I-40 Colorado River Bridge Replacement Project

SAN BERNARDINO COUNTY, CALIFORNIA
MOHAVE COUNTY, ARIZONA
DISTRICT 8-SBD-40 PM 153.9/154.7 (CA); PM 0.0/0.6 (AZ)
0R3800/0812000067

Partial Recirculation of Draft Environmental Impact Report

Prepared by the
State of California, Department of Transportation

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

August 2023

General Information about This Document

What's in this document:

Introduction

This Recirculated Partial Draft Environmental Impact Report (EIR) (Recirculated Draft EIR) was prepared in accordance with the California Environmental Quality Act (CEQA). Portions of the Draft Environmental Impact Report/ Environmental Assessment (Draft EIR/EA) are being recirculated under CEQA Guidelines Section 15088.5(a) to provide additional information and clarification on the potential effects of the proposed project on cultural and tribal resources. Sections included in the Recirculated Draft EIR supersede the corresponding sections in the Draft EIR/EA issued in June 2023. Sections from the Draft EIR/EA that have not been included for recirculation, are available in the Draft EIR/EA issued in June 2023.

Background

Caltrans filed a Notice of Preparation for the Draft EIR/EA with the State Clearinghouse on October 3, 2020. The filing of the Notice of Preparation began a 30-day scoping period that extended from October 3, 2020, to November 2, 2020. During the 30-day scoping period, a public scoping meeting was held October 18, 2023.

Caltrans filed a Notice of Completion for the Draft EIR/EA with the State Clearinghouse on June 14, 2023. The filing of the Notice of Completion began a 45-day public review and comment period that extended from June 14, 2023, to July 28, 2023. While the Draft EIR/EA was circulating for public review, as a result of consultation with the California State Historic Preservation Officer (SHPO), Federal Highways Administration (FHWA), Caltrans, and the Fort Mojave Indian Tribe, the identification, evaluation, and effect finding effort for cultural resources has been revisited.

Draft EIR Partial Recirculation Decision and Explanation

"Significant new information" has been added and revisions made to the Draft EIR/EA since the original public review period (June 14, 2023, to July 28, 2023), and therefore, in accordance with Public Resources Code Section 21092.1 and State California Environmental Quality Act (CEQA) Guidelines Section 15088.5, Caltrans has determined that recirculation of focused elements of the Colorado River Bridge Replacement Project Draft EIR/EA is required.

CEQA Guidelines Section 15088.5 sets forth the legal standards and principles governing the recirculation of Draft EIRs. Subdivision (a) of that provision states that recirculation of an EIR should occur if:

> … *significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before*

certification. As used in this section, the term 'information' can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such effect…

Significant new information requiring recirculation includes a disclosure showing that:

1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen environmental impacts of the project, but the project's proponents decline to adopt it.
4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The recirculation of the Draft EIR is in accordance with Criterion 1 listed above. The recirculation is "partial" (meaning that only chapters or portions of the prior Draft EIR/EA with new information have been revised and reissued) rather than "full" (meaning that the entire document has been revised and reissued).

The National Environmental Policy Act (NEPA) requires Federal agencies to consider and disclose the environmental impacts of their proposed actions as part of their decision-making. Sometimes there are changes to the proposed action, new information or circumstances, or there is a lapse of time between preparation of the environmental document and implementation of the action. This may trigger the need to revisit the NEPA analysis if there is a remaining Federal action. FHWA NEPA regulations (23 CFR part 771) contain a process in 23 CFR 771.129 for re-evaluating environmental documents or decisions to determine whether the original document or decision remains valid, or a supplemental or new analysis (e.g., supplemental environmental impact statement (EIS) or environmental assessment (EA)) is needed. The re-evaluation can occur at any point after completion of the project's environmental document (for example, draft or final EIS) or decision (for example, issuance of a record of decision (ROD), combined final EIS/ROD, finding of no significant impact (FONSI), or CE determination), but only to the extent there are remaining Federal approvals for the project.

Based off of the reevaluation, it has been determined that a supplemental EA is not required. The environmental analysis presented in the final NEPA document will include updates to the analysis presented in the draft document. The final EA will provide a roadmap to key changes at the beginning of each chapter; summarization of agency coordination activities that occurred between the draft EA and final EA;

acknowledgement and explanations of any important changes to the analysis (e.g., new data, new models, new guidance); and a summary of the results of the reevaluation.

Please note that changes made to the Draft EIR/EA subsequent to the public review period will be included in the Final EIR/EA The changes identified will be in response to comments received on the Draft EIR/EA, clarifications, and minor edits which do not create a need for recirculation.

Summary of Revisions to Draft EIR

The revisions to the Draft EIR consist of updates to the sections that discuss the analysis of potential impacts to cultural and tribal resources. Additionally, due to these updates, the Cumulative impacts section has also been revised. In order to stay consistent with the circulated Draft EIR, this recirculated, partial Draft EIR follows the same numbering system. As such, the revisions can be found in Chapter 2, Section 2.1 Human Environment, Subsection 2.1.12 Cultural Resources; Chapter 2, Section 2.3 Cumulative Impacts; Chapter 3, Section 3.2 CEQA Checklist, subsection 3.2.5 Cultural Resources; Chapter 3, Section 3.2 CEQA Checklist, Subsection 3.2.18 Tribal Cultural Resources; Chapter 4, Section 4.2 Interagency Coordination and Consultation, subsection 4.2.3 Arizona State Historic Preservation Officer; Chapter 4, Section 4.2 Interagency Coordination and Consultation, Subsection 4.2.6 California State Historic Preservation Officer; and Appendix C Avoidance, Minimization, and/or Mitigation Summary. Below is Table GI-1 and Table GI-2. Table GI-1 provides a summary of the revisions includesd in the recirculated, partial Draft EIR. Table GI-2 provides a list of all the chapters includes in the Draft EIR/EA and identifies which sections are included in the recirculated, partial Draft EIR, and whether they have been revised or not.

Table GI-1: Summary of Revision

Location in Document	Summary of Revision to Draft EA/EIR
Chapter 2, 2.1, 2.1.12	The APE has been expanded to encompass elements of the Topock traditional cultural property (TCP). Caltrans proposes that the Topock TCP is eligible). Additionally, Native American Consultation, the record search has been updated for the National Register of Historic Places (NRHP) under Criteria A and D.
Chapter 2, 2.1, 2.1.13	FHWA in cooperation with Caltrans and Arizona Department of Transportation (ADOT) has applied the Criteria of Adverse Effect in 36 CFR 800.5(a) and has determined that the Undertaking will result in a finding of Adverse Effect on CA-SBR-219 / Topock Maze and Topock Traditional Cultural Property under Alternatives 1, 2, and 3. The Undertaking will result in a finding of No Historic Properties Affected for this historic property under Alternative 4 (no build) (36 CFR §800.5

Chapter 2, 2.1, 2.1.14	Additional Revisions to the avoidance, minimization, and mitigation measures have been made, however no additional avoidance, minimization, or mitigation is proposed at this time.revised
Chapter 2, 2.3	The cumulative impacts section has been revised to account for the temporary impacts to cultural and tribal resources. The overall findings remain the same.
Chapter 3, 3.2, 3.2.5	Revisions have been made to reflect the updated APE, changes to the eligibility ofto the Topock TCP., and changes to the avoidance, minimization, and mitigation measures.
Chapter 3, 3.2, 3.2.18	Questions a and b have been revised to "Less than Significant with Mitigation Incorporated". Additional revisions have been made to reflect changes to the updated APE, change to the eligibility ofto the Topock TCP., and changes to the avoidance, minimization, and mitigation measures.
Chapter 4, 4.2, 4.2.	Updates to the coordination with Arizona State Historic Preservation Officer has been made.
Chapter 4, 4.2, 4.2.6	Updates to the coordination with California State Historic Preservation Officer has been made.
Appendix C	The environmental commitments record has been updated to reflect changes to the cultural and tribal resource avoidance, minimization, and mitigation measures.

Table GI-2: Summary of Content Inclusion and Updates for Recirculated Draft EA/EIR

Chapter	Section	Subsection	Included in Recirculation?	Updates?
Summary	S-1 Introduction		No	N/A
Summary	S-1 Introduction	S-1.1 Purpose and Need	No	N/A
Summary	S-1 Introduction	S-1.2 Project Action	No	N/A
Summary	S-2 Project Impacts		No	N/A
Summary	S-3 Coordination with Public and Other Agencies		No	N/A
Summary	S-4 Permits and Approvals Needed		No	N/A
Chapter 1-Proposed project	1.1 Introduction		Yes	No revision, content same as circulated Draft EA/EIR
Chapter 1- Proposed Project	1.2 Purpose and Need	1.2.1 Project Purpose	Yes	No revision, content same as circulated Draft EA/EIR
Chapter 1- Proposed Project	1.2 Purpose and Need	1.2.2 project Need	Yes	No revision, content same as circulated Draft EA/EIR
Chapter 1- Proposed Project	1.3 Project Description	1.3.1 Alternatives	Yes	No revision, content same as circulated Draft EA/EIR
Chapter 1- Proposed Project	1.3 Project Description	1.3.2 Common Design Features of the Build Alternatives	Yes	No revision, content same as circulated Draft EA/EIR
Chapter 1- Proposed Project	1.3 Project Description	1.3.3 Unique Features of the Build Alternatives	Yes	No revision, content same as circulated Draft EA/EIR

Chapter 1- Proposed Project	1.3 Project Description	1.3.4 Transportation System Management/Transportation Demand Management (TSM/TDM)	No	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.5 Reversible Lanes	No	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.6 Access to Navigable Rivers	No	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.7 No-Build (No-Action) Alternative	Yes	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.8 Comparison of Alternatives	No	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.9 Alternatives Considered but Eliminated from Further Discussion	No	N/A
Chapter 1- Proposed Project	1.3 Project Description	1.3.10 Permits and Approvals Needed	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.1 Existing and Future Land Use	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.2 Parks and Recreational Facilities	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.3 Regulatory Settings	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.4 Farmlands	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.5 Growth	No	N/A

Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.6 Community Character and Cohesion	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.7 Relocations and Real Property Acquisition	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.8 Environmental Justice	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.9 Utilities/Emergency Services	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.10 Traffic and Transportation/ Pedestrian and Bicycle Facilities	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.11 Visual/Aesthetics	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.1 Human Environment	2.1.12 Cultural Resources	Yes	Revised for recirculation
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.1 Hydrology and Floodplain	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.2 Water Quality and Storm Water Runoff	No	N/A

Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.3 Geology/Soils/Seismic/Topography	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.4 Hazardous Waste/ Materials	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.5 Air Quality	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.6 Noise and Vibration	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.7 Energy	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.8 Biological Environment	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.9 Wetlands and Other Waters	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.10 Plant Species	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.11 Animal Species	No	N/A

Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.12 Threatened and Endangered Species	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.2 Physical Environment	2.2.13 Invasive Species	No	N/A
Chapter 2- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2.3 Cumulative Impacts		Yes	Revised for recirculation
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.1 Determining Significance under CEQA		Yes	No updates. Content same as circulated Draft EA/EIR
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.1 Aesthetics	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.2 Agriculture and Forest Resources	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.3 Air Quality	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.4 Biological Resources	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.5 Cultural Resources	Yes	Revised for recirculation
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.6 Energy	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.7 Geology and Soil	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.8 Greenhouse Gas Emissions	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.9 Hazards and Hazardous Waste	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.10 Hydrology and Water Quality	No	N/A

Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.11 Land Use and Planning	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.12 Mineral Resources	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.13 Noise	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.14 Population and Housing	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.15 Public services	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.16 Recreation	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.17 Transportation	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.18 Tribal Cultural Resources	Yes	Revised for recirculation
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.19 Utilities and Service Systems	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.20 Wildfires	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.2 CEQA Environmental Checklist	3.2.21 Mandatory Findings of Significance	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.3 Senate Bill 743/ Induced Demand Analysis	3.3.1 Regulatory Setting	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.3 Senate Bill 743/ Induced Demand Analysis	3.3.2 Affected Environment	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.3 Senate Bill 743/ Induced Demand Analysis	3.3.3 Environmental Consequences	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.3 Senate Bill 743/ Induced Demand Analysis	3.3.4 Avoidance, Minimization, and/or Mitigation Measures	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.4 Wildfire	3.4.1 Regulatory Setting	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.4 Wildfire	3.4.2 Affected Environment	No	N/A

Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.4 Wildfire	3.4.3 Environmental Consequences	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.4 Wildfire	3.4.4 Avoidance, Minimization, and/or Mitigation Measures	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate Change	3.5.1 Regulatory Setting	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate change	3.5.2 Environmental Setting	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate Change	3.5.3 Project Analysis	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate Change	3.5.4 Greenhouse Gas Reduction Strategies	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate Change	3.5.5 Adaptation	No	N/A
Chapter 3- California Environmental Quality Act (CEQA) Evaluation	3.5 Climate Change	3.5.6 References	No	N/A
Chapter 4- Comments and Coordination	4.1 Scoping Process		No	N/A
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.1 Federal Highway Administration	No	N/A
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.2 US Fish and Wildlife Services	No	N/A
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.3 Arizona State Historic Preservation Officer	Yes	Revised for recirculation
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.4 Arizona Department of Transportation	Yes	Revised for recirculation
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.5 Arizona Game and Fish Department	No	N/A
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.6 California State Historic Preservation Officer	Yes	Revised for recirculation
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.7 California Department of Fish and Wildlife	No	N/A
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.8 Native American Consultation	Yes	Revised for recirculation
Chapter 4- Comments and Coordination	4.2 Interagency Coordination and Consultation	4.2.9 Cultural Resources Consultation with	No	N/A

		Government, Utility, and Historical Societies		
Chapter 4- Comments and Coordination	4.3 Notice of Preparation		No	N/A
Chapter 5- List of Preparers			Yes	Revised for recirculation
Chapter 6- References Cited			Yes	Revised for recirculation
Chapter 7 Distribution List			Yes	No updates. Content same as circulated Draft EA/EIR
Appendix A- Section 4(f)			Yes	Revised for recirculation
Attachment B- Title VI Policy Statement			No	N/A
Appendix C- Avoidance, Minimization and/or Mitigation Summary			No	N/A
Appendix D- List of Acronyms and Abbreviations			Yes	No updates
Appendix E- Notice of Preparation			No	N/A
Appendix F- List of Technical Studies			Yes	Revised for recirculation
Appendix G- Agency Correspondence			No	N/A

Please note, updates made after public circulation of the Draft EIR/EA have been incorporated into the text of the Recirculated Draft EIR/EA and are indicated by a vertical line in the margin of the Recirculated Draft EIR text.

What you should do:

- Please read this document.
- We'd like to hear what you think. The Recirculated Draft EIR will be subject to review and comment by the public, as well as all responsible agencies and other interested parties, agencies, and organizations for a period of 45 days that will start on August 18, 2023, and end on October 2, 2023. If you have comments on the Recirculated Draft EIR, please submitted to:

  Via postal mail to:
  Gabrielle Duff, Senior Environmental Planner
  Caltrans District 8
  464 W. 4th Street
  San Bernardino CA, 92401, 6th Floor MS 829

  Via email to:
  D8.,0R380.ColoradoRiverBridge.Comments@dot.ca.gov

- Be sure to send comments by the deadline: October 2, 2023

Comments submitted outside that comment period are considered untimely. Comments must focus on the Recirculated Draft EIR; comments focused on issues beyond the Recirculated Draft EIR are considered beyond the scope of this comment period. Caltrans may, but is not required to, respond to comments that are untimely or outside the scope of the comment period.

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

What happens next:

After comments are received from the public and reviewing agencies on this Recirculated Draft EIR, Caltrans, as assigned by the FHWA, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, the Department could design and construct all or part of the project.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Gabrielle

Duff, Senior Environmental Planner, 464 W. 4th Street, 8th Floor, MS829, San Bernardino, CA 92401 (909) 501-5142 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

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FHWA Highway ID No. 2022_0818_001

SCH# 2020110050
CA: 08-SBD-40- 153.9/154.7
AZ: MO-40- 0.00/0.60
08-0R380
0812000067

Replace the Colorado River Bridge (California Bridge No. 54-0415, Arizona Bridge No. 957) spanning the California/Arizona state line on Interstate 40, near Topock, Arizona.

PARTIAL RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

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

THE STATE OF CALIFORNIA
Department of Transportation
And
Federal Highway Administration

Cooperating Agencies:
Arizona Department of Transportation
US Army Corps of Engineers
US Coast Guard

Responsible Agencies:
California State Lands Commission

Date

Catalino A. Pining III Caltrans
District 8 Director
California Department of Transportation
CEQA Lead

California Department of Transportation
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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) in cooperation with the Arizona Department of Transportation (ADOT), proposes to replace the Colorado River Bridge (California Bridge No. 54-0415, Arizona Bridge No. 957), spanning the California/Arizona state line on Interstate 40 (I-40) near Topock, Arizona. Caltrans will be the lead agency for the proposed project under the California Environmental Quality Act (CEQA) and the Federal Highway Administration (FHWA) will be the lead agency under the National Environmental Policy Act (NEPA). The project is located in San Bernardino County, California and Mohave County, Arizona on I-40 between Park Moabi Road and Topock Road. The total length of the project on I-40 is 1.34 miles, between Post Mile (PM) 153.9 and PM 154.7 in California and PM 0.0 to 0.6 in Arizona. Refer to Figures 1.1 and 1.2 for the project location and project vicinity.

I-40 is a major transcontinental transportation corridor that runs west to east, beginning at Interstate 15 (I-15) near Barstow, California where it crosses the Mojave Desert; runs through Arizona, New Mexico, Texas, Oklahoma, Arkansas, and Tennessee before ending in Wilmington, North Carolina at United States Route 117 (US 117). In California, I-40 carries a high volume of truck traffic transporting goods across the nation and a significant volume of recreational trips to the Mojave Desert, the Colorado River, and states to the east. Completed in 1859, I-40 generally considered the first federal highway in the Southwestern United States. In the early 20th century, a number of auto trails were established by private organizations to aid motorists in traveling between major cities. Among these was the National Old Trails Road, which roughly followed the western part of present-day I-40 to Albuquerque, and the Lee Highway, which followed much of the eastern portion of the route. When the state governments established the United States Numbered Highway System in 1926, two of these most important highways, United States Route 66 (US 66) and Unites States Route 70 (US 70)) were established within the present-day I-40 corridor.

The Colorado River Bridge (Bridge No. 54-0415) is located along I-40 and originally built in 1966. The bridge is used for interstate travel and goods movement between California and states to the east beginning with Arizona. The bridge is a seven span structure comprised of continuous steel plate girders on reinforced concrete pier walls and reinforced concrete open end seated abutments on steel "H" piles, with the exception of Pier 2 which is supported on a spread footing. The total length of the structure is 1,294 feet. The bridge deck is a cast in place (CIP) reinforced concrete deck. The bridge currently accommodates four 12-foot lanes of traffic (two in each direction) separated by a median barrier. The existing bridge has non-standard 2 foot inside shoulders and 4

foot outside shoulders with Type 2 bridge rails (Type 2 bridge rails consist of see-through, four-bar steel rails with integral raised concrete sidewalks).

Table 0-1, Existing Bridge Geometry

No. of Lanes	Lane Widths	Shoulder Widths		Center Median Width
		Inside	Outside	
4 (2 in each direction)	12 ft	2 ft	4 ft	6 ft

In 1963, an interagency agreement was finalized between the California Department of Public Works and the Arizona Highway Department for the planning, construction, and maintenance of the bridge structure. The agreement states that both parties will equally and jointly assume responsibility for the maintenance, policing, repairing, replacing, or reconstructing of this bridge structure. The agreement further states that the division of costs for planning, construction, maintenance, policing, repairing, replacing, or reconstructing of the bridge will be shared equally between both states without regard for the actual location of the interstate boundary line in the vicinity of the bridge. In 1987, a subsequent agreement was finalized between the California and Arizona Departments of Transportation. This agreement states that California will assume one half the cost of all maintenance and/or repair work for the bridge structure and that Arizona will reimburse California for one half of the costs of maintenance or repair and any related engineering work performed. The project is included in the 2021 Federal Transportation Improvement Program (FTIP) and is proposed for funding from the State Highway Operation and Protection Program (SHOPP) Bridge Preservation Program.

1.2 Purpose and Need

1.2.1 Project Purpose

The purpose of the project is as follows:

- To improve the safety and integrity of the bridge structure by addressing the deck deterioration and strengthening the girders to increase the load rating.
- To enhance the safety of the traveling public by providing standard lane and shoulder widths and upgraded bridge rail systemThe safety of the traveling public will be enhanced because the standard lane and shoulder widths are proposed as well as an upgrade to the bridge rail system.

1.2.2 Project Need

The concrete deck of the Colorado River Bridge has begun to deteriorate. There are spalls and delaminations along the outside shoulders, and transverse cracks throughout the transverse top mat rebar. The top mat transverse rebar are exposed with inadequate concrete cover. If no rehabilitation is done, the existing deterioration will worsen and ultimately compromise the integrity and safety of the structure. In addition, the bridge has a permit vehicle rating of PPPGO (purple permit rating up to 9-axle vehicles and reduced permit rating for 11 and 13 axle vehicles).

CAPACITY, TRANSPORTATION DEMAND, AND SAFETY

The traffic data information for I-40 at PM 154.51 is presented in the table below. The traffic data was extracted from the Traffic Engineering Performance Assessment (TEPA) dated January 2016.

Table 0-2, Traffic Data Information

Year	2015	2018	2038
Annual Average Daily Traffic (AADT)	12,700	14,400	30,800
Design Hour Volume (DHV)	1,160	1,250	1,990
Truck Percent in AADT	60%	60%	60%
Source: Caltrans Project Study Report Project-Development Support (PSR-PDS).			

As summarized in the table above, the annual Average Daily Traffic (AADT) is expected to increase to 30,800 by year 2038 of which 60 percent will be truck AADT.

Accident data taken from the four-year period from January 2009 to December 2012 within the proposed project limits from the Caltrans Traffic Accident Surveillance and Analysis System (TASA) – Transportation System Network (TSN) is summarized in the table below.

Table 0-3, Accident Rates

Accident Rates (per Million Vehicle Miles)						
Limits	Actual			Statewide Average		
Location	Fatal	Fatal+Injury	Total	Fatal	Fatal+Injury	Total
I-40 East PM 154.51	0.00	0.00	0.56	0.014	0.17	0.36
I-40 West PM 154.51	0.00	0.00	1.12	0.014	0.17	0.36
Source: Project Study Report-Project Development Support (PSR-PDS)						

As shown in the table above, the total accident rate on both I-40 East and West at PM 154.51 has a higher total average than the statewide rate of 0.36. According to the TASA-TSN data, along the proposed project route the primary accident factors are speeding (33.3%), other than driver (33.3%), and unknown (33.3%) cause. The type of accidents are a result of hit objects (66.7%) and sideswipe accidents (33.3%). The type of objects struck

along the proposed project route are the median barrier (33.3%), other objects on the road (33.3%), and one car hitting another car (33.3%).

In consideration of this data, the safety of the traveling public will be enhanced with the following proposed improvements: standard lane and shoulder widths, a standard median barrier, and a standard bridge railing system.

ROADWAY DEFICIENCY

As previously mentioned, the Colorado Bridge is deteriorating. There are several areas of spall and delamination along the outside shoulders, particularly in the westbound direction. There are transverse cracks throughout the bridge that are spaced within the transverse top mat rebar. Several of the top mat transverse rebars are exposed with inadequate concrete cover. The existing level of deterioration will worsen over time and ultimately compromise the integrity and safety of the structure. In addition, based on the current Highway Design Manual (HDM) standards, the inside and outside shoulder widths on the Colorado River Bridge are non-standard.

The proposed project would improve safety and the integrity of the Colorado River Bridge by addressing deck deterioration and strengthening the girders to increase the load rating to accommodate all permit vehicle traffic.

SOCIAL DEMANDS OR ECONOMIC DEVELOPMENT

I-40 is a major transcontinental transportation corridor linking southern California with the East Coast, spanning a total of 2,554 miles. The Colorado River Bridge is used for interstate travel and goods movement between California, Arizona, and beyond. Based on the San Bernardino County, Countywide Policy Plan and Land Use Map for the North Desert Region, the project vicinity within San Bernardino County, California, is designated as Open Space (OS), Resource/Land Management (RLM), and Public Facility (PF). Based on the Mohave County 2015 General Plan Countywide Land Use Diagram – Sub Area 7, the project vicinity in Mohave County, Arizona, is designated as Rural Development Areas (RDA). As detailed below, the project site is surrounded by mostly vacant, open space, the Havasu National Wildlife Refuge and Havasu Wilderness, the Chemehuevi Mountains Wilderness, the Moabi Regional Park, the Topock 66 Restaurant, Bar, and Store, and the Pacific Gas & Electric (PG&E) Topock Compressor Station.

- Havasu National Wildlife Refuge and Havasu Wilderness: The Havasu Wilderness area lies within the Havasu National Wildlife Refuge which is located north and south of I-40, along the Colorado River for 30 miles between Needles, California and Lake Havasu City, Arizona and was designated by the United States Congress in 1990. The Havasu National Wildlife Refuge and Havasu Wilderness area has a total of 17,801 acres, with 14,606 acres in Arizona and 3,195 acres in California. Approximately one-third of the Havasu National Wildlife Refuge consists of the Havasu Wilderness. The Havasu Wildlife Refuge shares its western border with the Chemehuevi Mountains Wilderness area. Hunting is allowed in designated areas as well as hiking; however,

camping is not permitted. The Havasu Wildlife Refuge and Havasu Wilderness are managed by the U.S. Fish and Wildlife Service.

- Chemehuevi Mountains Wilderness: The Chemehuevi Mountains Wilderness area was designated by the United States Congress in 1994 and encompasses the Chemehuevi Mountains, consisting of low rolling hills and granite peaks, located 10 miles southeast of Needles, California along US Highway 95, and south of I-40, in San Bernardino County. The Chemehuevi Mountains Wilderness is a total of 85,864 acres, which is managed by the U.S. Bureau of Land Management. The Chemehuevi Mountains Wilderness offers recreational activities including hiking, horseback riding, hunting, camping, and backpacking.

- Moabi Regional Park (100 Park Moabi Road, Needles, CA): The Moabi Regional Park is located along the banks of the Colorado River, north of I-40, at the California and Arizona state lines. Moabi Regional Park offers recreational opportunities including a campground, fishing, swimming, hiking, picnic areas, boating, and off-road driving. The Moabi Regional Park is part of the San Bernardino County Regional Parks and operated by the Pirate Cove Resort and Marina.

- Topock 66 Restaurant, Bar and Store (14999 W. Historic Route 66, Topock, AZ): The Topock 66 Restaurant, Bar, and Store is located north of I-40, on Historic Route 66. This riverfront restaurant, bar, and store includes a pool, stage for outdoor performances, and RV parking.

- PG&E Topock Compressor Station: The PG&E Topock Compressor Station is located 12 miles east of Needles at 145453 National Trails Highway, approximately 1,500 feet from the Colorado River. This facility compresses natural gas so it can be transported through pipelines to PG&E's customers in northern and central California. The site is also undergoing remediation for groundwater contamination and soil contamination due to historical disposal and waste handling practices that occurred at the site previously. Construction of phase 1 for groundwater remediation began October 2018 and concluded in December 2021. Phase 2 construction began March 2022 and is expected to be completed in April 2024.

MODAL INTERRELATIONSHIPS AND SYSTEM LINKAGES

I-40 is the third-longest freeway in the United States spanning 2,556.61 miles across the southern half of the country from California to North Carolina. I-40 is experiencing increasing freight flows from both domestic and international sources. The corridor's location facilitates commercial freight flow between major Pacific coast ports and Midwestern U.S. regions.

The facility interfaces with the Needles Airport, which is operated by the County of San Bernardino Department of Airports is and is located approximately 9 miles northeast of the project site. The Needles Airport is a small, general aviation airport with two 100-foot runways located in the city of Needles, California. Services provided at the Needles Airport include fuel, minor airframe, and power plant services. The Needles Airport was

originally constructed to support cross country flight but now serves as a general aviation airport for the Colorado River area.

AIR QUALITY IMPROVEMENTS

Currently, I-40 is not designated as a bicycle facility; however, bicycles are allowed on the segment of I-40 that encompasses the project limits because there is not a parallel alternative route. Bicyclists are known to traverse along the U.S. Route 66, and along I-40 between California and Arizona in the vicinity of the project. Depending on alternative, widening the shoulders to standard width will provide shoulder continuity that will allow for safer use by bicycle travelers.

INDEPENDENT UTILITY AND LOGICAL TERMINI

Federal Highway Administration (FHWA) regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope. Logical termini are defined as rational end points for transportation improvements and rational end points for a review of the environmental impacts. The project would result in a replacement of the Colorado River Bridge which would improve the safety and integrity of the structure by addressing deck deterioration and strengthening girders to increase the load rating. As Sshown in Figure 1.1. and Figure 1.2, the project limits include the Colorado River Bridge portion along I-40. The logical termini for the project are inclusive of the points at which the bridge ties into the existing I-40.

2. Have independent utility or independent significance (be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made). The project meets the identified need for improving the safety and integrity of the bridge structure and as an independent project and not dependent on any other projects to meet the identified purpose for the bridge replacement. Therefore, the project demonstrates independent utility.

3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. The preliminary design of the project avoids potential conflicts with other reasonably foreseeable transportation improvements. The proposed project can be constructed independently of other transportation projects in the area, and furthermore, other transportation projects are not dependent on the proposed project for implementation.

1.3 Project Description

This section describes the proposed action and the project alternatives (see Figures 1.4, 1.5, and 1.6) developed to meet the purpose and need of the project, while avoiding or

minimizing environmental impacts. The build alternatives would either replace the bridge north, south, or on the existing bridge alignment as follows:

- Alternative #1: New bridge is built along the existing alignment
- Alternative #2: New bridge is built just north of the existing alignment
- Alternative #3: New bridge is built just south of the existing alignment
- No-Build Alternative: No improvements would be made under this alternative.

The project proposes to replace the Colorado River Bridge (California Bridge No. 54-0415, Arizona Bridge No. 957) spanning the California/Arizona state line on I-40 in San Bernardino County, California and in Mohave County, Arizona. The total length of the project on I-40 is 1.34 miles, between Post Mile (PM) 153.9 and PM 154.7 in California, and PM 0.0 to 0.6 in Arizona. Geotechnical borings are also proposed to be completed during the design phase (see Figure 1.3). The purpose of the project is to improve the safety and integrity of the bridge by addressing deck deterioration and strengthening the girders to increase the load rating to accommodate all permit vehicle traffic. The deck deterioration on the existing bridge facility is characterized by spall and delamination along the outside shoulders, and transverse cracks are present throughout the transverse top mat rebar. The top mat transverse rebar is exposed with an inadequate concrete cover.

1.3.1 Alternatives

In addition to the No-Build Alternative, three build alternatives are considered and described in further detail below.

1.3.2 Common Design Features of the Build Alternatives

The pier foundations for each of the build alternatives would be on large diameter cast in drilled hole (CIDH) piles. Furthermore, each of the build alternatives would consist of an 84-foot-wide bridge deck carrying two 12-foot lanes, a 5-foot inside shoulder, and a 10-foot outside shoulder in each direction. Additionally, each build alternative would feature a Type 60M median and CA ST-75 bridge rails.

A system of temporary trestles would be constructed along each side and under the existing bridge. These trestles would be used as a work platform for foundation construction, material hauling, falsework erection, and removal of the existing bridge. A 50-foot navigational opening would be provided along the Colorado River on the Arizona side for safe public passage during construction. Access to these trestles would be required from the California and Arizona side. Temporary access roads and temporary retaining walls that lead to the trestles from the California and Arizona side would also be required for each of the build alternatives. The temporary trestles would initially be

installed by a crane operating from the shore. The temporary trestles would be removed at the end of construction.

Geotechnical borings consisting of 13 rotary core (RC) borings are also proposed during the design phase for the build alternatives. The drilling equipment will consist of a drill rig capable of rotary wash methods and the ability to switch to rock core drilling and sampling when the bedrock is reached. The boring locations are anticipated to be at the following locations:

- Northside shoulder of I-40 (RC-20-001, -002, -003, -004, and -005). A one- or two-lane closure will likely be necessary, to be determined after site reconnaissance.
- Natural ground (RC-20-006, -007, and -008). These locations are accessible by an unpaved road just north of Marina Road, an undercrossing bridge, and a maintenance road under the bridge. If the maintenance road is overgrown with vegetation under the bridge, some vegetation clearance may be necessary prior to drilling.
- Barge (RC-20-009, -010, and -011). These locations would be drilled from the water on a barge. At the boring locations, the method involves setting a casing, hammering the casing approximately 5 feet deep, sealing the inside bentonite, and then drilling through the bentonite seal.
- North of I-40 (RC-20-012, and -013). These locations would be in Arizona, nearest to the road.

In addition, seismic refraction testing would be performed along 3 horizontal lines. The seismic refraction tests are performed by striking a plate on the surface with a sledgehammer or similar device and setting up geophones on the surface along a line. No drilling or subsurface disturbance is necessary to perform the seismic refraction testing.

Each of the build alternatives will also implement new technology in construction materials, including, but not limited to the use of low-energy cement.

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

Each project alternative includes the following standardized measures that are included as part of the project description. Standardized measures (such as Best Management Practices [BMPs]) are those measures that are generally applied to most or all Caltrans projects. These standardized, or pre-existing measures, allow little discretion regarding their implementation and are not specific to the circumstances of a particular project.

TR-1: A Transportation Management Plan (TMP) will be prepared for the project. The TMP would be implemented to minimize potential traffic congestion caused by temporary lane closures, speed reductions, and the presence of construction personnel and

equipment. The TMP would help to ensure continued emergency access to the project area and nearby properties. The build alternatives would also implement the Storm Water Data Report and Best Management Practices (BMPs) that are feasible into the project. The Colorado River is a navigable waterway that is within the limits of this project and build alternatives, as such, will require coordination with the U.S. Coast Guard. Public access and the ability to navigate on the Colorado River are anticipated not to be limited during construction for the build alternatives.

CR-1 and CR-2: Standard provisions dealing with the discovery of unanticipated cultural materials or human remains will be included in the project plans and specifications.

AQ-1, AQ-2, AQ-3: The construction contractor must comply with the Department's Standard Specifications in Section 14-9 and Erosion Control and Air Quality Best Management Practices (BMPs).

WQ-3 and **WQ-4**: Construction and Post Construction best management practices (BMP) will be implemented to minimize sedimentation, erosion, and stormwater runoff.

1.3.2.1 Roadway Improvements

In summary, the roadway improvements common to Alternatives 1, 2, and 3 include the following:

- Two standard 12-foot lanes, with 10-foot-wide shoulders, a 5-foot center median in both directions, a standard median barrier, and a standard bridge railing system.
- A 25-foot-wide temporary access route on the north side of both the eastbound and westbound approaches.
- A 15-foot-wide temporary access road on the south side of the eastbound approach.
- Construction staging area located immediately southwest of the I-40, near National Trails Highway.
- Temporary retaining walls, temporary trestles, and temporary cross trestle and support during construction.

1.3.2.2 Nonvehicular and Pedestrian Access Improvements

Although I-40 is not designated as a bicycle facility, bicycles are allowed on the segment of I-40 that encompasses the project limits because there is not a parallel alternative route for bicyclists to travel. As each of the build alternatives would widen the shoulders to standard width, this would provide shoulder continuity that will allow for safer use by bicycle travelers.

1.3.3 Unique Features of Build Alternatives

BUILD ALTERNATIVE 1

Build Alternative 1 will replace the bridge on the existing I-40 centerline. This alternative will require staging the construction operation in two major stages and will reduce traffic to one lane in each direction. The first stage would remove half of the existing bridge to construct half of the proposed bridge, while running traffic on the remaining half of the existing bridge. The second stage would shift traffic to the newly constructed portion of the bridge deck, then remove the remaining existing bridge to build the second half of the proposed bridge. This build alternative is anticipated to require temporary construction easements (TCEs) as follows:

Table 0-4, Build Alternative 1, Right of Way Summary

State	Parcel	Approximate Area (square feet)	Type of Acquisition
California	065-016-109	6,270	TCE
Arizona	210-48-009	18,705	TCE
Arizona	210-48-005C	15,306	TCE
Arizona	210-48-001	273	TCE
Arizona	210-48-005B	2,403	TCE
Arizona	210-48-008	502	TCE
Notes: TCE=temporary construction easement.			

BUILD ALTERNATIVE 2

Build Alternative 2 will realign the bridge to the north of the existing I-40 centerline allowing the construction of the new bridge to take place while the existing bridge remains fully operational. Staging will only be necessary for transitioning the new realigned bridge to the existing I-40 centerline alignment on both ends of the bridge. With this alternative, the bridge at the National Trails Highway undercrossing would also be replaced. In addition, a minor realignment is proposed to Oatman Highway to accommodate the bridge realignment. This build alternative is anticipated to require additional right of way as follows:

Table 0-5, Build Alternative 2, Right of Way Summary

State	Parcel	Approximate Area (square feet)	Type of Acquisition
California	065-016-109	7844; 101	TCE, Permanent Acquisition
Arizona	210-48-009	18,526;	TCE

		76,537	Permanent Acquisition
Arizona	210-48-010	351	Permanent Acquisition
Arizona	210-48-005C	12,261	Permanent Acquisition
Arizona	210-48-001	270	Permanent Acquisition
Arizona	210-48-005B	395	Permanent Acquisition
Arizona	210-48-008	482	Permanent Acquisition
Arizona	210-47-003	2,594	Permanent Acquisition
Arizona	210-47-002C	580	Permanent Acquisition
Notes: TCE=temporary construction easement.			

BUILD ALTERNATIVE 3

Build Alternative 3 would realign the bridge to the south of the existing I-40 centerline and allow the construction of the new bridge to take place while the existing bridge is still operational. Staging will only be necessary for transitioning the new realigned bridge to the existing I-40 centerline alignment on both ends of the bridge. With this alternative, the bridge at the National Trails Highway undercrossing would also be replaced. This build alternative is anticipated to require additional right of way as follows:

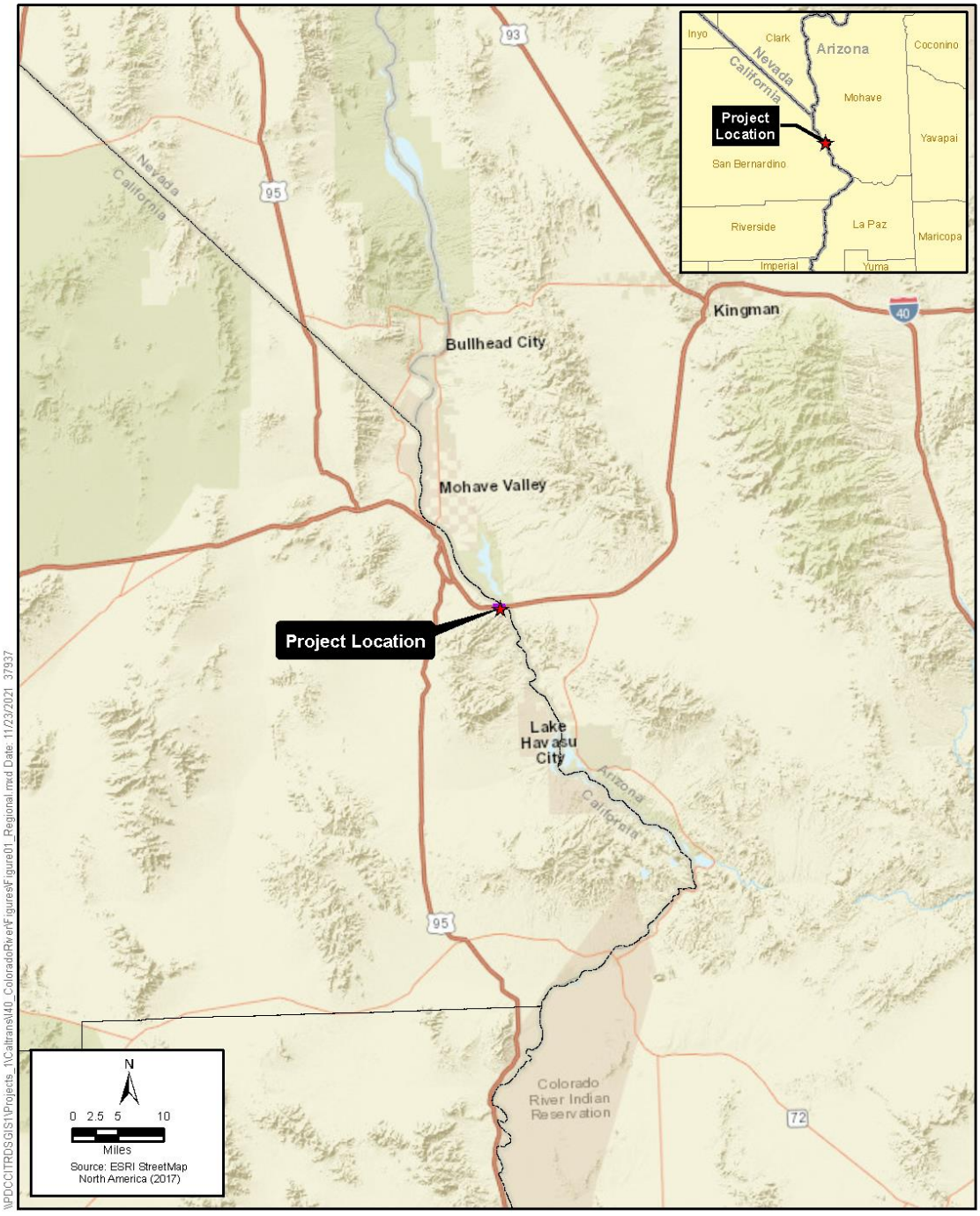
Table 0-6, Build Alternative 3, Right of Way Summary

State	Parcel	Approximate Area (square feet)	Type of Acquisition
California	065-016-109	4,545; 996	Permanent Easement, Permanent Acquisition
Arizona	210-48-009	14,953	TCE
Arizona	210-48-005C	1,930	Permanent Acquisition
Arizona	210-48-001	2,231	Permanent Acquisition
Arizona	210-48-005B	984	Permanent Acquisition
Arizona	210-48-008	2,662	Permanent Acquisition
Arizona	210-47-003	1,136	TCE
Arizona	210-47-002C	415	TCE

1.3.7 No-Build (No-Action) Alternative

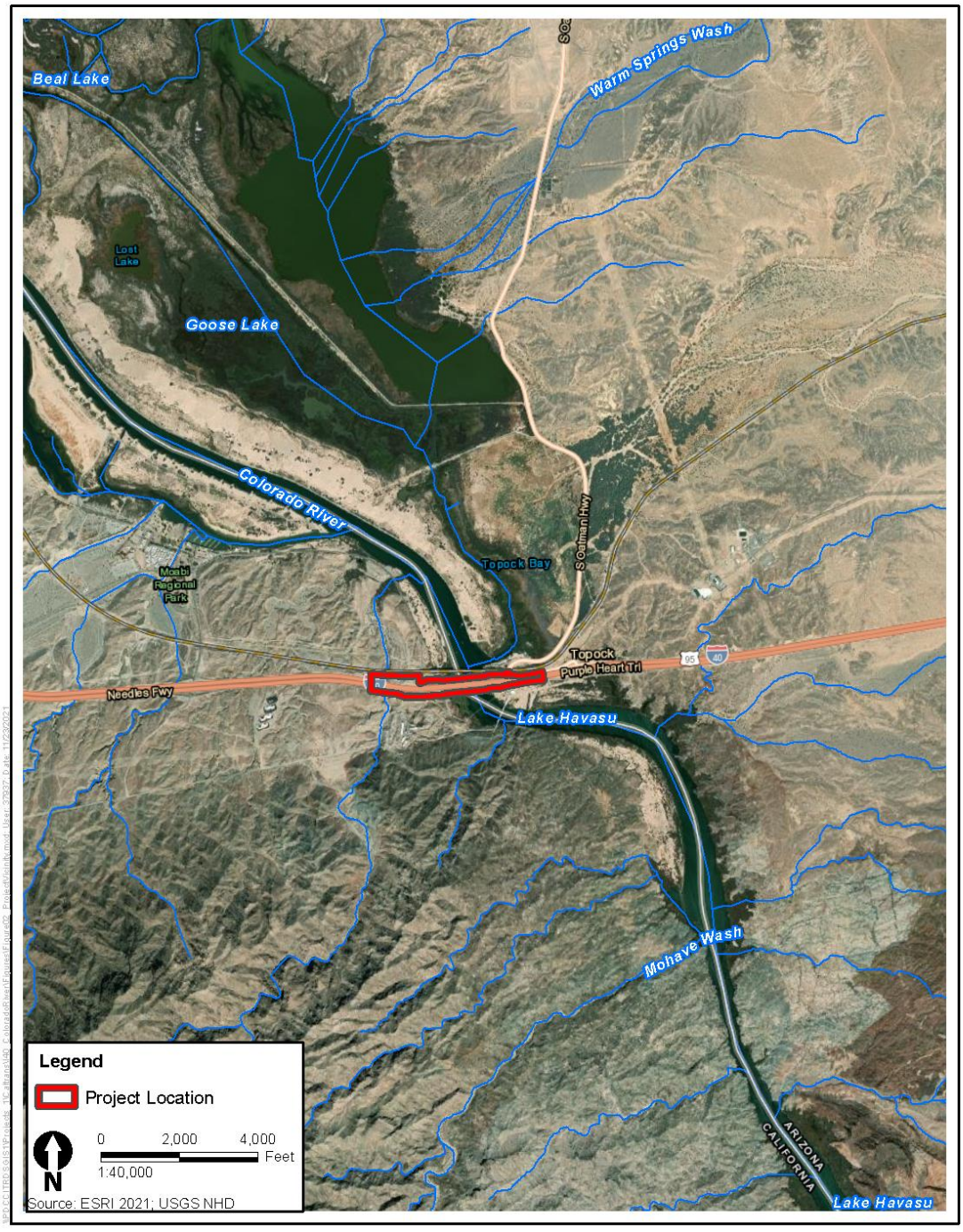
The No-Build (No-Action) Alternative assumes that no improvements will be made to the Colorado Bridge. Without the planned improvements proposed as part of the project, the concrete deck of the Colorado Bridge will continue to deteriorate. The existing spalls and delaminations along the outside shoulders, and transverse cracks throughout the transverse top mat rebar will continue to worsen. The top mat transverse rebar will remain exposed with inadequate concrete cover. The deterioration and worsening of these conditions will ultimately compromise the integrity and safety of the bridge structure. In addition, under this alternative, the bridge would continue to accommodate four 12-foot lanes of traffic (two in each direction) separated by a median barrier and non-standard 2-foot inside shoulders and 4-foot outside shoulders with Type 2 bridge rails. As such, this alternative would not upgrade to standard lane and shoulder widths and would not upgrade the bridge rail system.

Figure 1.1, Regiuonal Vicinity Map



Regional Vicinity
I-40 Colorado River Bridge Replacement Project

Figure 1.2, Project Vicinity Map



Project Vicinity
I-40 Colorado River Bridge Replacement Project

Figure 1.3, Geotechnical Bore Locations

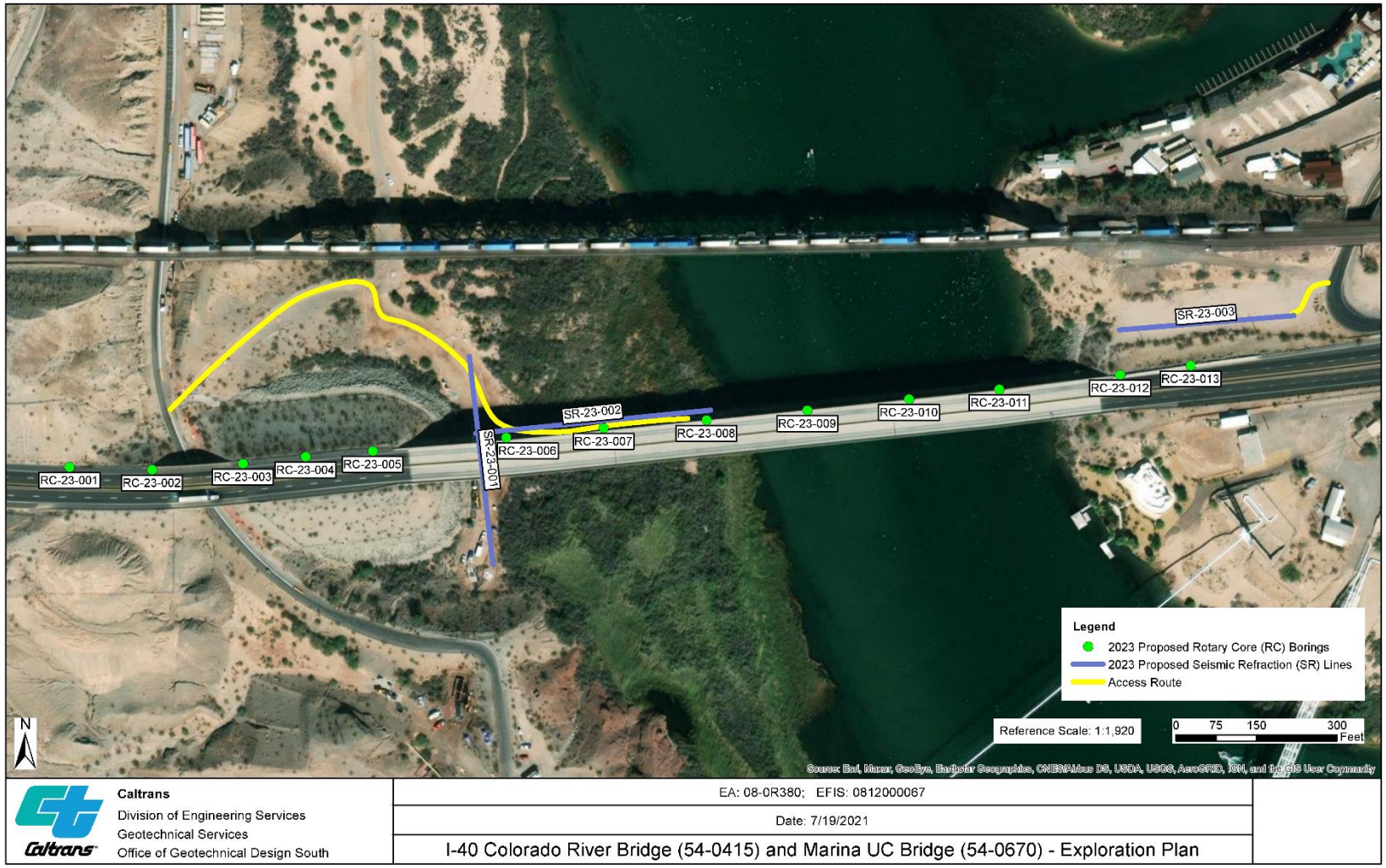


Figure 1.4, Proposed Layout Alternative 1

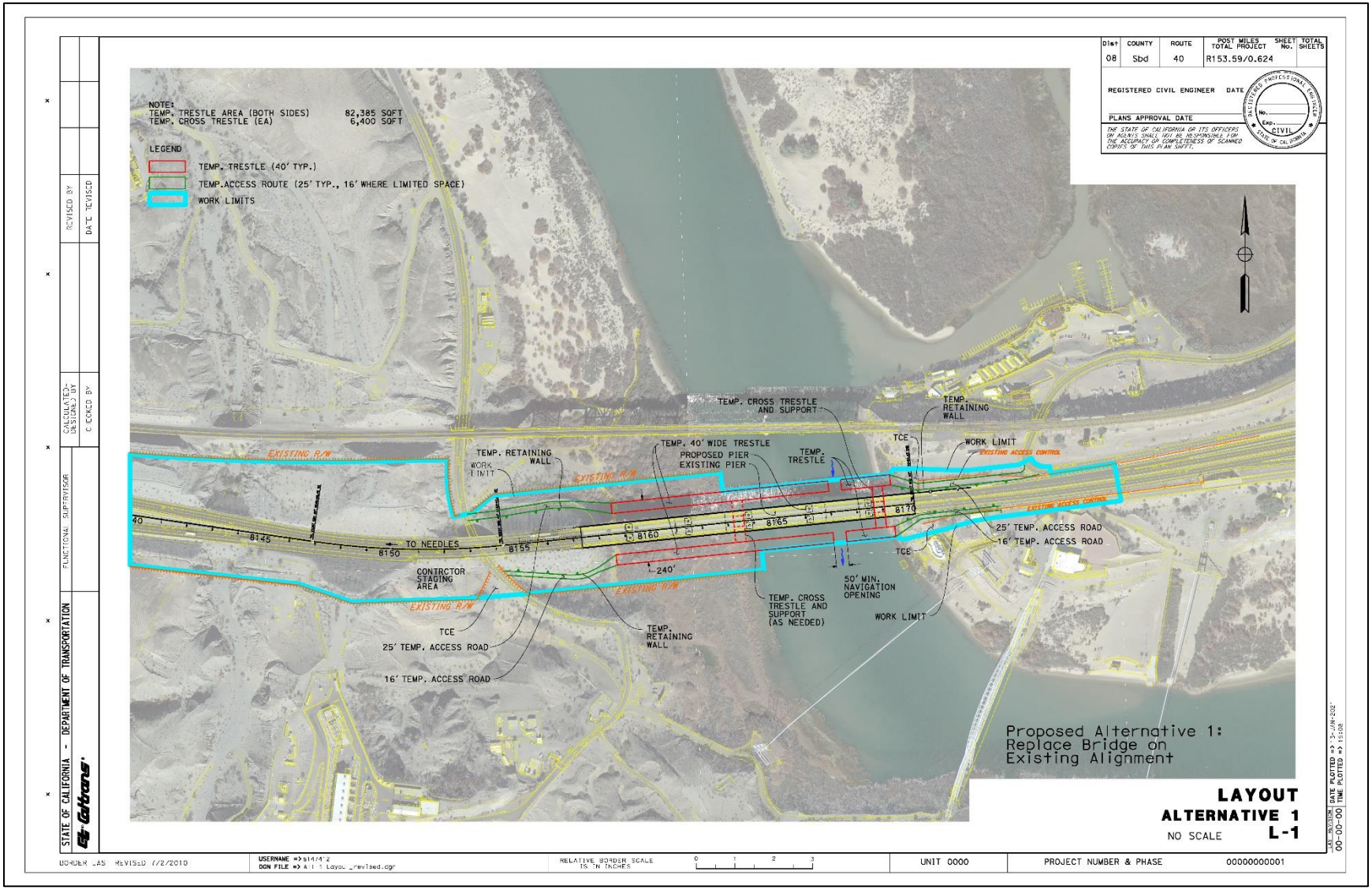


Figure 1.5, Proposed Layout Alternative 2

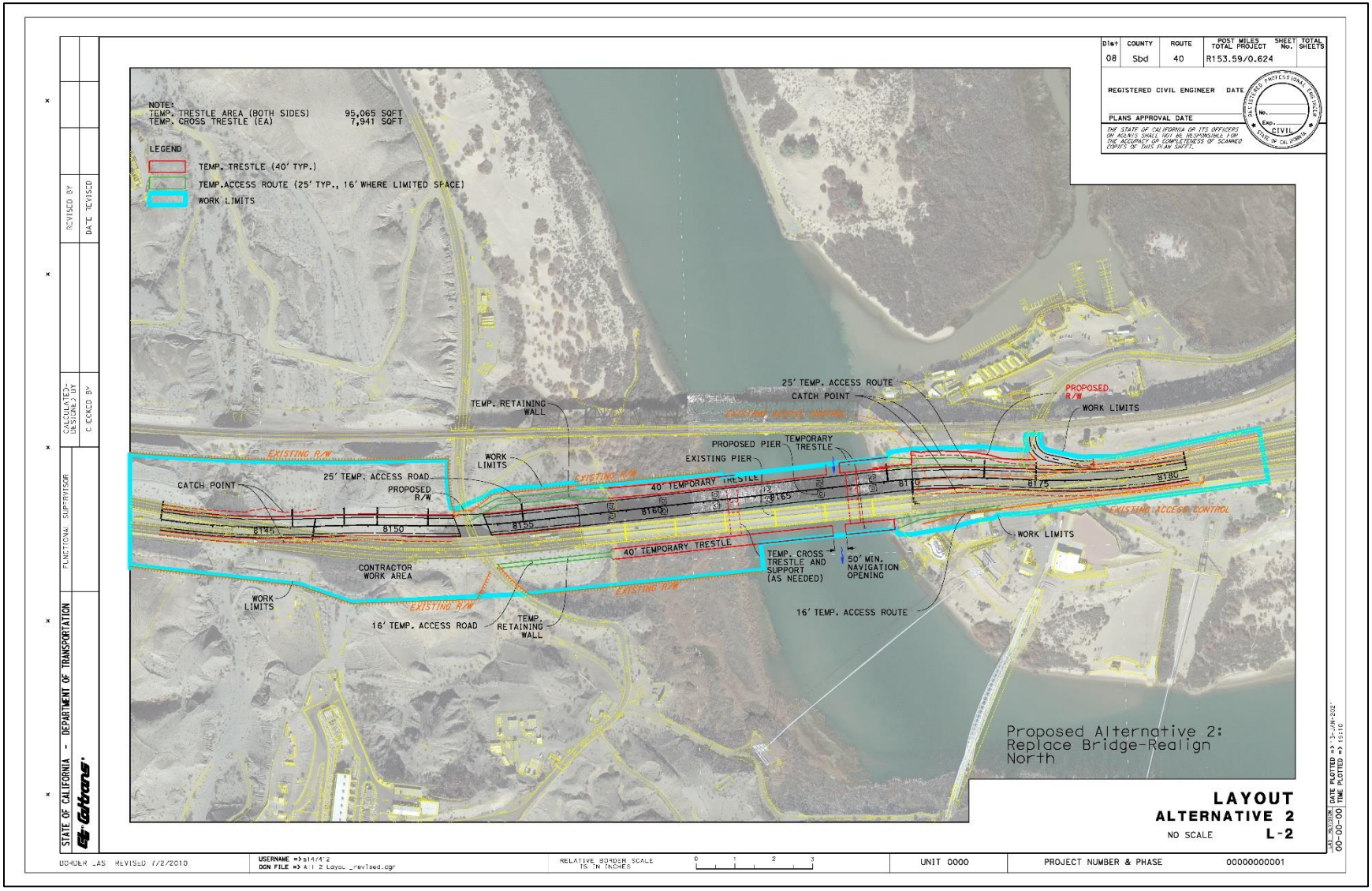
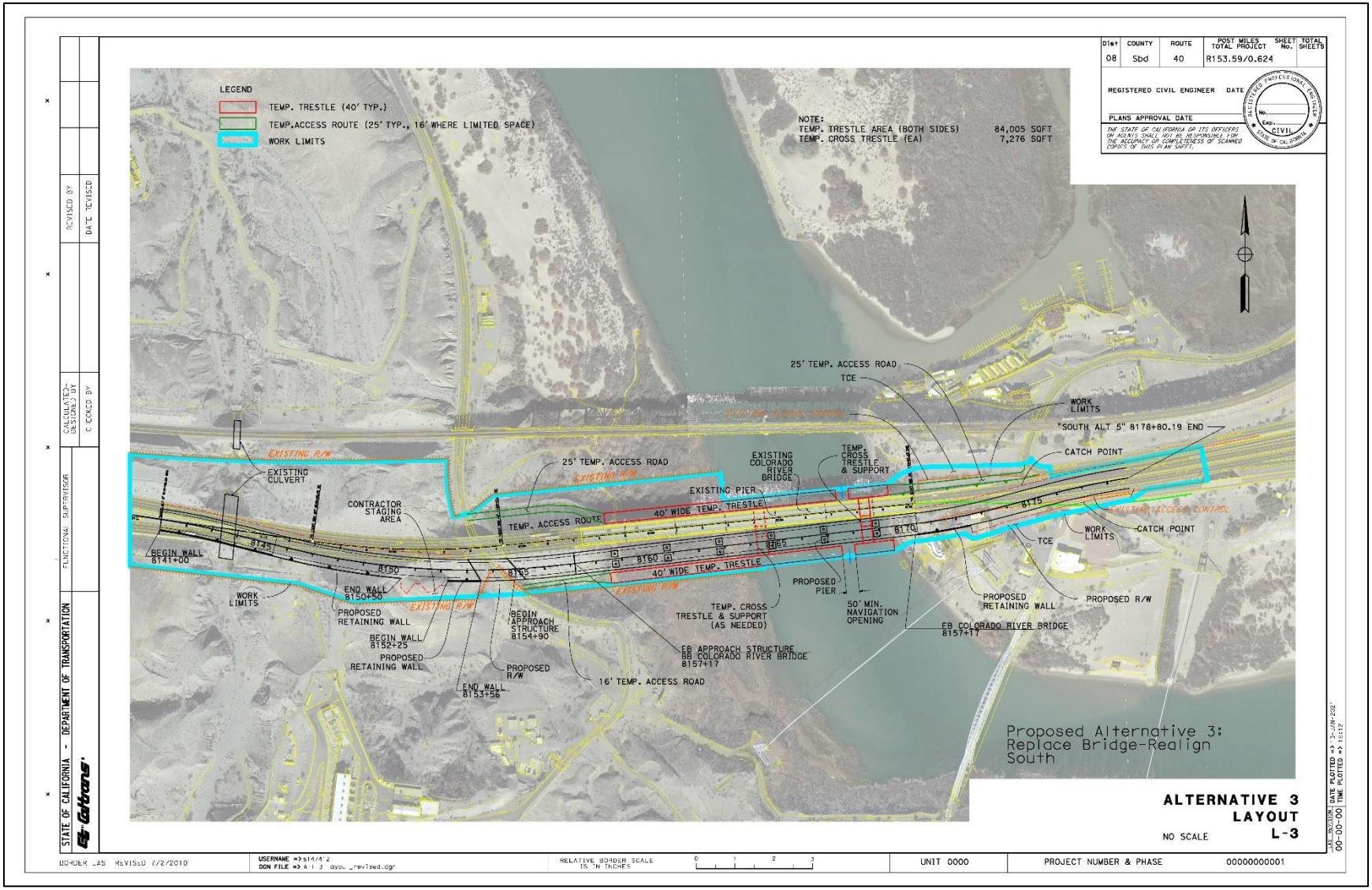


Figure 1.6, Proposed Layout Alternative 3



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

2.1.12 Cultural Resources

2.1.12.1 Regulatory Setting

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU)[1] between the Department and SHPO, effective January 1, 2015. Affected Environment

2.1.12.2 Affected Environment

This section is based on the Historic Property Survey Report (HPSR) (Caltrans, 2022g), Archaeological Survey Report (ASR) (Statistical Research Inc., and Caltrans, 2022a), Historical Resources Evaluation Report (HRER) (Statistical Research Inc., and Caltrans, 2022b), Addendum to the HPSR and Finding of Adverse Effect (FOE) (Caltrans, 2023f), and Finding of Adverse Effect (FOE) (Caltrans, 2023) prepared for the project.

AREA OF POTENTIAL EFFECTS (APE)

The Area of Potential Effects (APE) includes all areas where potential direct or indirect impacts to historic properties could occur as a result of construction, operation, or maintenance. The APE for the project consists of land located along I-40 from PM 153.9 to PM 154.7 in San Bernardino County, and from PM 0.0 to 0.6 in Mohave County, Arizona. The overall size of the APE is approximately 73.7 acres, with 24.8 acres located in Arizona and 48.9 acres located in California. The APE was established from the direct Project footprint, or Area of Direct Impact (ADI) and includes all cut and fill limits and all work for construction staging, plus additional areas to account for potential indirect effects such as noise, vibration, or settling impacts. The horizontal APE is 1.2 miles long and generally corresponds with the Caltrans and ADOT right of way. However, the APE has been expanded to encompass both archaeological and built-environment resources that are either within or adjacent to the project footprint to account for any potential indirect effects to these resources. The vertical extent of the APE is four feet below ground level for the roadbed. The maximum depth of the APE is 110 feet below ground level for the piles and bents within the Colorado River for the new bridge. The maximum extent of the APE is 45 feet above the original bridge deck to account for lighting, barriers, and signs on the new bridge deck.

NATIVE AMERICAN CONSULTATION

[1] The MOU is located on the SER at https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/5024mou-15-a11y.pdf

On January 27, 2020, the Native American Heritage Commission (NAHC) was contacted to initiate a search of the Sacred Lands File (SLF). On February 7, 2020, the NAHC responded stating a negative SLF search, along with a list of Native American contacts. Coordination also occurred with the ADOT Historic Preservation Specialist which provided a list of contacts that should be contacted as part of the project. The following tribes were sent consultation initiation letters on June 4, 2020.

Hopi (Stewart Koyiyumyewa, Tribal Historic Preservation Officer)

The Hopi Tribe was sent the consultation initiation letter on June 4, 2020, and responded on June 15, 2020, stating the Tribe wished to consult on the project if it was determined that it had the potential to adversely affect prehistoric resources and notified of any cultural deposits discovered during construction. A project update with summary letters and updated footprint was sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and March 30, 2022. The Finding of Effect (FOE) was made available on June 30, 2022, and follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction.

Hualapai (Dr. Damon R. Clarke, Tribal Chairman, Peter Bungart, Tribal Historic Preservation Officer)

The consultation initiation letter was sent on June 4, 2020 and follow up email was sent on August 6, 2020. The Tribe responded on November 6, 2020, stating that the Tribe defers consultation to the Fort Mojave and Chemehuevi Tribes. The Tribe requested to be contacted if human remains are found during construction but had no further concerns with the project.

Yavapai-Prescott (Greg Glassco, Compliance Officer, Robert Ogo, Acting President, and Linda Ogo, Director of the Cultural Research Department)

The consultation initiation letter was sent on June 4, 2020, and a response received on June 16, 2020, stating the Tribe wished to consult on the project and review the survey report once completed. A project update with summary letters and updated footprint maps were sent to the Tribe on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent to the Tribe on March 10, 2022, and March 30, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction

Moapa Band of Paiute Indians (Vickie Simmons, Tribal Chairperson)

The consultation initiation letter was sent on June 4, 2020, and follow up email sent on August 6, 2020. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a follow up sent on March 30, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction

Chemehuevi Indian Tribe (Charles Wood, Tribal Chairman)

The consultation initiation letter was sent on June 4, 2020, and follow up email sent on August 6, 2020. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022 and a follow up sent on March 30, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction.

Colorado River Indian Tribes (Dennis Patch, Tribal Chairman)

The consultation initiation letter was sent on June 4, 2020, and a response was received on June 24, 2020, requesting that all prehistoric sites be avoided and their desire to continue consultation. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a follow up sent on March 30, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction.

Fort Mojave Indian Tribe (Timothy Williams, Tribal Chairman, Linda Otero, Director of the Aha-Makav Cultural Society of the Fort Mojave Indian Tribe)

The consultation initiation letter was sent on June 4, 2020, and a phone call from Ms. Otero was received on June 22, 2020, requesting the consultation initiation letters be resent. The letters were resent the same day. An email from Ms. Otero was received on June 24, 2020, requesting contact information for FHWA and the Caltrans District 8 Director. The requested information was provided on June 25, 2020. On July 2, 2020, Ms. Otero sent a letter to the Caltrans D8 Director stating that the original bridge construction never considered its effects on the Mojave People and that all work in the area should automatically be an adverse effect. On August 6, 2020, Caltrans sent an email to Ms.

Otero explaining that the project was in the early stages and that the Tribe would be consulted with during the entire process.

A project update with a summary letter and updated footprint maps was sent to Ms. Otero on November 17, 2020. A teleconference meeting between FHWA, Caltrans and the Tribe was held on March 24, 2021. Ms. Otero identified the entire project area as sensitive and stated that she looked forward to reviewing the project cultural reports. A project update letter was sent to Ms. Otero on November 24, 2021, and a third update packet including the first draft copies of the project inventory and evaluation reports were sent to Ms. Otero for Tribal review on March 10, 2022.

Ms. Otero provided comments on the draft report May 25, 2022, asking for clarification on the locations of certain sites and restating the general sensitivity of the area. On June 13, 2022, Ms. Otero sent an email to Caltrans stressing that Alternative 4, the No Build Alternative, is the Tribe's preferred alternative.

Revised project reports were sent to Ms. Otero on June 30, 2022. On September 15, 2022, Ms. Otero sent an email with additional comments about the project finding, asking that the Topock Maze be added to the California Register of Historic Places, and that an Environmentally Sensitive Area (ESA) Action Plan and evaluation document be sent to her for her review.

Caltrans responded to Ms. Otero on December 19, 2022, via letter addressing the Tribe's comments in detail, providing a new link to the ESA action plan and evaluation document which had been sent to her on June 30, explaining the industry standard methods which had been used to identify the cultural sensitivity of the area, and mentioning that the Topock Maze has been on the California Register of Historic Places since 1978. Since that time, Caltrans has attempted to contact Ms. Otero asking for a meeting on January 4, January 24, and January 26, 2023.

On March 3, 2023, CA SHPO concurred with the eligibility determinations for several sites within the project footprint but requested additional information about the tangible and intangible effects mentioned by the Tribe.

On March 9, 2023, Caltrans sent an email to Ms. Otero with maps of the Mojave traditional territory, proposed Topock sacred area, and the project footprint to ask for additional consultation with the Tribe to help describe the effects the project would have on the tangible and intangible qualities of the landscape as considered under Section 106. On March 29, 2023, Ms. Otero emailed Caltrans to ask for a field meeting at the project location to discuss the Tribal perspective of the landscape.

On May 2, 2023, Caltrans met with Tribal representatives, including Ms. Otero, the consulting archaeologist Dawn Hubbs, former Tribal Chairwoman Nora MacDonald, and

Mojave artist and teacher, Paul Jackson at the Pipa AhaMaKav Cultural Center in Mohave Valley Arizona.

On July 19, 2023, Caltrans, FHWA, CA SHPO, and the Fort Mojave Indian Tribe met via videoconference to further discuss the Tribal perspective of the landscape and how the Project potentially impacts it.

Twenty-Nine Palms Band of Mission Indians (Darrel Mike, Tribal Chairman, Anthony Madrigal, Tribal Historic Preservation Officer)

The consultation initiation letter was sent on June 4, 2020, and project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a follow up sent on March 30, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No response has been received. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction.

Fort Yuma Quechan Tribe (Jill McCormick, Tribal Historic Preservation Officer)

The consultation initiation letter was sent on August 11, 2020. A project update with summary letters and updated footprint maps were sent on November 17, 2020 and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022. A response letter was received on March 14, 2022, stating no comments on the project, and deferring to the Fort Mojave Tribe. The Tribe will continue to receive project updates and consultation remains ongoing. The Tribe will have the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction.

GOVERNMENT AND HISTORICAL SOCIETY CONSULTATION

Initial letters and follow up communication were sent out to the following local parties including land management agencies, regulatory agencies, local museums, and historical societies located in California and Arizona.

Army Corps of Engineers (Daniel Grijalva, Archaeologist)

A consultation initiation letter was sent on October 26, 2020, and project update letter was sent on November 16, 2021. An update letter was sent on March 10, 2022, and follow up letter on March 30, 2022 indicating the inventory and evaluation reports were available. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

Arizona State Museum (Shannon Plumber, Arizona Antiquities Act Administrator, Permits Office Manager, Dr. Patrick Lyons, Director)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. A response was received on November 17, 2021, from the museum requesting to be a consulting party. The inventory and evaluation reports were sent on March 10, 2022, comments received from the museum on April 11, 2022. The comments will be addressed in a separate document as part of the Arizona State Museum's permitting requirements. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. The museum responded on July 22, 2022, stating their concurrence with the finding of No Adverse Effect.

Arizona Historical Society (James Burns, Executive Director)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. A response was received on March 31, 2022, requesting to review the environmental report and FOE. The FOE was made available on June 30, 2022, and follow up letters were sent on July 18, 2022 and August 5, 2022. No comments have been received.

Bureau of Land Management, Lake Havasu District (Collin Price, Archaeologist)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. A response was received on March 30, 2022, indicating no mail was received. The original letter was resent again on March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters were sent on July 18, 2022 and August 5, 2022. No comments have been received.

California Historic Route 66 Association (Glen Duncan, President)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

California Route 66 Preservation Foundation (Jim Conkle, President)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

California Lands Commission (Nicole Debroski, Chief Division of Environmental Planning and Management)

The California Lands Commission was identified as a potential consulting party as a respondent to the Notice of Preparation. A response was received on December 2, 2020 requesting a submerged resources survey through their database, and language reflecting submerged lands, shipwrecks, archaeological sites, historic and cultural resources are vested in the state and under jurisdiction of the California Lands Commission, and that consultation continue with local Native American groups. A submerged resources survey request was sent to the California Lands Commission on August 10, 2021, and a response was received the same day indicating negative results for known resources within the project area.

Mohave Museum of History and Arts (Bill Wales, President)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

Mojave River Valley Museum (Robert Hilburn, President)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter indicating the inventory and evaluation reports were available for review was sent on March 10, 2022, and March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

National Park Service, Route 66 Corridor Preservation Program (Kaisa Barthuli, Program Manager)

A consultation initiation letter was sent on July 15, 2021, and a response received on December 16, 2021, requesting clarification of the project. A response and map were sent on December 20, 2021. The inventory and evaluation reports were sent on March 10, 2022, and follow ups on March 30, 2022, and April 18, 2022. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

National Historic Route 66 Federation (David Knudson, President)

Previously known as the Route 66 Historical Association. A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter was sent on March 10, 2022, and March 30, 2022 indicating the inventory and evaluation reports were available for review. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022 and August 5, 2022. No comments have been received.

Needles Regional Museum

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter was sent on March 10, 2022, and March 30, 2022, indicating the inventory and evaluation reports were available for review. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

Pacific Gas & Electric (Jennifer Darcangelo, Tribal and Cultural Resource Land Consultant)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter was sent on March 10, 2022, and March 30, 2022, indicating the inventory and evaluation reports were available for review. A response was received on March 30, 2022, requesting to review the documents, and requested documents were sent the same day. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

San Bernardino Historical Society

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. An update letter was sent on March 10, 2022, and March 30, 2022, indicating the inventory and evaluation reports were available for review. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

United States Coast Guard (Carl Hausner, Chief Bridge Section)

A consultation initiation letter was sent on October 26, 2020, and November 16, 2021. A response was received on November 26, 2020, requesting to be a cooperating agency under NEPA and for technical reports and consultation. An update letter was sent on March 10, 2022, and follow up on March 30, 2022, stating that the inventory and evaluation reports were available for review. A response requesting the documents was received on April 4, 2022. The reports were sent on April 7, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022, and August 5, 2022. A response was received on June 30, 2022, indicating the documents were accessed. No other comments have been received.

United States Fish and Wildlife Service, Lake Havasu Refuge (Linda Miller)

A consultation initiation letter was sent on October 26, 2020, and October 27, 2020. An update letter was sent on November 16, 2021. The inventory and evaluation reports were sent on March 10, 2022, and response received on March 15, 2022, with a request for the reports. The reports were made available on the same day. The FOE was made available on June 30, 2022, with follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

Advisory Council on Historic Preservation (Mandy Ranslow)

A formal consultation letter was sent on October 26, 2020, with an update letter sent on March 10, 2020. A response was received on March 14, 2022, indicating a new point of contact. A follow up email was sent on March 30, 2022. The FOE was made available on June 30, 2022, and follow up letters sent on July 18, 2022, and August 5, 2022. No comments have been received.

Arizona State Historic Preservation Office

A formal consultation initiation letter was sent on October 26, 2020. FHWA/Caltrans continued consultation by submitting the DOE to Arizona SHPO on August 16, 2022. The Arizona SHPO concurred with the finding of No Adverse Effects on September 14th, 2022. In a letter dated August 4th, 2023, the FHWA sent the HPSR and FOE RSP Addendum and requested that the Arizona SHPO concur with the APE Delineation, identification of historic properties located within the Undertaking's APE, Evaluation of resources, and proposed Ffinding of Adverse Effect for the Undertaking.

A formal consultation initiation letter was sent on October 26, 2020. FHWA/Caltrans continued consultation by submitting the DOE to Arizona SHPO on August 16, 2022. The Arizona SHPO concurred with the finding of No Adverse Effects on September 9, 2022.

California State Historic Preservation Office

A formal consultation initiation letter was sent on October 26, 2020. FHWA/Caltrans continued consultation by submitting the DOE to SHPO on August 16, 2022. Consultation remains ongoing. On December 19, 2022, Caltrans sent a letter to the Fort Mojave Tribe and CA SHPO addressing each of the Tribe's comments and providing details on the methodologies used by Caltrans/FHWA to determine the finding for the project. On March 3, 2023, CA SHPO concurred with the eligibility determinations for several sites within the project footprint but requested additional information about the tangible and intangible effects mentioned by the Tribe before SHPO could concur on the finding for the project. During a videoconference between Caltrans, FHWA, CA SHPO, and the Fort Mojave Indian Tribe on July 19, 2023, the Tribe reiterated the points made during the May 2, 2023 meeting with Caltrans for the benefit of CA SHPO and FHWA staff. In brief, the Tribe considers their placement on the reservation, construction of the railroads in the 1800s, the original building of the Colorado River Bridge in the 1960s, and the effects on the landscape by the PG&E Compressor Station and the resulting toxic soil removal efforts which are currently ongoing south of the I-40 right of way, to be part of a single continuous series of adverse effects on the Mojave people.

In a letter dated August 4th, 2023, the FHWA sent the HRSPPSR and FOE Addendum and requested that the California SHPO concur with the APE Delineation, identification of historic properties located within the Undertaking's APE, Evaluation of resources, and proposed finding of Adverse Effect for the Undertaking.

RECORDS SEARCH

As the project is located within California and Arizona, records searches were conducted in each state. For California, a records search with the South-Central Coastal Information Center (SCCIC) was conducted. For Arizona, the records search was conducted online with Arizona State University's AZSITE, which provides a consolidated informational network of recorded cultural resources. The SCCIC identified 174 previously recorded cultural resources, 8 of which were mapped within the APE. The Arizona records search identified 10 previously recorded resources within 0.5-mile of the APE, with four of those resources intersecting the APE. A pedestrian survey of the APE was conducted on June 8 and 9, 2021. A total of 8 cultural resources were encountered. These resources include four previously recorded resources in California (CA-SBR-000219, CA-SBR-11910/H, CA-SBR-12642H, and CA-SBR-13791H), one new site in Arizona (SRI-2), and three resources spanning the state line [CA-SBR-2910, and AZ I:15:156 (ASM), CA-SBR-6693H/AZI:14:334 (ASM), and P-36-027678]. No new resources were recorded on the California side of the project. The pedestrian survey also determined several resources identified in the records searches were mis-plotted or otherwise not located within the APE including historical-period walls, trails, footings, and pits (CA-SBR-13792H), the remains of a cellar [AZL7:19(ASM)], isolated resource (P-36-023220) fragments of refractory (heat-resistant) material. Based on the survey, none of these resources intersects the APE and are either mis-plotted or located outside of the APE.

The Colorado River Bridge (54-0415) and Marina Road Undercrossing (54-0670) bridges are listed as Category 5 bridges (previously determined not eligible for listing in the NRHP). As such, none of the bridges are subject to evaluation.

The following cultural resources within the APE were previously determined eligible for inclusion in the NRHP and those determinations remain valid:

- CA-SBR-000219. Topock Maze/Topock Traditional Cultural Property consists of a complex of three (3) loci containing intaglio or geoglyphs. Locus A (18 acres) is located immediately to the south of the I-40 ROW and locus B (11 acres) and locus C (6 acres) are located to the north of the BNSF/ATSF railroad which is beyond the ADI. The maze is a large intaglio or geoglyph consisting of parallel windrows of dark desert-pavement gravels piled up from the surrounding desert pavement surface. The site is listed on both the NRHP and CRHR under Criterion D/4. CA-SBR-00219 was reevaluated in the HPSR Addendum dated August 2023 and determined to be eligible for the NRHP under Criterion A as well as Criterion D. CA-SBR-000219. Topock Maze/Topock Traditional Cultural Property is part of a larger maze complex, with only the main portion of the maze (Locus A) within the APE. Locus A covers approximately 17.7 acres and located south of I-40, between PM 153.9 and PM 154.2, south of the western end of the APE. The maze is a large intaglio or geoglyph consisting of parallel windows of dark desert pavement gravel, piled on the surrounding desert pavement surface. The site is listed on both the NRHP and CRHR under Criterion D/4.

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- CA-SBD-6693H/AZI:14:334. BNSF/ATSF Railroad. This resource consists of a segment of the BNSF railroad that extends through the APE. The segment includes a series railroad tracks, a bridge over Route 66 in California and over Oatman Highway in Arizona, and a culvert/tunnel beneath the tracks on the California side of the project area. This resource was determined eligible for listing in the NRHP (Criterion A) with California SHPO in 1994.

- Segments (4 and 5) of National Old Trails Highway/Route 66 (NOTH/66): NOTH/66 CA and AZ. CA-SBR-2910 ad AZ I:15:156 (ASM). This resource consists of five different sections or alignments of NOTH/66. This historic route runs through the project area toward Needles, California to the northwest and Topock and Oatman, Arizona to the north. The resources on the California side consist of the alignment of the road and guard rails, culvert, road signs, and trash scatter. The resources continues into Arizona where it is recorded as AZ I:15:156 (ASM) and consists of an asphalt-paved segment of Oatman Highway. Generally, NOTH/66 within California is considered eligible for the NRHP and CRHR under Criteria A and C. However, multiple segments within the California portion of the APE have been previously evaluated and SHPO concurred upon, with varying levels NRHP status. The Arizona portion of NOTH/66 was evaluated and found to be eligible for the NRHP under Criteria A and C.

- Old Trails Arch Bridge (P-36-027678). This resource is 832 feet in length and 20 feet in width and is a steel-trussed, single-span, center-hinged, through- type arch bridge. The bridge was constructed in 1916 and functioned as an automobile bridge along the NOTH (designated Route 66 in 1926) until 1947, when the bridge was decommissioned, and traffic was redirected to the newly repurposed Red Rock Bridge. In 1948, the roadway of the bridge was removed, and the bridge was incorporated into the design of the El Paso Natural Gas Company (EPNG) interstate natural gas pipeline. Currently, the bridge supports natural gas pipelines as they traverse the Colorado River from Arizona to the Topock Compressor Station in California. The resource was evaluated and listed in the NRHP in 1988 under Criterion A and C.

The following cultural resources are within the APE and were evaluated as a result of this project and are not eligible for inclusion in the NRHP.

- CA-SBR-13791H. This resource consists of a 164 foot-by-65 foot-7 inch scatter of railroad related debris including locomotive firebox bricks, railroad timber, spikes, bolts, tie plates, fragments of asbestos, and historical-period kitchen refuse. The site is located along the slope of a terrace overlooking the western shoreline of the Colorado River and actively eroding downslope and is highly scattered. This site is recommended as not eligible for the NRHP and CRHP.

- CA-SBR-12642H. This resource consists of a 10 foot long-by-1 foot-11.5 inch wide formed and poured concrete footing located on a terrace overlooking the western

shoreline of the Colorado River. This footing constitutes the last remaining component of the Red Rock Bridge, a railroad bridge constructed across the Colorado River in 1890 that was ultimately converted into a highway bridge as part of the Route 66 system in 1947.The bridge was abandoned and dismantled during the 1970s. The site is recommended as not eligible for the NRHP and CRHP.

- CA-SBR-11910/H. This resource consists of a multicomponent archaeological site composed of a small, discrete prehistoric lithic scatter and three foxholes, a rock cairn, two concentrations of insulator glass fragments, and pieces of historical period refuse. The historic component only is recommended as not eligible.

- SRI 2. This resource consists of approximately a 30-foot diameter, 80-foot-tall steel water tank located on the Arizona side of the APE, adjacent to the BNSF railroad tracks. This site is currently recommended as not eligible for the NRHP and CRHP.

There are cultural resources within the APE that were not evaluated as a result of this project and are considered to be eligible for inclusion in the NRHP because they can be protected in theirre entirely through the establishment of an Environmentally Sensitive Area (ESA).

- CA-SBR-11910/H. This archaeological site is a small, discrete lithic scatter on desert pavement consisting of cobble, five pieces of debitage, and two waterworn cobbles, all composed of quartzite. The historic component consists of three foxholes, a rock cairn, two concentrations of insulator glass fragments, and historical period refuse. The site record does not indicate if the site was evaluated for its eligibility listing in the NRHP or CRHR.

- AZ L7:81(ASM). This highly disturbed site consist of discrete, prehistoric isolate lithic scatter located upon a highly disturbed tract of land between the extended northern shoulder and pull-out area of AZ-95 Oatman to Topock Highway, and the BNSF railroad. The site has not been evaluated for the NRHP but will be treated as eligible and protected in its entirety through the establishment of an ESA.

2.1.12.3 Environmental Consequences

The records search, surveys, and evaluation efforts resulted in six Historic Properties in the APE. Four of these including Topock Maze (CA-SBR-219), NOTH/Route 66, Atchison, ATSF/BNSF, and Old Trails Arch Bridge (P-36-027678) have been previously determined eligible for the NRHP, and two (CA-SBR-11910/H and AZ L:7:81) will be considered eligible for the NRHP under Criterion D for the project. Caltrans / FHWA analyzed the potential effects of the Undertaking on the six Historic Properties identified in the APE in accordance with the NHPA Section 106 Criteria of Adverse effect in 36 CFRcfr .800.5 as follows:

Topock Maze (CA-SBR-219)

The eaffects to this property are the same under Build Alternative 1, 2, and 3. This historic property has been previously determined eligible for the NRHP under Criterion D and the resource can be protected through the establishment of an ESA. As part of the consultation efforts with the Fort Mojave Tribe, the AhaMaKav Cultural Society indicated that the Tribe considers the maze to be part of a Traditional Cultural Property and prefers the maze to be referred to as the Topock Maze/Topock Traditional Cultural Property. The Tribe also stated their view that the maze is part of a larger spiritual landscape which is central to their traditional lifeways and the land holds special significance in both tangible and intangible ways. No project related work is currently proposed at any of the three loci. This property is located well away from the ADI and was brought into the APE out of an abundance of caution due to the cultural sensitivity of the area and to ensure there was no inadvertent damage to the site. The site will be protected in its entirety through the establishment of an ESA to ensure there are not direct effects to this property from construction related activities. The physical features of this site will be protected through the establishment of the ESA. The setting will change as the existing bridge would be removed and a new bridge would be constructed in its place, however, this effect will be temporary. Although the proposed bridge would be slightly taller and longer, it is of similar construction and is being constructed in roughly the same location as the existing bridge. Therefore, there would be no new indirect effects upon this property's setting or character. Furthermore, the project would not change the intangible characteristics of the Topock Maze/Topock Traditional Cultural Property. The build alternatives would not affect the Topock Maze/Topock Traditional Cultural Property's functions within the Fort Mojave Tribe's beliefs and lifeways. As such, the build alternatives would have No Adverse Effect on the Topock Maze/Topock Traditional Cultural Property (CA-SBR-219).

Subsequent consultation efforts with the Fort Mojave Indian Tribe have resulted in a reanalysis of *Nyo-Haive-Kee-Matche-Eve* (Topock Maze) and a determination that CA-SBR-219 is eligible for the NRHP under Criterion A as well as Criterion D. For the purposes of this project, the boundaries of the three known archaeological loci for CA-SBR-219 is shown on the APE with the understanding that the TCP covers the entire APE. Further, it is recognized that additional efforts beyond the scope of a single project would be required to formally document the Topock TCP. The Topock Maze (CA-SBR-219) consists of a complex of three (3) loci containing intaglio or geoglyphs. There are no physical remains of the Maze complex within the Caltrans ROW as the interstate was cut below the natural ground surface during construction in the mid-1960s.

Topock Maze Traditional Cultural Property

The purpose of this discussion is to expand the characterization of the existing Topock Maze conceived as a single archaeological site into a Traditional Cultural property of which Topock Maze in an integral and important nexus. The Tribe's view that the Maze is part of a larger spiritual landscape which is central to their traditional lifeways and that the land holds special significance in both tangible and intangible ways. An especially powerful element of the TCP is the Colorado River itself. T the TCP, the Topock Intaglio

itself described above and the Colorado River are its most salient and discernable features.

In sum, Caltrans/FHWA has determined that the project will have an Adverse Effect on the Topock TCP because of anticipated indirect effects including the sound of demolition of the current Colorado River Bridge, the operation of heavy equipment,, and other general construction noise, as well as potentially additional dust and construction activities within the Colorado River.

The project will result in the *introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant features* (v). Any visual, atmospheric, or audible effect from the demolition of the current Colorado River Bridge and construction of the new bridge will be temporary in nature limited to the duration of the project. Change to the Colorado River will be minimal and limited to the period of construction as the existing bridge is being replaced by one of similar scope and scale.

The range of possible effects to this property are the same under Build Alternative 1, 2, and 3.

CA-SBR-11910/H

The effects to this property are the same under Build Alternatives 1, 2, and 3. The prehistoric portion of this site is being treated as eligible for the NRHP under Criterion D as the resource can be protected in its entirety through the establishment of an ESA. No work is proposed at this location, however, out of an abundance of caution and to protect against direct and inadvertent effects, this small lithic scatter will be protected in its entirety through the ESA. As such, there would be No Adverse Effect on this resource.

AZ L:7:81 (ASM)

The effects to this property are the same under Build Alternatives 1, 2, and 3. This historic property is being treated as eligible for the NRHP under Criterion D as the resource can be protected in its entirety through the establishment of an ESA. No project work is proposed at this location, however, out of an abundance of caution this small lithic scatter will be protected in its entirety through the establishment of an ESA. As such, the build alternatives would have No Adverse Effect on this resource.

NOTH/Route 66, Segments 4 and 5

The NOTH/Route 66 Segments 4 and 5 are located within the APE with Segment 4 located within the ADI on the California side and Segment 5 located outside of the ADI in Arizona. Segments 4 and 5 are eligible under Criteria A and C, with Segment 4 consisting of approximately 1,600 feet of roadway within the APE and Segment 5 consisting of approximately 100 feet of roadway within the APE. Segment 4 is a local access road currently in fair condition, and Segment 5 is part of the Oatman Highway and used for regular traffic, currently in good condition. Each of the build alternatives are analyzed separately below, as the effect to each segment varies based on build alternative.

- Build Alternative 1

There is no work proposed at any locations within the ADI or APE on either segment. However, there is potential for the segments to be affected as the resource may potentially be utilized as part of the construction haul road and as an access point to temporary roads to be constructed to the north and south of the existing fill used as part of the approach to the Colorado River bridge. This potential construction related traffic is not anticipated to damage the road but incidental damage to the roadbed may occur during hauling and moving construction vehicles to temporary roads or staging and storage areas.

If the roadbed is damaged as part of the construction process, the repair work will be conditioned to reflect an in-kind replacement of the pavement (measure CR-5) with similar components of the existing road surface. A second condition (measure CR-7) states that the repair work would not modify the horizontal or vertical dimensions of the roadbed structure or realign portions of the resource. The overall character of the property will not change as the conditions would ensure the road is repaired in a manner consistent with current conditions. The overall character of the property will also be preserved as the proposed bridge is of similar size and scale of the existing bridge. As such, Build Alternative 1 would have No Adverse Effect on the NOTH/Route 66 Segments 4 and 5.

- Build Alternative 2 and 3

With Build Alternative 2 and 3, the effects to Segment 5 will be the same as discussed under Build Alternative 1 and would result in No Adverse Effect for that segment. The effects to Segment 4 would include the same impacts as discussed under Build Alternative 1 with additional impacts as discussed below.As such, the analysis will examine the effects to Segment 4 under Build Alternatives 2 and 3. With Build Alternatives 2 and 3 there is potential for Segment 4 to be affected as the resource may potentially be utilized as part of the construction haul road and as an access point to temporary roads to be constructed to the north and south of the artificial fill used as part of the approach to the Colorado River bridge. Incidental damage to the roadbed may occur through the use of the road as part of construction hauling and moving construction vehicles to the temporary roads or staging and storage areas. If the roadbed is damaged as part of the construction process, the repair work would reflect an in-kind replacement of the pavement (measure CR-5). The repair work would also not modify the horizontal or vertical dimensions of the roadbed structure or realign portions of the resources (measure CR-7).

With Build Alternative 2 and 3, the Marina Road Undercrossing would be removed and a new bridge, either slightly to the north (Build Alternative 2) or south (Build Alternative 3) would be constructed. The Marina Road Undercrossing is not part of the historic property (Segment 4) but crosses above the linear resource, and the work on the bridge has the potential to affect the resource located below. Part of the demolition of the bridge is the removal of piers in close proximity to one of the character defining features of Segment 4, the 1950's guardrail. There is the potential for partial removal of the 1950s guardrail. Modern Midwest Guardrail System (MGS) would be installed to meet current safety

standards and to protect the new bridge from vehicular collisions. The installation of MGS would be conditioned (measure CR-6) to either be stained or painted white to match the 1950s guardrail, if the original cannot be salvaged and replaced, and be of similar massing, size and scale. The potential loss of the 1950s guardrail is an effect to Segment 4, however, this effect does not rise to the level of adverse as there are other associated road features that are present along this segment which would continue to convey the character and feeling of this property. As such, Build Alternatives 2 and 3 would have No Adverse Effect on Segment 4 and 5.

ATSF/BNSF CA-SBR-6693H (P-36-006693)/AZ I:14:334 (ASM)

This property is a continually utilized and maintained railroad line by BNSF. The effects to this property, includeing the raised bed, trestle bridge, and two overcrossings over NOTH/66 and the Oatman Highway, are the same for Build Alternatives 1, 2, and 3. No work is proposed at this location, and it is outside of the ADI for the project. As such, the build alternatives would have No Adverse Effect.

Old Trails Arch Bridge (P-36-027678)

The effects to this property are the same under Build Alternatives 1, 2, and 3. This resource was previously used as an automobile bridge that crossed the Colorado River, butColorado River but was converted in 1948 to carry natural gas and continues to function in this capacity currently. This resource is located within the APE but outside of the ADI and located between 350 to 1,150 feet to the south of the Colorado River Bridge. As such, the build alternatives would have No Adverse Effect on this resource.

In summary, there are six Historic Properties located within the APE: Topock Maze/ Topock Traditional Cultural Property CA-SBR-219 (recommended as eligible for the NRHP under both Criterion A and Criterion D), BNSF/ATSF Railroad (previously determined individually eligible under Criterion A), NOTH/66 and Old Trails Arch Bridge (previously determined to be eligible under Criteria A and C), the prehistoric portion of CA-SBR-11910/H and AZ L:7:81 (ASM) (treated as eligible under Criterion D as they can be protected in place with establishment of ESA. Based on the application of the Criteria of Adverse Effect, Caltrans/FHWA has determined that the Undertaking will result in a Finding of No Adverse Effect on five (5) Historic Properties, and an adverse effect on one Historic Property. Thus, FHWA has determined that a Finding of Adverse Effect is appropriate for the Undertaking as a Whole. FHWA/Caltrans initiated consultation on the DOE with the Arizona and California SHPOs on August 03, 2023. Consultation with the AZ SHPO is ongoing. The California SHPO concurred with the project eligibility determinations on August 15th, 2023.

In summary, there are six Historic Properties located within the APE: Topock Maze/ Topock Traditional Cultural Property CA-SBR-219 (previously determined individually eligible under Criterion D), BNSF/ATSF Railroad (previously determined individually eligible under Criterion A), NOTH/66 and Old Trails Arch Bridge (previously determined to be Eligible under Criteria A and C), the prehistoric portion of CA-SBR-11910/H and AZ L:7:81 (ASM) (treated as eligible under Criterion D as they can be protected in place with establishment of ESA. Based on the application of the Criteria of Adverse Effect,

Caltrans/FHWA has determined preliminarily that the Undertaking will result in a Finding of No Adverse Effect on the 6 historic properties, FHWA/Caltrans initiated consultation on the DOE with the Arizona and California SHPOs on August 16, 2022. The AZ SHPO concurred with Caltrans/FHWA findings on September 14, 2022. The California SHPO concurred with the project eligibility determinations on March 3, 2023. Caltrans/FHWA is in the process of completing consultation with the FMIT and thereby is in the process of supplementing the Section 106 finding of effect documentation. Caltrans will complete consultation with the California SHPO regarding finding of effect once consultation is completed.

No-Build Alternative

The No-Build Alternative would not adversely affect cultural resources.

2.1.12.4 Avoidance, Minimization, and/or Mitigation Measures

The following standard project features **CR-1 through 4** would be implemented to avoid or minimize potential effects on previously undocumented cultural materials or human remains.

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 Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact Andrew Walters, DEBC, (909) 260-5178, Caltrans District 8 Division of Environmental Planning, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

CR-3 All project-related activities or inadvertent disturbances will be prohibited within the Environmentally Sensitive Areas (ESA).

CR-4 An Archaeological Monitor will be assigned to monitor construction related activities within the Archaeological Monitoring Area (AMA). No work shall occur within the AMA unless the Archaeological Monitor is present. If archaeological resources are discovered within the AMA, compliance is required with Standard Plans Section 14-2.02.

The measuresMeasures **CR-5 through 7** below would lessen the effect to the NOTH/Route 66 Segments 4 and 5:

CR-55 Repair of the pavement on CA-SBR-2910 and AZ I:15:156 (ASM) National Old Trails Highway/Route 66 (NOTH/66) CA and AZ Segments 4 and 5 will be conducted according to the Secretary of the Interior's Standards (SOIS): Any pavement repair will conform to the existing profile, width, etc. Similar or identical paving techniques as the existing will be utilized such as materials type and aggregate size. Paving plans and specifications shall be reviewed and approved by the Caltrans PQS Principal Architectural Historian for compliance.

CR-66 The historic period 1950s guardrails impacted by the project will be salvaged and re-used as practical. If guardrail cannot be reused, then stained or painted Midwest Guardrail System type will be used. If guardrail cannot be salvaged, an alternative rail will be chosen in consultation with the Caltrans PQS Principal Architectural Historian to ensure that it is compatible with the massing, size, scale, and architectural features of the 1950s guardrail to protect the historic integrity of the property and its environment.

CR-77 The roadbed shall not be realigned or altered in a way that changes the horizontal and vertical dimensions that together comprise a contiguous roadbed structure including the addition of side slopes, and/or graded shoulders where none previously existed. Plans and Specifications shall be reviewed by Caltrans PQS Principal Architectural Historian for compliance.

FHWA/Caltrans will continue consultation with the Fort Mojave Indian Tribe regarding mitigation of adverse effects to CA-SBR-00219/Topock Maze/Topock Traditional Cultural Property through the preparation of an MOA.

2.3 Cumulative Impacts

Regulatory Setting

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

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

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

Methodology

In 2005, Caltrans, in conjunction with the Federal Highway Administration (FHWA) and the U.S. Environmental Protection Agency (USEPA), developed a guidance document: Guidance for Preparers of Cumulative Impact Analysis. The following analysis is based on the guidance, which involves the following eight step process:

1. Identify the resources to consider in the cumulative impact analysis by gathering input from knowledgeable individuals and reliable information sources. This project is initiated during project scoping and continues throughout the NEPA/CEQA analysis.

2. Define the geographic boundary or Resource Study Area (RSA) for each resource to be addressed in the cumulative impact analysis.

3. Describe the current health and historical context of each resource.

4. Identify the direct and indirect impacts of the proposed project that might contribute to a cumulative impact on the identified resources.

5. Identify a set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impact analysis.

6. Assess cumulative impacts.

7. Report the results of the cumulative impact analysis.

8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

As specified in the guidance, if a proposed project would not result in a direct or indirect impact on a resource, it would not contribute to a cumulative impact on that resource. This cumulative impact analysis includes environmental resources that are substantially affected by the project and resources that are currently in poor or declining health, or at risk even if project impacts would not be substantial.

In addition to the project, there are a number of development and transportation projects that have been identified as planned, approved, or recently constructed projects within the general project vicinity. Each project would be subject to all

applicable federal and state environmental compliance requirements, as applicable. The following list of projects, considered in this cumulative analysis is provided below.

Table 0-1, Planned Project in the Project Vicinity

Name	Location	Description	Status
I-40 Regrade Existing Median Project (EA 08-0R142)	16-miles west of City of Needles to California/Arizona state line, in unincorporated San Bernardino County.	Re-grading existing nonstandard I-40 median cross slopes.	Final environmental document completed.Under construction.
I-40 Median Regrade Project (EA 08-0R141)	Along I-40 from Essex Road Overcrossing to east of Homer Wash Bridge in San Bernardino County.	Re-garading the median cross slopes from Post Mile (PM) R100.0 to PM R125.0.	Final environmental document completed.Construction complete.
I-40 Bridge Scour Mitigation Project (EA 08-1G830)	Along I-40 at PM R100.8/R101.8 near Essex in San Bernardino County.	Retrofitting north and south bridges with outrigger bents or replacement of bridges to mitigate scour at Halfway Hills Wash Bridge on I-40.	Final environmental document completed.Under construction.
Source: Caltrans District 8 website, Current Projects Listings: https://dot.ca.gov/caltrans-near-me/district-8/district-8-current-projects State of California, Governor's Office of Planning and Research, State Clearinghouse CEQAnet Database website: https://ceqanet.opr.ca.gov/			

Resources Excluded from the Cumulative Impact Analysis

If a proposed project would not cause direct or indirect impacts on a resource, it would not contribute to a cumulative impact on that resource and would not need to be evaluated with respect to a potential cumulative impact. The project would have no effect on timberlands, coastal zone, or wild and scenic rivers. Therefore, the project would not have the potential to contribute to a cumulative impact on these resources, and they will not be discussed in this section.

Furthermore, it was determined that the following resources would not require detailed cumulative impact analysis for the reasons described under each resource area.

Farmlands

The RSA for farmlands is defined as a 0.5-mile radius of the proposed right of way. This RSA was selected because it is the most likely areas to experience potential impacts from the physical improvements associated with the project. There are no areas within the RSA that are important farmlands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance. The build alternatives would not result in impacts to farmlands.

Geology

The RSA is composed of the area of I-40 located on the California-Arizona border at the east boundary of the Mojave Desert California Geomorphic Province and the west boundary of the Basin and Range Geological Province of Arizona. The nearest fault in California is approximately 330 feet southwest of the project site and characterized by an unnamed thrust fault. The next closest faults are the Needles graben faults located approximately 6 miles to the northeast in Mohave County, Arizona. The potential for adverse effects associated with fault rupture within the project site is considered low. Furthermore, seismically induced impacts are localized and would not contribute to cumulative impacts. The proposed project would include standard design measures intended to verify proper geological conditions of the construction site and excavation techniques to minimize adverse effects. Furthermore, hazards mapping provisions require that the location proposed structures be evaluated for their susceptibility to catastrophic risks including seismic and geotechnical hazards. The combination of these provisions ensures that risks to structures and their users are minimized. As such, the build alternatives and planned projects would be required to adhere to these guidelines and regulations.

Utilities and Emergency Services

The RSA for utilities and emergency services is limited to the immediate vicinity of the active construction work areas. Proposed construction activities requiring relocation of an underground fiber optic cable, for example, could be scheduled to coincide with a telephone company project to underground telephone lines. Thus, a situation may be avoided where constant construction and traffic delays occur on a busy street due to poorly coordinated schedules. The effects of other projects on utilities and emergency services would be assessed as part of the environmental review of those other projects. For transportation and public infrastructure projects, the impacts from these projects would be beneficial because they normally result in improved circulation in their respective areas. Emergency services would potentially benefit from improved access and circulation. The project would not be substantially increasing use of utilities after construction and would not contribute to need for new or expanded services. Direct or indirect cumulative impacts on utilities and emergency services are not anticipated to result from this project. Impacts from the project would not be cumulatively considerable.

Growth

The RSA for growth is regional and includes San Bernardino County and Mohave County. The build alternatives would not be expected to influence the amount, location, or distribution of growth within the project area because the project would not encourage population density, result in the construction of new housing, or result in the opportunities for capital investment by the public or private sectors. The build alternatives are not providing new alternate routes through the project area and would not result in the addition of roadway capacity. The planned projects in the project vicinity would also not result in growth within the project area as the anticipated traffic conditions would remain relatively similar. The build alternatives are not anticipated to affect the rate or location of future development within the project area or region. The build alternatives are also not expected to result in direct or indirect impacts related to growth in the form of providing additional access to new areas that are currently inaccessible. The proposed project itself would also not cause development to occur in the region due to land use controls such as County General Plan land use designation, development restrictions, lands committed to conservation, and lands currently or in the process of being developed. Implementation of the proposed project and other related project would not have a cumulatively considerable contribution related to growth.

Parks and Recreational Facilities

The RSA for parks and recreational resources includes any park, recreational facility, or other recreational uses within 0.5 mile of the project. This RSA was chosen because it includes the populations and communities that are most likely to experience potential impacts associated with the project. There are four resources near the build alternatives: the Colorado River, Havasu National Wildlife Refuge and Havasu Wilderness, the Chemehuevi Mountains Wilderness, and Moabi Regional Park. Furthermore, although I-40 is not designated as a bicycle facility, bicycles are allowed on the segment of I-40 that encompasses the project limits because there is not a parallel alternative route for bicyclists. Build Alternatives 2 and 3 would result in permanent right of way from BLM. This permanent right of way would not affect how users interact with and utilize the park, refuge, and wilderness areas. Temporary impacts would be addressed through preparation of a TMP and compliance with standard noise reducing measures incorporated as part of the project design. Furthermore, the planned project would be required to address potential impacts on parks and recreational facilities as part of the project approvals by jurisdictions in the areas which they are located. With the implementation of design measures, operation of the build alternatives would result in only a minor contribution to cumulative impacts on parks and recreational facilities within the RSA.

Land Use

The RSA for land use is defined as a 0.5-mile radius of proposed project right of way. Based on the San Bernardino County Land Use map, land use designations adjacent to I-40 along the project corridor consists of Open Space, Resource Conservation, and Institutional. The Mohave County Land Use map designates land uses adjacent to I-40

along the project as Ag/Vacant Land Non-Profit, Commercial/Real and Improvement, Non-Primary Residence, and Rental Residential. Build Alternative 1 would not result in any land use designation changes and would generally be consistent with the San Bernardino County General Plan and Mohave County General Plan. Build Alternative 3 would require right of way on the California side from a parcel owned by BLM. There are no structures or facilities located on the parcel and no changes to land use designations would occur as a result of the right of way acquired. Build Alternative 2 would require the greatest amount of right of way with parcels in California and Arizona. The right of way required would consist of parcels owned by BLM, BNSF, and Southwest Water Incorporated. No structures or facilities are located on the parcels for the required right of way. No changes to the land use designations would occur as a result of the right of way acquisitions. The acquisitions necessary for Build Alternatives 2 and 3 represent a small percentage of the total land within San Bernardino County and Mohave County, as such, appreciable land use change would not occur as a result of the project. No additional property acquisitions are anticipated, and operation of the project would not change the existing land uses. Land use impacts involved during construction would be addressed with the incorporation of standard project measures. The project, when combined with other planned projects, would not result in an increase in land acquisitions or noticeable land use changes in the RSA or throughout San Bernardino County or Mohave County. Implementation of the project and other planned projects would not have a cumulatively considerable contribution to land use.

Hydrology and Floodplains

The RSA for hydrology and floodplains are the Colorado River, Lake Havasu, Mohave Wash, and various unnamed blue-line streams within the project area. The project is within an area designated as Flood Hazard Area indicating the 1 percent annual chance flood (100-year flood) Zone A, Without Base Flood Elevation (BFE) and Regulatory Floodway. The potential for temporary hydrologic impacts associated with construction activities of the build alternatives could occur as a result of stormwater runoff. With implementation of the Construction General Permit, the build alternatives would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement construction best management practices (BMPs) to reduce pollutants of concern in stormwater runoff. The construction BMPs would include erosion control, sediment control, and general good housekeeping BMPs that would minimize erosion, retain sediment on-site, and prevent spills. As such, the build alternatives would not result in temporary water quality impacts related to floodplains. Currently, there are no stormwater drainage structures on the existing bridge and no drainage structures are proposed to be constructed with the build alternatives. Potential runoff would be collected on the outside shoulders of the proposed bridge and similar to existing conditions, the runoff from the new bridge would be conveyed on north and south sides of the bridge and flow east. The build alternatives have been designed so that 100-year storm flows would be conveyed and would not result in any new flooding. The build alternatives would result in a more reliable highway and would not result in interruption to emergency services or routes. There would be no substantial flood-related risks to life or property associated with implementation of the build alternatives.

Implementation of the planned projects have the potential to increase impervious surfaces, alter the amount of runoff, and increase potential pollutant loads. All planned projects and future planned development would be required to comply with applicable requirements for water quality standards as defined by local, regional, State, and Federal agencies. All planned future projects would be required to mitigate the effects to hydrology and floodplains on a project-by-project basis.

Water Quality and Stormwater Runoff

The RSA for water quality and stormwater runoff is the Colorado River Basin Region, within the southern portion of the Havasu-Mohave Lakes Watershed, in which the project is located. The project site is also located within the Needles Valley Groundwater Basin. The surface is drained by the Piute Wash, eastward towards the Colorado River. Groundwater levels are generally between 9 and 12 feet below ground surface and under natural conditions, the groundwater typically flows eastward through the basin towards the Colorado River. There are currently no drainage structures on the existing bridge. The profile of the bridge slopes from the California side towards the Arizona side. As a result, runoff on the bridge currently conveys to the north and south sides of the bridge.

Pollutants of concern during construction of the build alternatives includes sediments, trash, petroleum products, concrete waste, sanitary waste, and chemicals. Furthermore, during construction, excavated soil would be exposed resulting in an increased potential for soil erosion. The project would comply with the State Water Resources Control Board's Construction General Permit, by preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) to minimize potential adverse effects. Construction best management practices (BMPs) would be designed to retain sediment and other pollutants on the project site. In addition, a Section 401 Water Quality Certification and a Section 404 Nationwide Permit would be obtained for the project. With the implementation of treatment and design pollution prevention BMPs, the build alternatives would not result in any adverse impacts to water quality or stormwater runoff during operation.

Cumulative and planned projects within San Bernardino County and Mohave County would be required to comply with municipal stormwater requirements. Furthermore, cumulative and planned projects would be required to comply with local jurisdictions review on a project-by-project basis to ensure that sufficient local and regional drainage capacity is adequate. As such, cumulative impacts on water quality and stormwater runoff would not be cumulatively considerable.

Transportation

The RSA for cumulative impacts associated with transportation includes I-40, adjacent on-and off-ramps, and area roadways. As the project would improve the safety and integrity of the bridge structure by addressing deck deterioration and strengthening the girders to increase the load rating, no increase in roadway capacity would occur and no additional lanes are proposed. The current bridge accommodates two lanes of traffic in each direction and the build alternatives would also result in two lanes in each

direction. Construction related delays could impede movement in the area, however, a TMP would be developed and implemented to address these short-term access and circulation effects during project construction. With implementation of the proposed project the safety of the traveling public, including bicyclists, would be enhanced, as standard lane and shoulder widths would be proposed. The build alternatives would have beneficial effects on traffic and circulation including bicyclists. Therefore, the project would not result in adverse effects on traffic and transportation and bicycle facilities.

Noise

The RSA includes the four segments (NAA1, NAA2, NAA3, and NAA4) as discussed in Section 2.2.8. NAA1 is located on the north side of I-40, west of the Colorado River and includes industrial and undeveloped land. NAA2 is located on the south side of I-40, west of the Colorado River and also includes industrial and undeveloped land. NAA3 is located on the north side of I-40, east of the Colorado River and includes industrial, undeveloped land, residential, and commercial land. NAA4 is located on the south side of I-40, east of Colorado River and includes residential, industrial, and undeveloped land.

A noise impact would occur under NEPA if the project would cause noise levels to approach or exceed the Noise Abatement Criteria (NAC) or would result in a 12 dB increase during the design year relative to the existing traffic noise levels. The results of the traffic noise analysis indicate that predicted traffic noise levels for the Design Year would approach or exceed the NAC of 67 dBA Leq(h) for Activity Category B (Residential) land uses within NAA4 under all three build alternatives. Abatement in the form of two noise barriers (S8176 and S8178) were considered and analyzed from 8 to 16 feet in two-foot increments. The barriers were analyzed to determine their ability to meet the feasibility requirements (ability to provide 5 dB insertion loss at modeled locations) and the reasonableness requirement (ability to provide 7 dB insertion loss) at one modeled location as well as the cost to construct the barrier. For each of the build alternatives, barrier S8176 and S8178 were found not to be reasonable from a cost perspective and would not be incorporated as part of the project. As the predicted traffic noise levels would approach or exceed the NAC of 67 dBA Leq(h), the project's cumulative impacts would be cumulatively considerable.

Noise levels at residential sites range from 61 dBA Leq to 68 dBA Leq, under the existing condition for all three build alternatives. Noise levels under Design Year Build conditions would range from 61 dBA Leq to 68 dBA Leq for Build Alternative 1, 61 dBA Leq to 67 dBA Leq for Build Alternative 2, and 61 dBA Leq to 71 dBA Leq for Build Alternative 3. The changes in noise levels during the Design Year Build conditions relative to the existing conditions would range from a -1 dB decrease to no change under Build Alternative 1, a -3 dB decrease to no change under Build Alternative 2, and a -2 dB decrease to a 3 dB increase under Build Alternative 3. A 3 dB increase is the generally accepted threshold at which a person of normal sensitivity can begin to identify a perceptible change in noise. A 5 dB increase is considered a noticeable change. Caltrans considers an increase of 12 dB in noise levels, between future build and existing conditions, to be the CEQA threshold of significancea substantial increase. As such, one residential location, under

Build Alternative 3, would experience a 3 dB increase during the Design Year Build condition relative to the existing condition. No other residential location would experience an increase of greater than 1 dB under any build alternative.

For Build Alternatives 1 and 2, the impact pile driving from construction of the bridge would result in a vibration level of 0.17 inches per second (in/s) peak particle velocity (PPV) at the closest vibration sensitive receptor. This vibration level would not be expected to exceed the vibration criterion of 0.5 in/s PPV for potential building damage, however, it would exceed the vibration criterion of 0.04 in/S s PPV for potential human annoyance. For Build Alternative 3, impact pile driving from construction of the bridge would result in a vibration level of 0.24 in/s PPV at the closest vibration sensitive receptor. This vibration level would not exceed the vibration criterion for potential building damage; however, it would exceed the vibration criterion for potential human annoyance. As such, for pile driving, the potential for vibration levels to exceed the distinctly perceptible threshold may lead to human annoyance at the closest residence during construction. With inclusion of measures **NOI-1** and **NOI-2**, impacts associated with vibration would be reduced to less than significant.

As the planned projects in the project area would not increase capacity, they would likely not result in increased traffic noise associated with additional vehicles. As such, the planned projects are not anticipated to contribute to cumulative noise effects in the project area.

Environmental Resources Considered in the Cumulative Impact Analysis

Visual Resources/Aesthetics

The RSA for cumulative impacts on visual resources would consist of the project corridor and its key views. As described in the Visual Impact Assessment (VIA) prepared for the project, the landscape of the immediate area is defined by the Colorado River with its shoreline and surrounding floodplains. California native shrub groupings dot the natural low hills and formed slopes with the riparian landscape denser along the shorelines. The land use within the project corridor is primarily made up of the Havasu National Wildlife Refuge, both to the north and south of the bridge. There are a few single-family residences along the shoreline to the north and south of the bridge on the Arizona side and a small commercial resort located to the northeast. A gas line utility station is located to the south on the California side. I-40 is on the State Scenic Highway Eligibility List. The notable scenic resources within the project corridor include the Old Trails Bridge which was added to the National Register of Historic Places in 1988. As indicated in the VIA, the project would address the deteriorating and outdated bridge and would provide standard median and shoulder widths for safer vehicular and bicycle travel. By retaining the open sky aspect, the bridge would preserve the picturesque views of the Colorado River, surrounding mountain ranges, and nearby bridges. These key benefits would apply for all build alternatives and positively impact the collective viewer response and produce a positive impact on the visual corridor. The planned projects have the potential to affect visual change and viewer responses in proximity to the RSA. These future planned projects would be evaluated on a project-by-project basis to determine

impacts and applicable measures required to reduce potential impacts on visual and aesthetic resources. As the proposed project would implement standard design features and measure **VIS-1** to minimize visual impacts during construction, its cumulative contribution to visual effects from planned projects within the RSA would not be adverse during construction. Therefore, the proposed project, in conjunction with past, present, and reasonably foreseeable projects would not result in a cumulative effect related to visual resources.

Hazardous Waste/Materials

The RSA for hazardous waste and materials cumulative impacts analysis includes the project site and a quarter mile radius of the project site. The transportation, use, storage, and disposal of hazardous waste and materials are highly regulated by local, state, and federal laws, as such, impacts associated with hazardous waste and materials would be localized. There were four recognized environmental conditions (RECs) identified near the project site. The Topock Compressor Station's cooling tower wastewater was discharged into the Bat Cave Wash adjacent to the compressor station site from 1951 to 1964. The treated wastewater was discharged into ponds for storage and evaporation until 1985. Investigations conducted onsite identified elevated levels of various contaminants in soil, within and adjacent to the project area and within the existing Caltrans right of way. Additionally, a hexavalent chromium groundwater plume extends below the western portion of the project area. Implementation of measure **HAZ-1** would protect construction personnel and the surrounding environment from the potential effects associated with encountering contaminated soil or groundwater during construction. Monitoring wells, as part of the existing groundwater remediation activities located within the project area would be preserved during construction activities. Measure **HAZ-2** would require an asbestos and lead-based paint survey for any structures, built prior to 1980, to be demolished. As part of measure **HAZ-3**, an ADL survey would be conducted along the shoulders of I-40 and bridge abutments, adjacent to the project, in areas to be disturbed during construction. In addition, a pile of railroad ties were observed in the southeast portion of the project area adjacent to Oatman Highway. As railroad ties are typically treated with creosote and chromated copper arsenate for preservation, they require proper removal and disposal in accordance with applicable laws and regulations.

Construction of other planned projects in the area may expose or require handling of contaminated soils. Each planned project would be evaluated on a project-by-project basis in order to determine the potential for encountering hazardous materials and any appropriate measures required to reduce potential impacts. The cumulative planned projects within the RSA would be required to adhere to existing laws and regulations regarding the use, storage, transport, and disposal of hazardous materials and waste which would ensure that there would be no adverse hazardous material impacts resulting from future development in the area. As such, the proposed project would not contribute to cumulative hazardous waste and materials impacts.

Cultural

Under CEQA and NEPA, cumulative impacts refer to the indirect and direct cumulative effects on cultural resources for the current project coupled with past, future, and other current projects in or near the project area. The RSA for cultural resources is the Area of Potential Effects (APE). The APE is approximately 73.7 acres and is located along I-40 from PM 153.9 to PM154.7 in San Bernardino County, California and from PM 0.0 to 0.6 in Mohave County, Arizona. The APE includes approximately 0.027% of Mojave homeland and all known or potential components of the Topock Traditional Cultural Property (TCP), within the immediate project area, including all three loci of site CA-SBR-219. The APE was expanded to encompass both archaeological and built environment resources that are either within or adjacent to the project footprint to account for any potential indirect effects to these resources.

The Addendum to the Historic Property Survey Report (HPSR), and Finding of Adverse Effect prepared for the project indicates there are six Historic Properties located within he APE: Topock Maze/Topock Traditional Cultural Property CA-SBR-219 (previously determined individually eligible under Criterion D), BNSF/ATSF Railroad (previously determined individually eligible under Criterion A), NOTH/66 and Old Trails Arch Bridge (previously determined to be Eligible under Criteria A and C), the prehistoric portion of CA-SBR-11910/H and AZ L:7:81 (ASM) (treated as eligible under Criterion D as they can be protected in place with establishment of ESA). Based on the application of the Criteria of Adverse Effect, as defined in the revised Section 106 guidelines [36 CFR 800.5(1)], overall, the project proposes a Finding of Adverse Effect to one historic property, the Topock Maze/Topock Traditional Cultural Property (TCP) CA-SBR-219 for all proposed build alternatives and is seeking SHPOs concurrence of this finding.

Although the project would have a temporary adverse effect on the TCP, the project would have no potential to affect any physical component of the TCP outside of the immediate Colorado River and Topock Maze viewshed. Potential impacts to the TCP include direct physical effects to the Colorado River and visual, atmospheric, and audible effects during demolition and construction of the proposed project. These temporary effects would temporarily, indirectly affect the characteristics of the TCP and the intangible relationship between the Fort Mojave Indian Tribe and the property. The effects to individual components of the TCP would be temporary and limited to the construction period, which is expected to begin after completion of the nearby projects, listed in Table 2-59.

Standard project features **CR-1**, **CR-2**, **CR-3**, and **CR-4** would be implemented to avoid or minimize potential effects on previously undocumented cultural materials or human remains. Measures **CR-5, CR-6** and **CR-7** would be implemented to lessen the effects to NOTH/Route 66 Segments 4 and 5. Any potential cumulative impact to the Topock Maze TCP would be avoided or minimized through measures developed in the MOA (see Measure CR-8) and implemented during construction of the project. Therefore, the proposed project is not anticipated to contribute to a cumulative effect on the TCP.

Additionally, to proactively protect and consider the potential for impacts on historical and archaeological resources, federal, state, and local regulations have been created and planned projects would be required to comply with these regulations, which would contribute to a reduction in cumulative impacts on archaeological and historical resources.

Wetlands

The RSA for wetlands includes the Lower Colorado River Watershed, specifically the Havasu-Mojave Lakes Watershed. The Lower Colorado River Watershed encompasses over 3,400 square miles and falls within Arizona, California, Nevada, and Mexico. The most prominent feature is the Colorado River, which begins in the Rocky Mountains of Colorado, crosses Utah, Nevada, Arizona, California, Mexico and terminates at the Gulf of California. There are two primary aquatic resources within the project area: Bat Cave Wash and the Colorado River. According to the Natural Environment Study (NES) and Jurisdictional Delineation (JD) prepared for the project, several types of aquatic resources have been mapped within the delineation area consisting of USACE, RWQCB, and CDFW jurisdiction including the Colorado River (a perennial stream), Bat Cave Wash (an ephemeral wash), and associated riparian or marsh (wetland) habitat areas. Impacts to these resources are expected to be subject to Section 404 permitting. Impacts to RWQCB jurisdiction and potential CDFW jurisdiction would require coordination and permitting for the project under Section 401 of the Clean Water Act, the Porter Cologne Water Quality Act and Section 1600 of the California Fish and Game Code. Implementation of other planned projects may result in temporary and permanent impacts to wetlands and other waters. These actions would be evaluated on a project-by-project basis to determine the acreages of impacts to jurisdictional drainage features and measures to reduce impacts. With the implementation of standard project features and BMPs, the proposed project, in conjunction with other planned projects would not result in a cumulative effect on wetlands and other waters.

Animal Species

The RSA for cumulative animal species effects is the boundaries of the Lower Colorado River Multi-Species Conservation Plan. Based on the NES prepared for the project, 21 special-status animal species were found to be present within the biological survey area (BSA) during field surveys. Habitat assessments for special-status fish was conducted to analyze the suitability of habitat within the BSA. A search of historical and recent records of special-status fish yielded occurrence for bonytail chub (*Gila elegans*), flannelmouth sucker (*Catostomus latipinnis*), and razorback sucker (*Xyrauchen texanus*) within two miles of the BSA. All three populations within the Lower Colorado River have or are currently being augmented by stocking. Only one native species, a dead razorback sucker, was documented during field surveys. Portions of the BSA were considered to have low habitat suitability for all three fish species and Build Alternatives 1, 2, and 3 were determined to have the potential to impact these species and their habitats. Habitat assessments were also conducted for special status bird species, and based on site disturbances, vegetation composition and cover, and proximity to a perennial water source, the majority of the BSA was determined to provide suitable nesting and foraging

habitat for multiple special-status bird species. Portions of the BSA that were considered to contain suitable sensitive bird habitat ranged from marginal to high quality nesting and foraging habitat. A habitat assessment for special-status small mammal species was also conducted and based on site disturbances, soil characteristics, vegetation composition and cover, and habitat fragmentation, the majority of the western portion of the BSA was determined to be either moderate or low suitability for Colorado River cotton rat (*Sigmodon arizonae plenus*) and desert pocket mouse (*Chaetodipus penicullatus sobrinus*), while no suitable habitat was found on the eastern portion of the BSA. A habitat assessment for special-status bats were was conducted and structures with suitable day-roosting habitat include I-40 Bat Cave Wash Culvert and the I-40 Colorado River Bridge. At Bat Cave Wash, bats were observed day roosting along the vertical pipes in the ceiling of the easternmost pipes, as well as along the sides of the four corrugated metal pipes. At the I-40 Colorado River Bridge, two joints provide roosting habitat along the entire length of the bridge. As the bridge structure would be removed completed as part of the project, there is potential for "take" from direct mortality and net loss of roosting habitat at those locations. Implementation of the measures in the Bat Management and Mitigation Plan (BMMP) would reduce the potential for adverse effects to bat species. Based on site disturbances, soil characteristics, vegetation composition and cover, the majority of the BSA was considered to contain low suitability or marginal suitability for desert tortoise habitat.

Potential other planned projects in the area may result in loss of foraging, roosting, or nesting habitat for animal species. However, these planned projects would be evaluated on a project-by-project basis to determine the presence of animal species and the appropriate measures required to reduce impacts. The project site is also within the Lower Colorado River Multiple Species Conservation Plan which requires that all projects are consistent with the plan and that species required measures are implemented, based on a project's potential species impacts. As such, the project, in conjunction with other planned projects would not make a significant contribution to cumulatively adverse effects to animal species.

Threatened and Endangered Species

The RSA for cumulative threatened and endangered species effects is the jurisdictional boundaries of the Lower Colorado River Multiple Species Conservation Plan. As indicated in the NES prepared for the project, FHWA, in coordination with Caltrans and ADOT, has determined that, in accordance with Section 7 of the Federal Endangered Species Act, the project has the following Effect Determinations: No Effect on California least tern, Colorado pikeminnow, northern Mexican gartersnake, roundtail chub, Monarch butterfly, Sonoran desert tortoise, and a May Affect, Not Likely to Adversely Affect to southwestern willow flycatcher and yellow-billed cuckoo, and May Affect, Likely to Adversely Affect to bonytail chub, Mojave desert tortoise, razorback sucker, and Yuma Ridgway's rail. Caltrans has determined there may be Take to state-listed species (bonytail chub, razorback sucker, California black rail, and Yuma Ridgway's rail) and therefore, a CDFW incidental take permit (pursuant to Section 2081 of the CFG Code) is anticipated for the project. Because razorback sucker, Yuma Ridgway's rail, and California black rail have CDFW fully protected species designation, CDFW has no permit

to allow Take of fully protected species for construction projects. Caltrans intends to pursue legislation to amend the CFG Code in order to pursue CDFW Incidental Take Permits for these species. Caltrans has determined there will be No Take to all other state-listed species. Caltrans has also determined that the project will have No Take to fully protected species bald eagle, Colorado pikeminnow (Ptychocheilus lucius), and California least tern (Sterna antillarum browni), pursuant to CESA. Other planned projects in the area may result in loss of threatened and/or endangered species and their habitats. These actions would be evaluated on a project-by-project basis to determine the presence of threatened and/or endangered species and their habitats, and applicable measures to reduce impacts. Compliance with the Lower Colorado River Multiple Species Conservation Plan would ensure that potential regional effects from construction and operation of planned projects are not adverse. As such, the project, in conjunction with other planned project, would not make a significant contribution to cumulatively adverse effects to threatened and/or endangered species.

Invasive Species

The RSA for cumulative invasive species is the jurisdictional boundaries of the Lower Colorado River Multiple Species Conservation Plan. Implementation of the build alternatives have the potential to spread invasive species by entering and existing construction areas with contaminated equipment, from seed mixtures and mulch that contain invasive species, and by the improper removal and disposal of invasive species in which seeds are spread along the highway. Implementation of Caltrans standard BMPs, the BMPs in the SWPPP and the 2018 Standard Specifications, in addition to avoidance and minimization measures would prevent the introduction and spread of invasive species. Planned projects in the area may also result in the germination and spread of invasive species. These planned projects would be evaluated on a project-by-project basis to determine the potential for invasive species and appropriate measures required to reduce impacts. The Lower Colorado River Multiple Species Conservation Plan would also ensure that potential regional effects from construction and operation of the project as well as other planned projects are not adverse. As such, the project, in conjunction with other planned projects, would not make a significant contribution to cumulatively adverse effects from invasive species.

Avoidance, Minimization, and/or Mitigation Measures

No measures beyond those identified in Chapter 2, as well as GHG emission reduction measures discussed in Chapter 3 of this EIR/EA are required to address the effects of the build alternatives.

Chapter 3 California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) in coordination with the Arizona Department of Transportation (ADOT) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Department is the lead agency under CEQA and FHWA is the lead agency under NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to

CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures practices that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures direction included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §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?	☐	☐	☐	☒

CEQA SIGNIFICANCE DETERMINATIONS FOR CULTURAL RESOURCES

a), b) <u>Less Than Significant with Mitigation Incorporated</u>

As indicated in the Cultural Resources section in Chapter 2, there are cultural resources within the APE that were previously determined eligible for inclusion in the NRHP: CA-SBR-000219 (Topock Maze/Topock Traditional Cultural Property), CA-SBD-6693H/AZ I:14:334 (ASM) BNSF/ATSF Railroad, Segments (4 and 5) of NOTH/66: National Old Trails Highway/Route 66, and Old Trails Arch Bridge (P-36-027678). The following cultural resources within the APE were not evaluated as a result of the project and are considered to be eligible for inclusion in the NRHP because they can be protected in their entirety

through the establishment of an ESA: CA-SBR-11910/H, and AZ L:7:81 (ASM). Implementation of measures **CR-1** through **CR-4** would be implemented to avoid or minimize potential effects on undocumented cultural materials. Implementation of mitigation measures **CR-5** through **CR-7** would lessen the effects to NOTH/Route 66 Segments 4 and 5. As indicated in the Cultural Resources section in Chapter 2, CA-SBR-00219 (Topock Maze/Topock Traditional Cultural Property has been determined eligible for inclusion in the NRHP under Criterion A and Criterion D. FHWA in cooperation with Caltrans and Arizona Department of Transportation (ADOT) has applied the Criteria of Adverse Effect in 36 CFR 800.5(a) and has determined that the project will result in a finding of Adverse Effect on CA-SBR-219 / Topock Maze and Topock Traditional Cultural Property under Alternatives 1, 2, and 3 because of anticipated indirect effects during construction. The project will result in a finding of No Historic Properties Affected for this historic property under Alternative 4 (no build) (36 CFR §800.5). Additional measures will be developed as mitigation measures to be included in the Memorandum of Agreement (MOA) with the Fort Mojave Indian Tribe and the final environmental document (FED). Cultural resources within the APE previously determined eligible for inclusion in the NRHP include: CA-SBD-6693H/AZ I:14:334 (ASM) BNSF/ATSF Railroad, Segments (4 and 5) of NOTH/66: National Old Trails Highway/Route 66, and Old Trails Arch Bridge (P-36-027678). The following cultural resources within the APE were not evaluated as a result of the project and are considered to be eligible for inclusion in the NRHP because they can be protected in their entirety through the establishment of an ESA: CA-SBR-11910/H, and AZ L:7:81 (ASM). Implementation of measures **CR-1** through **CR-4** would be implemented to avoid or minimize potential effects on undocumented cultural materials. Implementation of mitigation measures **CR-5** through **CR-7** would lessen the effects to NOTH/Route 66 Segments 4 and 5.

CR-5: Repair of the pavement on CA-SBR-2910 and AZ I:15:156 (ASM) National Old Trails Highway/Route 66 (NOTH/66) CA and AZ Segments 4 and 5 will be conducted according to the Secretary of the Interior's Standards (SOIS): Any pavement repair will conform to the existing profile, width, etc. Similar or identical paving techniques as the existing will be utilized such as materials type and aggregate size. Paving plans and specifications shall be reviewed and approved by the Caltrans PQS Principal Architectural Historian for compliance.

CR-6: The historic period 1950s guardrails impacted by the project will be salvaged and re-used as practical. If guardrail cannot be reused, stained or painted Midwest Guardrail System type will be used. If guardrail cannot be salvaged, an alternative rail will be chosen in consultation with the Caltrans PQS Principal Architectural Historian to ensure that it is compatible with the massing, size, scale, and architectural features of the 1950s guardrail to protect the historic integrity of the property and its environment.

CR-7: The roadbed shall not be realigned or altered in a way that changes the horizontal and vertical dimensions that together comprise a contiguous roadbed structure including the addition of side slopes, and/or graded shoulders where none previously

existed. Plans and Specifications shall be reviewed by Caltrans PQS Principal Architectural Historian for compliance.

C) <u>No Impact</u>

No human remains were discovered during field surveys conducted for the project, and no formal cemeteries are located within the project site. In the event that previously unknown buried human remains are encountered during construction, compliance with Caltrans standard features, **CR-1** and **CR-2**, would avoid and minimize potential impacts to previously unknown human remains. Impacts would be considered less than significant in this regard.

3.2.18 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	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.	☐	☒	☐	☐

CEQA SIGNIFICANCE DETERMINATIONS FOR TRIBAL CULTURAL RESOURCES

a), b) Less Than Significant Impact with Mitigation Incorporated.

As indicated in the Cultural Resources section in Chapter 2.1.12, CA-SBR-00219 (Topock Maze/Topock Traditional Cultural Property) has been determined eligible for inclusion in the NRHP under Criterion A and Criterion D. FHWA in cooperation with Caltrans and Arizona Department of Transportation (ADOT) has applied the Criteria of Adverse Effect in 36 CFR 800.5(a) and has determined that the project will result in a finding of Adverse Effect on CA-SBR-219 / Topock Maze and Topock Traditional Cultural Property under Alternatives 1, 2, and 3 because of anticipated indirect effects during construction. The project will result in a finding of No Historic Properties Affected for this historic property under Alternative 4 (Nno Bbuild) (36 CFR §800.5). Additional measures will be developed as mitigation measures to be included in the Memorandum of Agreement (MOA) with the Fort Mojave Indian Tribe and the final environmental document (FED).

The NAHC was contacted to initiate a search of the Sacred Lands File. The NAHC responded with a negative Sacred Lands File search, along with a list of Native American contacts. The Native American contacts provided were sent consultation letters for the project. The Hopi Tribe wished to be consulted on the project and requested to be notified of any cultural deposits discovered during construction. The Hopi Tribe will continue to receive project updates and consultation remains ongoing. The Hopi Tribe will also be afforded the opportunity to consult further if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction. The Hualapai Tribe requested to be contacted if human remains are found during construction but had no further concerns with the project. The Yavapai-Prescott Tribe requested to consult on the project and review the survey report once completed. Project update materials and reports were sent, and the Yavapai-Prescott Tribe will continue to receive project updates and consultation remains ongoing. The Colorado River Indian Tribe stated that all prehistoric sites be avoided and requested to continue consultation for the project. The Colorado River Indian Tribe will continue to receive project updates and consultation remains ongoing. The Fort Mojave Indian Tribe considers the areas around the Colorado River to have spiritual importance regardless of any physical manifestations. The Fort Mojave Indian Tribe will be afforded the opportunity to continue consultation. In the event that previously unknown tribal cultural resources are encountered during construction, compliance with standard Caltrans measures **CR-1**, **CR-2, and CR-3** would avoid and/or minimize potential impacts to previously unknown tribal cultural resources.

Chapter 4 Comments and Coordination

4.2 Interagency Coordination and Consultation

The project development process has been carried out through a cooperative dialogue among representatives of the following agencies and organizations:

- Federal Highway Administration (FHWA)
- U.S. Fish and Wildlife Service (USFWS)
- State Historic Preservation Officer (SHPO)
- Arizona Department of Transportation
- Arizona Game and Fish Department
- California Department of Fish and Wildlife (CDFW)
- Native American Heritage Commission (NAHC)
- Native American Tribal Representatives

The following sections summarizes the results of the efforts of Caltrans to fully identify, address and resolve project issues through early and ongoing coordination.

4.2.3 Arizona State Preservation Officer

FHWA initiated consultation with the Arizona SHPO regarding the proposed project in a letter dated August 16, 2022. The FHWA requested concurrence from Arizona SHPO regarding the adequacy of the delineation of the APE for the undertaking, identification of potential historic properties located within the undertaking's APE, and with the evaluation of resources.
The Arizona SHPO concurred with the finding of No Adverse Effects on September 14th, 2022. In a letter dated August 4th, 2023, the FHWA sent the HPSR Addendum and requested that the Arizona SHPO concur with the APE Delineation, identification of historic properties located within the Undertaking's APE, Evaluation of resources, and proposed Ffinding of Adverse Effect for the Undertaking.

4.2.6 California State Historic Preservation Officer

FHWA initiated consultation with the California SHPO regarding the proposed project in a letter dated August 16, 2022. The FHWA requested concurrence from California SHPO regarding the adequacy of the delineation of the APE for the undertaking, identification of potential historic properties located within the undertaking's APE, and with the evaluation of resources. On March 3, 2023, CA SHPO concurred with the eligibility determinations for several sites within the project footprint. In a letter dated August 4th, 2023, the FHWA sent the HRSP Addendum and requested that the California SHPO concur with the APE Delineation, identification of historic properties located within the Undertaking's APE, Evaluation of resources, and proposed finding of Adverse Effect for the Undertaking.

4.2.8 Native American Consultation

The NAHC was contacted on January 27, 2020, to initiate search of the Sacred Lands File (SLF). The NAHC responded on February 7, 2020, stating the SLF search was negative, and provided a list of tribal groups to contact for additional information. The ADOT Historic Preservation Specialist was also contacted to request information from groups that should be contacted as part of the project. As a result, the following nine tribes were sent consultation initiation letters on June 4, 2020:

- Hopi Tribe (Stewart Koyiumyewa, Tribal Historic Preservation Officer): Response letter received on June 15, 2020, stating that the Hopi Tribe wished to consult on the project if determined to adversely affect prehistoric resources. The tribe also wished to be notified if any cultural deposits were discovered during construction. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent to the tribe on March 10, 2022, and a follow up was sent on March 30, 2022. No comments were received from the tribe. The tribe will continue to receive project updates and would be afforded the opportunity to consult if there are any adverse effects to prehistoric resources or if cultural deposits are uncovered during construction. As such, consultation remains ongoing.

- Hualapai Tribe (Dr. Damon R. Clarke, Tribal Chairman and Peter Bungart, Tribal Historic Preservation Officer): A follow up email was sent to the tribe on August 6, 2020, after the initial letter. The tribe responded on November 6, 2020, stating that the tribe defers consultation to the Fort Mojave and Chemehuevi Tribes. The tribe requested to be contacted if human remains are found during construction but had no further concerns with the project.

- Yavapai-Prescott Tribe (Greg Glassco, Compliance Officer, Robert Ogo, Acting President, and Linda Ogo, Director of Cultural Research Department): A response was received on June 16, 2020, stating the tribe wished to consult on the project and to review the survey report when completed. A project update with summary letters and updated footprint maps were sent to the tribe on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were also sent on March 10, 2022 and follow up was set on March 30, 2022. The tribe will continue to receive project updates and afforded the opportunity to consult.

- Moapa Band of Paiute Indians (Vickie Simmons, Tribal Chairperson): A follow up email to the initial letter was sent on June 4, 2020, and August 6, 2020. A project update with summary letters and updated footprint maps were sent to the tribe on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, with a follow up on March 30, 2022. To date,

no responses have been received. The tribe will continue to receive project updates when available.

- Chemehuevi Indian Tribe (Charles Wood, Tribal Chairman): A follow up email to the initial letter was sent on August 6, 2020. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, with a follow up on March 30, 2022. To date, there has been no response from the tribe. The tribe will continue to receive project updates when available.

- Colorado River Indian Tribes (Dennis Patch, Tribal Chairman): A response letter was received on June 24, 2020, stating their wish that all prehistoric sites be avoided and their desire to continue consultation for the project. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a follow up on March 30, 2022. The tribe will continue to receive project updates when available.

- For Mojave Indian Tribe (Timothy Williams, Tribal Chairman and Linda Otero, Director of the Aha-Makav Cultural Society): A response letter was received on June 22, 2020, requesting the consultation initiation letter be resent. The letter was resent the same day and a response was received on June 24, 2020, asking for contact information for the FHWA ad Caltrans District 8 Director. All requested contact information was emailed on June 25, 2020. A project update with summary letter and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and follow up on March 30, 2022. Another follow up was sent on April 14, 2022, and a response received on April 19, 2022, indicating that the information was under review by the tribe. Caltrans reached out to the tribe again on April 26, 2022, requesting a review completion date of May 8, 2022. Caltrans sent the draft Finding of Effects (FOE) document to the tribe on June 30, 2022. On September 15, 2022, the Tribe provided comments on the FOE document wherein the requested a reconsideration of the findings for the project. On December 19, 2022, Caltrans sent a letter to the tribe addressing the tribe's comments and to provide details on the methodology used by Caltrans and FHWA to determine the findings of the project. On May 2, 2023, Caltrans District 8's District Native American Coordinator meet with Tribal representatives at the Pipa AhaMaKav Cultural Center in Mohave Valley Arizona to gain a better understanding of the tribe's perspective and to aid in addressing the Project's effects. On July 19, 2023, a videoconference between Caltrans, FHWA, CA CHPO, and the Fort Mojave Indian Tribe occurred. During this and the May 2nd meeting, the tribe emphasized moving forward, that the most important consideration is that the work be done in a respectful way. Caltrans and the tribe developed a list of conditions to be implemented during construction which would meet the Tribe's needs. Caltrans will continue to work with and update the tribe.

- Twenty-Nine Palms Band of Mission Indians (Darrel Mike, Tribal Chairman and Anthony Madrigal, Tribal Historic Preservation Officer): A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a follow up sent on March 30, 2022. To date, there have been no responses from the tribe. The tribe will continue to receive project updates when available.

- Fort Yuma Quechan Tribe (Jill McCormick, Tribal Historic Preservation Officer): A consultation initiation letter was sent on August 11, 2020. A project update with summary letters and updated footprint maps were sent on November 17, 2020, and November 24, 2021. The inventory and evaluation reports were sent on March 10, 2022, and a response was received on March 14, 2022 stating that the tribe had no comments on the project and deferred to the Fort Mojave Tribe with support for their decision on the project.

Chapter 5 List of Preparers

The following personnel were involved in the preparation of this document.

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APPENDIX F- List of Technical Studies

The following technical studies were prepared in support of this document and project.

Air Quality Conformity Findings Checklist. Caltrans, June 23rd, 2022

Archaeological Survey Report. Statistical Research Inc., and Caltrans, August 2022

Biological Assessment. Caltrans, June 2022

Community Impact Assessment Checklist. Caltrans, January 30th, 2023

Community Impact Assessment Memorandum. Caltrans, January 30th, 2023

Finding of Effect. Caltrans, August 2022

Finding of Effect (Revised). Caltrans, July 2023

Historic Property Survey Report. Caltrans, August 2022.

Historic Property Survey Report (Addendum). Caltrans, July 2023

Historical Resource Evaluation Report. Statistic Research Inc., and Caltrans, August 2022

Initial Site Assessment Checklist. Caltrans, January 11th, 2023

Initial Site Assessment Report. Stantec Consulting Services Inc., November 19th, 2021

Location Hydraulic Study and Summary Floodplain Encroachment Report. Caltrans, January 10th, 2023.

Natural Environmental Study. Caltrans, January 31st, 2023

Noise Study Report. Caltrans, April 9th, 2022

Noise Abatement Decision Report. Caltrans, May 26th, 2022

Paleontological Memorandum. Caltrans, May 5th, 2020

Scoping Questionnaire for Water Quality Issues. Caltrans, May 2022

Site Investigation Report. Stantec Consulting Services Inc., January 11th, 2023

Traffic Data Request Memorandum, Caltrans. May 12th, 2021

Visual Impact Assessment. Caltrans, July 12th, 2022