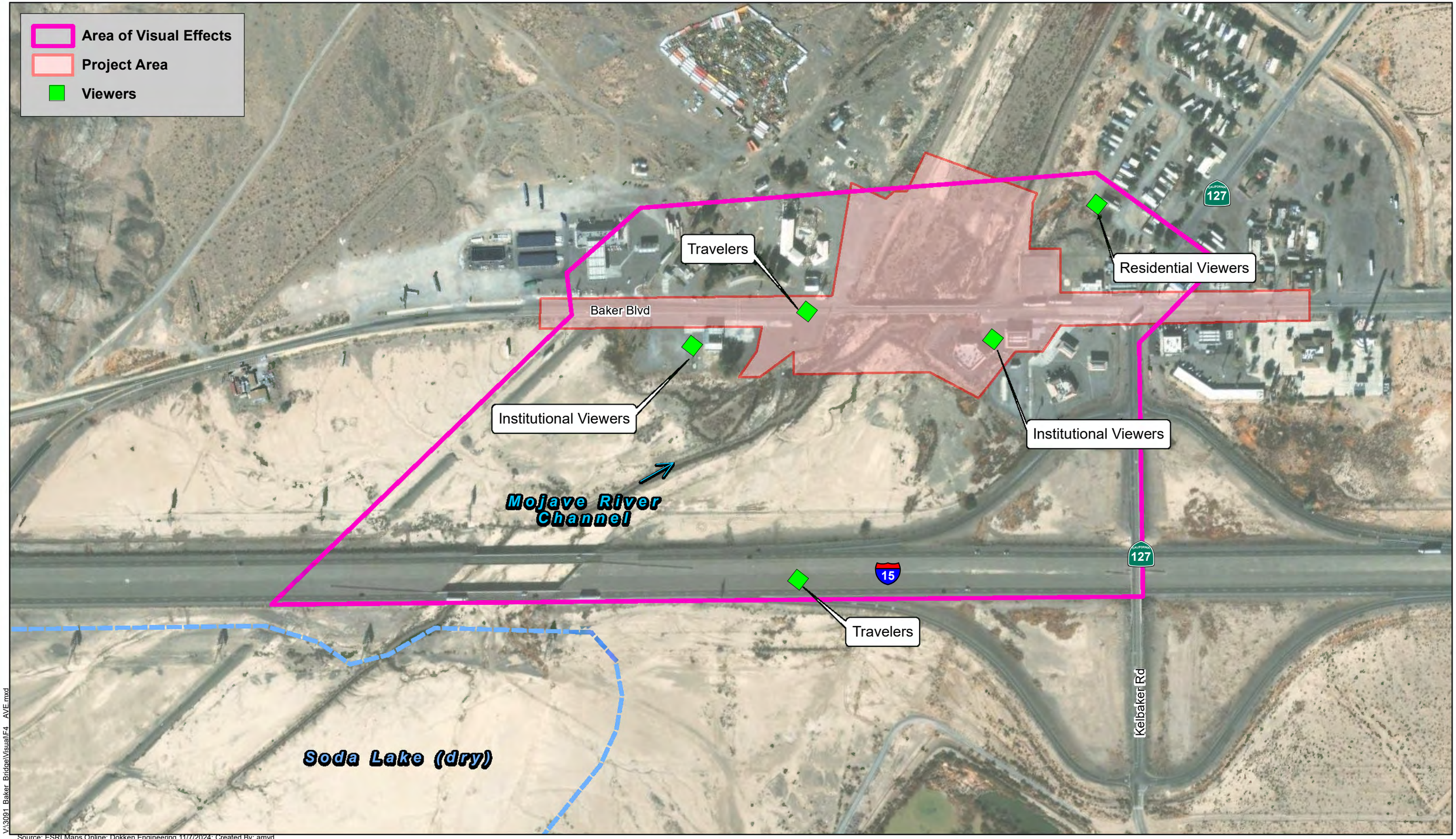
Description of Landscape Visual Character

The existing visual character of the Area of Visual Effect (AVE) was developed based on perspective views of the road, from the road, and the location of proposed Project features**. Figure 4 Area of Visual Effect** presents a map showing the AVE. The AVE is dominated by transportation facilities and developed environment. Baker Boulevard Bridge is a central feature within the AVE. The 410-foot-long bridge spans the Mojave River Channel. The County's FCD periodically conducts maintenance within the channel. At either end of the bridge there are few vertical impediments that block the views of the opposite bank. The narrow shoulders on the bridge with the low barrier rail comprised of "4x4" posts and two "2x4" rails and the wood deck mounting system painted white serve as a frame that guides the viewer to look down the bridge to the other side of the town.

The AVE includes I-15 from west of the I-15/SR-127 Separation Bridge interchange where the Baker Boulevard Bridge is visible from I-15. The I-15/SR-127 Separation Bridge is included as the Baker Boulevard Bridge is visible from the elevated structure. Views of the Baker Boulevard Bridge from I-15 east of the I-15/SR-127 Separation Bridge are blocked by the I-15/SR-127 Separation Bridge abutments.

Cultural Environment within the AVE
Within the AVE, the cultural environment consists of Baker Boulevard from past the proposed road conforms as well as the following businesses fronting Baker Boulevard:

- Shell Gas Station with Dairy Queen Grill and Chil,
- Mobil Gas Station and Food Shop,
- Chevron Gas Station with Taco Bell,
- ARCO Gas Station,
- Baker Market,
- Los Dos Toritos Restaurant,
- Mad Creek Café, and
- 76 Gas Station and County Store.



V:\3091_Baker_BridgeVisual\F4_AVE.mxd

Source: ESRI Maps Online; Dokken Engineering 11/7/2024; Created By: amyd

0 200 400 600 800 1,000 Feet

Figure 4
Area of Visual Effects

Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

There are several closed businesses within the AVE, including the Royal Hawaiian Motel near the southwest corner of the bridge. The motel is in a dilapidated state with deteriorating roofs, graffiti on the buildings, some dead landscaping, weeds, and trash on the grounds. Outside of the AVE, the cultural environment consists of other commercial development on Baker Boulevard and a mobile home park located between the Mojave River Channel and SR-127. The commercial development contains horizontal and vertical lines and many bright colors on the gas stations.

Project Environment within the AVE

The Project environment includes I-15, the I-15/SR-127 Separation Bridge, utility poles, street lighting, roadway signs, and undeveloped open land east and west of I-15. Whereas I-15 presents straight lines, the on- and off-ramps present sinuous lines. The pavement is colored gray with yellow and white lines to delineate the road, as necessary. The median separating the eastbound and westbound lanes on I-15 is unvegetated with a sandy grey color.

The I-15/SR-127 Separation Bridge contains horizontal lines and is colored grey and made of smooth-textured concrete. The utility poles present vertical lines and contain brown coloring as well as grey coloring. The utility lines which connect the utility poles are thin horizontal lines with grey and/or black coloring. The existing roadway signs vary in shape and are supported by thin gray cylindrical forms, and they are made of galvanized steel with smooth texture. The signs vary in color, either yellow, green, or red and are also made of galvanized steel with smooth texture.

Existing lighting in the area consists of streetlights along the adjacent frontage roads and residential streets and lighting from residential houses and commercial developments. The Project will retain dominant linear features of the bridge. The Project will positively influence the Project environment by introducing an aesthetically pleasing concrete bridge with sidewalks.

Natural Environment within the AVE

The natural environment in the AVE consists of the Mojave River Channel, saltbush, and desert sink/Mojave River Channel. The existing lines in the natural environment are irregular and the form is heterogeneous. The vegetation in this area varies from deep greens to browns depending on the season and the texture is rough. The sparsely vegetated dry lakebed of Soda Lake (Dry Lake) is visible to the south. Low vegetation scrub across the plain does not inhibit views of the mountains. Outside the AVE, there are wide open landscape views across the plain towards small mountains that rise 500 to over 1,600-feet off the valley floor. The summits of Nickel Mountain and Otto Mountain are west and northwest a short 0.8-mile and 1.5-mile away, respectively. The Soda Mountains frame the viewshed to the west; the Silurian Hills and Turquoise Mountains are to the northeast; the Mid Hills to the east; and the Granite and Providence Mountains to the south.

Description of Landscape Visual Quality

The vividness of the overall landscape and natural environment, which consists of the low shrub vegetation in the Mojave River Channel and mostly unobstructed views across the desert plain to the mountains makes the landscape memorable.

The cultural environment, which consists of the developed land surrounding the AVE, and Project environment, which consist of Baker Boulevard, I-15, and associated commercial and retail features, dominate the area. Intactness is low since the urban development in the area disrupts the landscape character.

Unity is low since design features of the built environment and natural environment are not harmonious with the landscape topography or are balanced with each other.

Viewers and Viewer Sensitivity

There are two major types of viewer groups for highway projects: neighbors and travelers. Neighbors are people who have views to the road. For this Project neighbors include:

- Residents
- Institutional viewers (workers at the service stations and other retail stores in the vicinity)

Travelers are people who have views from the road. For this Project travelers include:

- Motorists
- Bicyclists
- Pedestrians

The proposed Project will replace the existing bridge with a wider bridge. Approximately three additional luminaires will be added. The barrier rail will look different but retains a low profile with openings. Since viewer sensitivity is moderately high and viewpoint sensitivity is moderate, neighbors (people with views *to* the transportation project), travelers (people with views *from* the transportation project), and viewpoints will be affected by the proposed Project. See below for an analysis regarding viewer and viewpoint sensitivity.

Viewer Sensitivity
To determine viewer sensitivity, three attributes for viewer exposure (proximity, extent or number of viewers, and duration) and three for viewer awareness (attention, focus, and protection) were evaluated.

The neighbors viewer groups would have a moderately high viewer exposure since they are in proximity to the Project features. The neighbors viewer groups would have direct views of the Project features, and duration would be high due to their fixed position. For the neighbors viewers group, viewer awareness is moderate as individuals in this viewer group would be observant of the proposed changes. Broad and general views of the area would result in less sensitivity to visual changes.

For the travelers' viewer group, viewer exposure would be moderately high since they are travelling over the Project features. The extent would be moderately high as the travelers would have views of the Project and duration would be moderately low to low since they are only passing through the area. Viewer awareness would be moderately low since individuals in this viewer group would be preoccupied with other activities, have a broad and general view of the area, but are likely to value the natural setting of the existing bridge. Travelers on Baker Boulevard would have a different visual experience compared to travelers on I-15 as the travelers on Baker Boulevard see the road surface, rails, and luminaires but never a side view of the bridge. Travelers on I-15 see a side view of the bridge, rails, and, possibly, the pier columns. The bridge is 950-feet or more from the eastbound travel lanes and is not visually distinct as seen from I-15. Overall viewer sensitivity for neighbors and travelers is considered to be moderate.

Viewpoint Sensitivity
Viewpoint sensitivity is a judgment of the scenic importance of a viewpoint and whether it is part of an identified scenic resource. Sensitive viewpoints can be scenic or visual resources, vistas, landscape, or ocean views important to neighbors or travelers. SR-127 is a local, County designated scenic route according to the San Bernardino Policy Plan. At the intersection of SR-127 and Baker Boulevard, however, the developed area adjacent distracts from this resource. Therefore, viewpoint sensitivity is considered moderate.

DISCUSSION OF IMPACTS

a) Have a substantial adverse effect on a scenic vista?

Less than Significant with Mitigation. According to the San Bernardino Policy Plan Draft Environmental Impact Report, I-15 west of SR-127 is a County Scenic Route and Eligible State Scenic Highway. SR-127 is also an Eligible State Scenic Highway. The Baker Boulevard Bridge is visible from I-15 while the bridge railing is only visible from SR-127 when within the intersection. Project construction activities would result in only temporary visual changes, lasting no longer than two years, which would not negatively affect viewers.

As part of the Project, aesthetic treatments will be applied to the bridge. With implementation of mitigation measures **VIS-1** thorough **VIS-3**, visual impacts will be less than significant through limiting the amount of vegetation removed from the vicinity, utilizing appropriate lighting, and following aesthetic treatments developed by the County.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant with Mitigation. The Project location and setting provides the context for determining the type of changes to the existing visual environment and potential degradation of the existing visual character or quality of the site. As described in the *Environmental Setting*, the Project area and AVE is dominated by transportation facilities and developed environment. The Baker Boulevard Bridge is a central feature within the AVE. The 410-foot-long bridge spans the Mojave River Channel. The natural environment in the AVE consists of the desert sink scrub habitat located in the Mojave River Channel, saltbush, and saltcedar.

Although there are no designated scenic vistas, highways, or historic buildings located within or adjacent the Project AVE (Dokken 2025h); SR-127 is a local, County designated scenic route according to the County Policy Plan (2022). At the intersection of SR-127 and Baker Boulevard, however, the developed area adjacent distracts from this resource. Therefore, viewpoint sensitivity is considered moderate. Impacts to would be reduced to a less than significant level with implementation **VIS-1** through **VIS-3** through limiting the amount of vegetation removed from the vicinity, utilizing appropriate lighting, and following aesthetic treatments developed by the County.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact with Mitigation. The proposed Project is located in the community of Baker, which is a nonurbanized area. Zoning within the Project area includes Highway Commercial (CH), Rural Commercial (CR), and Floodway (FW). The Project would construct a replacement bridge over the Mojave River Channel. The proposed Project would be consistent with the existing zoning. Aesthetic treatments would be applied to all Project features to minimize visual impacts, ensuring that the Project would not conflict with regulations governing scenic quality. Implementation of mitigation measures **VIS-1** through **VIS-3** would ensure that impacts are less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant with Mitigation. As previously described above, approximately three new streetlights (luminaires) are proposed. One luminaire will be located on the edge of the upstream side of the bridge, the second luminaire will be located on the opposite edge of the bridge on the downstream side, and the third luminaire will be located off the northwest corner (upstream side) of the bridge. The lighting associated with the proposed Project is not anticipated to result in substantial new light and glare impacts as the lights would be shielded, per measure **VIS-2**.

Construction of the proposed Project may require the use of construction lighting after daylight hours, which may create a new source of light or glare in the Project area. There are several residential homes that reside within the northeastern portion AVE. However, any new source of construction lighting would be temporary and limited to the time of construction. Therefore, impacts are considered less than significant with **VIS-2** incorporated.

Avoidance, Minimization, and/or Mitigation Measures

VIS-1: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats (same as **BIO-3**).

VIS-2: Lighting will be appropriately shielded. The Project's lighting design must be consistent with the County's lighting guidelines and standards.

VIS-3: The new structure over the Mojave River Channel will follow aesthetic treatments developed by the Project engineer.

II. AGRICULTURE AND FOREST RESOURCES

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

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC 2024) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

REGULATORY SETTING

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 in response to the critical need for assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. Important Farmland Maps are prepared by the FMMP pursuant to Section 65570 of the California Government Code. To create maps, FMMP combines current land use information with U.S. Department of Agriculture – Natural Resources Conversion Service (NRCS) soil survey data. According to the 2020 Important Farmland Series for San

Bernardino County, the Project area is not mapped as it falls outside of the NRCS soil survey (DOC 2024).

California Land Conservation Act of 1965

The California Land Conservation Act of 1965 – commonly referred to as the Williamson Act – enables local governments to enter contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use (DOC 2024). The program is voluntary, locally administered and offers preferential property taxes on lands which have enforceable restrictions on their use via the contracts between individual landowners and local governments.

DISCUSSION OF IMPACTS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. As described above, the Project area falls outside of the NRCS soil survey and is not mapped by the FMMP as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Implementation of the proposed Project would not result in the conversion of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. Therefore, no impact to farmland resources would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project area is zoned for Highway Commercial (CH), Rural Commercial (CR), and Floodway (FW). As described above, the Project area falls outside of the NRCS soil survey and is not mapped by the FMMP. The proposed Project would not conflict with the existing zoning for agricultural use or Williamson Act contract lands; therefore, no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. There is no forestland, timberland, or timberland zoned for Timberland Production within the Project vicinity or Project area. The Project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production; therefore, no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. There is no forestland or forest resources located within the Project vicinity or Project area. 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.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed Project includes the demolition of the existing two-lane 22 span simple-supported timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The proposed Project would not result in the conversion of farmland to non-agricultural use, or conversion of forestland to non-forest use; therefore, no impact would occur.

III. AIR QUALITY

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

This section evaluates the potential for the proposed Project to impact Air Quality within the Project area. The environmental setting and analysis in this section is based in part on the Air Quality Report prepared by Dokken Engineering (Dokken 2025f; **Appendix B**).

REGULATORY SETTING

Federal and State

Clean Air Act

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws and related regulations by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$), and sulfur dioxide (SO_2). In addition, national and state standards exist for lead (Pb), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Transportation Conformity

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional – or, planning and programming level – and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in non-attainment and "maintenance" (former non-attainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. The U.S. EPA regulations at 40 CFR 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has attainment or maintenance areas for all these transportation-related "criteria pollutants" except SO_2 and has a non-attainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP), and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), FHWA, and Federal Transit Administration (FTA), make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and the TIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP and the project has a design concept and scope that has not changed significantly from those in the RTP and TIP. If the design concept and scope have changed substantially from that used in the RTP Conformity analysis, RTP and TIP amendments may be needed. Project-level conformity also needs to demonstrate that project analyses have used the latest planning assumptions and U.S. EPA-approved emissions models; the project complies with any control measures in the SIP in PM areas. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM non-attainment or maintenance areas to examine localized air quality impacts.

National Environmental Policy Act

NEPA requires that policies and regulations administered by the federal government are consistent with its environmental protection goals. NEPA also requires that federal agencies use an interdisciplinary approach to planning and decision-making for any actions that could impact the environment. It requires environmental review of federal actions including the creation of Environmental Documents (EDs) that describe the environmental effects of a proposed project and its alternatives (including a section on air quality impacts).

California Environmental Quality Act

CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA documents address CCAA requirements for transportation projects. While state standards are often more strict than federal standards, the state has no conformity process.

Table 2. State and Federal Ambient Air Quality Standards

Table of Ambient Air Quality Standards

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	9.0 µg/m³	15.0 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		53 ppb (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (7/16/24)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15.0 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (7/16/24)**

Source: Dokken 2025f

Local

The U.S. EPA has delegated responsibility to air districts to establish local rules to protect air quality. Caltrans' Standard Specification 14-9.02 (Dokken 2025f) requires compliance with all applicable air quality laws and regulations including local and air district ordinances and rules.

Mojave Desert Air Quality Management District (MDAQMD)
The MDAQMD is the agency responsible for preparing the Air Quality Management Plan (AQMP) for the San Bernardino and Riverside County portions of the Mojave Desert Air Basin (MDAB). MDAQMPD has adopted the following attainment plans for nonattainment pollutants that are applicable in the Project area (Dokken 2025f):

Ozone Attainment Plans

- 2008 Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)
- 2004 Ozone Attainment Plan (State and Federal)
- 1996 Triennial Revision to the 1991 Air Quality Attainment Plan
- 1994 Reasonable Further Progress Rate-of-Progress Plan
- Post-1996 Attainment Demonstration and Reasonable Further Progress Plan
- 1991 Air Quality Attainment Plan

Particulate Matter Attainment Plans

- 1995 Mojave Desert Planning Area Federal Particulate Matter Attainment Plan
- 1995 Searles Valley PM10 Plan, San Bernardino County Portion of Searles Valley Planning Area

MDAQMD Rules and Regulations
All projects in the MDAB are subject to MDAQMD rules and regulations in effect at the time of activity, including:

- **Rule 201, Permit to Construct, and Rule 204, Permit to Operate**. This requires that new or replacement equipment (stationary sources) that generate air pollutant emissions obtain a permit from the MDAQMD prior to their installation (Rule 201) and operation (Rule 203).
- **Rule 401, Visible Emissions**. This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in viable emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is dark or darker than designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- **Rule 402, Nuisance**. This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits

any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury, or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403, Fugitive Dust, Rule 403.1, Fugitive Dust Control for the Searles Valley Planning Area, and Rule 403.2, Fugitive Dust Control for the Mojave Desert Area Planning Area**. This rule is intended to reduce the amount of particulate matter entrained in the ambient air because of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities. Rules 403.1 and 403.2 require implementation of additional control measures outlined in the Searles Valley PM10 State Implementation Plan and the Mojave Desert Planning Area Federal PM10 Attainment Plan, respectively, to ensure that construction contractors implement additional soil stabilization techniques to minimize impacts from windblown dust (blowsand) during construction. These rules apply to construction/demolition activity, heavily traveled publicly maintained unpaved roads, weed suppression activity, limestone processing in the Lucerne Valley Area, and activities on Bureau of Land Management Land.

- **Regulation XIII, New Source Review (NSR)**. This rule sets forth the requirements for the preconstruction review of all new or modified facilities (stationary and area sources) to ensure that (1) new sources do not interfere with the attainment and maintenance of the AAQS, (2) that is no net increase in the emissions of any nonattainment air pollutant from new or modified major facilities which emit or have the potential to emit any nonattainment air pollutant in an amount greater than or equal to the in MDAQMD Rule 1303(B)(1), (3) the construction or modification of facilities subject to NSR comply with the preconstruction review requirements for Toxic Air Contaminants (TACs) set forth in MDAQMD Rule 1320; and (4) the construction or modification of facilities subject to this Regulation or District Regulation XVI: Prevention of Significant Deterioration comply with the preconstruction review requirements set forth in MDAQMD Rule 1600.

<u>San Bernardino County Policy Plan (2022)</u>
The policies of Goal NR-1 Air Quality listed below are excerpted from San Bernardino County Policy Plan – Natural Resources chapter (County 2022). These policies are designed to guide improving air quality, and promote clean, sustainable transportation options and are applicable to the proposed Project.

Policy NR-1.3 Coordination on air pollution – we collaborate with air quality management districts and other local agencies to monitor and reduce major pollutants affecting the county at the emission source.

Policy NR-1.5 Sensitive land uses – we consider recommendations from the California Air Resources Board on the siting of new sensitive land uses and exposure to specific source categories.

Policy NR-1.6 Fugitive dust emissions – we coordinate with air quality management districts on requirements for dust control plans, revegetation, and soil compaction to prevent fugitive dust emissions.

Policy NR-1.8 Construction and operations – we invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions.

ENVIRONMENTAL SETTING

Meteorology (weather) and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone and ozone precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can act as a barrier that prevents ozone from dispersing.

The Barstow – Dagget Airport weather station is located near the Project site and is representative of meteorological conditions near the Project. The wind rose shows wind patterns collected by the Merced Muni AP weather station from November 5th, 2023, to November 5th, 2024, and the data is provided by the Midwestern Regional Climate Center in Champaign, Illinois (Dokken 2025f).

Mojave Desert Air Basin (MDAB)
The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada to the north, air masses pushed onshore in southern California by differential heating are channeled through the MDAB.

This MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes from the main channels for these air masses. Antelope Valley is bordered by the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 ft elevation). Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 ft). The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 ft). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (Morongo Valley).

The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of the series of valleys (notably the Coachella Valley, whose primary channel is the San Gorgio Pass (2,300 ft) between the San Bernardino and San Jacinto Mountains. During the summer the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, because these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south.

The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate,

with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100.4F (Dokken 2025f).

Existing Air Quality
This section summarizes existing air quality conditions near the proposed Project area. It includes attainment statuses for criteria pollutants, describes local ambient concentrations of criteria pollutants for the past 5 years, and discusses MSAT and GHG emissions. The closest monitor to the Project site that measures all criteria pollutants is the Barstow monitoring station, which is located approximately 65 miles southwest of the Project location.

Criteria pollutants and Attainment Status
Table 3 lists the state and federal attainment status for all regulated pollutants. The Project area is in a State and Federal non-attainment designation for 8-hour Ozone and PM10. The Project area is within attainment or is unclassified for all other pollutants.

Table 3. State and Federal Attainment Status (MDAB)

Pollutant	State Attainment Status	Federal Attainment Status
Ozone	Nonattainment	Nonattainment
PM10	Nonattainment	Nonattainment
PM2.5	Attainment	Unclassifiable/Attainment
Carbon Monoxide	Attainment	Attainment/Unclassified
Nitrogen Dioxide	Attainment	Attainment/Unclassified
Sulfur Dioxide	Attainment	Attainment/Unclassified
Lead	Attainment	Attainment/Unclassified
Visibility Reducing Particles	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Vinyl Chloride	Unclassified	No Federal Standard
Source: Dokken 2025f		

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. A project is considered to conflict with or obstruct implementation of regional air quality plans if it would be inconsistent with the emissions inventories contained in the regional air quality plans. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region. The proposed Project includes the demolition of the existing two-lane 22 span simple-supported timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project would serve the existing and planned community and would not result in an increase in population or VMT. Implementation of the proposed Project would improve structure safety and operations through replacement of the existing bridge and roadway approaches. The proposed Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the Project in and of itself will not generate increase traffic volume and/or demand. The proposed Project would not be anticipated to conflict with existing or future air quality planning efforts. Therefore, no impact would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant. As described in the *Environmental Setting*, the proposed Project is located in the MDAB. The State of California has designated the MDAB as being a nonattainment area for ozone (O_3), particulate matter (PM_{10}), particulate matter ($PM_{2.5}$), and hydrogen sulfide; and is designated attainment or unclassified for all other pollutants. At the federal level, EPA has also designated this area as being a nonattainment area for O_3 and PM_{10}. Criteria pollutant $PM_{2.5}$, CO, NO_2 and SO_2 are designated as unclassified/attainment. The proposed Project involves adding additional lanes, which results in the Project not being one of the project types listed in the Code of Federal Regulations (CFR) 93.126 (Exempt Projects) and is therefore not exempt from the requirement to determine conformity, nor is it exempt from regional conformity (Dokken 2025f).

The Project area is in a Federal non-attainment designation for 8-hour Ozone and PM_{10}. The Project does not cause or contribute to any new localized CO, $PM_{2.5}$, and/or PM_{10} violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan (or regional emissions analysis).

Long-term Effects (Operational Emissions)

Operational emissions consider long-term changes in emissions due to the Project (excluding the construction phase). The operational emissions analysis compares forecasted emissions for existing/baseline, No-Build, and all Build alternatives. **Table 4. Summary of Comparative Emissions Analysis during Peak Hour** below contains a summary of all long-term operational emissions associated with the proposed Project. Additional information regarding each criterion pollutant can be found in **Appendix B**.

Table 4. Summary of Comparative Emissions Analysis during Peak Hour

Scenario/ Analysis Year	CO (lbs)	PM10 (lbs)	PM2.5 (lbs)	NOx (surrogate for NO2) (lbs)	CO2 (lbs)
Baseline (Existing Conditions) 2024	0.270	0.195	0.035	0.200	169.134
No Build Future (2050)	0.199	0.342	0.058	0.085	183.741
Future + Project (2050)	0.199	0.342	0.058	0.085	183.741
Source: Dokken 2025f					

Cumulative/Regional/Indirect Effects

The SCAG Regional Council certified the Final Program Environmental Impact Report (PEIR) for the Connect SoCal 2024 Regional Transportation Plan on April 4, 2024. The Final PEIR determined that criteria pollutant emissions from individual projects could result in localized air quality impacts, and that some counties would be exposed to increased emissions as a result of increased VMT. Therefore, the Plan could contribute to cumulative impacts from adjacent MPO's, and the impact is considered significant and unavoidable.

As the proposed Project would be implemented as part of the 2023 Federal RTIP and 2024 Connect Socal RTP, the project would potentially contribute to cumulative/regional/indirect effects as identified in the PEIR.

Short-term Effects (Construction Emissions)

Construction Equipment, Traffic Congestion, and Fugitive Dust

Site preparation and roadway construction will involve clearing, realignment of the existing Alvarado Canyon Roadway, cut-and-fill activities, widening Fairmount Avenue, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOX, VOCs, directly emitted PM_{10} and $PM_{2.5}$, and TACs such as diesel exhaust particulate matter. Construction activities are expected to slightly increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated using the Caltrans 2021 Construction Emissions Tool (CAL-CET). Construction-related emissions for the proposed Project are presented in **Table 5**. See **Appendix B** for the results of the construction emission calculations. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by construction of the proposed Project.

Table 5. Construction Emissions for Roadways

	PM10 (lbs/day)	PM2.5 (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO2 (tons/phase)
Land Clearing/Grubbing	1.019	0.359	3.816	4.071	0.519
Roadway Excavation	0.969	0.769	9.671	9.974	1.128
Structural Excavation	1.493	0.333	1.917	3.332	0.488
Base/Subbase/ Imported Borrow	1.593	1.260	16.734	15.902	1.717
Structural Concrete	0.217	0.212	2.250	3.514	0.399
Paving	0.912	0.896	5.254	12.423	1.219
Drainage/ Environment/ Landscaping	0.325	0.318	1.970	4.226	0.419
Traffic Signalization/ Signage/Striping/ Painting	0.275	0.270	2.936	4.603	0.953
Other Operations	0.000	0.000	0.000	0.000	0.000
Maximum daily (lbs/day)	1.593	1.260	16.734	15.902	1.717
SCAQMD Daily Emissions Thresholds	150	55	550	100	-
Project Total (tons/construction project)	0.187	0.145	1.546	0.024	462

Source: Dokken 2025f

Asbestos
Based on a review of the California Department of Conservation, Division of Mines and Geology map of ultramafic rock in the state, asbestos occurrence is not within the vicinity of the project area. Therefore, the potential for impact from Naturally Occurring Asbestos (NOA) during project construction is low (Dokken 2025f).

Lead
Lead is normally not an air quality issue for transportation projects unless the project involves disturbance of soils containing high levels of aerially deposited lead or painting or modification of structures with lead-based coatings. Any potential Aerially Deposited Lead (ADL) issues will be addressed withing the Initial Site Assessment (**Appendix D**).

Conclusion

Project-related emissions will have an adverse environmental impact if they result in pollutant emissions levels that either create or worsen a violation of an ambient air quality standard (identified in **Table 2.**) or contribute to an existing air quality violation.

Short-term increases in emissions would occur during construction period; however, impacts would be limited and temporary. Short-term construction-related emissions resulting from the Project construction were estimated using the Road Construction Emissions Model, a spreadsheet-based model specifically designed to estimate emissions with construction of roadway facilities and other linear projects (**Appendix B**).

Adherence to applicable MDAQMD rules and regulations and standard Caltrans Best Management Practices would be sufficient to keep impacts to a less than significant level. No additional minimization measures are necessary; and therefore, impacts are considered less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. As previously described in the *Environmental Setting*, sensitive receptors include residential areas, schools, hospitals, other health care facilities, child/day care facilities, parks, and playgrounds. Land uses within the zone of greatest concern include areas designated for Commercial, Low Density Residential, and Public Facility. Sensitive receptors include residential development along Baker Boulevard. No other sensitive receptors, such as hospitals, daycare facilities, or schools occur within the 500-foot buffer of the Project area (Dokken 2025f).

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the California Air Resources Board (CARB) identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period often is assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Health impacts associated with exposure to diesel exhaust from Project construction are anticipated to be less than significant because construction activities are expected to occur well below the 70-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore,

construction of the proposed Project is not anticipated to result in an elevated cancer risk to exposed persons.

Therefore, overall exposure of sensitive receptors to substantial pollutant concentrations from the proposed Project would be less than significant and no mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. While offensive odors rarely cause physical harm, they can be unpleasant, leading to annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Project-related odor emissions would be limited to times when equipment would be utilized for construction and emission from equipment may be evident in the immediate surrounding area. Construction activities would be short-term and would not result in the creation of long-term objectionable odor because they would be quickly dispersed after equipment utilization. Therefore, due to the short-term nature of the construction activities, combined with limited exposure to sensitive receptors, impacts associated with development of the Project are considered less than significant and no mitigation is required.

IV. BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

This section describes the natural resources present within and immediately surrounding the Project area and includes a discussion of the special-status species and sensitive habitats potentially occurring in the Project area. Also included is an analysis of the impacts that could occur to biological resources due to implementation of the proposed Project and appropriate mitigation measures to reduce or avoid significant impacts. The analysis of biological resources presented in this section is based on a review of the current Project description, the Natural Environment Study (Dokken 2025d; **Appendix C**) prepared for the Project, available literature, and a survey conducted by Dokken Engineering biologists Vincent Chevreuil and Katie Jacobson on August 14, 2024.

REGULATORY SETTING

This section describes the federal, state, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA). Applicable federal and state permits

and approvals that will be required before construction of the Project are described previously in *Section 2.4 Required Project Approvals*.

Federal

National Environmental Policy Act

The NEPA provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decision makers take environmental factors into account. NEPA applies when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for the proposed Project acting under delegation from the Federal Highways Administration (FHWA).

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the U.S. CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool. This Project will require a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit regulated by the EPA.

The United States Army USACE of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "Waters of the state" under waste discharge requirements (WDRs) pursuant to the Porter-Cologne Water Quality Control Act.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner.

As part of the proposed action, Caltrans, as designated by FHWA, is the lead federal agency and therefore would be responsible for ensuring that the proposed action complies with Executive Order 13112 and does not contribute to the spread of invasive species through implementation of avoidance and minimization measures.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

State

California Environmental Quality Act

California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing). Candidacy designation temporarily applies CESA protections, including protection from "take" of the species without permit authorization, while CDFW determines the species should be listed as threatened or endangered.

CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 1602: Streambed Alteration Agreement
Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors
CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests.

Section 3513: Migratory Birds
CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

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

The RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired, and the standards cannot be met through point source or non-source point controls (National Pollutant Discharge Elimination System [NPDES] permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads which specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

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

Local

San Bernardino County Policy Plan (2022)
The County Policy Plan is a comprehensive policy document which provides the framework for land use, development, and resource management within the County. It sets forth policies and goals, as well as implementation measures to guide future land use, infrastructure development and environmental preservation. Section V of the Policy Plan includes the Conservation Element, which provides direction regarding the conservation, development, and utilization of the County's natural resources. Its objective is to prevent the wasteful exploitation, destruction and neglect of resources.

Desert Region Habitat is considered a Recognized Important Biological Area per the Policy Plan as it supports various important biological resources such as desert tortoise (*Gopherus agassizii;* [DT]*)* and desert bighorn sheep (*Ovis canadensis nelsoni*) habitat. Baker is part of the North Desert Region, which represents the largest of the County's five regional planning areas and is characterized by its arid desert climate and expansive open spaces, including the Mojave Desert (Dokken 2025d).

Compliance with all relevant goals and policies outlined in the Policy Plan will be required as part of the Project, including but not limited to:

- **Policy CO 2.1** – The County will coordinate with state and federal agencies and departments to ensure that their programs to preserve rare and endangered species and protect areas of special habitat value, as well as conserve populations and habitats of commonly occurring species, are reflected in reviews and approvals of development programs.

- **Goal CO 5** – The County will protect and preserve water resources for the maintenance, enhancement and restoration of environmental resources.

- **Goal D/CO 1** – Preserve the unique environmental features and natural resources of the Desert Region, including native wildlife, vegetation, water and scenic vistas.

County of San Bernardino Development Code
§ 88.01.060 Desert Native Plant Protection. This Section provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code §§ 80001 et seq.) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act.

(a) *Definitions*. Terms and phrases used within this Section shall be defined in Division 10 (Definitions) and/or defined by the California Food and Agricultural Code. The California Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this Development Code.

(b) Applicability. The provisions of this Section shall apply to desert native plants specified in Subdivision (c) (Regulated Desert Native Plants) that are growing on any of the following lands, unless exempt in compliance with § 88.01.030 (Exempt Activities):

(1) Privately owned or publicly owned land in the Desert Region.

(2) Privately owned or publicly owned land in any parts of the Mountain Region in which desert native plants naturally grow in a transitional habitat.

(c) Regulated Desert Native Plants. The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with § 88.01.050 (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.

(1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:

(A) Dalea spinosa (smoketree).

(B) All species of the genus Prosopis (mesquites).

(2) All species of the family Agavaceae (century plants, nolinas, yuccas).

(3) Creosote Rings, ten feet or greater in diameter.

(4) All Joshua trees.

(5) Any part of any of the following species, whether living or dead:

(C) Olneya tesota (desert ironwood).

(D) All species of the genus Prosopis (mesquites).

(E) All species of the genus Cercidium (palos verdes).

(d) Compliance with Desert Native Plants Act. Removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code §§ 80001 et seq.) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

Applicable exempt activities listed in Development Code § 88.01.030 include exemptions for government owned lands; removal of public utilities; and removal that is within 20 feet of a structure that was constructed or set down on the parcel under a County development permit. Due to these exemptions, the majority of the Project is not subject to § 88.01.060 Desert Native Plant Protection. In those areas that are not within 20 feet of a structure or that are on privately owned property, there are no Desert Native Plants that would be impacted by the Project.

ENVIRONMENTAL SETTING

The Project area, defined as the area of direct impact, is approximately 15.95 acres. Prior to field surveys, the BSA was defined as the area required for Project activities, in addition to an approximate 50-foot buffer to account for adjacent biological resources and potential changes in Project design. The total area of the BSA is approximately 23.75 acres.

Online databases from USFWS, CDFW California Natural Diversity Database (CNDDB), and California Native Plant Society (CNPS) were queried for presence of potential threatened, endangered, rare or special status species within USGS 7.5-minute quadrangles. These searches identified 17 regional species of special concern with potential to occur in the vicinity of the Project

area. After biological surveys were conducted, each species' specific habitat requirements were compared to actual site conditions and the potential for occurrence was then determined. Raw data returned from the database queries is provided in **Appendix C**.

A general biological survey was conducted on August 14, 2024, by Dokken Engineering biologists Vincent Chevreuil and Katie Jacobson. The survey consisted of a general assessment of biological conditions of the Project area, with special attention given to sensitive plant and wildlife species that were determined by the literature assessment to have a potential of occurring within the Project vicinity. Methodology involved walking meandering transects throughout the BSA and recording observed vegetation and wildlife species as well as categorizing existing habitat communities.

In addition, a jurisdictional delineation was conducted in accordance with technical methods outlined in the USACE Wetlands Delineation Manual (USACE 1987), Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008). The OHWM data sheet is included in **Appendix C**.

Dominant Land Cover and Vegetative Communities

Dominant land cover and vegetative communities within the BSA consist of urban/barren, disturbed areas, salt brush scrub, and desert sink scrub habitat located in the Mojave River Channel (**Figure 5**. **Habitat Communities**).

Urban/Barren
Urban/barren areas are characterized by urban structures, dirt roads, pavement, landscaping, and other developed areas. The BSA encompasses Baker Boulevard, which is a paved, two-lane roadway that is devoid of vegetation. In addition, numerous paved parking lots and businesses located both north and south of Baker Boulevard fall within the BSA boundaries. These areas provide little to no suitable habitat for local wildlife species. Urban/barren land cover comprises approximately 13.55 acres (57%) of the BSA (**Figure 5**. **Habitat Communities**).

Disturbed Areas
Within the BSA, disturbed areas include the undeveloped lots adjacent to Baker Boulevard that lack substantial vegetation and appear to be highly disturbed by human activity. This land cover type also includes the dirt levees, access roads, and graded areas utilized by the Flood Control District to maintain the Mojave River Channel. South of Baker Boulevard, disturbed land cover occurs in the upland areas directly adjacent to desert sink scrub habitat, delineated on August 14, 2024. Disturbed area comprises approximately 4.13 acres (17%) of the BSA (**Figure 5**. **Habitat Communities**).

Saltbush Scrub
Saltbush scrub habitat is primarily comprised of sparse, low-lying shrubs such as big saltbush (*Atriplex lentiformis*) and saltcedar (*Tamarix ramosissima*). Additional species within this habitat community include occasional stands of non-native Mediterranean canarygrass (*Phalaris minor*) as well as infrequent populations of creosote bush (*Larrea tridentata*) and honey mesquite (*Neltuma odorata*). Within the BSA, this habitat is highly fragmented and occurs along the margins of developed or highly disturbed areas. This habitat community comprises approximately 1.15 acres (5%) of the BSA (**Figure 5. Habitat Communities**).

Desert Sink Scrub
Within the BSA, Baker Boulevard passes over the Mojave River Channel, which has been classified as desert sink scrub habitat as its situated between two low-lying playas, Soda Lake

(Dry Lake) and Silver Lake (Dry Lake). Within the BSA, the channel is an excavated passageway managed by the SBCFCD which helps manage excess water flow from Soda Lake (Dry Lake), particularly during periods of heavy rainfall or flooding. The channel serves to direct floodwaters away from populated areas and infrastructure within Baker, preventing potential damage. The channel works by allowing water that exceeds the capacity of the river's main bed to flow into adjacent low-lying areas, naturally dispersing or being redirected to avoid flooding in the town. The channel primarily flows underground, and surface water is only present immediately following rain events or during historic wet years. Vegetation within the channel is similar to adjacent upland habitat and consists of stands of big saltbush and saltcedar. In addition, bush seepweed (*Suaeda nigra*) is frequently observed along the banks of the delineated channel. The stream channel comprises approximately 4.92 acres (21%) of the BSA (**Figure 5. Habitat Communities**).

Biological Study Area (23.75 acres)

Project Area (15.95 acres)

Habitat Communities

Urban/Barren (13.55 acres)

Disturbed Areas (4.13 acres)

Desert Sink Scrub (4.92 acres)

Saltbush Scrub (1.15 acres)

Mojave River Channel

CALIFORNIA 127

Baker Blvd

V:\3091_Baker_Bridge\Biology\F4_Veg_Comm_2024_10.mxd

Source: ESRI Maps Online; Dokken Engineering 12/13/2024; Created By: kjacobson

0 200 400 600 800 1,000 Feet

Figure 5
Habitat Communities

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

Hydrological Resources

Hydrological resources within the BSA consists of the Mojave River Channel. The Mojave River Channel passes underneath the existing Baker Boulevard bridge within the BSA from south to north. It stretches across the Mojave Desert, with surface water rarely visible except during significant rainfall or flooding events. The Mojave River Channel links Soda Lake (Dry Lake) to the south and Silver Lake (Dry Lake) to the north, contributing to the hydrological system in the region, though these lakes are usually dry due to the low precipitation. In the Baker area, the Mojave River Channel often runs beneath the surface due to the arid climate and sandy soils, emerging only during heavy storms or in certain sections of the riverbed. The Mojave River Channel plays a crucial role in flood management for Baker, with overflow channels directing excess water away from populated areas, protecting the town from potential flood damage during storms. The riverbed and surrounding areas support desert-adapted vegetation, such as big saltbush, saltcedar, and bush seepweed (*Suaeda nigra*). The sparse plant life is indicative of the harsh desert conditions, but these plants help stabilize the soil and provide habitat for local wildlife.

Wildlife

The majority of the BSA is comprised of paved or developed surfaces that are not suitable to support sensitive wildlife species. Wildlife habitat within the BSA is limited to the desert sink scrub habitat and the adjacent saltbush scrub habitat. During the biological survey conducted on August 14, 2024, wildlife observed within the BSA consisted of locally common bird species including common raven (Corvus corax), house sparrow (Passer domesticus), rock pigeon (Columbia livia), and Eurasian collared dove (Streptopelia decaocto). No special-status species were observed.

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2024) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages. These include areas that represent the best remaining connections between core natural areas to maintain habitat connectivity. The implementation of this Project will not result in permanent fragmentation of existing natural habitats.

The Baker Boulevard Bridge will be replaced roughly within the same linear footprint, and no new barriers or additional habitat fragmentation will be created as a result of the Project. Once complete, the Project would allow for the continued movement of wildlife along desert sink scrub habitat and would preserve existing habitat connectivity.

Regional Species and Habitats and Natural Communities of Concern

Plant and wildlife species are considered to have special status if they have been listed as such by Federal or state agencies or by one or more special interest groups, such as CNPS.

Prior to the field surveys, online databases from USFWS, CNDDB, and CNPS were queried for presence of potential threatened, endangered, rare, or special-status species. Database search results identified ten special-status or sensitive wildlife species and seven special-status or sensitive plant species with potential of occurring in the vicinity of the BSA. **Table 2** below includes a complete list of these special-status species along with a discussion and determination of each species' potential of occurring within the BSA. An analysis of habitat requirements, recorded observations, and field surveys determined that one of these species has the potential to occur within the BSA: desert tortoise (DT) (*Gopherus agassizii*).

Special Status Plants

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. Prior to field surveys, preliminary literature research of online databases concluded that ten special status plant species, as identified by federal and state laws, had the potential to occur within the Project vicinity. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA (**Appendix C – Table 2**). After a careful comparison between habitat requirements and the habitat available within the BSA, no special status plant species have potential to occur within the BSA. Please note that this table does not include any plants listed in the County of San Bernardino's Desert Native Plant Protection Code, as the majority of the Project is exempt from the code and no plants listed in the code would be impacted by the Project.

A general biological survey was conducted on August 14, 2024, by Dokken Engineering biologists Vincent Chevreuil and Katie Jacobson. The survey consisted of a general assessment of biological conditions of the Project area, with special attention given to sensitive plant and wildlife species that were determined by the literature assessment to have a potential of occurring within the Project vicinity. No special status plant species were identified during the survey efforts; and therefore, congruent with the preliminary literature research results. No Project-related impacts to special status plant species are anticipated.

Special Status Wildlife

Wildlife is considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status animals occurring on site. Prior to field surveys, preliminary literature research of online databases concluded that seven special status wildlife species have the potential of occurring within the Project vicinity. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA (**Appendix C – Table 2**). After a careful comparison between habitat requirements and the habitat available within the BSA, DT is the only special status wildlife species that has potential to occur within the BSA. Habitat requirements and ranking for DT is described below.

Desert Tortoise (DT)

The DT is listed as a threatened species on both the Federal Endangered Species Act List (1990) and the California Endangered Species Act (1989) due to habitat destruction, which has caused a substantial decline in the population. DT declines appear to have been most severe and widespread in the Western Mojave Desert due to habitat loss and degradation, especially for large-scale solar energy development projects (Dokken 2025d). It should be noted that while the DT is currently listed as threatened on the California Endangered Species Act, in April 2024, the California Fish and Game Commission unanimously decided to list the DT as endangered under California Endangered Species Act. Findings for the determination will be adopted at a future meeting. Until the adoption of determination findings, California Endangered Species Act species lists will continue to show DT as "threatened".

Most DTs inhabit creosote bush scrub habitats at elevations ranging from 1,000 to 3,000 feet above sea level, though they can be found in suitable areas up to 5,000 feet. The species is divided into two distinct populations, separated by the Mojave and Sonoran deserts. DTs occupy

a large region that spans the Mojave and Sonoran Deserts of California, Nevada, Utah, and parts of Arizona. They thrive in a variety of habitats, including sandy flats, rocky foothills, alluvial fans, washes, and canyons, where the soil is suitable for constructing burrows (Dokken 2025d). Being entirely terrestrial, DTs need firm ground for digging burrows, forbs and plants for foraging, and ample land for movement, dispersal, and gene flow (Dokken 2025d).

Desert tortoises are elusive desert dwellers, surviving extreme temperatures by spending up to 95% of their lives underground. Their strong limbs and well-developed claws allow them to dig burrows to escape the heat. This underground retreat enables them to survive ground temperatures exceeding 140°F and freezing conditions. They build hibernation dens up to 30 feet long, and the availability of soil suitable for burrowing is a key factor limiting their distribution. Burrows are often located beneath creosote bushes, where roots help stabilize the soil (Dokken 2025d).

DTs are slow to mature, reaching adulthood between 14 to 20 years, and they have long lifespans, with individuals living well over 50 years. Their reproduction cycle spans 25 years, but they have low reproductive potential, producing only 3 to 14 eggs per clutch, with juvenile mortality rates approaching 99%. Juveniles grow slowly, about 2.5 cm per year, and their soft shells make them highly vulnerable to predation (Dokken 2025d). Active from spring to fall, DTs emerge in the mornings or late afternoons to forage and hibernate during the winter. Activity timing varies by habitat, but most tortoises hibernate by late fall and remain underground until spring, only emerging during winter storms to replenish water stores. DTs sometimes dig shallow basins in impermeable soils to catch rainwater, but they can survive for years without drinking, obtaining water primarily from plants and storing it in their bladders. In the spring, DTs emerge to feed on ephemeral plants, with grasses and wildflowers providing key nutrition during a six-week period. In drier times, they rely on dry grass stems and cactus pads. Unfortunately, introduced plant species have significantly encroached on their natural habitat, degrading the ecosystem that supports their survival.

DISCUSSION OF IMPACTS

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation. As described above in the *Environmental Setting*, the USFWS, CDFW CNDDB, and CNPS database queries identified 17 species of special status plant and wildlife species with potential to occur within the Project vicinity. After a careful comparison between habitat requirements and the habitat available within the BSA, DT is the only special status species that has potential to occur within the BSA (**Appendix C – Table 2**).

The following is a discussion on potential impacts to DT and proposed avoidance, minimization, and mitigation measures that when incorporated will reduce impacts to a less than significant level.

Survey Results

The Project is located within the known range of the DT, and the BSA includes potentially suitable saltbush scrub habitat that could support the species by providing opportunities for dispersal, foraging, and refuge. However, during biological survey efforts conducted

on August 14, 2024, no DT burrows, scat or tracks were detected within the BSA. Additionally, soils within the BSA are mostly composed of clay and are unlikely to support DT burrow construction.

DTs are known to avoid developed areas and human disturbances and are generally absent from habitat within 1 km of areas with greater than 10% development (Dokken 2025d). Since the Project is in a semi-developed area and directly adjacent to a high amount of human disturbance relative to the surrounding area, it is unlikely that an individual of the species would burrow within the BSA.

There is only one documented CNDDB occurrence of the species within 10 miles of the BSA, located approximately 9.5 miles northwest, near Halloran Springs (1986). Halloran Springs (1986). However, there are four recent nearby documented iNaturalist occurrences of the species within 6 miles of the BSA in adjacent undeveloped areas. The first occurrence is approximately 4.9 miles north of the existing Baker Bridge and was recorded in June 2010. The second occurrence is approximately 5.5 miles northeast of the existing bridge and was recorded in May 2022. The third occurrence is approximately 5.3 miles east of the bridge and was recorded in April 2024. The last occurrence is approximately 3.6 miles southwest of the existing bridge and was recorded in April 2021. DTs are believed to have an average home-range of 1 km^2 with limited dispersal ability (Dokken 2025d). Therefore, there is a low potential for DT to be encountered within the BSA. Due to this low potential, consultation under Section 7 of the Endangered Species Act with the USFWS is not required and direct impacts or take of DT is not anticipated; therefore, consultation with CDFW under Section 2081 is not anticipated.

Project Impacts to DT

Permanent and temporary impacts to marginally suitable saltbush scrub habitat are anticipated to occur as a result of the proposed Project. Excavation for the southwestern bridge piers and the placement of Rock Slope Protection (RSP) around the western bridge abutment will result in approximately 0.0207 acres of permanent impacts to saltbush scrub habitat (**Appendix C – Table 3**). These activities will likely require the removal of vegetation to accommodate installation of RSP. Additionally, approximately 0.30 acres of temporary impacts are anticipated as a result of regrading within the channel as well as equipment and personnel access **(Figure 6. Biological Habitat Impacts**). However, the habitat within the BSA is highly fragmented and occurs along the margins of developed or highly disturbed areas, making it unlikely that a DT would occur here. The species is highly sensitive to human disturbance and would likely avoid the area, especially during active construction.

Cumulative Impacts to DT

The Project is not anticipated to have cumulative impacts on the DT population in the region. DT recent occurrences are concentrated outside of Baker in the surrounding areas that are undeveloped/unoccupied. Impacts to potentially suitable dispersal habitat within the BSA are relatively minor, and mostly temporary. The Project would not result in any large scale or long-term impacts to DT or potentially suitable DT dispersal habitat. Furthermore, other projects in the region that may result in impacts to DT or DT habitat would be considered separate from the proposed Project; and therefore, the Project would not result in cumulative impacts to the species.

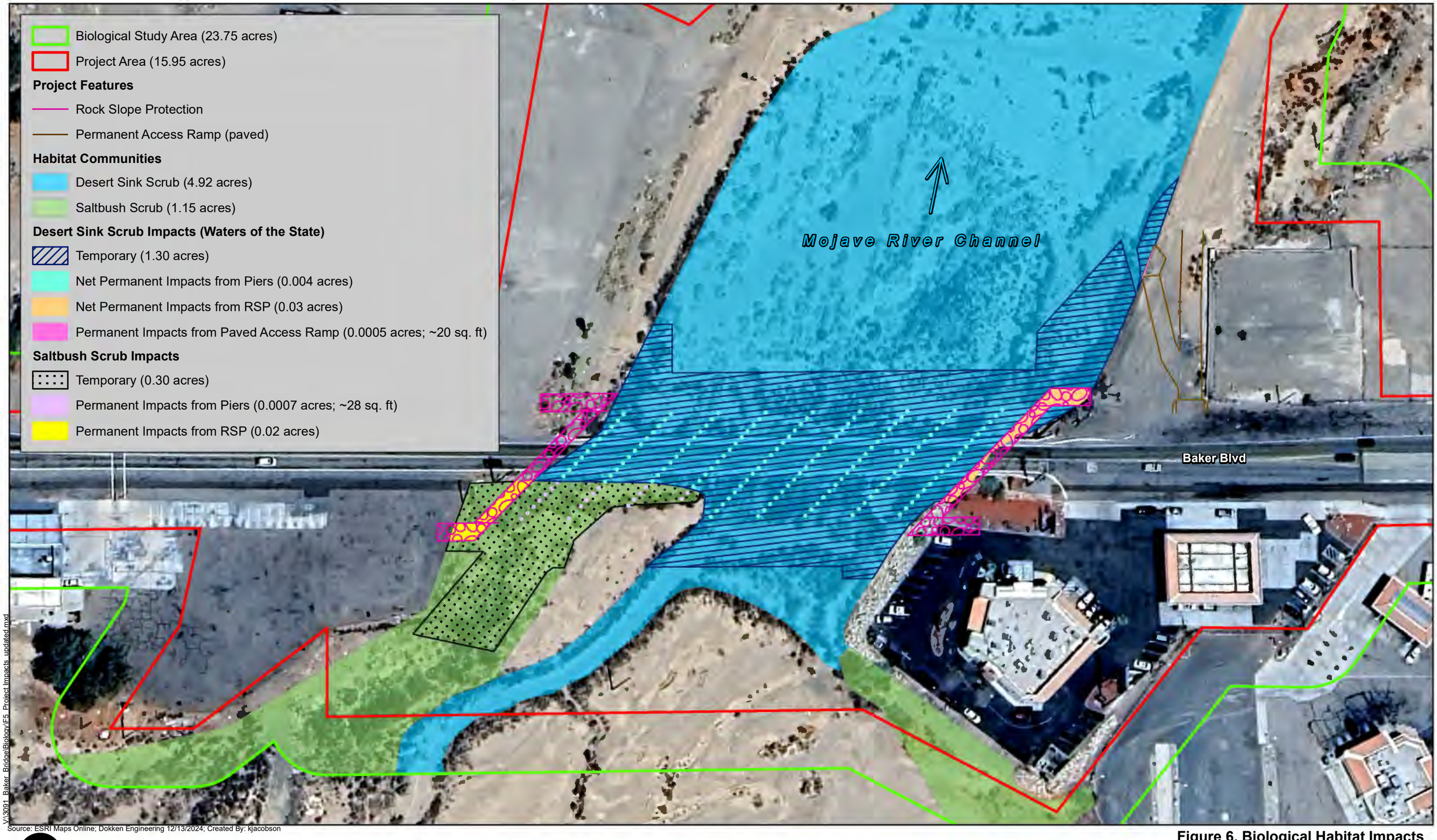


Figure 6. Biological Habitat Impacts

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project
STPL-5954(193)
Baker, San Bernardino County, California

Avoidance, Minimization, and/or Mitigation Measures for DT

Although no direct impacts to DT are anticipated, the following measures **BIO-4** through **BIO-11** will be incorporated into the Project to avoid and minimize potential Project-related impacts to the species:

BIO-4: Approximately 2-4 weeks in advance of construction activities, a focused survey for desert tortoises and their burrows within the Project area shall occur by the authorized biologist. Survey methodology shall assure 100% visual coverage of the survey area. Additionally, within 24 hours of the start of soil disturbance, another focused preconstruction clearance survey for desert tortoise will be conducted by the authorized biologist. The focused desert tortoise survey shall not be combined with other surveys conducted for other species while using the same personnel. If a tortoise or tortoise sign is found in the impact areas or within the immediate vicinity during either preconstruction survey, USFWS and CDFW shall be contacted immediately and the tortoise shall be allowed to move outside the construction area/exclusionary area on their own before the Project can commence installation of exclusionary fencing, on-site construction preparation activities, or any construction activities.

BIO-5: Areas that provide suitable habitat for the desert tortoise (saltbush scrub habitat and desert sink scrub habitat) will be marked with temporary desert tortoise exclusion fencing, if required by regulatory permits. Exclusion fencing locations will be decided in coordination with USFWS and CDFW. The desert tortoise fencing must comply with the standards outlined in the 2009 USFWS Desert Tortoise (Mojave Population) Field Manual. A USFWS/CDFW approved biologist will oversee installation of exclusion fencing.

If required by regulatory permits, desert tortoise exclusion fencing will be inspected at least twice weekly by the authorized project biologist or trained personnel and repaired as needed. Repairs must occur within two days. Any debris that accumulates along the fence should be removed as the fence is inspected.

BIO-6: The Project biologist will monitor ground disturbing activities at the Project site which may cause take of the desert tortoise. The authorized biologist will also oversee the implementation of all avoidance and minimization measures put in place to protect the desert tortoise. Should a desert tortoise be found within the Project limits, construction activities shall cease and the USFWS and CDFW shall be contacted within 12 hours. The tortoise shall be allowed to leave the Project area limits on its own volition. Construction may only recommence at the Project biologist's authority and once the desert tortoise is outside of project limits.

BIO-7: Environmental awareness training will be provided to all construction personnel prior to the onset of ground disturbing activities. The training will include information on desert tortoise, including life history, protection measures, and protocols for encounters with the species.

BIO-8: Project personnel will thoroughly check under parked vehicles/equipment and within the exclusion fence area every day prior to mobilization for desert

tortoises. If any desert tortoises are found within the staging and/or construction areas, they will be allowed to move away from such areas on their own accord. Workers will not be allowed to capture, handle, or relocate tortoises. Project activities will re-commence only once the desert tortoise is outside the Project limits or at the USFWS and CDFW approved biologist's authority.

BIO-9: Construction vehicles will not exceed 15 mph when traveling on soil surfaces within the Project limits.

BIO-10: Open trenches, auger holes, or other excavations that may act as pitfall traps will be inspected prior to working in or around the excavation area and prior to backfilling. Any excavations that remain open overnight must be covered to prevent entrapment of wildlife. Any animals found within the excavations will be relocated by the Project biologist. Should any listed or sensitive species be found within these excavations, the appropriate wildlife agency will be contacted immediately and subsequent actions will be performed under the direction of the lead wildlife agencies.

BIO-11: Should a desert tortoise be injured as a result of project related activities; it shall be immediately taken to a CDFW approved rehabilitation facility by the authorized biologist. The CDFW approved rehabilitation facility in the vicinity of the Project area is the Big Bear Alpine Zoo (909) 584-1299. Any veterinarian bills for such injured tortoises shall be paid by San Bernardino County. The CDFW and USFWS shall be notified within 12 hours of the incident. Notification shall include the date, time, location, and circumstances of the incident.

Compensatory Mitigation for DT

No compensatory mitigation for the DT is proposed, as no direct impacts to the species are expected as a result of the proposed Project.

Other Applicable Mitigation Measures

Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to prevent and control the introduction and spread of invasive species. Measure **BIO-12** will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

BIO-12: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures **BIO-13** through **BIO-15** have been incorporated into the Project design.

BIO-13: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-14: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-15: If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Sections 3513 and 3503. The implementation of measure **BIO-16** would avoid all potential impacts to migratory birds.

BIO-16: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

An initial100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant with Mitigation. As previously described in the *Regulatory Setting*, the proposed Project will comply with all relevant goals and policies outlined in the San Bernardino County General Plan (County 2022), including but not limited to:

- **Policy CO 2.1** – The County will coordinate with state and federal agencies and departments to ensure that their programs to preserve rare and endangered species and protect areas of special habitat value, as well as conserve populations and habitats of commonly occurring species, are reflected in reviews and approvals of development programs.
- **Goal CO 5** – The County will protect and preserve water resources for the maintenance, enhancement and restoration of environmental resources.
- **Goal D/CO 1** – Preserve the unique environmental features and natural resources of the Desert Region, including native wildlife, vegetation, water and scenic vistas.

Survey Results

Desert Sink Scrub/Mojave River Channel
During the biological surveys conducted on August 14, 2024, no water was observed in the Mojave River Channel. However, signs of vertisols were evident, including the presence of wide cracks. During survey efforts, a jurisdictional wetland delineation was conducted in accordance with technical methods outlined in the USACE Wetlands Delineation Manual (USACE 1987), Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008) to determine absence/presence of wetland communities, as well as the OHWM (Appendix E). During the wetland delineation, sample points were taken in the upland areas as well as within the low flow channel southwest of the existing bridge. No wetland features were identified, however OHWM indicators were evident from bank to bank and within the low flow channel.

Saltbush Scrub
The saltbush scrub habitat within the BSA is highly fragmented and occurs along the margins of developed or highly disturbed areas. Dominant species within this vegetation community include low-lying shrubs such as big saltbush (*Atriplex lentiformis*) and saltcedar (*Tamarix ramosissima*). Additional species within this habitat community include occasional stands of non-native Mediterranean canarygrass (*Phalaris minor*) as well as infrequent populations of creosote bush *(Larrea tridentata*) and honey mesquite (Neltuma odorata). Within the BSA, this habitat This habitat community comprises approximately 1.14 acres.

Project Impacts

Desert Sink Scrub/Mojave River Channel
Grading within the desert sink scrub habitat located in the Mojave River Channel will occur to restore the channel back to its original condition. Over time, storms have carried sediment and debris from upstream, depositing them downstream and causing a gradual rise in the channel bed elevation. Grading activities as well as construction of the maintenance vehicle access ramp to the channel invert will result in approximately 1.30 acres of temporary impacts to desert sink scrub. Paving of the access ramp, if implemented, will also permanently impact approximately 0.0005 acres (20 square feet) of desert sink scrub habitat. Additionally, the Project will be replacing the existing bridge piers and installing RSP around the bridge abutments. There are approximately 138, 12-inch diameter timber piles within the existing channel, or approximately 0.002 acres of permanent fill (110 square feet). These piers will be removed and replaced with 162 (144 within desert sink scrub habitat), 18-inch diameter concrete piers, which totals approximately 0.006 acres of permanent fill (255 square feet). Therefore, the total net permanent impact of the replacement bridge piers will be approximately 0.004 acres.

Furthermore, approximately 0.03 acres of permanent impacts are anticipated due to placement of RSP along the eastern bridge abutment. Please note that RSP within the channel invert will be buried below scour elevation while the RSP located above the invert will be keyed into the channel embankment. It is the RSP keyed into the channel embankment that will be considered as a permanent impact. The total net permanent fill anticipated within the desert sink scrub due to RSP is approximately 0.0345 acres (**Figure 6. Biological Habitat Impacts).**

Saltbush Scrub

Placement of RSP around the western bridge abutment will result in approximately 0.02 acres of permanent impacts to saltbush scrub habitat. In addition, approximately 0.0007 acres (28 sq. ft) of permanent impacts to this habitat community are anticipated due to the new bridge piers. These activities will likely require the removal of vegetation within both the bridge pier and RSP footprints, resulting in a total permanent impact of 0.0207 acres. Additionally, approximately 0.30 acres of temporary impacts are anticipated to facilitate grading within the channel as well as equipment and personnel access (**Figure 6. Biological Habitat Impacts; Appendix C - Table 3.**).

Avoidance, Minimization, and/or Mitigation Measures

Desert Sink Scrub/Mojave River Channel

The Project will minimize impacts to the desert sink scrub habitat located in the Mojave River Channel with the use of avoidance and minimization measure **BIO-1** which incorporates specific Best Management Practices (BMPs) described below. Impacts would be less than significant with mitigation incorporated.

BIO-1: BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction;
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

Compensatory Mitigation

The Project would result in approximately 0.0345 acres of permanent impacts to the desert sink scrub habitat located in the Mojave River Channel and temporary impacts will consist of approximately 1.30 acres. In addition to avoidance and minimization measure **BIO-1**, the following compensatory mitigation will be required:

BIO-2: The County will fulfill all compensatory mitigation required by permitting agencies (CDFW and/or RWQCB) as outlined in the final environmental permits acquired for the Project. Compensatory mitigation will be developed during the permitting phase and is anticipated to be required for permanent impacts to desert sink scrub habitat. Mitigation may consist of credit purchases, in lieu fee payments, or on/offsite habitat enhancement or restoration. All permanent impacts will be mitigated at a minimum of 1:1 ratio.

Cumulative Impacts

Desert Sink Scrub/Mojave River Channel

This section of the Mojave River Channel will be enhanced by improving the bridge's ability to withstand potential high flood events. The County does not have any future and/or reasonably foreseeable actions that would result in impacts to this stream channel at this location. The implementation of any project occurring within or near this section of the Mojave River Channel and the desert sink scrub habitat within it would be considered separate from the proposed Project. The Project would not result in long-term impacts to this portion of the Mojave River Channel as it relates to the overall function and habitat value of this resource. Thus, no cumulative impacts are anticipated as a result of the proposed Project.

Saltbush Scrub

With incorporation of measure **BIO-3** described below, impacts to saltbush scrub habitat will be avoided and minimized to the greatest extent feasible. Given the small number of permanent impacts, approximately 0.0207 acres, no compensatory mitigation is proposed.

The following avoidance, minimization, and mitigation measure **BIO-3** will be incorporated into the Project design and Project construction to reduce potential impacts to saltbush scrub habitat:

BIO-3: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. During the biological surveys conducted on August 14, 2024, no water was observed in the Mojave River Channel. However, signs of vertisols were evident, including the presence of wide cracks. During survey efforts, a jurisdictional wetland delineation was conducted in accordance with technical methods outlined in the USACE Wetlands Delineation Manual (USACE 1987), Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008) to determine absence/presence of wetland communities, as well as the OHWM (**Appendix C**). During the wetland delineation, sample points were taken in the upland areas as well as within the low flow channel southwest of the existing bridge. No wetland features were identified, however OHWM indicators were evident from bank to bank and within the low flow channel.

This habitat community has been classified as desert sink scrub as its situated between two low-lying playas, Soda Lake (Dry Lake) and Silver Lake (Dry Lake); therefore, there is no impact to federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation. As described in the *Environmental Setting*, the CDFW Biogeographic Information & Observation System (Dokken 2025d) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages. These include areas that represent the best remaining connections between core natural areas to maintain habitat connectivity. The implementation of this Project will not result in permanent fragmentation of existing natural habitats.

Within the BSA, Baker Boulevard passes over the Mojave River Channel, which has been classified as desert sink scrub habitat as its situated between two low-lying playas, Soda Lake (Dry Lake) and Silver Lake (Dry Lake). The stream channel comprises approximately 4.92 acres (21%) of the BSA (**Figure 5. Habitat Communities**). The channel primarily flows underground, and surface water is only present immediately following rain events or during historic wet years. Vegetation within the channel is similar to adjacent upland habitat and consists of stands of big saltbush and saltcedar. In addition, bush seepweed is frequently observed along the banks of the delineated channel.

Grading activities as well as construction of the maintenance vehicle access ramp to the channel invert will result in approximately 1.30 acres of temporary impacts to desert sink scrub. Paving of the access ramp, if implemented, will also permanently impact approximately 0.0005 acres (20 square feet) of desert sink scrub habitat. Additionally, the Project will be replacing the existing bridge piers and installing RSP around the bridge abutments. There are approximately 138, 12-inch diameter timber piles within the existing channel, or approximately 0.002 acres of permanent fill (110 square feet). These piers will be removed and replaced with 162 (144 within desert sink scrub habitat), 18-inch diameter concrete piers, which totals approximately 0.006 acres of permanent fill (255 square feet).

Therefore, the total net permanent impact of the replacement bridge piers will be approximately 0.004 acres.

Furthermore, approximately 0.03 acres of permanent impacts are anticipated due to placement of RSP along the eastern bridge abutment. Please note that RSP within the channel invert will be buried below scour elevation while the RSP located above the invert will be keyed into the channel embankment. It is the RSP keyed into the channel embankment that will be considered as a permanent impact. The total net permanent fill anticipated within the desert sink scrub due to RSP is approximately 0.0345 acres

Saltbush scrub habitat is also present within the BSA and is primarily comprised of sparse, low-lying shrubs such as big saltbush (Atriplex lentiformis) and saltcedar (Tamarix ramosissima). Additional species within this habitat community include occasional stands of non-native Mediterranean canarygrass (Phalaris minor) as well as infrequent populations of creosote bush (Larrea tridentata) and honey mesquite (Neltuma odorata). Within the BSA, this habitat is highly fragmented and occurs along the margins of developed or highly disturbed areas. These plants play a key role in providing food and habitat for wildlife, such as small mammals and desert birds. It may also provide marginally suitable habitat for the DT.

Placement of RSP around the western bridge abutment will result in approximately 0.02 acres of permanent impacts to saltbush scrub habitat. In addition, approximately 0.0007 acres (28 sq. ft) of permanent impacts to this habitat community are anticipated due to the new bridge piers, resulting in a total permanent impact of 0.0207 acres. Additionally, approximately 0.30 acres of temporary impacts are anticipated to facilitate grading within the channel as well as equipment and personnel access (**Figure 6. Biological Habitat Impacts; Appendix C – Table 3**).

With implementation of the avoidance, minimization, and mitigation measures **BIO-1** through **BIO-3** described in response to question **b),** the Project is anticipated to have a less than significant effect to the habitat connectivity for birds, fish, insects, or small and medium terrestrial wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation. As previously described in the *Regulatory Setting*, the proposed Project will comply with all applicable *San Bernardino County General Plan* Policies including, but not limited to: **Policy CO 2.1**, **Goal CO 5**, and **Goal D/CO 1**; and County of San Bernardino Development Code ***§* 88.01.060 Desert Native Plant Protection (a)** through **(d)**. Regarding the Desert Native Plant Protection, as discussed, applicable exempt activities listed in Development Code § 88.01.030 include exemptions for government owned lands; removal of public utilities; and removal that is within 20 feet of a structure that was constructed or set down on the parcel under a County development permit. Due to these exemptions, the majority of the Project is not subject to § 88.01.060 Desert Native Plant Protection. In those areas that are not within 20 feet of a structure or that are on privately owned property, there are no Desert Native Plants that would be impacted by the Project.

Biological resources identified within the BSA are previously described in the *Environmental Setting* and responses to questions **a)** through **d)**. The saltbush scrub vegetation community is considered a natural community of special concern as it may

provide suitable habitat for DT. Additional species within this habitat community include infrequent occurrences of honey mesquite, which is protected under development code § 88.01.060. Furthermore, the desert sink scrub habitat located in the Mojave River Channel has been identified as a natural community of special concern as it is a jurisdictional water of the State. Excavation for the bridge piers and the placement of RSP around the western bridge abutment and a permanent ramp will result in approximately 0.0207 acres of permanent impacts to saltbush scrub habitat. Similarly, the excavation for the bridge piers and the placement of RSP along the eastern bridge abutment will result in approximately 0.0345 acres of permanent impacts to the desert sink scrub habitat located in the Mojave River Channel. Additionally, grading activities as well as construction of the maintenance vehicle access ramp will result in approximately 0.30 acres of temporary impacts to saltbush scrub and 1.30 acres of temporary impacts to the desert sink scrub habitat located in the Mojave River Channel (**Figure 6. Biological Habitat Impacts; Appendix C – Table 3**).

The USFWS, CDFW CNDDB, and CNPS database queries identified 17 species of special status plant and wildlife species with potential to occur within the Project vicinity. After a careful comparison between habitat requirements and the habitat available within the BSA, DT is the only special status species that has potential to occur within the BSA (**Appendix C – Table 2**). There is only one documented CNDDB occurrence of the species within 10 miles of the BSA, located approximately 9.5 miles northwest, near Halloran Springs (1986). However, there are four recent nearby documented iNaturalist occurrences of the species within 6 miles of the BSA in adjacent undeveloped areas. The first occurrence is approximately 4.9 miles north of the existing Baker Bridge and was recorded in June 2010. The second occurrence is approximately 5.5 miles northeast of the existing bridge and was recorded in May 2022. The third occurrence is approximately 5.3 miles east of the bridge and was recorded in April 2024. The last occurrence is approximately 3.6 miles southwest of the existing bridge and was recorded in April 2021. DTs are believed to have an average home-range of 1 km^2 with limited dispersal ability (Dokken 2025d). Therefore, there is a low potential for DT to be encountered within the BSA. While consultation under Section 7 of the Endangered Species Act may be required with USFWS, direct impacts or take of DT is not anticipated, and therefore, consultation with CDFW under Section 2081 is not anticipated.
With the implementation of mitigation measures **BIO-1 through BIO-16,** local policies or codes protecting biological resources including, but not limited to **Policy CO 2.1, Goal CO 5**, and **Goal D/CO 1** of the *San Bernardino County General Plan* would be less than significant with mitigation incorporated.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the Project area; therefore, the Project will have no impact or conflict with any habitat conservation plan.

V. CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

This section describes the cultural resources present within and immediately surrounding the Area of Potential Effect (APE). Also included is an analysis of the impacts that could occur to cultural resources due to implementation of the proposed Project and appropriate mitigation measures to reduce or avoid significant impacts. The analysis of cultural resources presented in this section is based on a review of the current Project description, the Historic Property Survey Report/Archaeological Survey Report (Dokken 2025g) and the CEQA Cultural Resources Technical Report (Dokken 2025c) prepared for the Project, available literature, and an archaeological field survey conducted by Dokken Engineering archaeologist Namat Hosseinion on August 12, 2024. Please note that due to the inclusion of sensitive and confidential information, the Historic Property Survey Report/Archaeological Survey Report is not available to the general public. The CEQA Cultural Resources Technical Report is included as **Appendix H**, but the sensitive information has been redacted.

REGULATORY SETTING

CEQA provides statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect sate-owned

resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

ENVIRONMENTAL SETTING

Area of Potential Effects

The APE for the Project was configured to include the bridge, approach roadways, areas of street striping, expected grading areas within the Mojave River Channel, and staging areas for construction equipment. The horizontal APE encompasses approximately 1,200 feet of roadway approach work on Baker Boulevard, several potential temporary construction staging areas, potential temporary construction easements (TCEs), utility relocation, installation of roadway/bridge lighting, and all associated grading activities to accommodate the bridge demolition, replacement bridge installation, permanent channel access ramp construction, and channel modifications to ensure the replacement bridge has sufficient hydraulic capacity. The entire horizontal APE is 15.95 acres in size (**Figure 7. Area of Potential Effects**).

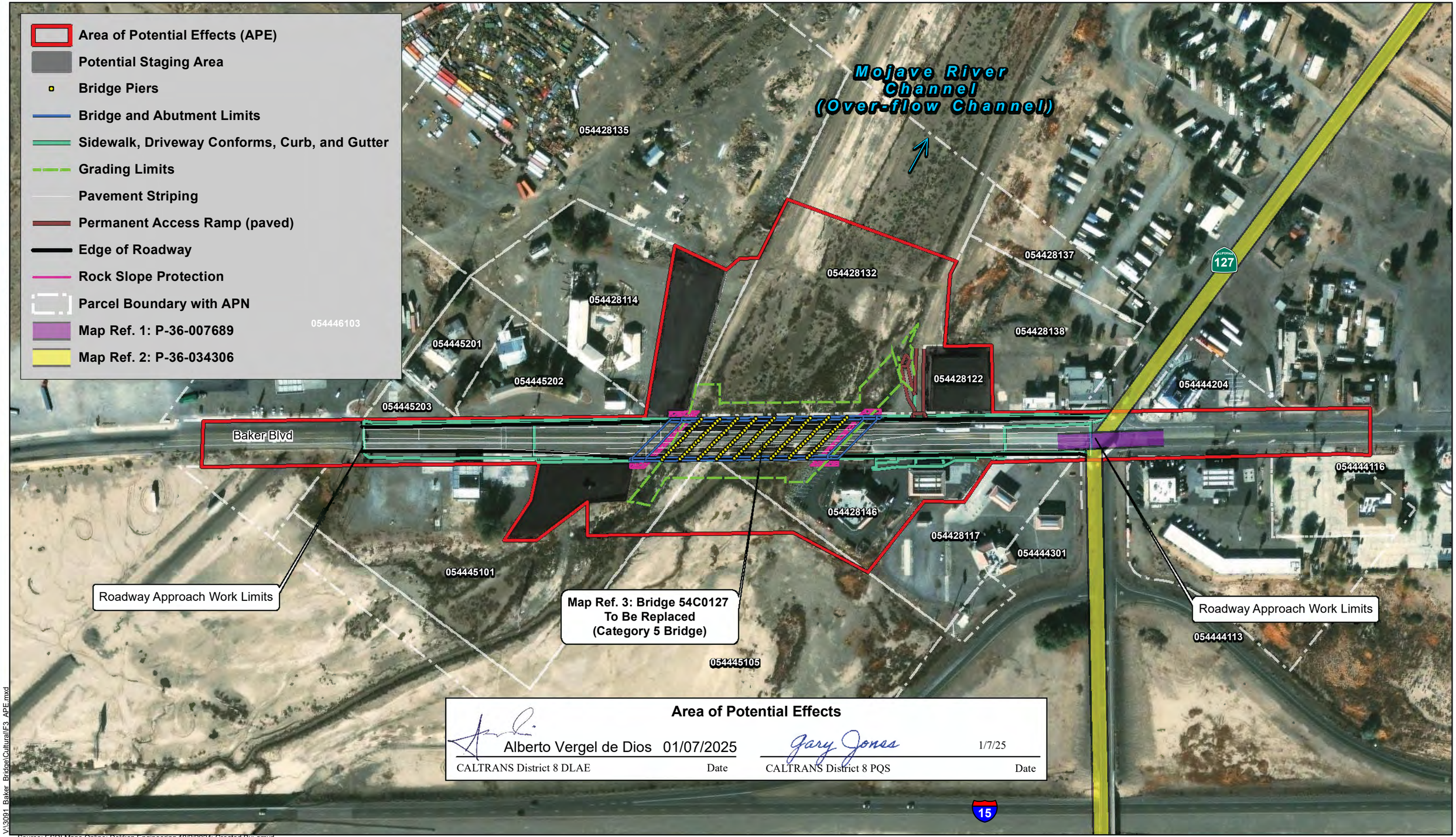
The vertical APE encompasses all grading activities required to demolish the existing bridge, install the replacement bridge, install street lighting, and relocate utilities. The vertical APE also encompasses the full height of the replacement bridge, as measured from the deepest ground disturbance in the existing channel, and the height of proposed roadway and bridge lighting, as measured from the roadway elevation. The deepest ground disturbance is associated with installation of the replacement bridge. The proposed depth for the bridge abutment walls and buried rock slope protection is 10 feet below existing channel grade with abutment piles extending an additional 30 feet (a total of 40 feet in depth for the abutments). The bridge piers will extend down about 53 feet below existing channel grade.

The proposed bridge height, including the railings, will be approximately 17 feet, as measured from the existing channel grade. The roadway lighting will match the heights of existing light poles along Baker Boulevard, extending up to 40 feet above existing roadway grade.

The majority of the deep ground disturbance will occur within the existing channel. Since its construction in 1938, the channel has been subject to significant flood (storm) events, associated storm water surface run-off/flows, and at least one additional more modification to the channel limits/structure. Such extensive ground disturbance indicates that the potential for buried sites present with the APE is low.

Sources Consulted

Background research was conducted to identify previous studies and recorded cultural resources within the APE and a 1.0-mile search radius around the APE. The background research consisted of a record search, literature and map reviews, and consultation with the Native American Heritage Commission (NAHC) and Native American groups. Available historic maps, aerial imagery, General Land Office (GLO) plat maps, geological deposit maps, and a review of soil compositions were also consulted.



Area of Potential Effects

Alberto Vergel de Dios 01/07/2025
CALTRANS District 8 DLAE Date

Gary Jones 1/7/25
CALTRANS District 8 PQS Date

V:\3091 Baker Bridge\Cultural\F3_APE.mxd

Source: ESRI Maps Online; Dokken Engineering 10/2/2024; Created By: amyd

0 200 400 600 800 1,000 Feet

Figure 7
Area of Potential Effects (APE)

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

Records Search

A record search for previously recorded resources and surveys or reports within the APE and a 1.0-mile search radius of the APE was requested from the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS). The results indicate that 34 previously documented cultural resources were reported within the 1.0-mile search radius of the APE and two (2) linear cultural resources were within the APE. The two resources include segments of P-34-007689/CA-SBR-7689H – Arrowhead Trail/Highway and P-36-034306 – Death Valley Road.

In addition to the records search results, the existing bridge, Bridge No. 54C-0127, is also over 50 years in age. Brief descriptions of the existing bridge, P-34-007689/CA-SBR-7689H– Arrowhead Trail/Highway, and P-36-034306 – Death Valley Road are provided below.

Bridge No. 54C-0127
The existing bridge was originally built in 1931 as a 93-foot (plus or minus) 5 span simple-supported stringer timber bridge crossing the Mojave River on Baker Boulevard (formerly State Route 31). It was repaired and lengthened in 1938 and 1939. Repairs conducted included removal of all untreated Douglas Fir timber within the existing bridge with Redwood; the addition of 9 new spans to the west and 8 new spans to the east increasing bridge overall length to 408-feet (plus or minus). The bridge was evaluated by Caltrans and is listed on the California Historic Bridge Inventory as a “category 5” bridge, not eligible for the National Register.

P-36-007689/CA-SBR-7689h -Arrowhead Trail/Highway
The trail was established in 1916 as a transcontinental road that once spanned over 850 miles between Los Angeles, California, and Salt Lake City, Utah. As a designated all-weather “scenic highway”, the development of this road stimulated travel through Southern California. In 1926, the road was absorbed by the U.S. Route 91 and portions of modern-day Interstate 15 (I-15). Today, the resource consists of multiple discontinuous segments that parallel I-15. Within the APE, a short segment was recorded at the intersection of SR 127 and Baker Boulevard. Discontinuous segments have been recorded both immediately west and east of the APE. These discontinuous segments were previously evaluated by Bureau of Land Management (BLM) and determined not eligible for inclusion in the National Register through State Historic Preservation Officer (SHPO) consultation. As the California Register significance criteria are modeled on the National Register criteria, these segments are also not considered eligible for listing on the California Register.

P-36-034306 - Death Valley Road
This resource is a two-lane paved road that originates in Baker near Kelbaker Road and extends northwest for approximately 41 miles. It was designated as SR 127 in 1933. The roadway was evaluated by BLM and determined not eligible for inclusion in the National Register through consultation with the SHPO. As the California Register significance criteria are modeled on the National Register criteria, this roadway segment is also not considered eligible for listing on the California Register.

Native American Consultation

A letter and map figures depicting the Project vicinity and location were sent to the NAHC requesting a review of the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project. The NAHC replied that the results of the review were *negative*.

On December 18, 2023, initial consultation letters were mailed to the Twenty-Nine Palms Band, Colorado River Indian Tribes, and the Yuhaaviatam of San Manual Nation (formerly San Manuel Band of Mission Indians). The Yuhaaviatam of San Manual Nation replied December 28, 2023 that the Project is outside of their area of interest and declined to consult on the Project. No response from the Twenty-Nine Palms Band of Mission Indians has been received.

Archaeological Site Sensitivity

To determine the archaeological sensitivity of the APE, historic literature, geographic features, soils, landform modifications, and past cultural resources survey results were reviewed. Several flooding events occurred within Baker in 1862, 1938, 1978, 2005, and 2014. These events would have eroded soils from the APE, potentially removing or damaging archaeological resources, while also redepositing soils from other areas. The most severe flood appears to have been the March 1938 flood, which damaged the former banks of the Mojave River Channel and resulted in damage to the Baker Boulevard bridge which predates the existing structure. It is unclear if the shallow embankments of the channel were washed away during the flood event or if the channel was significantly widened to prevent future flooding damage. Either way, the much shorter 93-feet long bridge was repaired and lengthened to approximately 408 feet to match the significantly wider channel constructed adjacent to the bridge. This indicates that a great amount of natural soil was removed from the APE. If cultural resources were present along these banks, they have since most likely been removed during the expansion of the flood control channel (Dokken 2025c).

Three additional distinct modifications occurred within the Mojave River Channel, as shown below. First, the 1973 aerial image (**Image 1**) indicates an artificial basin was created north of the bridge with a distinct low-flow water channel visibly transporting water. Later, the 1994 aerial image (**Image 2**) shows a more uniform, expanded corridor of the Mojave River Channel created by and currently maintained by the San Bernardino County Flood Control District. The basin is also no longer present. Last, sometime between 1994 and 2004, the southeast extent of the channel was narrowed as a result of a commercial property extending approximately 100 feet into the channel (**Image 3**). This lot expansion required excavation of the existing channel bed and embankments and deposition of fill into the channel to maintain the lot's elevation and extend its square footage and usable space.

The remainder of the APE largely consists of previously disturbed soils due to the construction of the roadway, Baker Bridge piers and abutments, and installation of utilities (buried and aerial) and street lighting.

Although Pleistocene-Holocene aged soils are present (Dokken 2025c), which were present during human occupation, the APE has undergone several decades of extensive landform modification due to flood events, creation and maintenance of the Mojave River Channel for flood control, construction of the roadway, installation of buried and aerial utilities, installation of roadway lighting, and construction of the existing bridge, including its piers and abutments. The overall APE vicinity has also been heavily modified from its original landscape due to the construction of gas stations and other commercial ventures. These extensive disturbances, combined with a lack of recorded archaeological resources within the APE confirm there is a very low potential for archaeological resources to be present within the APE.

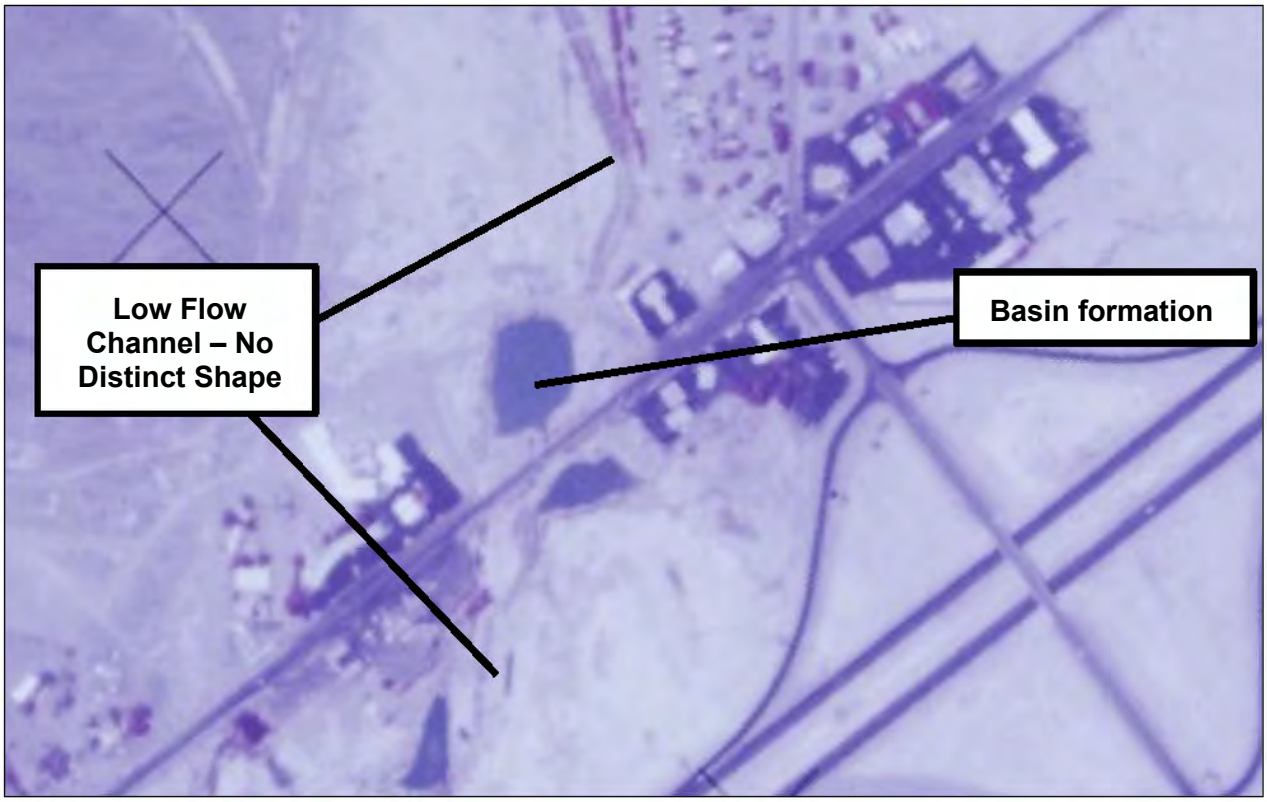


Image 1: 1973 Aerial overview of APE

Image 2: 1994 Aerial overview of APE.

Image 3: 2023 Aerial overview of APE.

Cultural Survey

An archaeological field survey was conducted on August 12, 2024, by consulting archaeologist Namat Hosseinion for the purposes of identifying and recording archaeological resources. The surface survey was conducted via controlled transects spaced at no greater than 10-meter intervals within the entire APE. Special attention was paid to all observed surface exposures and possible anthropogenic soils.

No archaeological resources were identified during the pedestrian survey. The survey did confirm that the previously recorded and evaluated resources were present and in the same condition as noted in the site recordations/lists: P-36-007689/CA-SBR-7689h - Arrowhead Trail/Highway; P-36-034306 - Death Valley Road; and Bridge No. 54C-0127.

Above all, the pedestrian survey confirmed what was noted during historic aerail review of the APE – extensive landform modifcations and past ground disturbance associated with widening and maintaining the Mojave River Channel as a flood control channel, construction of the extant bridge, construction of the roadway, installation of buried and aerial utilities, expansion of commercial property into the Mojave River Channel, and overall residential/commercial development.

DISCUSSION OF IMPACTS

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant with Mitigation. The only cultural resources identified within the APE were: P-36-007689/CA-SBR-7689h - Arrowhead Trail/Highway; P-36-034306 - Death Valley Road; and Bridge No. 54C-0127. As mentioned, all three resources have been previously determined to not be eligible for listing on the National Register through consultation with the SHPO. As the California Register significance criteria are modeled on the National Register criteria, these resources are also not considered eligible for listing on the California Register; therefore, there are no known historical resources present that could be impacted by the Project.

Further, an assessment of the potential for subsurface cultural resources to be present within the APE was conducted for this Project and determined to be low due to the amount of previous landform modifications throughout the area which would have removed subsurface cultural resources, should they have been present. However, should currently unknown subsurface cultural resources that have the potential to be eligible for the National Register or California Register be encountered during construction, implementation of measures **CR-1** and **CR-2** would reduce Project impacts to less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation. As described in the *Environmental Setting*, the only cultural resources present within the APE consisted of P-36-007689/CA-SBR-7689h - Arrowhead Trail/Highway; P-36-034306 - Death Valley Road; and Bridge No. 54C-0127. While these are historic-era cultural resources, they are not considered archaeological resources. Further, all three cultural resources were previously determined to not be eligible for listing on the National Register through consultation with the SHPO. As the California Register significance criteria are modeled on the National Register criteria, these resources are also not considered eligible for listing on the California Register.

Further, as discussed above, an assessment of the potential for subsurface cultural resources to be present within the APE was conducted for this Project and determined to be low due to the amount of previous landform modifications throughout the area which would have removed subsurface cultural resources, should they have been present. However, should currently unknown subsurface cultural resources that have the potential to be eligible for the National Register or California Register be encountered during construction, implementation of measures **CR-1** and **CR-2** would reduce Project impacts to less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. As stated in responses to questions **a)** and **b)**, and as described in the *Environmental Setting*, there are only three cultural resources identified within the APE - P-36-007689/CA-SBR-7689h - Arrowhead Trail/Highway; P-36-034306 - Death Valley Road; and Bridge No. 54C-0127. None of these resources have the potential for associated human remains to be present. Further, as discussed above,

an assessment of the potential for subsurface cultural resources to be present within the APE was conducted for this Project and determined to be low due to the amount of previous landform modifications throughout the area which would have removed subsurface cultural resources, should they have been present. However, should currently unknown subsurface cultural resources that have the potential to be eligible for the National Register or California Register be encountered during construction, implementation of measures **CR-1** and **CR-2** would reduce Project impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

CR-1: If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

CR-2: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). Further provisions of PRC 5097.98 are to be followed as applicable.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

According to the *County Policy Plan*, historically, energy has been generated by burning fossil fuels such as coal, oil, and natural gas. The County has identified natural gas as contributing to nearly three quarters of the County's energy production (County 2020). As fossil fuel supplies have substantially reduced, renewable energy (RE) sources have become a crucial part of the County's planning process. RE technologies capture energy from ongoing natural sources such as solar radiation, wind, tides, waves, rivers, biological processes, and geothermal heat. San Bernardino County has abundant RE resources with the potential to generate substantial energy (County 2020).

DISCUSSION OF IMPACTS

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The proposed Project will include the replacement and addition of streetlights. These fixtures will utilize Light Emitting Diode (LED) bulbs for energy efficiency. LED bulbs are energy efficient (consuming less than 20 watts or .000020 gigawatt-hours per day) and have a long use-life. This is consistent with the County's General Plan and would have no noticeable effect on baseline demands which include consumption of over 300,000 gigawatt-hours annually throughout the state (CEC 2022). Further, although the widening of the bridge will add travel lanes, traffic forecast modeling indicates that the average annual vehicle miles travelled would not increase as a result of Project implementation; therefore, energy consumption for operational use of the bridge would not be impacted by the Project.

Proposed Project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Fuel consumption was calculated by inputting emissions results from the Caltrans Construction Emissions Tool (Cal-CET) model. Fuel consumption was then converted into British thermal units (BTU) to express energy consumption using BTU conversion rates provided by the US Energy Information Administration (US EIA, May 2021). The estimated annual fuel/energy consumption needed to construct the proposed Project is displayed in the below table.

Table 6. Construction Fuel and Energy Consumption

Construction Year	Annual Energy Consumption				
	Diesel		Gasoline		Electricity
	Gallons	BTUs	Gallons	BTUs	Kilowatts
2027/2028	33,499	4.646311e9	9,738	1.21725e9	3,474

As indicated in the table, construction of the Project would result in the short-term consumption of 33,499 gallons from diesel-powered equipment and 9,738 gallons from gasoline-powered equipment. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand. Demand for fuel would have no noticeable effect on peak or baseline demands for fuel consumption, which is in the billions of gallons annually for the State (CEC 2025a, 2025b). Electrical usage is estimated at 3,474 kWh to construct the Project, which is equivalent to 0.003474 gigawatt-hours. This consumption would have no noticeable effect on baseline demands which include consumption of over 300,000 gigawatt-hours annually throughout the state (CEC 2022).

Consumption of these energy products is necessary for the Project and would be used efficiently and in accordance with the County's General Plan and all applicable local, state, and federal laws. Appropriate construction equipment would be used to minimize wasteful or inefficient actions, and construction energy consumption would not cause a significant reduction in available supplies. Therefore, the impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would not conflict with County Policy Plan renewable energy or energy efficiency goals and policies. The proposed Project would improve structure safety and operations through replacement of the existing bridge and approach roadways. As described in response to question **a)**, LED bulbs will be installed in the proposed streetlights for energy efficiency. The proposed Project is needed to meet current structural design standards. Therefore, the Project would not conflict with or obstruct a State or local plan for renewable energy, and no impact would occur.

VII. GEOLOGY AND SOILS

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

This section evaluates the potential for the proposed Project to impact geological and soil resources in the County. Geology, soils, and seismic concerns as they relate to public safety and Project design. Earthquakes are prime considerations in the design and retrofit of structures. The analysis in this section is based in part on the Foundations Report prepared by Earth Mechanics, Inc. (EMI 2024).

REGULATORY SETTING

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

ENVIRONMENTAL SETTING

Physiography and Topography

The Project area is located in the Mojave Desert geomorphic province in southern California. The Mojave Desert geomorphic province of California is a wedge-shaped region bounded by the Garlock fault on the north, the San Andreas fault on the southwest, and the Nevada state line on the east. The Mojave Desert includes isolated mountain ranges, separated by expanses of desert plains, and broad playas. Most of the area is undeveloped open desert terrain with extensive soil and rock exposures and sparse vegetation. Elevations in the Mojave Desert generally range between about 1,000 and 6,000 feet above mean sea level (msl).

The major river drainage is the Mojave River. The Mojave River originates in the eastern slopes of the San Bernardino Mountains and flows northeastward for approximately 100 miles, terminating at the dry Soda Lake (Dry Lake) near Baker, in eastern California. Except for during extreme floods, most of the river's flow is underground with the surface channels remaining dry. The Mojave River Channel crosses beneath the proposed Project area.

Stratigraphy

The Project area is underlain by Quaternary alluvial sediments. The Quaternary deposits include unconsolidated Holocene (less than 11,000 years old) deposits overlying more consolidated Pleistocene (11,000 to 2.6 million years old) alluvial deposits. The deposits are derived from the Mojave River which crosses the Project area. The alluvial soils generally consist of silty sands to silty clay. The alluvial soils are underlain by metamorphic and granitic basement rock that is exposed within the hills west of the Project area.

Geologic Structure

The Project area lies within the Mojave Desert, a wedge-shaped region bounded by the right lateral San Andreas fault system on the southwest, the left-lateral Garlock fault on the north, and the Colorado River on the east. Caught between these fault systems, the Mojave Desert region is undergoing active transpressional deformation and shortening.

Within the central part of the Mojave Desert, most faults are northwest-trending, right-lateral faults. These faults comprise the Eastern California Shear Zone, which allows for the transfer of plate motion between the San Andreas fault system and the Walker Lane Belt. The nearest fault to the Project area is the Baker fault. The Baker fault is located approximately 3.5 miles west of the Project area.

Faulting

The Mojave Desert is a seismically active area and may experience ground motion from regional earthquakes. However, there are no mapped active faults crossing within 1,000 feet of any of the structures (EMI 2024), and the structures are not located within an Alquist-Priolo Earthquake fault zone as defined by the California Geologic Survey.

The nearest active faults to the structures are the Red Pass fault, located approximately 13.6 miles southwest of the proposed Project, the Manix-Afton Hills fault, located approximately 23

miles southwest of the bridge site and the Garlock fault, located approximately 21 miles north-northwest of the proposed Project.

Red Pass Fault

The Holocene-age Red Pass Fault is located about 13.5 miles southwest of the Project area. The fault is approximately 10 miles long and exhibits right lateral strike slip movement. It is considered capable of generating a M6.6 earthquake.

Manix Fault

The left-lateral strike-slip Manix Fault is located about 23 miles southwest of the Project area. The Manix fault was the source of a ground rupturing M6.5 earthquake in 1947. It is considered capable of generating a maximum earthquake of M7.0 and has an estimated slip rate less than 1.0 mm/year.

Garlock Fault

The Garlock fault is a near vertical, left lateral strike-slip fault which extends for approximately 150 miles northeastward from its intersection with the San Andreas fault near Gorman, CA to the intersection with the Death Valley fault system in the Avawatz Mountains. As a defining feature of the California landscape, the Garlock fault separates the Mojave Desert geomorphic province from the Tehachapi Mountains and the Sierra Nevada and Basin and Range provinces to the north and northeast.

Seismicity

The Project area is in seismically active southern California, and the local area has historically experienced shaking from major earthquakes, which is approximately the last 150 years. Most earthquakes in the eastern Mojave Desert region occur in proximity to the major faults associated with the Eastern California Shear Zone (ECSZ). Major historical earthquakes include the 1999 Hector Mine, 1992 Landers, 1992 Big Bear Lake, 1947 Manix, and 1916 Death Valley earthquakes.

Soils Report

A Natural Resources Conservation Service (NRCS) custom soils report was obtained through the NRCS' web site. The NRCS report states that no digital data is available for the study area. The Foundation Report included a geotechnical field exploration including drilling and logging of exploratory bores and laboratory testing of selected subsurface soil samples. The Preliminary Foundation Report says:

> "The proposed bridge site is underlain by Quaternary alluvial sediments. The Quaternary deposits include unconsolidated Holocene (less than 11,000 years old) deposits overlying more consolidated Pleistocene (11,000 to 2.6 million years old) alluvial deposits. The deposits are derived from the Mojave River Channel which crosses the proposed bridge site. The alluvial soils generally consist of silty sands to silty clay. The alluvial soils are underlain by metamorphic and granitic basement rock that is exposed within the hills west of the project site."

The Preliminary Foundation Report further says:

> "The project corridor and bridge site are underlain by alluvial fan deposits. Although collapsible soils could potentially be a threat to the site based on the above sand

deposits, the laboratory test results, soil classifications and relatively high blowcounts from the site-specific soil borings indicates collapsible soil/hydroconsolidation potential is moderate at the subject bridge site."

DISCUSSION OF IMPACTS

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
ii) Strong seismic ground shaking?
iii) Seismic-related ground failure, including liquefaction?
iv) Landslides?

Less than Significant (i). The Project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides.

As previously described in the *Environmental Setting*, the Mojave Desert is a seismically active area and may experience ground motion from regional earthquakes. However, there are no mapped active faults crossing within 1,000 feet of any of the structures (EMI 2024), and the structures are not located within an Alquist-Priolo Earthquake fault zone as defined by the California Geologic Survey.

The nearest active faults to the structures are the Red Pass fault, located approximately 13.6 miles southwest of the proposed Project, the Manix-Afton Hills fault, located approximately 23 miles southwest of the bridge site and the Garlock fault, located approximately 21 miles north-northwest of the proposed Project.

Additionally, the bridge will be designed and constructed per State and Federal seismic design standards. These standards require the design to meet collapse prevention and public safety criteria during the maximum credible earthquake event (as determined by the current standards). As there are no nearby active faults and as the overcrossing and bridge will be designed to meet collapse prevention, the Project has limited potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic activity.

Landslides usually occur in locations with steep slopes and unstable soils. The majority of the Project area is situated on flat topography where the potential for slope failure is minimal to low. The Project would also have no impact related to seismic-related failure, including liquefaction, because the potential is believed to be slight at this predominantly flat, low-seismicity site. Design and construction in accordance with Caltrans' seismic design criteria will ensure that substantial impacts due to seismic forces and displacements are avoided or minimized to the extent feasible.

As described in the *Environmental Setting*, the Project corridor and bridge site are underlain by alluvial fan deposits. Although collapsible soils could potentially be a threat to the site based on the above sand deposits, the laboratory test results, soil classifications

and relatively high blowcounts from the site-specific soil borings indicates collapsible soil/hydroconsolidation potential is moderate at the subject bridge site.

As there is limited potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; as the Project will meet State and Federal seismic design standards to prevent collapse; and as all new slope design will incorporate stability analysis data to ensure they are designed to ensure stability, the Project will have a less than significant impact. A less than significant impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant with Mitigation. As described in the *Environmental Setting*, a NRCS Web Soil Survey was used to identify soils within the Project area (EMI 2024); however, the NRCS report states that no digital data is available for the Project area. The proposed Project area is underlain by Quaternary alluvial sediments. The alluvial soils generally consist of silty sands to silty clay. The alluvial soils are underlain by metamorphic and granitic basement rock that is exposed within the hills west of the Project area.

The proposed Project would include the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The proposed Project would cause potential impacts of soil erosion or loss of topsoil during construction. Potential impacts to soils would be minimized through soil stabilization measures covered within the required Construction General Permit and implementation of the SWPPP as discussed in section **2.4 Required Project Approvals** and section **3.X. Hydrology and Water Quality**. Erosion control practices outlined in a SWPPP, would reduce any potential impacts of the Project to a less than significant level, and no mitigation is required. In addition, measures **WQ-1** and **WQ-2,** in section **3.X. Hydrology and Water Quality** of this document, would further reduce impacts to erosion of soil to less than significant with mitigation.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. Refer to response to question **a)**. The Project will not be located on soil that is known to be unstable or would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. As such, there is limited potential for the risk of surface rupture and strong seismic ground shaking that would cause landslides, lateral spreading, subsidence, liquefaction, or collapse; thus, the Project will have a less than significant impact.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact. Refer to response to questions **a)** and **b)**. The Project will not be located on expansive soils creating substantial risks to life or property. As there are no nearby active faults and no expansive soils present, there is limited potential for the Project to create substantial risks to life or property; thus, the Project would have a less than significant impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project will not utilize septic tanks or an alternative wastewater disposal system on the site. Therefore, the Project would have no impact due to soils incapable of adequately supporting septic systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. A Paleontological Inventory Report was prepared for the proposed Project (Cogstone 2024). The ground surface of the Project is mapped as late Pleistocene to Holocene young alluvial fan deposits emplaced less than 129,000 years ago and late Holocene playa sediments deposited less than 5,000 years ago. Pleistocene fossils are known from regional lakes and adjacent river deposits in the east Mojave Desert. Specimens of extinct western tortoise, asphalt stork, small American coot, ground sloths, dire wolf, short-faced bear, a medium sized scimitar-tooth cat, American lion, horses, ancient bison, camels, llama, dwarf pronghorn antelope, four horned pronghorn, and mammoth have been recovered. Pleistocene or Holocene specimens of bird, rodents, squirrels, rabbit, and bovid have also been recovered from deposits similar to those of the Project area.

Due to the locations of some of the fossils referenced and the lack of construction over the area, most of the nearby fossils have been recovered from the surface or within small erosional channels. Because of this, all playa deposits are given a high potential, although the potential decreases near the center of the playas and increases near the margins or where channels are present. Due to the coarse-grained nature of the alluvial fan deposit, it is given a low potential. However, the potential for the alluvial fan increases near the playa deposits where the two units merge, which occurs within the Project area.

As this indicates that the Project area has the potential for fossils, implementation of measures **PAL-1** and **PAL-2** would reduce potential Project impacts to a less than significant level.

Avoidance, Minimization, and/or Mitigation Measures

PAL-1: A Paleontological Mitigation Plan shall be created for the Project. Preparation of the plan shall be done by a Principal Paleontologist. The Principal Paleontologist will meet the qualifications outlined under Caltrans Standard Environmental Reference, Volume 1, Chapter 8 (SER V1 Ch8). The Principal Paleontologist will be responsible for implementing the mitigation plan and maintaining professional standards of work to the recommendations of Caltrans Standard Environmental Reference Volume 1 Chapter 8.

PAL-2: Conduct paleontological monitoring:

- Full time paleontological monitoring is recommended for mass excavations exceeding 3 feet in Pleistocene deposits.
- Full time paleontological monitoring is recommended for mass excavations exceeding 5 feet in Holocene deposits.
- Full time monitoring should be conducted initially and depending on

the nature of sediments, the Principal Paleontologist may reduce the amount of monitoring to part-time or even spot checking. These decisions should be coordinated with the County.

- No monitoring is recommended for augering, potholing, pile driving, CIDH columns, or other excavation activities which will not allow the context of the fossil to be observed.
- If unanticipated discoveries of paleontological resources occur during construction, all work within 50 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist.

"Mass excavations" exclude augering, potholing, pile driving, or other excavation activities which will not allow the context of the fossil to be observed.

VIII. GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

REGULATORY SETTING

Federal and State

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO_2, CH_4, NOX, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the EPA. The waiver was denied by the EPA in December 2007 and efforts to overturn the decision had been unsuccessful. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. On January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts* v. *EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010[1] and significantly increased the fuel economy of all new passenger cars and light trucks sold in the United States. The standards required these vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. In August 2012, the federal government adopted the second rule that

[1]] http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq

increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 miles per gallon by 2025. Because NHTSA cannot set standards beyond model year 2021 due to statutory obligations and the rules' long timeframe, a mid-term evaluation is included in the rule. The Mid-Term Evaluation is the overarching process by which NHTSA, EPA, and ARB will decide on CAFE and GHG emissions standard stringency for model years 2022–2025. NHTSA has not formally adopted standards for model years 2022 through 2025. However, the EPA finalized its mid-term review in January 2017, affirming that the target fleet average of at least 54.5 miles per gallon by 2025 was appropriate. In March 2017, President Trump ordered EPA to reopen the review and reconsider the mileage target.[2]

NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO_2 emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

Presidential Executive Order 13783, *Promoting Energy Independence and Economic Growth*, of March 28, 2017, orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of GHGs." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Senate Bill 32 (SB-32) is a California Senate bill expanding upon AB-32 to reduce GHG emissions. SB-32 requires that there be a reduction in GHG emissions to 40% below the 1990 levels by 2030. SB-32 was contingent on the passing of Assembly Bill 197, which increased legislative oversight of CARB and is intended to ensure CARB must report to the legislature. AB-197 was signed into law on September 8, 2016.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the Project must be compared with the effects of past, current, and probable future projects. To gather sufficient

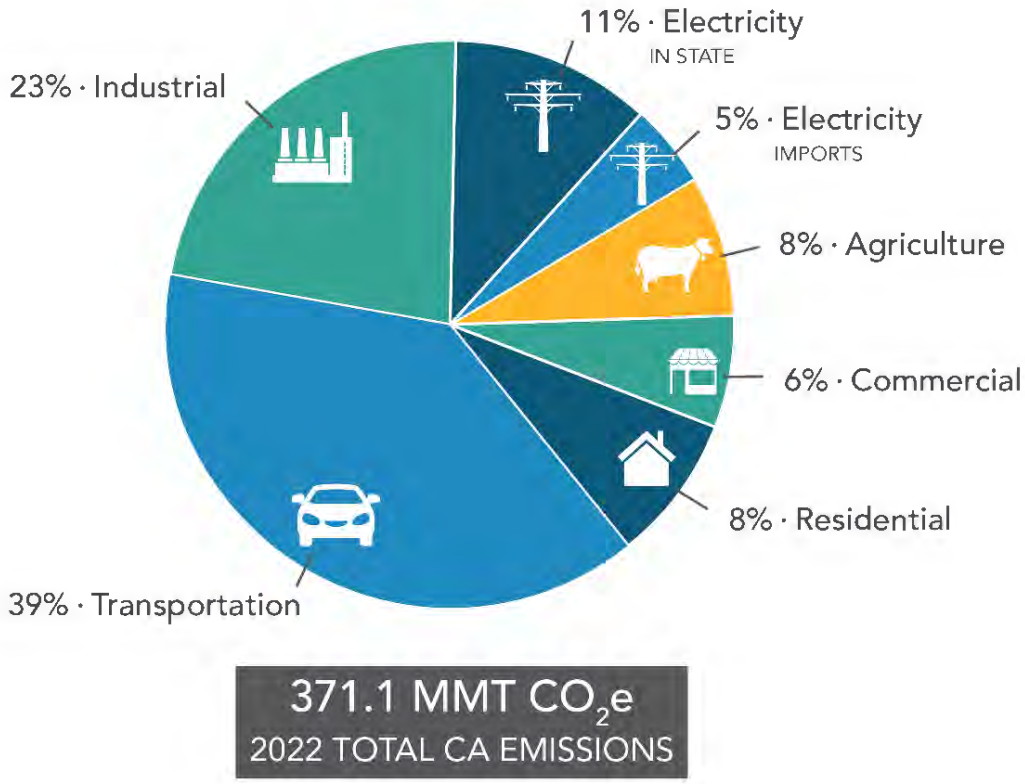
[2] http://www.nbcnews.com/business/autos/trump-rolls-back-obama-era-fuel-economy-standards-n734256 and https://www.federalregister.gov/documents/2017/03/22/2017-05316/notice-of-intention-to-reconsider-the-final-determination-of-the-mid-term-evaluation-of-greenhouse

information on a global scale of all past, current, and future projects to make this determination is a difficult if not impossible task.

CARB 2022 Climate Change Scoping Plan

As part of its supporting documentation for the 2022 Scoping Plan for Achieving Carbon Neutrality, CARB released an updated version of the GHG inventory for California (December 14, 2023). **Figure 8. California Greenhouse Gas Inventory** is a graph from that update that shows the total GHG emissions for California for 2021.

Figure 8. California Greenhouse Gas Inventory



(Taken from: https://ww2.arb.ca.gov/ghg-inventory-data)

Local

San Bernardino County Regional Greenhouse Gas Reduction Plan (2021)

In response to AB 32, a project partnership, led by SBCTA, has compiled an inventory of GHG emissions and developed reduction measures that could be adopted by the 25 Partnership Jurisdictions of San Bernardino County. The regional GHG reduction plan serves as the baseline for cities in the County to develop a more detailed community level climate action plan (CAP).

San Bernardino County Policy Plan (2022)

The policy of Goal NR-1 Air Quality related to GHG described below is excerpted from San Bernardino County Policy Plan – Natural Resources chapter (County 2022).

Policy NR-1.7 greenhouse gas reduction targets – We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.

ENVIRONMENTAL SETTING

The term GHG is used to describe atmospheric gases that absorb solar radiation and subsequently emit radiation in the thermal infrared region of the energy spectrum, trapping heat in the Earth's atmosphere. These gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and water vapor, among others. A growing body of research attributes long-term changes in temperature, precipitation, and other elements of Earth's climate to large increases in GHG emissions since the mid-nineteenth century, particularly from human activity related to fossil fuel combustion. Anthropogenic GHG emissions of particular interest include CO2, CH4, N2O, and fluorinated gases.

GHGs differ in how much heat each traps in the atmosphere (global warming potential, or GWP). CO2 is the most important GHG, so amounts of other gases are expressed relative to CO2, using a metric called "carbon dioxide equivalent" (CO2e). The global warming potential of CO2 is assigned a value of 1, and the warming potential of other gases is assessed as multiples of CO2. For example, the 2007 International Panel on Climate Change Fourth Assessment Report calculates the GWP of CH4 as 25 and the GWP of N2O as 298, over a 100-year time horizon. Generally, estimates of all GHGs are summed to obtain total emissions for a project or given time period, usually expressed in metric tons (MTCO2e), or million metric tons (MMTCO2e).

As evidence has mounted for the relationship of climate changes to rising GHGs, federal and state governments have established numerous policies and goals targeted to improving energy efficiency and fuel economy, and reducing GHG emissions. Nationally, electricity generation is the largest source of GHG emissions, followed by transportation. In California, however, transportation is the largest contributor to GHGs.

DISCUSSION OF IMPACTS

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

Less Than Significant. GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. For the Project, construction GHG emissions would include emissions produced by onsite construction equipment.

Table 7. CO_2 Emissions during Peak Hour gives projected CO_2 emissions for existing, design year No-Build, and design year Build Alternative conditions using peak hour traffic volumes along Alvarado Canyon Road and adjacent roadways where the realignment would occur. In the existing year, CO_2 emissions were modelled to be 172 pounds during peak hour. CO_2 emissions in the design year under No Build conditions were modelled to be 188 pounds during peak hour. CO_2 emissions in the design year are expected to increase 16 pounds during peak hour under no-build conditions. CO_2 emissions in the design year under Build Conditions were modelled to be 188 pounds during peak hour. CO_2 emissions in the design year are expected to increase by 16 pounds, or approximately 9%, over existing conditions if the Project is implemented. The CT-EMFAC model does not account for the Project's benefits related to congestion or vehicle delay; however, if modeled, these would yield a reduction in the GHG emissions estimates for the build alternative. The emission estimate below is the most conservative estimate as it does not

take any of these other factors into consideration, which would likely reduce the GHG emissions estimate for the build alternative.

Table 7. CO_2 Emissions during Peak Hour

Scenario/ Analysis Year	CO2 Emissions (lbs)	% change from Existing	% increase from No Build to Build
Baseline (Existing Conditions) 2024	169.134		
No Build Future (2050)	183.741	+9%	
Future + Project (2050)	183.741	+9%	+0%
Source: Dokken 2025f			

GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds. The Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the Project in and of itself will not generate increase traffic volume and/or demand. Therefore, a less than significant impact to GHG emissions or climate change would result from operations.

As discussed in section **3.III. Air Quality**, adherence to applicable MDAQMD rules and regulations and standard Caltrans Best Management Practices would be sufficient to keep impacts from criteria pollutants, including CO_2, to a less than significant level during construction. Furthermore, **Table 7** depicts a +0% increase from the No Build to Build alternative demonstrating that the proposed Project contribution to global climate change through GHG emissions are considered less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. Implementation of the proposed Project would not conflict with or obstruct implementation of any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As shown The proposed Project would also be consistent with circulation policies outlined in the San Bernardino County General Plans.

As described in response to question **a)**, construction and operation of the proposed Project would be consistent with applicable regulatory standards and requirements, including consistency with applicable MDAQMD rules and regulations and standard Caltrans Best Management Practices. Therefore, a less than significant impact would result from development of the Proposed Project.

IX. HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during Project construction.

ENVIRONMENTAL SETTING

The environmental setting and discussion below are derived from the Initial Site Assessment (ISA) Report (Dokken 2025a), which is attached to this Initial Study as **Appendix D**. The purpose of an ISA is to evaluate the Subject Properties for the presence of Recognized Environmental Conditions (RECs) and/or Activity and Use Limitations (AULs), which are:

REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."

AUL: "...legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or ground water on the property, or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment."

Recommendations given in the ISA report, relative to the potential for hazardous materials to exist within the Project area, are based upon the information derived from the site reconnaissance conducted on August 14, 2024, and from record and literature sources described. Certain indicators of the presence of hazardous materials not readily observable during the reconnaissance may become observable at a later date. Readily available public information sources were reviewed as providing complete and accurate information, without independent verification (Dokken 2025a).

A summary of the published lists of known hazardous substance sites was provided by Environmental Data Resources (EDR) and a copy of the report is included in **Appendix D**. EDR reviewed standard federal, state, and local listings of known sites within a 1.0-mile radius. 78 known hazardous substance sites were identified within a 1.0-mile radius of the Project area. However, the Project footprint is limited and as such, only sites within 0.125 of a mile have been included (**Appendix D – Table 4**).

Information available on the California Department of Toxic Substances Control's (DTSC) EnviroStor (http://www.envirostor.dtsc.ca.gov/public/) and California State Water Resources Control Board's GeoTracker (http://geotracker.waterboards.ca.gov) and online data management systems was also reviewed for information regarding documented environmental assessment and cleanup at the Project area and/or properties/facilities within 1.0- mile radius of the Project area. The DTSC EnviroStor Database indicated that there were no sites within or adjacent to the Project area. A review of the Geotracker Database indicated that there are 13 Leaking Underground Storage Tanks (LUST) cleanup sites within a 1-mile radius from the Project area. Based on the information provided and the cleanup statuses, it is considered unlikely that the sites listed below have impacted the Project area:

- ARCO #5010 – Located at 72058 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 2/7/2020.
- Baker General Store – Located at 71780 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 11/21/2013.

- Bronco Station (Former) – Located at 72074 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 3/30/2017.
- Chevron #9-9879 – Located at 72063 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 6/1/2016.
- Former DJ's Market – Located at 72352 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 3/6/2017.
- Gale Pike Property – Located at 71930 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that has been completed and the case is closed as of 6/9/1998.
- International Motor Hotels Inc. – Located at 71759 Baker Boulevard, Baker, CA 91730. This site is a LUST Cleanup site that has been completed and the case is closed as of 5/1/2001.
- Pikes Mobil – Located at 71927 Baker Boulevard, Baker, CA 92415. This site is a LUST Cleanup site that has been completed and the case is closed as of 12/24/2018.

There are 5 open LUST cleanup sites within the Project vicinity. A description of each open site is provided below.

- ARCO Station 5951 – Located at 72111/72097 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that is listed as Open – Site Assessment as of 6/30/2015. The site is a former Shell service station owned and operated by Silver Lake Properties, Inc. until April 1994. The Shell station and the five associated underground storage tanks (USTs) were subsequently removed in May 1994 and ARCO built a new service station. An unauthorized release of petroleum hydrocarbons at the site was discovered during the May 1994 UST removal activities on the property.

  Investigations conducted to date have included the installation of 16 monitoring wells, three vapor extraction wells, and two soil vapor probes. Groundwater monitoring results have indicated free product is present in multiple monitoring wells and may be migrating. Interim remedial actions have consisted of a vacuum truck free product removal program between October 1999 and July 2002, which removed an estimated 708 gallons of free product. Additionally, construction of a pneumatic free product skimmer pump system began in December 2005, but efforts to install the system were suspended on February 27, 2009 due to concerns with Underground Storage Tank Cleanup Fund (USTCF) reimbursement funding.

  In 2016, the site was nominated and accepted into the Expedited Claim Account Program. Since 2016, work at the site has included two groundwater and free product monitoring events conducted in 2019 and 2024, along with installation and sampling of soil vapor probes in 2019. Historically, free product has been detected at the site at a thickness of up to 5.85 feet (MW-16 12/14/1998). The January 2024 groundwater and free product monitoring results indicate at least three visually distinct free product types were still present with thicknesses of up to 3.94 feet reported (monitoring well SMW-2). Telluris previously estimated 5,600 gallons of free product remained in place at the site associated with the three free product plumes in October 2001; no volumetric evaluation update was provided in the January 2024 Monitoring Report.

  Review of the remediation plan and groundwater monitoring wells indicate that this contamination is located at depths below 30 feet. There are three plumes present adjacent to the existing ARCO facilities, which occur underneath Baker Boulevard and State Highway 127/Kelbaker Road (Appendix F). Project soil disturbing activities in this area consist of driveway conforms, curb and gutter installation, and sidewalk improvements. These activities would be limited to 4 feet below the ground surface. As contaminated soil is located below 30 feet from the ground surface, construction of the Project in this area

does not have the potential to encounter contaminated soils associated with the cleanup program site; therefore, no Phase II testing or adherence to Caltrans Standard Specifications and Standard Special Provisions for LPH management is proposed.

- Former Texaco Station – Located at 72132 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that is listed as Open – Remediation as of 8/11/2015. The unauthorized release of petroleum hydrocarbons at the site was reported in July 1994. UST removal activities at the site were conducted in 1999. The site was a former commercial petroleum fueling facility, operated by Silver Lake Properties Inc., and is currently developed as a Greek restaurant. San Bernardino County's Office of the Fire Marshal transferred regulatory oversight to the Lahontan Water Board on September 3, 2008.

  Investigations conducted to date have included the installation of 18 monitoring and extraction wells, and six soil vapor probes. Groundwater monitoring results have indicated free product is present in multiple monitoring wells and the extent of free product is undefined. Interim remedial actions have consisted of a vacuum truck free product removal program and operation of a pneumatic free product skimmer pump and soil vapor extraction system. The vacuum truck free product removal program was conducted between October 1999 and July 2002 which removed an estimated 1,300 gallons of free product. The pneumatic free product skimmer pump and soil vapor extraction system has been intermittently operated since installation in 2005. The pneumatic free product pump system operated between November 2005 and February 2009, between April 2010 and October 2010; and in 2018. Approximately 2,900 gallons of free product have been recovered by the pneumatic free product pump system. The SVE system component of the system operated between March 2007 to June 2007 and was shut down after asymptotic levels were reached and contaminant rebound was not observed. The SVE system removed an estimated 1,299 pounds of TPH or the equivalent of 174 gallons of gasoline.

  In 2016, the site was nominated and accepted into the Expedited Claim Account Program. Since 2016, work at the site has included three groundwater and free product monitoring events conducted in 2017, 2019, and 2024, along with installation and sampling of soil vapor probes in 2019. Aside from limited operation of the pneumatic free product skimmer pump system in 2018 which removed an estimated 186 gallons of free product, there have been no additional remediation activities performed at the site to date. The January 2024 groundwater and free product monitoring results indicated three visually distinct free product types were still present with thicknesses of up to 2.85 feet reported (monitoring well SLP-U). Telluris previously estimated 13,700 gallons of free product remained in place at the site associated with the west side (3,800 gallons) and east side (9,900 gallons) free product plumes in October 2001 using the volumetric analysis; no volumetric evaluation update was provided in the January 2024 Monitoring Report. The decline curve evaluation indicated it would take 8 years of system operation to reduce the initial recovery rate of 11 gallons per day (gpd) to 0.1 gpd.

  Review of the remediation plan and groundwater monitoring wells indicate that this contamination is confined to the areas within and adjacent to the former commercial facility. There are three plumes present adjacent to the former active petroleum fueling facility, which occur at depths below 30 feet underneath portions of Baker Boulevard and State Highway 127. Project soil disturbing activities in this area consist of driveway conforms, curb and gutter installation, and sidewalk improvements. These activities would be limited to 4 feet below the ground surface. As contaminated soil is located below 30

feet from the ground surface, construction of the Project in this area does not have the potential to encounter contaminated soils associated with the cleanup program site; therefore, no Phase II testing or adherence to Caltrans Standard Specifications and Standard Special Provisions for LPH management is proposed.

- Unocal Station – Located at 72137 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that is listed as Open – Site Assessment as of 9/17/2015. The unauthorized release of petroleum hydrocarbons at the site was reported in November 1993. UST removal and replacement activities at the site were conducted in 1999. The site is currently operating as an active petroleum fueling facility. site features include a closed motel. Investigations conducted to date have included the installation of 25 monitoring and extraction wells, and four soil vapor probes. Groundwater monitoring results have indicated free product is present in multiple monitoring wells and may be migrating. Interim remedial actions have consisted of a vacuum truck free product removal program and operation of a pneumatic free product skimmer pump and soil vapor extraction system. The vacuum truck free product removal program was conducted between October 1999 and July 2002 which removed an estimated 1,300 gallons of free product. The pneumatic free product skimmer pump system operated between May 2004 and October 2010 and removed approximately 5,000 gallons of free product. The SVE system component operated between May 2005 to May 2006 and was shut down after asymptotic mass recovery levels were reached. The SVE system removed an estimated 14,445 pounds of TPH or the equivalent of 2,158 gallons of gasoline.

  In 2016, the site was nominated and accepted into the Expedited Claim Account Program. Since 2016, work at the site has included three groundwater and free product monitoring events conducted in 2018, 2019, and 2024, along with installation and sampling of soil vapor probes in 2019. There have been no additional remediation activities performed at the site to date. The January 2024 groundwater and free product monitoring results indicated four visually distinct free product types were still present with thicknesses of up to 2.60 feet reported (monitoring well SMW5). Telluris previously estimated 11,600 gallons of free product remained in place at the site associated with the “main” (5,100 gallons) southwest diesel (5,200 gallons), and “smaller” (1,300 gallons) free product plumes in October 2001 using the volumetric analysis; no volumetric evaluation update was provided in the January 2024 Monitoring Report. The decline curve evaluation indicated it would take 8 years of system operation to reduce the initial recovery rate of 6.5 gallons per day (gpd) to 0.1 gpd.

  Review of the remediation plan and groundwater monitoring wells indicate that this contamination is confined to the areas within and adjacent to the former commercial facility. There are four plumes present adjacent to the existing active petroleum fueling facility, which occur underneath Baker Boulevard, Kelbaker Road, and the I-15 off ramp, all outside of the Project area (Appendix F). The nearest contamination is confined to an area located approximately 50 feet east of the Project. Since no Project activities are proposed within the contaminated parcel, there is no potential for the Project to encounter contaminated soils associated with the Unocal Station cleanup program site and further evaluation or protection measures are not warranted.

- Former XCEL Station – Located at 72307 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that is listed as Open – Site Assessment as of 2/16/2018. This site is a former commercial petroleum fueling facility that is currently vacant land. An unauthorized release was reported in February 2002 following the removal of three gasoline USTs in October 2001. Free product was reportedly identified onsite in the past and may likely be present. The nature and extent of the unauthorized release is yet to be

determined. The site's well network currently includes a total of seven on-site groundwater monitoring wells (MW-1 through MW4, and newly installed wells MW-6 through MW-8), and four soil vapor probes (SV-1 through SV-4). Quarterly monitoring of groundwater will continue until site assessment determines the site is eligible for closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Case Closure Policy.

Review of the remediation plan and groundwater monitoring wells indicate that this contamination is confined to the areas directly adjacent to the former XCEL Station and its former UST, located approximately 1600 feet northeast of the Project and at depths below 30 feet. Due to the distance of the contaminated soils and as there are no Project activities proposed within the contaminated parcel or at the depths of noted contaminated soils, there is no potential for the Project to encounter contaminated soils associated with the Former XCEL Station cleanup program site and further evaluation or protection measures are not warranted.

- John Cagigas Property – Located at 72358 Baker Boulevard, Baker, CA 92309. This site is a LUST Cleanup site that is listed as Open – Verification of Monitoring as of 1/31/2018. This site is the location of a former commercial facility that operated a gasoline UST and is currently used for truck parking. An unauthorized release was reported in January 1998 following a site assessment. One 250-gallon gasoline UST was removed, and an unknown volume of impacted soil was excavated and disposed offsite in in March 1998. Historically, free product has been detected at the site at a thickness of up to 2.27 feet (CMW9, 8/13/2003). Soil vapor extraction was conducted between December 2004 and November 2014, which removed 216,830 pounds of vapor-phase petroleum hydrocarbons. Reportedly, 2,175 gallons of free product has been recovered via vacuum truck between July 2009 and November 2014. The source of free product measured in site wells is likely from the Former DJ's Market (T0607100860), located west of the site. Since 2001, 16 groundwater monitoring wells have been installed and monitored. Previously, 38 groundwater monitoring wells were monitored at adjacent site, the Former DJs Market, prior to case closure and the abandonment of site wells. According to groundwater data, water quality objectives (WQOs) have not been achieved. The petroleum release is limited to the soil and shallow groundwater. Quarterly monitoring of groundwater will continue until site assessment determines the site is eligible for closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Case Closure Policy.

  Review of the remediation plan and groundwater monitoring wells indicate that this contamination is confined to the areas within the former commercial facility and its former UST, extending approximately 850 feet north of Baker Boulevard and at depths below 30 feet. The contamination is confined to an area located approximately 2,600 feet northeast of the Project. Due to the distance of the contaminated soils and as there are no Project activities proposed within the contaminated parcel or at the depths of noted contaminated soils, there is no potential for the Project to encounter contaminated soils associated with the John Cagigas Property cleanup program site and further evaluation or protection measures are not warranted.

A pedestrian survey was completed on August 14, 2024 by Dokken Engineering personnel. Based on the ISA Report, no evidence of RECs or AULs within the Project area were found, except those described in **Table 8. REC or AUL Evidence** below.

Table 8. REC or AUL Evidence

Location	Description of REC	Description of REC Evidence Found	Recommended Action
Northeast corner of existing Baker Boulevard Bridge.	Pole-mounted electrical transformer at the northeast corner of the existing Baker Boulevard bridge.	Potential polychlorinated biphenyl (PCB) in the pole-mounted electrical transformer. As of the date of this ISA, the existence and/or levels of PCB's associated with the pole-mounted electrical transformer, had not been determined.	Comply with Caltrans Standard Specifications and Standard Special Provisions, as applicable.
Throughout the Project area, along Baker Boulevard.	Three wooden utility poles present at the northeast, southeast and southwest corners of the existing bridge over Baker Boulevard. The existing bridge is constructed from treated redwood and features timber railings and plywood sidewalk planking, which may also have undergone treatment.	The Project Area contains treated wood utility poles and bridge structural elements which could potentially be disturbed during construction. Any treated wood encountered would be required to be disposed of as a hazardous waste.	Comply with Caltrans Standard Specifications and Standard Special Provisions, as applicable.
Existing Baker Boulevard Bridge.	Structural concrete within the existing Baker Boulevard bridge.	The structural elements of the bridge, including concrete, was potentially formed with asbestos containing material (ACMs), if it was constructed before 1989. As the existing bridge within the Project area predates 1989, any structural concrete to be disturbed by the Project would require testing for ACMs.	Phase II Site Assessment Comply with Caltrans Standard Specifications and Standard Special Provisions, as applicable.
Unpaved shoulders at the northeastern, northwestern and southwestern corners of the existing Bridge along Baker Boulevard.	Unpaved road shoulders along Baker Boulevard may contain aerially deposited lead (ADL).	Any work in the unpaved shoulders along Baker Boulevard may disturb soils with an accumulation of ADL. If present, ADL could pose a health hazard to construction workers and impact management options for soil removal and/or placement on the site. Prior to preparation of final plans and specifications, an assessment for ADL along Baker Boulevard may be required.	Phase II Site Assessment. Comply with Caltrans Standard Specifications and Standard Special Provisions, as applicable.

DISCUSSION OF IMPACTS

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant with Mitigation. As described in **Table 8**. above, four RECs were identified within the Project area. The scope of the ISA prepared for the Project is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review, and visual site survey, the following mitigation measures **HAZ-1** through **HAZ-5** shall be implemented to verify the presence/extent of RECs and evaluate the potential for remediation prior to construction of the proposed Project:

The proposed Project would involve the use of heavy equipment for grading, hauling, and materials handling during construction. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used and stored in accordance with all federal, state, and local applicable laws and regulations, and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within the designated staging area for the Project, and away from any aquatic features. The use of hazardous materials would be temporary, and the Project would not include a permanent use or source of hazardous materials. Mitigation measure **HAZ-6** would reduce any potential impacts to a less than significant level from temporary construction equipment and activities.

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?

Less than Significant with Mitigation. With any project conducting ground disturbance, there is a potential for unknown contaminates or accident conditions involving the release of hazardous materials into the environment, as well as upset or accident relating to machinery. The San Bernardino County Fire Protection District (SCFPD) is the Certified Unified Program Agency (CUPA) for the incorporated and unincorporated areas within San Bernardino County. As the CUPA, the SCFPD regulates the use, storage, and disposal of hazardous materials and is available to respond to hazardous materials complaints or emergencies, if any, during construction. The handling, use, and storage of hazardous materials during construction would be required to be compliant with SCFPD standards, and with the implementation of mitigation measures **HAZ-1** through **HAZ-6**, impacts are considered less than significant with mitigation incorporated.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant with Mitigation. The construction phase of the proposed Project has the potential to result in emissions of toxic air contaminants/HAPs in the form of diesel particulate matter emissions from the operation of diesel-fueled internal combustion engines. The Baker Unified School District, including Baker Elementary, Junior High, and High School are located approximately 0.70-mile north of the Project area. As previously discussed in section **3.III. Air Quality**, the County would adhere to applicable MDAQMD rules and regulations and standard Caltrans Best Management Practices, reducing any potential emissions to a less than significant level. Implementation of BMPs and specific instructions for handling of construction equipment such as limiting idle times to a maximum of five minutes along with frequent maintenance of the equipment which ultimately keeps the equipment running and operating like it should and therefore limit the

amount of emissions. Additionally, the construction activities would be temporary and intermittent which would further reduce any potential impact.

Hazardous materials used during construction would be typical of common construction activities and would be handled by the contractor in accordance with applicable federal, state, and local regulation for hazardous substances. Additionally, the amount of these materials needed for on-site equipment maintenance would not be enough to cause a significant hazard to the public, or any nearby schools, if released since the quantity of these hazardous materials on-site at any one given time would only amount to a refueling truck and the construction equipment. Measure **HAZ-6** would be implemented to require the contractor to prepare an accidental-spill prevention and response plan which would include BMPs to control for the accidental release of hazardous materials into the environment ensuring spills are appropriately cleaned up and would not result in a release of hazardous materials into the environment.

Therefore, with the implementation of **AQ-1** detailed in section **3.III. Air Quality** and **HAZ-1** through **HAZ-6** the Project would have a less than significant with mitigation incorporated related to emitting or handling of hazardous waste within one-quarter mile of an existing school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant with Mitigation. As described in the *Environmental Setting*, a review of EDR, GeoTracker and EnviroStor (Dokken 2025a) databases indicated that there are four RECs within the Project area (**Table 8. REC or AUL Evidence**) Mitigation measures **HAZ-1 through HAZ-6** shall be implemented prior to the start of construction and ensure that no significant hazard to the public or environment would occur. Impacts would be less than significant with mitigation incorporated.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The proposed Project is located within two miles of the Baker Airport. Baker is a public airport owned by BLM. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The proposed Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs. There would be no substantial change to the existing land use.

According to the Baker Airport Comprehensive Land Use Plan (ACLUP), the proposed Project is located outside of the Safety Review Area 3 boundary (County 1992). Therefore, the proposed Project does not conflict with the Baker ACLUP and would not result in a safety hazard for people working in the Project area. No impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed Project would replace the existing bridge structure. Temporary and permanent right of way acquisition may be required for construction. The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Therefore, the proposed Project would not impair or alter any existing emergency response plan or emergency evacuation plan either during or post construction. No impact would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no wildlands are adjacent to or within the Project area; therefore, no impact would occur.

Avoidance, Minimization, and/or Mitigation Measures

HAZ-1: Any leaking transformers observed during the course of the Project should be considered a potential PCB hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from the electrical transformer that is located directly within the proposed roadway widening limits be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the CCR and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the CCR and any other appropriate regulatory agency.

HAZ-2: An ACM inspection/survey will be conducted by a Certified Asbestos Consultant or by a Certified Site Surveillance Technician working under a Certified Asbestos Consultant as part of a limited Phase II Site Assessment. At least 10 working days prior to the commencement of abatement work, notification submissions shall be submitted to the National Emission Standards for Hazardous Air Pollutants (NESHAP). Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under CCR Title 22 and the NESHAP. Caltrans Standard Specifications regarding ACM will be included in the plan specifications and be implemented by the contractor, as applicable, to ensure ACM is properly managed and removed from the Project site.

HAZ-3: Aerially Deposited Lead (ADL) is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. A limited Phase II Site Assessment is recommended to test for the presence of ADL contamination within the limits of proposed construction. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis

and be of sufficient quantity to define the extent and concentration of contamination within the area extent and depths of planned construction activities adjacent to these sites. Criteria for construction safety practices when handling lead can be found in CCR, Title 8, Section 1532.1. If testing determines ADL to be present in unregulated and/or regulated earth materials within the planned construction area, then Caltrans Standard Specifications and Standard Special Provisions regarding ADL will be included in the Project specifications to be implemented by the contractor.

HAZ-4: Treated wood from the bridge may contain chemicals, e.g. creosote, which poses a risk to human health and the environment and must be handled in accordance with CCR, Title 22, Division 4.5 implemented by the Department of Toxic Substances Control (DTSC). Section 14-11.14 provides guidelines on handling, storing, transporting, and disposing of Treated Wood Waste (TWW). Caltrans follows the regulations adopted by DTSC regarding TWW, which may be handled as a regulated solid waste and disposed of in a State Water Resources Control Board certified solid waste landfill.

HAZ-5: For any previously unknown hazardous waste/ material encountered during construction, the procedures outlined in Caltrans Uknown Hazards Procedure, will be followed.

HAZ-6: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used onsite. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

X. HYDROLOGY AND WATER QUALITY

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

REGULATORY SETTING

Federal

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the U.S. from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the CWA, Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program. However, an approved USACE jurisdictional delineation (SPL-2010-01042-SLP) determined that Soda Lake (Dry Lake), which is upstream of the Mojave River Channel, is not a waters of the U.S. as it is an

isolated intrastate dry lake that is not considered a traditionally navigable water and does not meet the definitions of an "a(3)" water as outlined by the USACE. As such, Soda Lake (Dry Lake) is considered a non-jurisdictional water that does not fall under the purview of the USACE. Based on this determination, the channel within the Project area, which occurs downstream (north) of Soda Lake (Dry Lake), is also considered non-jurisdictional and will not require permitting or compliance under Section 401 or 404 of the CWA.

Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The U.S. EPA delegated to the SWRCB the implementation and administration of the NPDES program in California. The SWRCB established nine RWQCBs. The SWRCB enacts and enforces the Federal NPDES program and all water quality programs and regulations that cross Regional boundaries. The nine RWQCBs enact, administer and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s).

State

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by WDRs. WDRs may specify the inclusion of additional project features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

The SWRCB and RWQCBs are responsible for establishing the water quality standards and regulating discharges to protect beneficial uses of water bodies. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set standards necessary to protect these uses. Consequently, the water quality standards developed for particular water body segments are based on the designated use and vary depending on such use. Water body segments that fail to meet standards for specific pollutants are included in a Statewide List in accordance with CWA Section 303(d). If a Regional Board determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed. The SWRCB implemented the requirements of CWA Section 303(d) through the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ NPDES No. CAS000002).

The fourth edition of the Water Quality Control Plan (Basin Plan) for the Lahontan Region was adopted by the RWQCB in 2004, including amendments effective August 1995 through September 22, 2021.

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

National Pollutant Discharge Elimination System Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater." The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The SWRCB adopted an order for Small Municipal Separate Storm Sewer Systems (MS4) Phase II General Permit, Water Quality Order No. 2013-0001-DWQ, as amended (NPDES General Permit No. CAS000004). The Order directs Regulated Small MS4s to obtain coverage under a NDPES Permit. The SWRCB has designated San Bernardino County as a Regulated Small MS4 for the purposes of the NPDES permit. Within the urbanized portion of the Mojave River Watershed in San Bernardino County, the Phase II Small MS4 Permit covers the following jurisdictions:

- County of San Bernardino
    - Unincorporated areas of Phelan, Oak Hills, Spring Valley Lake and Victorville
- City of Hesperia
- City of Victorville
- Town of Apple Valley

The community of Baker is not covered by the Phase II Small MS4 Permit due to its population size of under 1,000 residents.

For the jurisdictions within the Mohave River Watershed, the County prepared the *Mohave River Watershed Technical Guidance Document for Water Quality Management Plans* (2016). The document establishes requirements for project proponents (both private and public agency project proponents) to meet the minimum Phase 2 MS4 Permit stormwater management requirements applicable to Regulated Projects. The document requires project proponents to incorporate infiltration Low Impact Development (LID) Best Management Practices (BMP) to the maximum extent practicable (MEP); and use biotreatment and harvest and use BMP for the remainder of the design capture volume (DCV).

Construction General Permit (CGP)
The Construction General Permit (NPDES No. CAS000002, SWRCB Order No. 2022-0057-DWQ, was adopted on September 8, 2022) and effective on September 1, 2023. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development.

For all projects subject to the CGP, the applicant is required to hire a Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP. A Qualified SWPP Practitioner (QSP) may be hired as well to assist in field work. All Project Registration Documents (PRDs), including the SWPPP, Risk Level (RL) Determinations, Site map and post-construction treatment documents are required to be uploaded into the SWRCB's on-line Stormwater Multiple Application and Report Tracking System (SMARTS). A Waste discharge Identification (WDID) number will be issued within 10 business days after the State Waterboard receives a complete Notice of Intent (NOI) package.

The 2022 CGP requires post-construction treatment permit registration documents to be submitted in SMARTS with the NOI to include: (1) An attachment or web-source containing the NPDES MS4 post-construction requirements and (2) the post-construction plans and calculations (Preliminary post-construction plans and calculations may be submitted as a Permit Registration Document, as long as the approved plans and calculations are submitted within 14 days of approval by the municipal stormwater permittee, through a Change of Information (COI) in Stormwater Multiple Application and Report Tracking System [SMARTS]). Additionally, a COI in SMARTS must be submitted for any revisions to post-construction plans and calculations prior to submitting the Notice of Termination (NOT).

The proposed Project is subject to the CGP. Coverage under the State Water Resources Control Board's Construction General Permit, which is a NPDES Permit, will be obtained. Any further avoidance or minimization measures from regulatory permitting would be incorporated into the Project, and adherence to the requirements set forth in these permits will further minimize impacts to water quality and aquatic resources.

Waiver from Construction General Permit
Projects that disturb over 1.0 acre but less than 5 acres of soil, may qualify for waiver of CGP coverage. This occurs whenever the Rainfall Erosivity, (R) in the Revised Universal Soil Loss Equation (RUSLE) is less than 5. When the R factor is below the numeric value of 5, projects can be waived from coverage under the CGP. Refer to the CGP, Attachment D.1, Risk Determination Worksheet of the CGP.

Construction activity that results in soil disturbances of less than 1.0 acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop a SWPPP, to implement soil erosion and pollution prevention control measures, and to obtain coverage under the CGP.

The proposed Project does not qualify for a waiver of CGP coverage as the total area of disturbed soil is 1.65 acres, of which 1.60 acres is temporary and 0.05 acres is permanent impact.

Risk Level Inspection and Sampling Requirements
The CGP contains a risk-based permitting approach by establishing three levels of risk possible for a construction site. RLs are determined during the planning, design, and construction phases, and are based on project risk of generating sediments and receiving water risk of becoming impaired. Requirements apply according to the RL determined, with additional monitoring and reporting requirements for higher risk projects with detailed requirements listed in Attachment D of the CGP. Requirements include:

- Visual inspections weekly, prior to Qualifying Precipitation Events (QPEs), during QPEs (every 24 hours) and post QPEs. A qualifying Storm Event (QPE) is defined as a forecasted 50% probability of precipitation of 0.5" or more within a 24-hour period and

continues on subsequent 24-hour periods when 0.25 inches or more is forecast.

- RL 2 and 3 projects have sampling requirement for pH and Turbidity.

- Additionally, sampling for Numeric Action Levels (NALs) and Numeric Effluent Limits (NELs) is required for all risk level projects for TMDL-related non-visible pollutants listed in Attachment H of the CGP, if there is a discharge due to failure to implement a BMP, a container spill or leak, or a BMP breach or malfunction.

Regional and Local

RWQCB Basin Plan

The Project is located within the boundaries of RWQCB Region 6V Lahontan. The Water Quality Control Plan for the Lahontan Region (Region 6) consists of the water quality goals and policies, descriptions of conditions, and discussions of solutions. The Basin Plan became effective March 31, 1995 and includes amendments effective August 1995 through September 22, 2021. It is also the basis for the Regional Board's regulatory programs. The Basin Plan establishes water quality standards for the ground and surface waters of the region. The term "water quality standards," as used in the federal CWA, includes both the beneficial uses of specific waterbodies and the levels of quality which must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the Regional Board and others that are necessary to achieve and maintain the water quality standards.

The Regional Board regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means.

Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For waterbodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included.

In some cases, it has been necessary for the Regional Board to completely prohibit the discharge of certain materials. Some types of discharges are prohibited in specific areas. Details on these prohibitions also appear in the Basin Plan.

On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," establishing an antidegradation policy for the protection of water quality. The State Board has interpreted the Resolution No. 68-16 to incorporate the federal antidegradation policy in order to ensure consistency with federal CWA requirements. Under the State Antidegradation Policy, whenever the existing quality of water is better than that needed to protect all existing and probable future beneficial uses, the existing high quality shall be maintained until or unless it has been demonstrated to the State that any change in water quality will be consistent with the maximum benefit of the people of the State, and will not unreasonably affect present and probable future beneficial uses of such water (Dokken 2025e).

As required by the federal CWA and implementing regulations, no permanent or long-term degradation is allowed in water designated as an Outstanding National Resource Water (ONRW). Only two ONRWs are designated in California: Lake Tahoe and Mono Lake. The Mojave River (Channel), Soda (dry) Lake, and the downstream Silver (dry) Lake are not designated as ONRW.

The policy of nondegradation of aquatic communities and populations does not apply to the Mojave River Channel as are no wetlands or aquatic life present in the channel.

ENVIRONMENTAL SETTING

The environmental setting and discussion below are derived primarily from the Water Quality Assessment Report (Dokken 2025e), which is attached to this Initial Study as Appendix E.

Baker is located east of and outside of the Mojave Region Groundwater Basin and is located east of and outside of the Mojave Water Agency's Integrated Regional Water Management Plan boundary (Dokken 2025e).

There are no wellhead protection areas in the Project area or adjacent to the Project area. The nearest public supply wells are located over 1.75 miles northeast of the Project area (Dokken 2025e).

Hydrology

The Mojave River watershed extends from east of the City of San Bernardino to the community of Baker. The Mojave River starts at the confluence of Deep Creek and the West Fork Mojave River near the northeastern base of the San Bernardino Mountains. The approximately 3,350 square mile (mi2) watershed includes the cities of Victorville, Barstow, and Afton. The mountainous upper part of the watershed comprises only about 5% of the total watershed at Baker, CA, while the other 95% is desert. Precipitation in the mountains is the primary source of flow in the Mojave River. The annual average precipitation upstream of the confluence is approximately 24.5 inches (Dokken 2025e).

The Mojave River's modern-day terminus is generally considered to be Soda Lake (Dry Lake), an isolated intrastate dry lakebed (playa) just south of Baker and south of I-15. When floodwaters fill Soda Lake (Dry Lake), it overtops and drains northward 2.9-miles to Silver Lake (Dry Lake), also an isolated intrastate dry lakebed. A human-modified channel now connects the two dry lakebeds so that excess flows from Soda Lake (Dry Lake) pass under the Baker Boulevard Bridge into Silver Lake (Dry Lake). Silver Lake (Dry Lake) has recorded inundation to a depth of 10-ft on infrequent occurrences. When Silver Lake (Dry Lake) fills, the ponded water backfills into Soda Lake (Dry Lake) (Dokken 2025e).

Precipitation and Climate

The proposed Project is located in the Mojave Desert Floristic Province (Dokken 2025e). Baker experiences a desert climate that consists of hot, dry summers and cool winters with little precipitation. The mean average annual high temperature is approximately 93.8 degrees Fahrenheit (°F) in July, and a mean annual low temperature of 47.5°F in December. The region averages 3.72 inches of precipitation annually (Dokken 2025e).

Surface Water

The Mojave River Channel is a manmade channel that connects Soda Lake (Dry Lake), an isolated dry lakebed south of I-15 and upstream of the proposed Project, to Silver Lake (Dry Lake), another isolated dry lakebed north of the community of Baker, and downstream of the proposed Project.

The Mojave River ends at Soda Lake (Dry Lake). Before the construction of the Mojave River Channel, inundation levels in Soda Lake (Dry Lake) would rise then spill over into the floodplain that connects to Silver Lake (Dry Lake). Now, the Mojave River Channel passes surface waters

in Soda Lake before it overflows. If the inundation in Silver Lake (Dry Lake) is sufficient, water will back up in the Mojave River Channel and into Soda Lake (Dry Lake). Water also pools in the Project area during the cooler months.

The Mojave River upstream of the proposed Project and upstream of Soda Lake (Dry Lake) is a losing stream, which means the surface flows decrease from the upper watershed to the lower watershed in the downstream direction due to infiltration losses (Dokken 2025e). The Mojave River is perennial in a stretch near Victorville and again in Afton Canyon. Flows in most of the rest of the Mojave River is intermittent. The Mojave River within the proximity of the Project area primarily flows underground, and surface water is only present immediately following rain events or during historic wet years (Dokken 2025e).

Total Maximum Daily Loads (TMDL)
The SWQCB's 2018 Integrated Report for CWA Section 303(d) list of impaired waters identifies TMDLs for segments of the Mojave River between the Mojave Forks Reservoir to the Upper Narrows and Upper and Lower Narrows which are over 110 river miles upstream of the proposed Project. There are no TMDLs for the Mojave River Channel that passes under the Baker Boulevard Bridge (Dokken 2025e).

Floodplains
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Mojave River Channel crossing at Baker Boulevard is considered a Special Flood Hazard Area (SFHA), and is labeled as Zone A. SFHAs are defined as the area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year, or within the 100-year floodplain. Areas outside of the surface water crossing within the Project area are labeled as Zone X, area of minimal flood hazard (Dokken 2025e)

No current or future flood prevention projects in the community of Baker are identified on the San Bernardino Public Works Flood Control division website (Dokken 2025e).

Additional Impervious Surfaces
The Project will result in an approximate 0.66 acre increase of new impervious surface, which will increase the volume of storm water runoff from the roadways surface. The proposed Project will adhere to water quality standards maintained by the SWRCB for the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. A CGP would be obtained prior to construction. Potential impacts would be mitigated for sediment, erosion, and non-storm water control methods pursuant to the requirements of the NPDES CGP.

DISCUSSION OF IMPACTS

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant with Mitigation. The proposed Project would not increase long-term impacts to water quality during operations and maintenance as compared to the existing baseline.

As described in the *Environmental Setting*, the Project will result in an approximate 0.66 acre increase of new impervious surface, which will increase the volume of storm water runoff from the roadways surface. The proposed Project will adhere to water quality standards maintained by the SWRCB for the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. A CGP would be obtained

prior to construction. Potential impacts would be mitigated for sediment, erosion, and non-storm water control methods pursuant to the requirements of the NPDES CGP.

The Project will be designed with BMPs that the RWQCB has deemed as effective at reducing erosion, controlling sediment, and managing runoff. These can include covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs include installing silt fences or placing straw wattles below slopes, installing berms, and other temporary run-on and runoff diversions.

The Project will implement standard BMPs to avoid and minimize water quality impacts; however, they are not to preclude new or innovative approaches currently available or being developed. The CGP, including the monitoring log, must be kept on-site during construction activities and will be made available upon request to representatives of the RWQCB. Based on the Project schedule of approximately 24 months, construction will be on-going during a winter, rainy season. The SWPPP will require the contractor to use BMPs for winterization and clear water diversions as appropriate. The Google Earth Streetview image from March 2023 and a field survey in September 2023 by River Focus both document that water may be pool in the Project area after rainfalls during cooler months (Dokken 2025e). The implementation of BMPs for water diversion will be timed in response to precipitation events.

Implementation of the following mitigation measures **WQ-1** and **WQ-2** will further minimize temporary or permanent water quality impacts created by the Project to a less than significant level:

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?

Less than Significant. The Baker Community Services District (Baker CSD) provides potable water to residents and commercial users from six groundwater wells (SWRCB 2024). The wells are located over 1.75 miles northeast of the Project area. The wells draw from the Soda Lake (Dry Lake) groundwater basin; however, the Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. The proposed Project will widen the existing bridge and add 0.66 acres of impervious surface. Impacts to groundwater would be minimal as the proposed Project does not contain elements that would add to or draw from groundwater supplies. Additionally, the proposed Project would not be constructed immediately above a preexisting well, nor would areas known to contain wells be disturbed by construction of the proposed Project. Therefore, impacts to groundwater supplies would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site?

Less than Significant with Mitigation. Minor loss of vegetation and general disturbance to the soil for construction of the proposed Project would occur within the Project footprint. Removal of vegetation and soil can accelerate erosion processes within the Project area.

As described in response to question **a)**, the proposed Project will adhere to water quality standards maintained by the SWRCB and a CGP would be obtained prior to construction. Potential impacts would be mitigated for sediment, erosion, and non-storm water control methods pursuant to the requirements of the CGP.

The Project will implement standard BMPs to avoid and minimize impacts associated with erosion and siltation. Furthermore, implementation of **WQ-1** and **WQ-2** will ensure the Project will conform with current regulations and therefore ensure the Project impacts will be less than significant with mitigation.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite or (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant with Mitigation. The proposed Project is currently designed to add a net impervious surface of approximately 0.66 acre to the area due the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. Approximately 1,200 feet of approach roadway work would be required to widen Baker Boulevard to its ultimate width. The proposed Project structure would span the Mojave River Channel; however, as described in the *Environmental Setting*, the channel primarily flows underground, and surface water is only present immediately following rain events or during historic wet years.

Any additional stormwater runoff due to a localized increase in impervious surfaces will flow onto adjacent natural or landscaped areas for absorption by vegetation and/or percolation into the ground and will not result in flooding on- or off-site. The existing drainage patterns of the area would not be altered. As previously described, compliance with water quality standards maintained by the SWRCB, acquiring a CGP prior to construction, and implementation of **WQ-1** and **WQ-2** will ensure the Project will conform with current regulations. The proposed Project impacts will be less than significant with mitigation incorporated.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (iv) impede or redirect flood flows?

Less than Significant with Mitigation. The Project would add a net impervious surface of approximately 0.66 acre to the area due to the addition of pavement for the construction of new bridge and approach roadway work, which will result in an increase in the quantity of runoff generated in a storm event. However, the quantity of additional runoff generated from the proposed Project would not be substantial and is not expected to contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems in the Project vicinity. As previously described, compliance with water quality standards maintained by the SWRCB, acquiring a CGP prior to construction, and implementation of **WQ-1** and **WQ-2** will ensure the Project will conform with current regulations. The proposed Project impacts related to erosion and siltation will be less than significant with mitigation incorporated.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant with Mitigation. As described in the *Environmental Setting*, the Baker Boulevard Bridge area is within a FEMA Zone A floodplain signifying that the reach was studied and mapped by FEMA using approximate methods (i.e., no detailed modeling was performed by FEMA). FEMA does not have reported peak flows for the study reach, nor do they have base (100-year) flood elevations. Given the Zone A (approximate) floodplain, a FEMA regulatory floodway has not been established for the study area (Dokken 2025e). No current or future flood prevention projects in the community of Baker are identified on the San Bernardino Public Works Flood Control division website.

The proposed Project would include demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project may have short-term impacts associated with potential sediment and/or pollutant runoff during grading and construction. The proposed Project will disturb more than 1.0 acre; and therefore, is subject to NPDES regulations as described above. The Project is located in the proximity the Mojave River Channel. Surface water is only present immediately following rain events or during historic wet years, and is not anticipated to substantially degrade water quality of groundwater beneath the site.

As previously described, compliance with water quality standards maintained by the SWRCB, acquiring a CGP prior to construction, and implementation of **WQ-1** and **WQ-2** will ensure the Project will conform with current regulations. The proposed Project impacts related to erosion and siltation will be less than significant with mitigation incorporated.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact with Mitigation. The Project must adhere to the CGP and SWPPP which includes water quality and watershed protection measures necessary for proper storm water management. The Project would not obstruct implementation of the any groundwater management plan. Further, implementation of **WQ-1** and **WQ-2** will ensure the Project will conform with current regulations and therefore ensure the Project impacts will be less than significant with mitigation incorporated.

Avoidance, Minimization, and/or Mitigation Measures

WQ-1: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats (same as Measure **BIO-3**).

WQ-2 BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels) (same as Measure **BIO-1**):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction;
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

XI. LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

REGULATORY SETTING

The County's Development Code (Title 8 of the County Code of Ordinances) provides the basis for current zoning designations and development regulations in unincorporated areas.

ENVIRONMENTAL SETTING

The current land uses within the Project area include Commercial (C), Public Facility (PF) and Limited Industrial (LI). The current zoning designations within the Project area include Highway Commercial (CH), Floodway (FW), and Rural Commercial (CR).

The land use in the surrounding area is primarily commercial development. According to San Bernardino County Land Use Service's Online Interactive Land Use Map, the parcels south of the existing bridge within the Project area are zoned as CH. This land use zoning district provides sites for retail trade and personal services, lodging services, office and professional services, recreation and entertainment services, wholesaling and warehousing, contract/construction services, transportation services, open lot services, and similar and compatible uses. The parcels north of the existing bridge within the Project area are zoned as CR. This land use zoning district provides sites for retail trade and personal services, repair services, lodging services, recreation and entertainment services, transportation services, and similar and compatible uses. Agriculture and residential uses allowed also but are secondary in importance. A portion of the Mojave River Channel is also present within the Project area and is zoned as FW. The FW land use zoning district provides sites for animal keeping, grazing, crop production, and similar and compatible uses (County 2022).

DISCUSSION OF IMPACTS

a) Physically divide an established community?

No Impact. The Project would not divide an established community. The proposed Project includes the demolition of the existing two-lane 22 span stringer timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs. No barriers to movement through the local communities would be installed. Therefore, no impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project is consistent with the land use and zoning designations in the County Policy Plan (2022). As previously described, the proposed Project involves the replacement of the existing bridge to meet structural design and safety standards with no substantial change in the existing land use. Therefore, the proposed Project would not conflict or cause a significant impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project. No impact would occur.

XII. MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the state geologist (California Geological Survey) to inventory and classify selected mineral resources in California. The proposed Project is located in an area of the unincorporated community of Baker, which is located in the North Desert Region of San Bernardino County California. Approximately 6.2% of the region is designated MRZ-2 or MRZ-3 (County 2019). The following is a description of SMARA mineral resource classifications:

- MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources
- MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources.
- MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources.
- SZ Areas: Contain unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.
- IRA Areas: County- or state-identified areas where production and information indicates that significant minerals are present.

DISCUSSION OF IMPACTS

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed Project is not located within or adjacent to a mineral resource zone. The proposed Project would not result in the use or extraction of any mineral or energy resources and would not restrict access to known mineral resource areas. Furthermore, the proposed Project would not result in the loss of availability of a known mineral resource. Therefore, no impact would occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Refer to response to question **a)**, above. The proposed Project would have no impact on mineral resources. No impact would occur.

XIII. NOISE

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

REGULATORY SETTING

Federal

23 CRG 772
23 CFR 772 provides procedures for preparing operational and construction noise studies and evaluating noise abatement considered for federal and Federal-aid highway projects. Under 23 CFR 772.7, projects are categorized as Type I, Type II, or Type III projects.

FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment of the highway. The following projects are also considered to be Type I projects:

- The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a high-occupancy vehicle (HOV) lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane,
- The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane,
- The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange,
- Restriping existing pavement for the purpose of adding a through traffic lane or an auxiliary lane,
- The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot, or toll plaza.

If a project is determined to be a Type I project under this definition, the entire project area as defined in the environmental document is a Type I project.

A Type II project is a noise barrier retrofit project that involves no changes to highway capacity or alignment. A Type III project is a project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects
The Protocol specifies the policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction of federal or Federal-aid highway projects. The Protocol defines a noise increase as substantial when the predicted noise levels with project implementation exceed existing noise levels by 12 dBA or more. The Protocol also states that a sound level is considered to approach an NAC level when the sound level is within 1 dB of the NAC identified in 23 CFR 772 (e.g., 66 dBA is considered to approach the NAC of 67 dBA, but 65 dBA is not).

The Technical Noise Supplement to the Protocol provides detailed technical guidance for the evaluation of highway traffic noise. This includes field measurement methods, noise modeling methods, and report preparation guidance.

State

CEQA
Noise analysis under CEQA may be required regardless of whether or not the project is a Type I project. The CEQA noise analysis is completely independent of the 23 CFR 772 analysis done for NEPA. Under CEQA, the baseline noise level is compared to the build noise level. The assessment entails looking at the setting of the noise impact and then how large or perceptible any noise increase would be in the given area. Key considerations include: the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level.

The significance of noise impacts under CEQA are addressed in the environmental document rather than the Noise Study Report (NSR). Even though the NSR (or noise technical memorandum) does not specifically evaluate the significance of noise impacts under CEQA, it must contain the technical information that is needed to make that determination in the environmental document.

Section 216 of the California Streets and Highways Code
Section 216 of the California Streets and Highways Code relates to the noise effects of a proposed freeway project on public and private elementary and secondary schools. Under this code, a noise impact occurs if, because of a proposed freeway project, noise levels exceed 52 dBA-L_{eq}(h) in the interior of public or private elementary or secondary classrooms, libraries, multipurpose rooms, or spaces. This requirement does not replace the “approach or exceed” NAC criterion for FHWA Activity Category E for classroom interiors, but it is a requirement that must be addressed in addition to the requirements of 23 CFR 772.

If a project results in a noise impact under this code, noise abatement must be provided to reduce classroom noise to a level that is at or below 52 dBA-L_{eq}(h). If the noise levels generated from freeway and roadway sources exceed 52 dBA-L_{eq}(h) prior to the construction of the proposed freeway project, then noise abatement must be provided to reduce the noise to the level that existed prior to construction of the project.

Local

San Bernardino County Code of Ordinances § 83.01.080 Noise
The following is applicable to construction-related impacts of the proposed Project:

(2) Noise Limit Categories. No person shall operate or cause to be operated a source of sound at a location or allow the creation of noise on property owned, leased, occupied, or otherwise controlled by the person, which causes the noise level, when measured on another property, either incorporated or unincorporated, to exceed any one of the following:

(d) Noise Standards for Adjacent Mobile Noise Sources. Noise from mobile sources may affect adjacent properties adversely. When it does, the noise shall be mitigated for any new development to a level that shall not exceed the standards described in the following **Table 9. Noise Standards for Adjacent Mobile Noise Sources**.

Table 9. Noise Standards for Adjacent Mobile Noise Sources

Land Use		Ldn (or CNEL) dB(A)	
Categories	**Uses**	**Interior (1)**	**Exterior (2)**
Residential	Single and multi-family, duplex, mobile homes	45	60 (3)
Commercial	Hotel, motel, transient housing	45	60 (3)
	Commercial retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater		
Institutional/Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65
Notes:			
(1) The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.			
(2) The outdoor environment shall be limited to: • Hospital/office building patios • Hotel and motel recreation areas • Mobile home parks • Multi-family private patios or balconies • Park picnic areas • Private yard of single-family dwellings School playgrounds			
(3) An exterior noise level of up to 65 dB(A) (or Community NEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.			
CNEL = (Community Noise Equivalent Level). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m.			
Source: San Bernardino County San Bernardino County Code of Ordinances § 83.01.080 Noise			

(g) Exempt Noise. The following sources of noise shall be exempt from the regulations of this Section:
(1) Motor vehicles not under the control of the commercial or industrial use.

(2) Emergency equipment, vehicles, and devices.

(3) Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

San Bernardino County Policy Plan (2022)
The County's Policy Plan (2022) Hazards (HZ) Element contains goals, policies, and programs designed to protect the community from the harmful and annoying effects of exposure to excessive noise. Applicable Goals and Policies related to the proposed Project include:

Goal HZ-2 Human-Generated Hazards – People and the natural environment protected from exposure to hazardous materials, excessive noise, and other human-generated hazards.

Policy HZ-2.6 Coordination with Transportation Authorities: We collaborate with airport owners, FAA, Caltrans, SBCTA, Southern California Association of Governments (SCAG), neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans and projects to minimize noise impacts and provide appropriate mitigation measures.

Policy HZ-2.7 Truck Delivery Areas: We encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated.

Policy HZ-2.8 Proximity to Noise Generating Uses: We limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.

Policy HZ-2.9 Control Sound at the Source: We prioritize noise mitigation measures that control sound at the source before buffers, soundwalls, and other perimeter measures.

ENVIRONMENTAL SETTING

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

Existing Land Uses
A review of aerial photography and San Bernardino County General Plan Land Use Map were studied to identify land uses that could be subject to traffic and construction noise impacts from the proposed Project. The following land uses were identified in the Project area:

- Commercial: Activity Category C
- Motel: Activity Category E
- Undeveloped land: Activity Category F

As required by the Protocol, noise abatement is only considered for areas of frequent human use that would benefit from a lowered noise level. Accordingly, the following impact analysis focuses

on locations with defined outdoor activity areas, such as common use areas at apartment complexes or outdoor seating areas in commercial areas.

Noise Descriptors
Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most used in traffic noise analysis.

- Equivalent Sound Level (Leq): Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound that occurs during the same period. The 1-hour A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a one-hour period, and is the basis for NAC used by Caltrans and FHWA.

- Percentile-Exceeded Sound Level (Lxx): Lxx represents the sound level exceeded for a given percentage of a specified period (e.g., L10 is the sound level exceeded 10% of the time, and L90 is the sound level exceeded 90% of the time).

- Maximum Sound Level (Lmax): Lmax is the highest instantaneous sound level measured during a specified period.

- Day-Night Level (Ldn): Ldn is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.

- Community Noise Equivalent Level (CNEL): Similar to Ldn, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m., and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

DISCUSSION OF IMPACTS

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the Project in and of itself will not generate increase traffic volume and/or demand. The proposed Project would not generate a substantial increase in noise during operation and would not contribute substantially to the ambient noise environment. Therefore, this section focuses on construction-related noise impacts.

During construction of the proposed Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. **Table**

10. Construction Equipment Noise summarizes noise levels produced by construction equipment that is commonly used on roadway construction projects.

Table 10. Construction Equipment Noise

Type of Equipment	Typical Noise Level (dBA) 50 feet from Source
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82
Source: Dokken 2025b	

Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

To minimize the construction-generated noise, the following mitigation measure **NOI-1** as specified in the special provisions under Standard Specification 14-8.02 “Noise Control” must be followed:

- Control and monitor noise resulting from work activities; and
- Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Standard Specification 14-8.02 and applicable County noise standards. Construction noise would be short-term, intermittent, and overshadowed by local traffic noise. Compliance with San Bernardino County General Plan Noise Element and noise ordinance for construction is recommended to minimize construction noise.

Construction of the proposed Project would result in a temporary, periodic increase in ambient noise levels that would exceed the County noise standards. However, this increase would be temporary, intermittent, and limited to daytime hours. Further, minimization is available that would limit hours of construction, appropriate locations for staging areas, noise-reduction intake and exhaust mufflers and engine shrouds for construction equipment, and minimization of construction equipment idling, which would reduce impacts to less than significant. Implementation of measures **NOI-1** through **NOI-4** will reduce impacts to less than significant by limiting the hours of noise-generating construction operations to daytime hours, locating construction equipment and staging areas away from sensitive land uses, requiring construction equipment to be equipped with noise-reduction intake and exhaust mufflers and engineer shrouds, and prohibiting the idling of motorized construction equipment when not in use.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant with Mitigation. No new groundborne vibration or noise levels would be generated during operational use of the new bridge. Groundborne vibration and noise levels would be generated during construction of the proposed Project. Construction would be temporary and would occur between the hours of 7 a.m. and 7 p.m. on weekdays

in accordance with San Bernardino County Code of Ordinances § 83.01.080 Noise and the **Goal HZ-2** and **Policies HZ-2.6** through **HZ-2.9** identified in the Regulatory Setting from the County Policy Plan.

Pile driving or other activities commonly associated with vibration may occur. Impacts would be less than significant with incorporation of mitigation measures **NOI-1** through **NOI-4** by limiting the hours of noise-generating construction operations to daytime hours, locating construction equipment and staging areas away from sensitive land uses, requiring construction equipment to be equipped with noise-reduction intake and exhaust mufflers and engineer shrouds, and prohibiting the idling of motorized construction equipment when not in use. Therefore, Project impacts would be less than significant with mitigation.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. As described in section **3.IX. Hazards and Hazardous Materials**, the proposed Project is located within two miles of the Baker Airport. According to the Baker Airport ACLUP, the proposed Project is located outside of the Safety Review Area 3 boundary (County 1992). Therefore, the proposed Project does not conflict with the Baker ACLUP and would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

Avoidance, Minimization, and/or Mitigation Measures

NOI-1: To minimize the construction-generated noise, contractor shall follow the Caltrans Standard Specification 14-8.02 “Noise Control” and San Bernardino County Code of Ordinances § 83.01.080 Noise, which requires the following:

- Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.
- Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Control and monitor noise resulting from work activities.

NOI-2: Construction equipment and equipment staging areas shall be located at the farthest distance possible from adjacent sensitive land uses.

NOI-3: Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.

NOI-4: When not in use, motorized construction equipment shall not be left idling.

XIV. POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

According to the 2016 American Community Survey, only 14.6% of County residents lived in unincorporated areas. The County Policy Plan only addresses unincorporated lands as it relates to increases in population and housing (County 2019). The 2020 Decennial Census reports a total population of 442 for the Community of Baker (USCB 2020). The proposed Project does not involve the addition of new housing or the displacement of existing housing.

DISCUSSION OF IMPACTS

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed Project does not include the construction of new homes or businesses. The proposed Project does expand the capacity to of the bridge to service more vehicles; however, this action will not result in an increase in traffic volume and/or demand per the traffic forecast completed for the Project. Therefore, the Project would have no potential to induce substantial population growth in the area, either directly or indirectly. No impact would occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project will not displace any number of existing housing or necessitate the construction of replacement housing. No impact would occur.

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

In some unincorporated areas of the County independent and self-governed community services districts (CSDs) are responsible for funding local public facilities and services (County 2019). Property owners within the Baker CSD have agreed to a special property tax on the land to fund improvements. The Baker CSD funds the Jesse Meyer Community Center; Senior Center; public swimming pool; and parks and recreation, sewer, solid waste, fire protection, television translators, and street lighting services (County 2019).

Fire Protection

The San Bernardino County Fire Department (County Fire) provides fire protection and emergency services to unincorporated communities within the County. The community of Baker resides in the North Desert Region (Division 5) (County 2019). The County #53 Fire Station is located approximately one mile northeast of the Project area at 72734 Baker Boulevard.

Police Protection

The community of Baker receives general public safety and law enforcement services from the San Bernardino County Sheriff's Department. The department operates 15 patrol stations and a centralized headquarters disperse throughout the County. The patrol stations are organized in to two bureaus: Valley/Mountain Patrol Bureau and the Desert Patrol Bureau. There are 10 cities in San Bernardino County that have their own municipal police departments and do not contract with the Sheriff 's Department (County 2019); including the City of Barstow, which serves the community of Baker through the operation of the Baker substation, a resident post of the Barstow Station. Due to Baker's proximity to I-15, the Baker substation has a mutual aid agreement with the California Highway Patrol (Sheriff's Department 2024).

Schools
The community of Baker is served by the Baker Valley Unified School District which oversees five public schools servicing students ranging in age from pre-school to adult (BVUSD 2024).

DISCUSSION OF IMPACTS

a-b) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection and/or Police Protection?

Less than Significant Impact. Police and fire protection (including ambulance services) are currently provided by the Barstow Station and Baker substation and Fire Station #53; respectively. The Barstow Station (including Baker and Trona substations) employs 26 patrol deputies to service a population of approximately 442 people (County 2019) The Baker CSD is responsible for accessing the need of these services as the community expands and develops. The *County Policy Plan Personal & Property Protection Element* (2022) contains policies relating to police and fire protection.

Construction of the proposed Project would not result in increased population and residential structures; however, fire and police services could be required for users of the bridge. Implementation of the proposed Project will not impact current service ratios, response times, and performance objectives. For these reasons, a less than significant impact to police and fire protection is anticipated.

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

No Impact. The proposed Project does not include new development for habitation, nor does it include development of new businesses. Therefore, the proposed Project would not induce population growth; and furthermore, does not include any components that would result in any schools or parks. Establishment of additional facilities to maintain acceptable service ratios for the public would not be necessary. Therefore, no impact would occur.

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

Less than Significant Impact. The County's Department of Public Works Transportation Division is responsible for the management of the planning, design, operation, maintenance, and improvements of the County Maintained Road System

(CMRS) that currently includes approximately 2,500 miles of roadways (County 2024). As described in response to questions "**a-b)**", the proposed Project will not impact current service rations, response times, and performance objectives. Furthermore, the proposed Project is expanding service capacity by the demolition of the existing two-lane 22 span timber bridge and replacing it with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions.

While existing mid-block pedestrian crossing located approximately 300 feet southwest of the Mojave River Channel may be removed as part of the Project, its original intent was to provide safe pedestrian access across Baker Boulevard from the Royal Hawaiian Motel. This motel has been closed for several decades and as a result, very little pedestrian use of the crossing occurs. As there are no current retail, food, or hospitality businesses or services that would necessitate or benefit from a pedestrian mid-block crossing at this location, the existing pedestrian crossing located at Baker Boulevard and SR 127/Death Valley Road provides sufficient, and most importantly, safe pedestrian crossing access; therefore, the Project would have a less than significant impact.

XVI. RECREATION

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The *County Policy Plan* (2022) contains goals and policies established to conserve existing national, State, and regional recreation areas, as well as encouragement for the development of additional recreational opportunities to meet the County's needs. Furthermore, the *Baker Community Action Guide* (CAG) describes an action plan based on community input and identifies values and Community Focus Statements to guide development (County 2019).

As previously described in section **3.XV. Public Services,** some parks and recreational facilities in unincorporated areas of the County are provided by CSDs. Property owners within the Baker CSD have agreed to a special property tax on the land to fund improvements. CSDs are independent, self-governed districts that can provide local public facilities and services. The Baker CSD funds the Jesse Meyer Community Center; Senior Center; public swimming pool; and parks and recreation, sewer, solid waste, fire protection, television translators, and street lighting services (County 2019).

DISCUSSION OF IMPACTS

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded CIDH piles or driven concrete pile extensions to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the Project in and of itself will not generate increase traffic volume and/or demand. Thus substantial physical deterioration of local parks and other recreational facilities is not expected to result from the proposed Project. Although the proposed Project involves the expansion of bridge that would allow for an increase in traffic capacity, there is no associated residential or commercial component that would increase human presence in the area resulting in an increased use of existing parks or recreational facilities. Further, traffic forecasting does not indicate that additional traffic would be generated due to the availability of additional lanes. The purpose of the Project is to improve structure safety and operations through replacement of the existing bridge and roadway approach. Therefore, no impact will occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The purpose of the proposed Project is to improve the structure safety and operations through the replacement of the existing bridge and roadway approach; and therefore, remains consistent with the existing land use of the Project site and surrounding areas. The proposed Project does not involve the construction or expansion of recreational facilities that would create a permanent or adverse physical impact. No impact would occur.

XVII. TRANSPORTATION

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

REGULATORY SETTING

On September 27, 2013, Governor Brown signed Senate Bill 743 (SB 743) and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service, and other similar measures of vehicle capacity or traffic congestion as a basis for determining significant impacts. The Governor's Office of Planning and Research (OPR) has issued final guidance entitled, Proposed Updates to the CEQA Guidelines (November 2017), covering the specific changes to the CEQA guidelines. The final guidance recommends elimination of auto delay and level of service for CEQA purposes and the use of Vehicle Miles Traveled, or VMT, as the preferred CEQA transportation metric. The City of Elk Grove General Plan Update (2021) incorporates the change in transportation impact analysis, resulting from SB 743, and includes VMT policy that establishes significance thresholds for CEQA analysis of future projects.

State

2019 CEQA Update: Section 15064.3(b)(2) - Determining the Significance of Transportation Impacts

Pursuant to CEQA section 15064.3(b)(2), transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

Local

County Policy Plan (2022)

The following policies from the County Policy Plan (2022) provides guidance for new and/or improved roadways related to reducing impacts to established communities:

- TM-1.2 Interjurisdictional roadway consistency – We promote consistent cross-sections along roads traversing incorporated and unincorporated areas.

- TM-2.1 Context-sensitive approach – We maintain and periodically update required roadway cross sections that prioritize multi-modal systems inside mobility focus areas (based on community context), and vehicular capacity on roadways outside of mobility focus areas (based on regional context).

- TM-2.2 Roadway improvements – We require roadway improvements that reinforce the character of the area, such as curbs and gutters, sidewalks, landscaping, street lighting, and pedestrian and bicycle facilities. We require fewer improvements in rural areas and more improvements in urbanized areas, consistent with the Development Code. Additional standards may be required in municipal spheres of influence.

- TM-4.1 Complete streets network – We maintain a network of complete streets within mobility focus areas that provide for the mobility of all users of all ages and all abilities, while reflecting the local context.

- TM-4.2 Complete streets improvements, improve connectivity by supporting active transportation in more densely populated community cores (mobility focus areas), where pedestrians and other mobility users of all ages and abilities would be accommodated safely. New development would be required to contribute to those improvements among others.

- TM-4.7 Regional bicycle network – We work with SBCTA and other local agencies to develop and maintain a regional backbone bicycle network.

- TM-4.8 Local bicycle and pedestrian networks – We support local bike and pedestrian facilities that serve unincorporated areas, connect to facilities in adjacent incorporated areas, and connect to regional trails. We prioritize bicycle and pedestrian network improvements that provide safe and continuous pedestrian and bicycle access to mobility focus areas, schools, parks, and major transit stops.

- TM-4.9 Bike and pedestrian safety – We promote pedestrian and bicyclist safety by providing separated pedestrian and bike crossings when we construct or improve bridges over highways, freeways, rail facilities, and flood control areas. We monitor pedestrian and bicycle traffic accidents and promote safety improvements in unincorporated high-accident areas.

- TM-5.5, Countywide truck routes – We support SBCTA's establishment of regional truck routes that efficiently distribute regional truck traffic while minimizing impacts on residents. We support funding through the RTP to build adequate truck route infrastructure.

- TM-5.6 Unincorporated truck routes – We establish local truck routes in unincorporated areas to efficiently funnel truck traffic to freeways while minimizing impacts on residents. We establish routes where trucks are prohibited in unincorporated environmental justice focus areas and to avoid overlaps or conflicts with safe routes to schools.

San Bernardino Transportation Impact Study Guidelines

The County has identified that vehicle level of service (LOS) is still of value to the residents of San Bernardino County. As such, the General Plan includes policies that address LOS and identify LOS standards for which County infrastructure will strive to maintain. Therefore, County projects will also be required to complete a transportation impact study (TIS), in addition to VMT assessment, to demonstrate consistency with the General Plan.

Level of Service Assessment for General Plan Consistency

Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the current General Plan, the County should consider the following roadway segment thresholds and improvement requirements:

- Any study roadway segment in the Valley or Mountain regions that is operating at an LOS D or better without project traffic in which the addition of project traffic causes the segment to degrade to an LOS E or F should identify improvements to achieve LOS D.

- Any study roadway segment in the Desert region that is operating at an LOS C or better without project traffic in which the addition of project traffic causes the segment to degrade to an LOS D, E, or F should identify improvements to achieve LOS D.

- Any roadway segment that operates unacceptably in the no project scenario where the project adds traffic in excess of 5% of the roadway capacity (e.g. a volume-to-capacity ratio increase of 0.05) should identify improvements to add capacity to the segment.

CEQA VMT Impact Threshold and Mitigation

A project should be considered to have a significant impact if the project VMT per person/employee is greater than 4% below the existing VMT per person for the unincorporated County.

Four percent below existing was identified as an appropriate threshold through an exercise completed by Fehr & Peers as part of the *General Plan* process. The process focused on development in the growth areas of the County (where major development is expected to occur) and utilized the California Air Pollution Control Officers Association (CAPCOA) Quantifying GHG Mitigation Measures (August 2010) to estimate the maximum feasible VMT mitigation that could be achieved through TDM. The TDM effort identified that the maximum achievable TDM reduction associated with development in the identified growth areas would be just over 4% for both residential projects and for commute trips associated with employment uses. Utilizing the maximum achievable TDM reduction as the threshold provides an achievable threshold for County development to consider when processing applications.

Once a significant impact is identified, the project's VMT per person/employee should be mitigated to 4% below the baseline VMT per person. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with Chapter 7 of the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010) and approved by the Traffic Division and Land Use Services Department (if applicable); or the project description should be reviewed and modified to promote reduced VMT.

ENVIRONMENTAL SETTING

Existing Traffic Volume Information

Existing traffic volumes provided by San Bernardino County for use in this study has been updated with more recent traffic counts. The updated counts include traffic volumes by vehicle classification and was collected on September 25, 2024, through October 1, 2024. The existing traffic data is presented in **Table 1 – Appendix G**.

Table 1 in **Appendix G** also provides an estimate of Passenger Car Equivalencies (PCEs). PCE is a factor that converts heavy vehicles to the equivalent capacity they occupy in terms of passenger cars. To were assumed to have a 3.0 PCE. Please note that the updated traffic count volumes are generally 1,000 PCEs higher than the previous counts provided by the County. The biggest change is in medium duty vehicles.

Traffic Forecasting Methodology
The San Bernardino Traffic Analysis Model Plus (SBTAM+) was used to generate the traffic forecasts for this assessment. SBTAM+ is a specialized subregional travel demand model created in 2023 to do forecasting for projects in San Bernardino County. It should be noted that the SBTAM+ model has limited detail in this area as Baker is represented by only one traffic analysis zone. The centroid loading to/from this TAZ is not detailed enough to get adequate forecasts in the study area. As such, Fehr & Peers utilized SBTAM+ to develop a growth estimate by looking at TAZ growth and growth on the I-10 freeway in the study area with the assumption that growth on Baker Boulevard would be similar to growth on I-10.

The utilized growth rate was 1.86% per year to estimate future conditions. Compounding the annual growth rate over 31 years (corresponding to a design year of 2050) yielded a growth "factor" applied to the existing vehicle fleet mix of 1.53.

The SBTAM+ model also forecasts "typical weekday" traffic volumes and does not differentiate typical weekday from peak periods in this corridor. As such, we applied the same growth rate to the weekend period for use in this assessment.

Finally, as it relates to future vehicle composition mix, Fehr & Peers utilized the existing vehicle fleet mix for that estimation and applied the same PCE conversions to estimate traffic on the study roadways.

The resulting forecast are summarized in **Table 2 – Appendix G**.

Level of Service (LOS) Analysis
Fehr & Peers compared the resulting forecasts to capacities identified in **Table 3 – Appendix G** from the San Bernardino County Policy Plan. The plan utilizes volume-to-capacity ratios that correspond to resulting congestion on the roadway by giving it a letter grade of LOS C through LOS E. LOS E represents at-capacity operations. The assumed capacities are noted below and utilize capacities for a Major Arterial/Major Highway (either two-lanes or four-lanes) and a posted speed of 45 MPH:

- Two-lane road = 19,000
- Four-lane road = 37,900

Table 4 – Appendix H presents the roadway segment PCE average daily traffic volumes (ADT) analysis based on the appropriate capacities noted above.

DISCUSSION OF IMPACTS

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place

reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. The Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system.

The proposed Project would improve performance from existing conditions. Analysis results conducted by traffic consultants (**Appendix G**) indicate that a two-lane roadway will operate at LOS C or better for most evaluated scenarios/time periods. However, during a typical weekend, the segment is projected to operate at LOS D in 2050 with only two lanes. The County's traffic impact study guidelines identify that segments in the Desert Region should operate at LOS C or better. As such, the peak weekend condition would require a four-lane roadway in year 2050.

The Project is consistent the County Policy Plan and Transportation Impact Study Guidelines. Therefore, no impact would occur.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant. The proposed Project would be in compliance with CEQA Guidelines section 15064.3, subdivision (b) which finds that transportation projects that reduce, or have no impact on, vehicle miles traveled are presumed to cause a less than significant transportation impact. The Traffic Demand Forecasting Memo determined that in both the Build and No Build conditions, the existing 2024 daily traffic volumes would increase from 5,400 vehicles on weekdays and 8,400 vehicles on weekend to 9,700 vehicles on weekdays and 14,700 vehicles on weekends. These traffic volumes were estimated along Baker Blvd between Kelbaker Rd to the east and Mill Rd to the west of the bridge, which is approximately 0.70 miles of roadway. To calculate the daily VMT, the traffic volumes are multiplied by the roadway miles. To calculate annual VMT, the daily VMT values are multiplied by 347, per ARB methodology (CARB 2008). This results in an existing VMT range of weekday and weekend annual VMT value of 1,311,660 and 2,040,360 VMT, respectively. In the future Build and No Build conditions in 2050, the VMT range of weekday and weekend annual VMT value would increase to 2,356,130 and 3,570,630 VMT, respectively. Although the average annual VMT would increase from existing conditions to future conditions, implementation of the Project would not result any new or additional VMT as the Build and No Build conditions result in identical VMT estimates. Regardless of project implementation, additional ADT is anticipated to travel along Baker Blvd; however, this Project would not increase annual VMT when comparing the Build and No Build conditions. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and a less than significant impact would occur.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed Project would be designed in accordance with the standards and guidelines set forth in the County Policy Plan and Transportation Impact Study Guidelines. The proposed Project would not create an increased hazard due to geometric design or incompatible uses. The Project is needed to meet current structural design standards by improving structure safety and operations through replacement of the existing bridge and roadway approach; therefore, no impact would occur.

d) Result in inadequate emergency access?

Less than Significant. Temporary and permanent right of way acquisition may be required for construction. The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Both options will keep the new bridge and approach road widenings within existing ROW. The Project has been designed in accordance with County road and improvement standards, thereby ensuring that adequate emergency access could be provided to the proposed uses. Therefore, the proposed Project would not result in inadequate emergency access and would have a less than significant impact.

XVIII. TRIBAL CULTURAL RESOURCES

XVII. 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:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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.	☐	☒	☐	☐

REGULATORY SETTING

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and Project proponents would have information available, early in the Project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a "project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to provide an opportunity to consult with any California Native American tribe which has filed a 'general request' letter with the lead agency, is traditionally and culturally affiliated with the geographic area of the proposed project and requests a consultation The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification of proposed projects within their traditionally and culturally affiliated area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents

must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

ENVIRONMENTAL SETTING

The analysis of tribal cultural resources presented in this section is based on a review of the current Project description, the Historic Property Survey Report/Archaeological Survey Report (Dokken 2025g) and the CEQA Cultural Resources Technical Report (Dokken 2025c) prepared for the Project, available literature, and an archaeological field survey conducted by Dokken Engineering archaeologist Namat Hosseinion on August 8, 2024. Please note that due to the inclusion of sensitive and confidential information, the Historic Property Survey Report/Archaeological Survey Report is not available to the general public. The CEQA Cultural Resources Technical Report is included as **Appendix H**, but the sensitive information has been redacted.

The following text is previously described in section **3.V. Cultural Resources** and similarly provides context for the analysis of tribal cultural resources in the Project area.

Area of Potential Effects

The APE for the Project was configured to include the bridge, approach roadways, areas of street striping, expected grading areas within the Mojave River Channel, and staging areas for construction equipment. The horizontal APE encompasses approximately 1,200 feet of roadway approach work on Baker Boulevard, several potential temporary construction staging areas, potential temporary construction easements (TCEs), utility relocation, installation of roadway/bridge lighting, and all associated grading activities to accommodate the bridge demolition, replacement bridge installation, permanent channel access ramp construction, and channel modifications to ensure the replacement bridge has sufficient hydraulic capacity. The entire horizontal APE is 15.95 acres in size (**Figure 7. Area of Potential Effects**).

The vertical APE encompasses all grading activities required to demolish the existing bridge, install the replacement bridge, install street lighting, and relocate utilities. The vertical APE also encompasses the full height of the replacement bridge, as measured from the deepest ground disturbance in the existing channel, and the height of proposed roadway and bridge lighting, as measured from the roadway elevation. The deepest ground disturbance is associated with installation of the replacement bridge. The proposed depth for the bridge abutment walls and buried rock slope protection is 10 feet below existing channel grade with abutment piles extending

an additional 30 feet (a total of 40 feet in depth for the abutments). The bridge piers will extend down about 53 feet below existing channel grade.

The proposed bridge height, including the railings, will be approximately 17 feet, as measured from the existing channel grade. The roadway lighting will match the heights of existing light poles along Baker Boulevard, extending up to 40 feet above existing roadway grade.

The majority of the deep ground disturbance will occur within the existing channel. Since its construction in 1938, the channel has been subject to significant flood (storm) events, associated storm water surface run-off/flows, and at least one additional more modification to the channel limits/structure. Such extensive ground disturbance indicates that the potential for buried sites present with the APE is low.

Sources Consulted

Background research was conducted to identify previous studies and recorded cultural resources within the APE and a 1.0-mile search radius around the APE. The background research consisted of a record search, literature and map reviews, and consultation with the Native American Heritage Commission (NAHC) and Native American groups. Available historic maps, aerial imagery, General Land Office (GLO) plat maps, geological deposit maps, and a review of soil compositions were also consulted.

Records Search

A record search for previously recorded resources and surveys or reports within the APE and a 1.0-mile search radius of the APE was requested from the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS). The results indicate that 34 previously documented cultural resources were reported within the 1.0-mile search radius of the APE and two (2) linear cultural resources were within the APE. The two resources include segments of P-34-007689/CA-SBR-7689H – Arrowhead Trail/Highway and P-36-034306 – Death Valley Road. In addition to the records search results, the existing bridge, Bridge No. 54C-0127, is also over 50 years in age. As none of these resources have been identified either in the recordation documentation or through consultation with Native American Tribal Governments as being associated with Native American cultural heritage, they are not considered Tribal Cultural Resources.

Native American Consultation

A letter and map figures depicting the Project vicinity and location were sent to the NAHC requesting a review of the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project. The NAHC replied that the results of the review were *negative*.

On December 18, 2023, initial consultation letters were mailed to the Twenty-Nine Palms Band, Colorado River Indian Tribes, and the Yuhaaviatam of San Manual Nation (formerly San Manuel Band of Mission Indians). The Yuhaaviatam of San Manual Nation replied December 28, 2023 that the Project is outside of their area of interest and declined to consult on the Project. No response from the Twenty-Nine Palms Band of Mission Indians has been received.

Archaeological Site Sensitivity

As discussed in section **3.V. Cultural Resources**, an assessment for the potential of subsurface archaeological resources to be present within the APE was conducted. For the full assessment,

including aerial imagery, please see section **3.V. Cultural Resources**. To summarize, extensive landform modifications and past ground disturbance associated with widening and maintaining the Mojave River Channel as a flood control channel, construction of the extant bridge, construction of the roadway, installation of buried and aerial utilities, expansion of commercial property into the Mojave River Channel/Soda Lake (Dry Lake), and overall residential/commercial development would have removed any potential TCRs from the APE. However, should currently unknown subsurface cultural resources that have the potential to be considered TCRs be encountered during construction, implementation of measures **CR-1** and **CR-2** would reduce Project impacts to less than significant.

Cultural Survey

An archaeological field survey was conducted on August 8, 2024, by consulting archaeologist Namat Hosseinion for the purposes of identifying and recording archaeological resources. The surface survey was conducted via controlled transects spaced at no greater than 10-meter intervals within the entire APE. Special attention was paid to all observed surface exposures and possible anthropogenic soils.

No archaeological resources were identified during the pedestrian survey. Above all, the pedestrian survey confirmed what was noted during historic aerail review of the APE – extensive landform modifcations and past ground disturbance associated with widening and maintaining the Mojave River Channel as a flood control channel, construction of the extant bridge, construction of the roadway, installation of buried and aerial utilities, expansion of commercial property into the Mojave River Channel, and overall residential/commercial development.

DISCUSSION OF IMPACTS

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:

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)?**

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?**

Less than Significant with Mitigation. No TCR was identified during identification and consultation efforts conducted for the Project. As such, the Project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). No impacts are anticipated for the Project related to TCRs.

Further, extensive landform modifications and past ground disturbance associated with widening and maintaining the Mojave River Channel as a flood control channel, construction of the extant bridge, construction of the roadway, installation of buried and

aerial utilities, expansion of commercial property into the Mojave River Channel/Soda Lake (Dry Lake), and overall residential/commercial development would have removed any potential TCRs from the APE. However, should currently unknown subsurface cultural resources that have the potential to be considered TCRs be encountered during construction, implementation of measures **CR-1** and **CR-2** as described in section **3.V. Cultural Resources** would reduce Project impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

CR-1: If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

CR-2: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). Further provisions of PRC 5097.98 are to be followed as applicable.

XIX. UTILITIES AND SERVICE SYSTEMS

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

ENVIRONMENTAL SETTING

CSDs provide sewer services to unincorporated communities through County service areas (CSAs) and community facilities districts (CFDs). The Baker CSD serves the community of Baker. Most special districts collect and transport sewage flow over miles of collection pipelines to local treatment facilities or to a third-party treatment provider. Special Districts outsource some of the sewage treatment to other agencies. For the CSAs that do not have treatment facilities, Special Districts have treatment agreements with Victor Valley Wastewater Reclamation Authority (WRA), Running Springs Water Agency, the City of Rialto, and Big Bear Area Regional Wastewater Agency (County 2019).

Water

The unincorporated areas within the County have access to domestic water sources that are generally supplied through local and imported water. Approximately 85% of the domestic water supplied by local groundwater sources and the remaining 15% supplied by imported purchased water. Imported water is primarily purchased from the Metropolitan Water District (MWD) through the State Water Project (SWP) as a supplemental source to local groundwater supplies. While several regional water wholesalers distribute this imported water throughout the County, numerous retail and private water purveyors manage the majority of the groundwater pumping and distribution. Baker CSD serves as the water supplier to the community of Baker through its CSA (County 2019).

Wastewater Service

In the North Desert Region, regional treatment facilities are provided by the Helendale CSD, Baker CSD, Oro Grande CSA, Victor Valley Wastewater Reclamation Authority, the Town of Apple Valley, Hesperia County Water District, and the cities of Barstow and Needles. These facilities fall under the jurisdiction of the Lahontan RWQCB (County 2019).

Solid Waste Service

Private trash hauling companies collect solid waste from unincorporated areas of San Bernardino County under franchise agreements with the County (County 2019). The community of Baker is served by Burrtec Waste Industries, Inc. Solid waste is taken to the Baker Transfer Facility and then delivered to one of the following landfills within the North Desert Region of San Bernardino County: Barstow Sanitary Landfill, Victorville Sanitary Landfill, and/or Ft. Irwin (County 2024).

DISCUSSION OF IMPACTS

a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Less than Significant. The proposed Project would improve structure safety and operations through replacement of the existing bridge and approach roadways and would not increase population in the Project vicinity; therefore, there would be no additional wastewater flows as a result of Project development; or result in expanded wastewater treatment or stormwater drainage treatment.

The proposed Project would add a net impervious surface of approximately 0.66 acres to the Project area due to the addition of pavement for the expansion of the existing two-lane 22 span timber bridge by replacing it with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. Approximately 1,200 feet of approach roadway work would be required to widen Baker Boulevard to its ultimate width. The Project will require relocation of overhead utilities, utilities attached to the bridge, and may require relocation of underground utilities along the roadway approaches. Coordination with utility companies regarding relocation is currently on-going.

This proposed structure will meet and address County and AASHTO standards and criteria, or equivalent. The proposed Project is not anticipated to generate excessive runoff, and the proposed Project would not include construction of new stormwater drainage facilities, or expansion of existing facilities. Therefore, impacts would be less than significant.

b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

No Impact. The Project would not result in the need for new or expanded water supplies. There may be a temporary need for water during construction to control dust; however, it is not anticipated to result in the need for water supply beyond what is currently available,

and no increase in demand for long-term water supply would be generated by the Project. No impact would occur.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of the proposed Project; therefore, the Project would not result in the need for new or expanded wastewater facilities. No impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant. The Project would not generate solid waste during operation. Solid waste would be generated during construction; however, the amount will not exceed landfill capacities. Solid waste generated by the proposed Project would be transported to Baker Transfer Station located south of I-15, 3 miles south of the community of Baker (County 2022). Therefore, impacts would be considered less than significant.

e) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste including the California Integrated Waste Management Act of 1989 (AB 939) and the California Solid Waste Re-Use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code). No impact would occur.

XX. WILDFIRE

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

ENVIRONMENTAL SETTING

Based on maps produced by the CAL FIRE, the Project area is not within or near a State Responsibility Area (SRA). An SRA is the area of the state where the State of California is financially responsible for the prevention and suppression of wildfires. SRAs do not include lands within city boundaries or in federal ownership. According to CAL FIRE's SRA Viewer (CAL FIRE 2024), the community of Baker is immediately adjacent to an area designated as a Federal Responsibility Area (FRA), which would designate financial responsibility to the Forest Service under the U.S. Department of Agriculture.

Additionally, the Project area is not within or near an area designated for moderate, high, or very high fire severity. There are no areas designated as such within any portion of the community of Baker (CAL FIRE 2024). Similarly, fire severity maps produced by CAL FIRE within the County's *Local Hazard Mitigation Plan Update for Local Responsibility* Areas (LRA), of which the County is a part, have not designated any "very high fire severity lands" within any portion of the community of Baker or adjoining areas (CAL FIRE 2024). The closest fire severity zone is located approximately 82 miles southwest of the Project area near Highway 18 southeast of Victorville which is zoned as "High". Lastly, based on map data developed by the US Forest Service, the Project area is not located within or adjacent to any wildfire potential zones (Forest Service 2023).

DISCUSSION OF IMPACTS

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant. The proposed Project is needed to improve structure safety and operations through replacement of the existing bridge and approach roadways.

Temporary and permanent right of way acquisition may be required for construction. The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Both options will keep the new bridge and approach road widenings within existing right-of-way. Emergency access would be maintained to Highway 127 and I-15, both designated as evacuation routes by the *County Policy Plan*. The Project has been designed in accordance with County road and improvement standards, thereby ensuring that adequate emergency access could be provided to the proposed uses. A less than significant impact would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The Project is located in a topographically flat, commercial area in the community of Baker, adjacent to commercial/public facility land uses. The proposed Project area is not within or adjacent to a SRA. FRA lands surround the jurisdictional boundaries of the community of Baker, but no FRA lands are in proximity to the Project Area. Emergency access would be maintained throughout construction, and, in the event of a fire, the San Bernardino Fire Department provides emergency fire services to the Project area. No impact would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant. The proposed Project is needed to improve structure safety and operations through replacement of the existing bridge and approach roadways. The new bridge and approach roadways will require ongoing maintenance. However, maintenance activities are not anticipated to exacerbate fire risk and the proposed Project area is not within or adjacent to a SRA. Impacts would be less than significant.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant. The Project is located in a topographically flat, commercial area in the community of Baker, adjacent commercial/public facility land uses and is not within or adjacent to a SRA. As described previously, the proposed Project would result in permanent impacts of approximately 0.0345 acres of the Mojave Rive Channel and 0.0207 acres of saltbush scrub (**Figure 6. Biological Habitat Impacts**). The proposed Project would have minimal changes to the operation of the Mojave River channel and drainage patterns. Implementation of the proposed Project would not expose people or structures to significant risks. A less than significant impact would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION OF IMPACTS

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. Implementation of the Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to Aesthetics (section 3.I), Biological Resources (section 3.IV), Cultural Resources (section 3.V), Geology and Soils (section 3.VII), Hazards and Hazardous Waste (section 3.IX), Hydrology and Water Quality (section 3.X), Noise (section 3.XIII), and Tribal Cultural Resources (section 3.XVIII).

Mitigation measures **BIO-1** through **BIO-16** would reduce impacts to biological resources to a less than significant level. The potential for discovery or disturbance of historical, archaeological, human remains, TCRs, or paleontological resources is not anticipated. However, implementation of mitigation measure **CR-1** and **CR-2** and **PAL-1** and **PAL-2** would reduce impacts to a less than significant level by ensuring that appropriate protocol is followed.

Project impacts to Hazards and Hazardous Waste, Hydrology and Water Quality, and Noise would primarily consist of temporary impacts related to construction of the Project. These impacts would be reduced to a less than significant level through implementation

and incorporation of **HAZ-1** through **HAZ-6**, **WQ-1** and **WQ-2**, and **NOI-1** through **NOI-4**, respectively.

See section **4.0 Summary of Mitigation Measures** for a summary of all mitigation measures, timing of implementation, and responsible party. Implementation of mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered less than significant with mitigation incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. CEQA Guidelines Section 15064(h) states that a lead agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must therefore be conducted in connection with the effects of past projects, or other current projects, and probable future projects.

The proposed Project is consistent with the San Bernardino County Policy Plan (County 2022), which serves as the County's General Plan for the unincorporated areas, including the community of Baker. The proposed Project is needed to improve structure safety and operations through replacement of the existing 86-year-old bridge and approach roadways, which is consistent with land use and zoning designations previously described in section **3.XI. Land Use and Planning**. The proposed Project includes the demolition of the existing two-lane 22 span timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on CIDH piles or driven concrete pile extensions. This proposed structure will meet and address County and AASHTO standards and criteria, or equivalent.

The proposed Project would make no significant contribution to cumulatively adverse impacts associated with existing or proposed development projects in the County as the Project would not directly generate vehicle trips. Construction of the proposed Project along with other construction in San Bernardino County would not contribute to cumulative environmental impacts. However, the proposed Project's contribution would be minimal considering the highly developed land uses in the area. Therefore, impacts of the proposed Project related to cumulatively considerable impacts in the San Bernardino County are considered less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. The Project would not cause significant or unavoidable adverse effects to human beings, either directly or indirectly with mitigation incorporated. See chapter 4.0 Summary of Mitigation Measures for a summary of all mitigation measures, timing of implementation, and responsible party. All potentially significant impacts have been reduced to a less than significant level by mitigation measures related to individual resource-specific impacts:

- Aesthetics (VIS-1 through VIS-3)

- Biological Resources (BIO-1 through BIO-16),
- Cultural Resources (CR-1 and CR-2),
- Geology and Soils (PAL-1 and PAL-2),
- Hazards and Hazardous Materials (HAZ-1 through HAZ-6)
- Hydrology and Water Quality (WQ-1 and WQ-2),
- Noise (NOI-1 through NOI-4), and
- Tribal Cultural Resources (CR-1 and CR-2).

Therefore, impacts are considered less than significant with mitigation incorporated.

4.0 SUMMARY OF MITIGATION MEASURES

4.1 Summary of Mitigation Measures

Aesthetics (Section 3.I)

VIS-1: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats (same as BIO-3).

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

VIS-2: Lighting will be appropriately shielded. The Project's lighting design must be consistent with the County's lighting guidelines and standards.

Timing/Implementation: *During and Post Project Construction*

Enforcement/Monitoring: *San Bernardino County Public Works*

VIS-3: The new structure over the Mohave River Channel will follow aesthetic treatments developed by the Project engineer.

Timing/Implementation: *Completion of Project Construction*

Enforcement/Monitoring: *San Bernardino County Public Works*

Biological Resources (Section 3.IV)

BIO-1: BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction;
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;

- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

Timing/Implementation: *During Project construction*

Enforcement/Monitoring: *Contractor*

BIO-2: The County will fulfill all compensatory mitigation required by permitting agencies (CDFW and/or RWQCB) as outlined in the final environmental permits acquired for the Project. Compensatory mitigation will be developed during the permitting phase and is anticipated to be required for permanent impacts to desert sink scrub habitat. Mitigation may consist of credit purchases, in lieu fee payments, or on/offsite habitat enhancement or restoration. All permanent impacts will be mitigated at a minimum of 1:1 ratio.

Timing/Implementation: *Prior to Project construction*

Enforcement/Monitoring: *San Bernardino County Public Works*

BIO-3: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-4: Approximately 2-4 weeks in advance of construction activities, a focused survey for desert tortoises and their burrows within the Project area shall occur by the authorized biologist. Survey methodology shall assure 100% visual coverage of the survey area. Additionally, within 24 hours of the start of soil disturbance, another focused preconstruction clearance survey for desert tortoise will be conducted by the authorized biologist. The focused desert tortoise survey shall not be combined with other surveys conducted for other species while using the same personnel. If a tortoise or tortoise sign is found in the impact areas or

within the immediate vicinity during either preconstruction survey, USFWS and CDFW shall be contacted immediately and the tortoise shall be allowed to move outside the construction area/exclusionary area on their own before the Project can commence installation of exclusionary fencing, on-site construction preparation activities, or any construction activities.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Project Biologist*

BIO-5: Areas that provide suitable habitat for the desert tortoise (saltbush scrub habitat and desert sink scrub habitat) will be marked with temporary desert tortoise exclusion fencing, if required by regulatory permits. Exclusion fencing locations will be decided in coordination with USFWS and CDFW. The desert tortoise fencing must comply with the standards outlined in the 2009 USFWS Desert Tortoise (Mojave Population) Field Manual. A USFWS/CDFW approved biologist will oversee installation of exclusion fencing.

If required by regulatory permits, desert tortoise exclusion fencing will be inspected at least twice weekly by the authorized project biologist or trained personnel and repaired as needed. Repairs must occur within two days. Any debris that accumulates along the fence should be removed as the fence is inspected.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor to install/maintain fencing; Project Biologist to oversee.*

BIO-6: The Project biologist will monitor ground disturbing activities at the Project site which may cause take of the desert tortoise. The authorized biologist will also oversee the implementation of all avoidance and minimization measures put in place to protect the desert tortoise. Should a desert tortoise be found within the Project limits, construction activities shall cease and the USFWS and CDFW shall be contacted within 12 hours. The tortoise shall be allowed to leave the Project area limits on its own volition. Construction may only recommence at the Project biologist's authority and once the desert tortoise is outside of project limits.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Project Biologist*

BIO-7: Environmental awareness training will be provided to all construction personnel prior to the onset of ground disturbing activities. The training will include information on desert tortoise, including life history, protection measures, and protocols for encounters with the species.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Project Biologist*

BIO-8: Project personnel will thoroughly check under parked vehicles/equipment and within the exclusion fence area every day prior to mobilization for desert tortoises. If any desert tortoises are found within the staging and/or construction areas, they will be allowed to move away from such areas on their own accord. Workers will not be allowed to capture, handle, or relocate tortoises. Project activities will re-commence only once the desert tortoise is outside the Project limits or at the USFWS and CDFW approved biologist's authority.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor and Project Biologist*

BIO-9: Construction vehicles will not exceed 15 mph when traveling on soil surfaces within the Project limits.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-10: Open trenches, auger holes, or other excavations that may act as pitfall traps will be inspected prior to working in or around the excavation area and prior to backfilling. Any excavations that remain open overnight must be covered to prevent entrapment of wildlife. Any animals found within the excavations will be relocated by the Project biologist. Should any listed or sensitive species be found within these excavations, the appropriate wildlife agency will be contacted immediately and subsequent actions will be performed under the direction of the lead wildlife agencies.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor and Project Biologist*

BIO-11: Should a desert tortoise be injured as a result of project related activities; it shall be immediately taken to a CDFW approved rehabilitation facility by the authorized biologist. The CDFW approved rehabilitation facility in the vicinity of the Project area is the Big Bear Alpine Zoo (909) 584-1299. Any veterinarian bills for such injured tortoises shall be paid by San Bernardino County. The CDFW and USFWS shall be notified within 12 hours of the incident. Notification shall include the date, time, location, and circumstances of the incident.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Project Biologist*

BIO-12: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-13: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-14: The contractor must not apply rodenticide or herbicide within the Project area during construction.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor*

BIO-15: If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Contractor and Project Biologist*

BIO-16: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project Biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 1 week of the nesting bird survey, all vegetated areas that are designated for removal must be cleared by the contractor or a supplemental nesting bird survey is required.

An initial100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project Biologist and in coordination with wildlife agencies) in the buffer area until a Project Biologist determines the young have fledged. A reduced no-work buffer can be established if determined appropriate by the Project Biologist, and will consider various factors including species of bird, location of nest, stage of nest, existing environment, and type of active work.

Timing/Implementation: *Prior to and During Project Construction*

Enforcement/Monitoring: *Project Biologist and Contractor*

Cultural Resources (Section 3.V) and Tribal Cultural Resources (Section 3.XVIII)

CR-1: If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor and Project Archaeologist*

CR-2: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). Further provisions of PRC 5097.98 are to be followed as applicable.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *San Bernardino Public Works, Contractor, and Project Archaeologist*

Geology and Soils (Section 3.VII)

PAL-1: A Paleontological Mitigation Plan shall be created for the Project. Preparation of the plan shall be done by a Principal Paleontologist. The Principal Paleontologist will meet the qualifications outlined under Caltrans Standard Environmental Reference, Volume 1, Chapter 8 (SER V1 Ch8). The Principal Paleontologist will be responsible for implementing the mitigation plan and maintaining professional standards of work to the recommendations of Caltrans Standard Environmental Reference Volume 1 Chapter 8.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *San Bernardino County Public Works and Project Paleontologist*

PAL-2: Conduct paleontological monitoring:

- Full time paleontological monitoring is recommended for mass excavations exceeding 3 feet in Pleistocene deposits.
- Full time paleontological monitoring is recommended for mass excavations exceeding 5 feet in Holocene deposits.
- Full time monitoring should be conducted initially and depending on the nature of sediments, the Principal Paleontologist may reduce the amount of monitoring to part-time or even spot checking. These decisions should be coordinated with the County.
- No monitoring is recommended for augering, potholing, pile driving, CIDH columns, or other excavation activities which will not allow the context of the fossil to be observed.
- If unanticipated discoveries of paleontological resources occur during construction, all work within 50 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist.

"Mass excavations" exclude augering, potholing, pile driving, or other excavation activities which will not allow the context of the fossil to be observed.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Project Paleontologist and Contractor*

Hazards and Hazardous Waste (Section 3.IX)

HAZ-1: Any leaking transformers observed during the course of the Project should be considered a potential PCB hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from the electrical transformer that is located directly within the proposed roadway widening limits be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the CCR and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the CCR and any other appropriate regulatory agency.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

HAZ-2: An ACM inspection/survey will be conducted by a Certified Asbestos Consultant or by a Certified Site Surveillance Technician working under a Certified Asbestos Consultant as part of a limited Phase II Site Assessment. At least 10 working days prior to the commencement of abatement work, notification submissions shall be submitted to the National Emission Standards for Hazardous Air Pollutants (NESHAP). Abatement of ACM should be conducted by contractors certified to perform such work and in accordance with state and federal regulations. Waste management issues for ACM are regulated under CCR Title 22 and the NESHAP. Caltrans Standard Specifications regarding ACM will be included in the plan specifications and be implemented by the contractor, as applicable, to ensure ACM is properly managed and removed from the Project site.

Timing/Implementation: *During Construction*

Enforcement/Monitoring: *Contractor*

HAZ-3: Aerially Deposited Lead (ADL) is commonly associated with transportation construction due to emissions from vehicles powered by lead gasoline. A limited Phase II Site Assessment is recommended to test for the presence of ADL contamination within the limits of proposed construction. The Phase II Site Assessment should consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the area extent and depths of planned construction activities adjacent to these sites. Criteria for construction safety practices when handling lead can be found in CCR, Title 8, Section 1532.1. If testing determines ADL to be present in unregulated and/or regulated earth materials within the planned construction

area, then Caltrans Standard Specifications and Standard Special Provisions regarding ADL will be included in the Project specifications to be implemented by the contractor.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

HAZ-4: Treated wood from the bridge may contain chemicals, e.g. creosote, which poses a risk to human health and the environment and must be handled in accordance with CCR, Title 22, Division 4.5 implemented by the Department of Toxic Substances Control (DTSC). Section 14-11.14 provides guidelines on handling, storing, transporting, and disposing of Treated Wood Waste (TWW). Caltrans follows the regulations adopted by DTSC regarding TWW, which may be handled as a regulated solid waste and disposed of in a State Water Resources Control Board certified solid waste landfill.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

HAZ-5: For any previously unknown hazardous waste/ material encountered during construction, the procedures outlined in Caltrans Uknown Hazards Procedure, will be followed.

Timing/Implementation: *During Construction*

Enforcement/Monitoring: *Contractor*

HAZ-6: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used onsite. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

Hydrology and Water Quality (Section 3.X)

WQ-1: Prior to the start of construction activities, temporary Environmentally Sensitive Area (ESA) fencing and/or desert tortoise exclusion fencing will be erected along the limits of the saltbush scrub habitat and desert sink scrub habitat impact areas to clearly demarcate their limits, if required by regulatory permits. Construction equipment and vehicles will be confined to designated access routes and work areas to minimize habitat disturbance. Vehicles and heavy machinery will avoid unnecessary idling and will be regularly maintained to reduce the risk of fluid leaks, which could contaminate nearby habitats (same as Measure **BIO-3**).

Timing/Implementation: *Prior to Project Construction*

Enforcement/Monitoring: *Contractor*

WQ-2 BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels) (same as Measure **BIO-1**):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction;
- Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

Noise (Section 3.XIII)

NOI-1: To minimize the construction-generated noise, contractor shall follow the Caltrans Standard Specification 14-8.02 “Noise Control” and San Bernardino County Code of Ordinances § 83.01.080 Noise, which requires the following:

- Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.
- Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m.

- Control and monitor noise resulting from work activities.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

NOI-2: Construction equipment and equipment staging areas shall be located at the farthest distance possible from adjacent sensitive land uses.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

NOI-3: Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

NOI-4: When not in use, motorized construction equipment shall not be left idling.

Timing/Implementation: *During Project Construction*

Enforcement/Monitoring: *Contractor*

5.0 LIST OF PREPARERS

5.1 List of Preparers

San Bernardino County Public Works Department

Arnold (AJ) Gerber, Senior Planner – Environmental Management Division

Dokken Engineering

Amy Dunay, RPA, Senior Environmental Planner/Archaeologist
Amy Bakker, Senior Environmental Planner
Dorienne Mendoza, Associate Environmental Planner
Jacqueline Lockhart, P.E.
Katie Jacobson, Environmental Planner/Biologist
Ken Chen, Associate Environmental Planner/Noise Specialist

6.0 REFERENCES

[BVUSD] Baker Valley Unified School District

2024. Our Schools. Available at: <http://www.baker.k12.ca.us/> (accessed 10/29/24).

[CAL FIRE] California Department of Forestry and Fire Protection. 2024. State Responsibility Area (SRA) Viewer. Available at: < https://bof.fire.ca.gov/projects-and-programs/state-responsibility-area-viewer/> (accessed 10/23/24).

[CARB] California Air Resources Control Board

2008. Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation. Appendix I, p. I-19. December. Available at: <https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm> (accessed 11/20/24).

[CDFW] California Department of Fish and Wildlife

2024. Biogeographic Information & Observation System. Available at: <https://wildlife.ca.gov/Data/BIOS> (accessed 9/17/2024).

[CEC] California Energy Commission

2025a. Diesel Fuel Data, Facts, and Statistics. Available at: < https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics#:~:text=According%20to%20the%20California%20Department,including%20offroad%20diesel)%20was%20sold.> (accessed 01/20/2025).

2025b. California Gasoline Data, Facts, and Statistics. Available at: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics#:~:text=Gasoline%20is%20the%20most%20used,of%20Tax%20and%20Fee%20Administration%20.> (accessed 01/20/2025).

2022. CEDU 2022 Baseline Forecast. Available at: < https://www.energy.ca.gov/data-reports/reports/2023-integrated-energy-policy-report/2023-iepr-workshops-notices-and-2> (accessed 01/20/2025).

[Cogstone] Cogstone Resource Management

2024. Paleontological Inventory Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

[County] San Bernardino County

2024a. Navigating the Plan: About the Countywide Plan. Available at: <https://countywideplan.sbcounty.gov/resources/> (accessed 11/12/2024).

2024b. Public Works Solid Waste Management Division. Available at: <https://dpw.sbcounty.gov/solid-waste-management/> (accessed 10/29/24).

2022. San Bernardino County Policy Plan.
Available at: <https://lus.sbcounty.gov/planning-home/general-plan/> (accessed 10/16/2024).

2019. San Bernardino Countywide Plan Draft Environmental Impact Report.
Available at: < https://countywideplan.com/resources/document-download/> (accessed 10/22/24).

2007. San Bernardino County, CA Code of Ordinances. § 88.01.060 Desert Native Plant Protection.
Available at:
<https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-175924#JD_88.01.060> (accessed 11/4/2024).

1992. Baker Airport Land Use Compatibility Plans. Available:
<https://lus.sbcounty.gov/planning-home/airport-land-use/> (accessed 10/23/2024).

[DOC] California Department of Conservation

2024. Williamson Act Program. Available at:
<https://www.conservation.ca.gov/dlrp/lca> (accessed 11/5/2024).

2022. Important Farmland Finder.
https://www.conservation.ca.gov/dlrp/grant-programs/cfcp. (accessed 11/5/2024).

[Dokken] Dokken Engineering
2025a. Hazardous Waste Initial Site Assessment, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025b. Noise Study, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025c. CEQA Cultural Resources Technical Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025d. Natural Environment Study, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025e. Water Quality Assessment Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025f. Air Quality Report, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

2025g. Historic Property Survey Report/Archaeological Survey Report, PSR#TD004 Baker Boulevard Over Mojave River Replacement Project.

2025h. Visual Impact Assessment Memorandum, PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project.

[EIM] Earth Mechanics, Inc.

2024. Foundation Report, Baker Boulevard Bridge Over Mojave River Replacement Project.

[Fehr and Peers] Fehr and Peers

2025. Baker Bridge Replacement and Travel Demand Forecasting Memo.

[Lichvar] Lichvar, R.W. & McColley, S.M. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. United States Army Engineer Research and Development Center, Hanover, New Hampshire.

[Sherif's Department] San Bernardino County Sheriff's Department.

2024. Barstow Patrol Station. Available at: <https://wp.sbcounty.gov/sheriff/patrol-stations/barstowtrona/> (accessed 10/29/2024).

[USACE] U.S. Army Corps of Engineers
1987. Corps of Engineers Wetlands Delineation Manual. Environmental Laboratory, Vicksburg, Mississippi.

2007. Regulatory Branch (SPK-2004-00629). Approved Jurisdictional Delineation for the East Lawn Expansion Project.

2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). U.S Army Corps of Engineers – Engineering Research and Development Center. Wetlands Regulatory Assistance Program.

[USCB] United States Census Bureau

2020. 2020 Decennial Census. Available at: <https://data.census.gov/all?q=Baker%20CA> (accessed 10/29/2024).

[Forest Service] U.S. Forest Service Department of Agriculture

2023. Wildfire Hazard Potential Classified Map. Available at: < https://research.fs.usda.gov/firelab/products/dataandtools/datasets/wildfire-hazard-potential> (accessed 10/23/24).