

# **Interstate 40 Median Regrade Project**

San Bernardino County, California  
District 08-SBd-40 (PM R100.0/R125.0)  
EA 08-0R141/PN 0815000200

## **Initial Study [with Proposed] Mitigated Negative Declaration**



Prepared by the  
State of California Department of Transportation



**September 2020**

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## **General Information About This Document**

### **What's in this document:**

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in San Bernardino County, California. The project is to regrade the existing median cross slope which vary from 2:1 to 6:1 or steeper gradient to 10:1 or flatter on Interstate 40 (I-40) from Post Mile (PM) R100.0 to PM R125.0. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed measures.

### **What you should do:**

- Please read this document.
- Additional copies of this document are available for review during regular business hours at the Needles Branch Library, 1111 Bailey Avenue, Needles, CA 92363, and at Caltrans District 8, 464 West 4<sup>th</sup> Street, San Bernardino, 92401.
- We welcome your comments. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline below.
- Submit comments via U.S. mail to Caltrans at the following address:

Gabrielle Duff, Senior Environmental Planner  
California Department of Transportation, District 8  
464 West 4<sup>th</sup> Street  
San Bernardino, CA 92401-1400

- Submit comments via email to: [gabrielle.duff@dot.ca.gov](mailto:gabrielle.duff@dot.ca.gov)
- Submit comments by the deadline: October 26, 2020.

### **What happens next:**

After comments are received from the public and reviewing agencies, Caltrans 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 appropriated, Caltrans could design and build 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 West Fourth Street, San Bernardino, 92401, 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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Regrade median cross slopes on Interstate 40 from Post Mile R100.0 to PM R125.0 in San Bernardino County, California


**INITIAL STUDY  
with (Proposed) Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

9/21/2020

\_\_\_\_\_  
Date



\_\_\_\_\_  
David Bricker  
District Director  
California Department of Transportation  
CEQA Lead Agency

The following persons may be contacted for more information about this document:

Gabrielle Duff, Senior Environmental Planner  
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## CEQA Environmental Checklist

### **PROJECT DESCRIPTION AND BACKGROUND**

**Project Title:** Interstate 40 Median Regrade Project

**Lead agency name:** Caltrans District 8

**Address:** 464 West 4<sup>th</sup> Street,  
San Bernardino, CA 92401

**Contact person:** Gabrielle Duff

**Phone number:** (909) 383-6933

**Project sponsor's name:** Caltrans District 8

**Address:** 464 West 4<sup>th</sup> Street,  
San Bernardino, CA 92401

**Project Location:** Interstate 40 in San Bernardino County, from Essex Road Overcrossing (PM R100.0) to 4.5 miles east of Homer Wash Bridge (PM R125.0).

**General plan description:** N/A

**Zoning:** N/A

#### **Description of project:**

The project consists of regrading the median cross slopes from existing conditions, which vary from 2:1 to 6:1 or steeper to 10:1 or flatter on I-40 from PM R100.0 to PM R125.0 in the County of San Bernardino.

#### **Surrounding land uses and setting:**

The project is in the western Mojave Desert with the eastern end of the project southwest of the Sacramento Mountain and the western end bordering the Mojave National Preserve to the north and just northeast of the Clipper Mountains. The surrounding area consists of undeveloped desert land.

**Other public agencies whose approval is required** (e.g. permits, financial approval, or participation agreements):

California Department of Fish and Wildlife, State Water Resources Control Board, U.S. Army Corps of Engineers.

### **NATIVE AMERICAN CONSULTATION**

**Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1?**    ☒ Yes    ☐ No

**If yes, ensure that consultation and heritage resource confidentiality follow PRC sections 21080.3.1 and 21080.3.2 and California Government Code 65352.4**

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce

the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

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



## PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

**State Clearinghouse Number:**

**DIST-CO-RTE-PM:** 08-SBd-40-PM R100.0/R125.0

**EA:** 0R141

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### Project Description

The California Department of Transportation (Caltrans) proposes to regrade the median cross slopes from existing conditions, which vary from 2:1 to 6:1 or steeper to a proposed 10:1 or flatter on Interstate 40 (I-40) from Essex Road Overcrossing (Post Mile [PM]) R100.0] in the community of Fenner to PM R125.0, 4.5 miles east of Homer Wash Bridge, in rural San Bernardino County.

There are segments within the project limits where the median cross slope is too steep to allow traffic traveling along I-40 to have a safe, recoverable transition back onto the highway. The proposed project would improve the safety of the traveling public by reducing the number of road run-off incidents in the median by providing median gradients of 10:1 or flatter. As the improvements would be in the existing median, no additional right of way or detour routes would be required.

The proposed project is located within the following U.S. Geological Survey (USGS) 7.5-minute quadrangles: Blind Hills, Fenner, Fenner Spring, and West of Flattop Mountain. The project crosses through several ranges and townships, as indicated below.

**Table 1. Project Township, Range, and Section Data**

<b>USGS 7.5-minute Quadrangle</b>	<b>Township</b>	<b>Range</b>	<b>Section(s)</b>
Blind Hills	8 North	16 East	2, 3, 1, 8, 10, 9, 11
Fenner	9 North	17 East	36
	8 North	17 East	5, 3, 6, 4, 1, 2,
	8 North	18 East	6
	9 North	18 East	31
Fenner Spring	9 North	18 East	32, 33, 34, 35, 36
	9 North	19 East	29, 31, 32
West of Flattop Mountain	9 North	19 East	23, 24, 26, 27, 28
	9 North	20 East	20, 22, 19, 21

To achieve the median 10:1 gradient or flatter, the proposed project would require moving soil from other areas in the median to create the proper gradient, hence balancing the earthwork. All grading work would be limited to the inner edge of pavement to inner edge of pavement and before washes. Modification of existing drainage facilities would also occur within the median. The drainage modifications and median improvement work would consist of adjusting existing inlets and extending culverts within the median. Furthermore, no grading or drainage work would occur within at least 25 feet of the railroad right of way.

The project limits include proposed permanent and temporary (i.e., staging) impacts as well as areas that will be avoided and not subject to permanent and temporary impacts. Temporary staging is anticipated to occur within the northern and southern gore areas near PM 115, the northern gore areas near PM 120, and within the median, if necessary. Construction personnel will access the project site using existing roadways.

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## Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have no effect on Aesthetics, Agriculture and Forest Resources, Energy, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation and Traffic, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.
- In addition, the proposed project would have less-than-significant effects on Air Quality, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality.
- With the following mitigation measures incorporated, the proposed project would have less-than-significant effects on Biological Resources:

**BIO-14:** The Resident Engineer is responsible for ensuring that all protective measures are being fully implemented. If the resident engineer determines, or is notified by the Authorized Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, authorized biologists, and biological monitors will be required to notify the resident engineer of any such problem they notice. The resident engineer must always be able to contact an approved biological monitor or Authorized Biologist to resolve any unforeseen issues.

**BIO-16:** When work is occurring in areas where desert tortoise exclusion fencing is absent, the Authorized Biologist, or approved biological monitors working under the direction of the Authorized Biologist, will be present on site daily to ensure the work area is clear of desert tortoises.

**BIO-35:** Vegetation Transport: Trucks with loads carrying vegetation shall be covered, and vegetative materials removed from the site shall be disposed of in accordance with all applicable laws and regulations.

**BIO-36:** Landscaped Native Vegetation: Bare soil will be landscaped with a Caltrans-recommended seed mix from locally adopted species, where feasible, to preclude the invasion of noxious weeds. For widespread native herbaceous species that are more likely to be genetically homogenous, site specificity is a less important consideration and seed from commercial sources may be used.

- Seed purity shall be certified by planting seed labeled under the California Food and Agricultural Code or that has been tested within a year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists.
- Plant species listed in Lists A and B of the California Exotic Pest Plant Council's list of exotic pest plants (latest edition) will not be used to restore or stabilize areas.

**BIO-37:** Vehicle Washing: Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds.

**BIO-38:** Soils and topsoil will be stockpiled in either disturbed areas lacking native vegetation or areas delineated for project-related disturbance. Topsoil will be re-spread following compaction.

**BIO-39:** Biological Monitor: A biological monitor will be present during ground-disturbing activities to ensure any wildlife that is unearthed or enters the work area during project activities is out of harm's way. This monitor will inspect all excavations at the beginning and end of each day to ensure wildlife has not become trapped and will conduct required preconstruction surveys.

## Signature

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David Bricker  
Deputy District Director  
Caltrans District 8

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Date

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## Acronyms and Abbreviations

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AB	Assembly Bill
ACECs	Areas of Critical Environmental Concern
ACM	asbestos-containing materials
ADI	Area of Direct Impact
ADL	aerially deposited lead
AMA	Archaeological Monitoring Area
APE	Area of Potential Effects
AR4	Airport Safety Review Area 4
ARB	California Air Resources Board
ASR	Archaeological Survey Report
bgs	below ground surface
Basin	Mojave Desert Air Basin
BLM	Bureau of Land Management
BMPs	Best Management Practices
BSA	Biological Study Area
CAC	Certified Asbestos Consultant
CAFE	Corporate Average Fuel Economy
Caltrans, Department	California Department of Transportation
Cal/OSHA	Division of Occupational Safety and Health
Cal Fire	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CH <sub>4</sub>	methane
CHP	California Highway Patrol
CIWQS	California Integrated Water Quality System
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> -equivalent
CRZ	Clear Recovery Zone
CTP	California Transportation Plan
DP-30	Director's Policy 30
DTC/C-AMA	Desert Training Center/California-Arizona Maneuver Area

DTSC	Department of Toxic Substances Control
DWMA	Desert Wildlife Management Areas
EO	executive order
ESA	Environmentally Sensitive Area
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTIP	Federal Transportation Improvement Program
FUDS	Formerly Used Defense Sites
GHG	greenhouse gas
H&SC	Health and Safety Code
HFCs	hydrofluorocarbons
HPSR	Historic Property Survey Report
HRER	Historical Resources Evaluation Report
I-40	Interstate 40
IPCC	Intergovernmental Panel on Climate Change
ISA	Initial Site Assessment
LBP	lead based paint
LCFS	low carbon fuel standard
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MDAQMD	Mojave Desert Air Quality Management District
MEP	Maximum Extent Practicable
MLD	Most Likely Descendent
MMTCO <sub>2e</sub>	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NECO	Northern and Eastern Colorado Desert Coordinated Management Plan
NEMO	Northern and Eastern Mojave Desert Management Plan
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic Safety Administration
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
PDT	Project Development Team

PM	Post Mile
PM10 and PM2.5	particulate matter
PS&E	Plans, Specifications, and Estimates
RECs	Recognized Environmental Conditions
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
Safeguarding California Plan	<i>Safeguarding California: Reducing Climate Risk</i>
SB	Senate Bill
SBCDC	San Bernardino County Development Code
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLR	sea-level rise
SLR Guidance	<i>California Sea-Level Rise Interim Guidance Document</i>
SMARTS	Stormwater Multi-Application Tracking System
SO <sub>2</sub>	sulfur dioxide
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
TMP	Transportation Management Plan
U.S. EPA	U.S. Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geological Survey
USTs	underground storage tanks
UXO	unexploded ordinance
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WDR	Waste Discharge Requirements
WEAP	Worker Environmental Awareness Program
WOS	Waters of the State of California

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# Chapter 1 Introduction

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## Project Description and Background

Project Title:	I-40 Median Regrade Project
Lead Agency Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
Contact Person and Telephone Number:	Gabrielle Duff, Senior Environmental Planner Email address: gabrielle.duff@dot.ca.gov
Project Location:	Interstate 40 in San Bernardino County, near the city of Needles from Essex Road Overcrossing (PM R100.0) to 4.5 miles east of Homer Wash Bridge (PM R125.0).
Project Sponsor's Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
General Plan Description:	N/A
Zoning:	N/A
Description of Project:	The proposed project consists of regrading the median cross slopes from existing conditions, which vary from 2:1 to 6:1 or steeper to 10:1 or flatter on I-40 from PM R100.0 to PM R125.0, in the County of San Bernardino. There are segments within the project limits where the median cross slope is too steep to allow traveling traffic to have a safe traversable and/or recoverable transition back to the highway.
Surrounding Land Uses and Setting:	The proposed project is on I-40 near the city of Needles from Essex Road Overcrossing (PM R100.0) to 4.5 miles east of Homer Wash Bridge (PM R125.0). The project is in the western Mojave Desert with the eastern end of the project southwest of Sacramento Mountain and the western end bordering the Mojave National Preserve to the north and just northeast of the Clipper Mountains. The surrounding area consists of undeveloped desert land. Elevations range from 594 meters (1,950 feet) above mean sea level to a high of 841 meters (2,762 feet) above mean sea level at the eastern end.
Other Public Agencies Whose Approval is Required:	California Department of Fish & Wildlife (CDFW), State Water Resources Control Board, U.S. Army Corps of Engineers (USACE).

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## Chapter 2 CEQA Environmental Checklist

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**DIST-CO-RTE:** 08-SBd-40 **PM/PM:** R100.0/R125.0 **EA/Project No.:** 08-0R141/0815000200

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

## I. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

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

**Response to Item a) No Impact.** Visual impacts on scenic vistas are not anticipated, as the project would involve regrading the existing median cross slopes. The project would involve moving soil from other areas in the median to create the proper gradient and modification of existing drainage facilities within the median. All grading improvements would occur within the median and would be limited to the inner edge of pavement to inner edge of pavement and before washes. Gore areas within the project limits would be considered for storage of construction equipment. However, no ground disturbance would occur in gore areas. Construction personnel would also access the project site using existing roadways, and no detour routes would be used. The proposed improvements would look the same characteristically as the existing roadway. The proposed improvements would not have a significant impact on a scenic vista or obscure significant views.

**Response to Item b) No Impact.** I-40 is not designated as a state scenic highway (Caltrans 2019) and is not noted in the County of San Bernardino General Plan as a County-designated Scenic Route. Within the project limits, I-40 consists of a four-lane divided freeway. The project site does not contain any structures and would not damage any scenic resources or historic buildings.

**Response to Item c) No Impact.** The existing visual character or quality of the site and its surroundings would remain the same as existing conditions; therefore, the project would not substantially degrade the area.

**Response to Item d) No Impact.** The project would not implement or create any new sources of light or glare that would adversely affect day or nighttime views in the area.

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

No measures are required for Aesthetics.

## II. Agriculture and Forest Resources

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

Question	CEQA Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

**Response to Item a) No Impact.** According to the California Department of Conservation Farmland Mapping and Monitoring Program, there are no farmlands or vacant lands that are mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance within the vicinity of the proposed project.

**Response to Item b) No Impact.** There are no areas within the study area under Williamson Act contract.

**Response to Item c) No Impact.** There are no forest lands, timberlands, or timberland production areas adjacent to or within the project site. The proposed project would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

**Response to Item d) No Impact.** The proposed project would not result in the loss or conversion of forest land.

**Response to Item e) No Impact.** There are no forest lands, timberlands, or agricultural lands within or adjacent to the project site. The proposed project would not involve changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

## Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Agriculture and Forest Resources.

### III. Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

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

**Response to Item a) No Impact.** California is divided geographically into 15 air basins for the purpose of managing the air resources of the state on a regional basis. Each air basin generally has similar meteorological and geographic conditions throughout. Local districts are responsible for preparing the portion of the State Implementation Plan (SIP) applicable within their boundaries.

The proposed project is located in the Mojave Desert Air Basin (Basin). The Mojave Desert Air Quality Management District (MDAQMD) has responsibility for managing the air resources for the portion of the Basin in which the project is located, and is responsible for bringing the Basin into attainment for federal and state air quality standards. To achieve this goal, MDAQMD prepares plans for the attainment of air quality standards, as well as maintenance of those standards once achieved.

The proposed project is listed, as currently proposed, in the region's conforming Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2019 Federal Transportation Improvement Program (FTIP) regional transportation planning documents under project number SBDLS01. As such, project emissions are consistent with applicable air quality plans.

#### **Response to Item b) Less-than-Significant Impact**

##### Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), directly emitted particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and toxic air contaminants such

as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO<sub>x</sub> and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involve clearing; cut-and-fill activities; grading, removing, or improving existing roadways; building bridges; and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM<sub>10</sub>, PM<sub>2.5</sub>, and small amounts of CO, sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, and VOCs to be of concern.

Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to dust-related PM<sub>10</sub> emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and some soot particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO<sub>2</sub> is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and California Air Resources Board (ARB) regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 parts per million of sulfur), so SO<sub>2</sub>-related issues due to diesel exhaust would be minimal.

Most of the construction impacts on air quality are short-term in duration and, therefore, would not result in long-term adverse conditions. Implementation of the standardized measures, such as compliance with MDAQMD Rule 403 to reduce onsite fugitive dust, would reduce any air quality impacts resulting from construction activities to a less-than-significant level.

### Operation

Because the project would not increase the number of travel lanes on I-40, it would not likely lead to a substantial or measurable increase in vehicle travel, and therefore does not require a travel analysis. Therefore, the proposed project would not increase roadway capacity on I-40 and would not increase emissions of criteria pollutants and their precursors following the

construction period. No operational impacts related to violation of air quality standards would occur.

As discussed above, project construction would generate criteria pollutants and their precursors. However, such emissions would be short term and transitory, and fugitive dust would be limited through compliance with MDAQMD Rule 403. No net increase in operational emissions would occur, as traffic volumes would be the same under the Build Alternative and No-Build Alternative. Implementation of the proposed project would not increase roadway capacity on I-40 and would not increase emissions of criteria pollutants and their precursors following the construction period. Because project construction would result in short-term generation of emissions, but no increases would occur for project operation, impacts related to a cumulatively considerable net increase of any criteria pollutants would be less than significant.

**Response to Item c) No Impact.** ARB characterizes sensitive land uses as simply as possible by using the example of residences, schools, day care centers, playgrounds, and medical facilities. However, a variety of facilities are encompassed. For example, residences can include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers.

No land uses that are sensitive to air pollutant emissions are located within 500 feet of proposed project improvements. As such, no impacts related to exposure of sensitive receptors to substantial pollutant concentration would occur.

**Response to Item d) No Impact.** According to ARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Because the project would not include any of these types of uses, and no sensitive land uses are located along the project alignment, no impacts would occur.

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

The following Air Quality measures would be implemented to minimize potential impacts, as stated in Section 14-9, “Air Quality,” of Caltrans’ 2018 Standard Specifications and Special Provisions:

**AQ-1:** Fugitive Dust: Contractor must abide by Caltrans’ provisions in Section 14-9, Air Quality of the 2018 Standard Specifications and Special Provisions.

**AQ-2:** Implement and follow Erosion Control and Air Quality Best Management Practices (BMPs).

**AQ-3:** Comply with AQMD rule 403 for Fugitive Dust and Caltrans Standard Specification Section 14-9.

**AQ-4:** Comply with the Caltrans Standard Specification Section 10.4.

#### **IV. Biological Resources**

Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant with Mitigation Incorporated
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant with Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

**Response to Items a), b), d) Less than Significant with Mitigation Incorporated.** The information from this section is based on the Natural Environment Study (NES)(Caltrans 2020a). The proposed project is located in the western Mojave Desert. The Biological Study Area (BSA) was confined to the project limits and included both permanent and temporary impacts. The project limits encompass the median between the I-40 eastbound and westbound lanes as well as the median between the interstate and the off- and on-ramps from PM R100.0 to PM R125.0, excluding the railroad right of way near PM 107.5. Temporary staging would occur within the northern and southern gore areas near PM 115, the northern gore areas near PM 120, and within the median if necessary. The eastern end of the BSA is located southwest of the Sacramento Mountain, and the western end of the BSA borders the Mojave National Preserve to the north and northeast of the Clipper Mountains. The surrounding area consists of undeveloped, rural, desert land. The city of Barstow is approximately 100 miles west of the project site, and the city of Needles is approximately 18 miles east of the project site.

##### Natural Communities

The BSA is located within the Mojave Desert biome of southern California. Five native plant communities, excluding disturbed/developed areas, occur within the BSA. The vegetation communities include Creosote Bush Scrub, Creosote Bush–White Bursage Scrub, Creosote Bush–Brittlebush Scrub, White Bursage Scrub, and Desert Mixed Scrub. A majority of the vegetation communities identified on site are moderately to greatly disturbed, with the vegetation communities present being located within a few feet of the median shoulder and several small

access roads between the eastbound and westbound lanes throughout the BSA. Additionally, there are some areas that have been partially cleared or are highly disturbed where only some patches of sparse native herbaceous vegetation occur.

### Plants Species

The BSA contains suitable habitat for three special status plant species: Clokey's cryptantha (*Cryptantha clokeyi*), Abrams' spurge (*Euphorbia abramsiana*), and Eliasson's woolly tidestromia (*Tidestromia eliassoniana*). Focused surveys conducted in April and May 2019 did not detect any special status plant species within the median, nor were any special status plant species incidentally observed during other biological surveys.

### Invasive Species

Mediterranean grass was the most common species throughout the BSA, dominating the interspaces. This grass is a common desert weed. Invasive species and other non-native species such as Russian thistle (*Salsola tragus*), red brome (*Bromus madritensis* var. *rubens*), and Saharan mustard were observed mostly in highly disturbed areas in the median. Construction disturbance has the potential to increase populations of invasive plants and to cause the species to spread. Measures implemented as part of project activities would minimize the spread of invasive species.

### Animal Species

Twenty-nine vertebrates and one invertebrate were either directly observed or detected through presence of sign within the BSA. These included reptiles, birds, mammals, and an arachnid. Most of these are resident, common species in the Mojave Desert, while others are seasonal migrants passing through the area. Representative common wildlife species detected include side-blotched lizard (*Uta stansburiana*), great basin whiptail (*Aspidoscelis tigris tigris*), common raven (*Corvus corax*), and desert cottontail (*Sylvilagus audubonii*). The BSA contained suitable habitat for the following special status wildlife species: desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), and desert bighorn sheep (*Ovis Canadensis nelson*). Neither loggerhead shrike nor Le Conte's thrasher were observed during the 2019 biological surveys. Desert bighorn sheep scat and tracks were observed during the October 2019 surveys within two of the large washes that flow under I-40 within the BSA. However, no bridge work would occur as part of the proposed project activities, and no work within the large washes that flow under the bridges is proposed.

The BSA contains suitable habitat for desert tortoise, a species listed as threatened by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). During protocol surveys conducted in April and May 2019, one live desert tortoise greater than 260 millimeters was observed on the south shoulder of the eastbound I-40 approximately 0.1 mile west of PM 104. In addition, four class five carcasses, or fragments



thereof, were observed within the project median. Existing permanent desert tortoise exclusion fencing has been installed along the eastbound and westbound right of way of I-40 from PM 107.5 to PM 125.0. The exclusion fencing was in good condition during a one-day fence survey conducted on April 23, 2020, and it ties into the existing culvert and bridge crossing that pass under I-40. These features will likely prevent desert tortoises from entering the median and traffic lanes on this 17-mile stretch of the project limits. From PM 107.5 to PM 125, gaps were observed in the permanent exclusion fencing at the intersections located near PM 115 and PM 120 to accommodate roadway intersections. Fencing was also absent between PM 100.0 and PM 107.5, with the exception of two small areas around the Essex eastbound and westbound rest stops near PM 105.5. Within the BSA, desert tortoises have the highest potential to occur between PM 100 and PM 107.5 where permanent exclusion fencing is mostly absent. However, the presence of permanent exclusion fencing from PM 107.5 to PM 125, and numerous wildlife crossings will likely prevent desert tortoises from entering the median, gore areas, and traffic lanes within this 17-mile stretch of the BSA. The project anticipates approximately 1.65 acres of permanent impacts and 4.89 acres of temporary impacts on suitable desert tortoise habitat between PM 100 and PM 100.3. The project will avoid habitat areas between PM 100.3 and PM 107.5 and these areas will not be subject to temporary or permanent impacts. Substantial impacts on desert tortoise are not anticipated with implementation of appropriate compensatory mitigation, avoidance, and minimization measures. Desert tortoises present to the north and south of I-40 may continue to be harmed as a result of vehicle collisions; however, the proposed project will not contribute to or increase the number of collisions. Construction activities within the BSA may indirectly impact adjacent suitable desert tortoise habitat located outside of the BSA. Indirect impacts may include increases in dust, noise, lighting, debris, and trash. All work will occur within the Caltrans right of way and outside of the desert tortoise critical habitat area. The project proposes to mitigate for impacts on suitable desert tortoise habitat through a mitigation bank approved by CDFW or other mitigation opportunities that will offset impacts. Caltrans proposes to purchase mitigation credits from an approved bank, although other options for mitigating desert tortoise impacts will be explored and presented to the regulatory agencies for their approval. With implementation of avoidance and minimization measures BIO-1, BIO-2, BIO-5 to BIO-29, impacts on desert tortoise are not anticipated.

The BSA also contains suitable habitat for burrowing owl, a CDFW Species of Special Concern and a Bureau of Land Management (BLM) “Sensitive” species. Burrowing owls are also protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. A habitat assessment was conducted in April and May of 2019 for burrowing owl. No burrowing owls or their signs were observed within the project median, and few burrows or burrow surrogates with potential to support burrowing owls were observed. Furthermore, burrowing owls were not incidentally observed during other general biological surveys that were conducted on site. With implementation of avoidance and minimization measures BIO-1, BIO-2, BIO-21, BIO-22, BIO-23, and BIO-39, impacts on burrowing owls are not anticipated to occur.

Desert bighorn sheep is a California fully protected species. There are two populations for this species: the Mojave (not federally listed), and the Peninsular (listed as federally endangered).

The Mojave population is documented and legally hunted within the Mojave National Preserve; therefore, it is located near the project site. Desert bighorn sheep signs, including scat and tracks, were observed during the October 2019 surveys within two of the large washes that flow under I-40 within the BSA. While suitable habitat for this species exists in these large channel washes, the median and gore areas do not contain suitable habitat. No bridge work would occur as part of the project, and no work within the large washes that flow under the bridges is proposed. Therefore, while project construction in general could deter individuals from the project vicinity, no impacts on desert bighorn sheep are anticipated with the implementation of avoidance and minimization measures BIO-1, BIO-2, BIO-21, BIO-22, BIO-23, and BIO-39.

A records search did not result in any records of bat species in the BSA area. However, several species of bats are known to use the Mojave desert habitats at various times throughout the year, including during migration and seasonal breedings, or as permanent residents. A habitat assessment for bats was conducted from April to May 2019 within the project median during daylight hours. Apart from a few small trees, the project site generally lacked trees of sufficient status and foliage density to support tree-roosting bat species. Similarly, the project site also lacks large boulders or rock outcroppings with crevices for roosting. Most of the bridges within the project limits lacked seams, cracks, or holes that could potentially support roosting bats. The one exception was a bridge with a hole in the foam-filled expansion seam potentially large enough to permit entry by bats. However, no signs of guano, bat urine stains, or vocalizations from roosting bats were detected at this site. No bats or their signs were observed under or on any of the bridges in the project limits. While bridge work will not occur as part of the proposed project, modification of existing drainage facilities within the median will occur and will consist of adjusting existing inlets and extending existing culverts within the median. Preconstruction bat presence/absence surveys conducted prior to culvert modification and work adjacent to bridges will identify current bat roosting locations and guide implementation of appropriate measure that will minimize potential impacts on bat roots within the BSA. The project would implement the following avoidance and minimization measures: BIO-1, BIO-2, BIO-21, BIO-22, BIO-23, BIO-30, BIO-31, and BIO-32.

#### Migratory Birds and Species of Special Concern (SSC)

Loggerhead shrike is not state or federally listed as threatened or endangered; however, it is designated as an SSC by CDFW and protected by the MBTA. Loggerhead shrike generally requires tall plants or structures for hunting and vocalization perches and open areas of short grasses, forbs, or bare ground for hunting. Loggerhead shrike was not observed during the April and May 2019 or October 2019 surveys. Project activities could deter loggerhead shrike from foraging in the project vicinity. The amount of foraging area in the vicinity is currently adequate for individuals pushed away during construction activities to temporarily find other foraging habitat. Although nesting by loggerhead shrike is unlikely within the project limits, implementation of measures BIO-1, BIO-2, BIO-20, BIO-21, BIO-22, BIO-32, BIO-33, and BIO-34 will ensure avoidance of impacts on nesting birds.

Le Conte's thrasher is a CDFW SSC and USFWS Bird of Conservation Concern. An uncommon to rare local resident in southern California deserts, this species occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats. Le Conte's thrasher was not observed during the April and May 2019 or October 2019 surveys. Although it is unlikely that nesting by Le Conte's thrasher would occur within the project limits, project-related activities could deter individuals from foraging in the project vicinity. Implementation of measures BIO-1, BIO-2, BIO-21, BIO-22, BIO-23, BIO-33, BIO-34, and BIO-39 would ensure avoidance of impacts on nesting birds.

#### Habitat Connectivity/Wildlife Corridors

I-40 travels through the California Desert Linkage Network, which is an area identified for essential ecological connectivity for conserving the biological diversity of California's deserts. The California Desert Linkage Network allows wildlife access to essential habitat and resources to continue to survive and grow their populations. The California Desert Linkage Network that runs north and south through I-40 connects the Mojave National Preserve north of I-40 to the Stepladder-Turtle Mountains and other desert lands south of I-40. Desert species that benefit from this linkage network include desert tortoise, Mojave ground squirrel (*Spermophilus mohavensis*), and desert bighorn sheep. Within or adjacent to the BSA, there are 17 culvert crossings and 10 bridge crossings. Each of the crossings are perpendicular to I-40 and are designed to allow wildlife to safely cross underneath I-40 to access northern and southern habitat areas with no access to the median areas. During the October 2019 biological surveys conducted for the proposed project, desert bighorn sheep signs, including scat and tracks, were observed, providing evidence of desert bighorn sheep movement via channel washes that flow under I-40 to reach habitat and resources. As part of the proposed project, no bridge work will occur and no work within the large channel washes that flow under the bridges is proposed. Impacts on the culvert crossings are not anticipated.

#### **Response to Item c): No Impact**

#### Wetlands and Other Waters

The BSA is located within the Lower Watson Wash and the Upper Homer Wash watersheds. The Lower Watson Wash watershed spans approximately 285 square miles and comprises the western portion of the project limits. Watson Wash flows south through the project limits and reaches Cadiz Lake approximately 35 miles south. The Upper Homer Wash watershed spans approximately 235 square miles and encompasses the eastern portion of the project limits. Homer Wash flows south from the project limits for about 45 miles before reaching Danby Lake. All drainages within the project limits eventually flow into one of two dry lake beds south of the project limits—Danby Lake or Cadiz Lake. The project limits support 17 jurisdictional streambed Waters of the State of California (WOS) jurisdictional features which are categorized as either earthen wash or earthen drainage. The earthen wash features are lined with rip rap with a width larger than 50 feet and are ephemeral features flowing perpendicular under the existing I-40. The remaining features were classified as earthen drainages considered to be small ephemeral

features ranging from 1 to 15 feet in width. In total, the project limits support approximately 14.85 acres of jurisdictional WOS. The earthen washes and earthen drainage features are considered CDFW jurisdiction due to the presence of a continuous bed and bank and/or hydraulic indicators such as bifurcated flow, organic wrack, flow lineation, or swale indication. In total, the CDFW jurisdictional streambed WOS within the project limits covers 14.85 acres and 5,302 linear feet. The project may tentatively have permanent impacts on one of the 17 identified jurisdictional streambed WOS features, for a total of 0.028 acre (298 linear feet) of impacts. The remaining 14.82 acres (5,004 linear feet) would be avoided. Currently, there are no anticipated temporary impacts are anticipated with implementation of the project. A 1602 Streambed Alteration Agreement is required for all activities, including the proposed project, that alter streams and lakes and their associated riparian habitat.

The project area occurs in Region 7 of the Regional Water Quality Control Board (RWQCB). The RWQCB regulates impacts on WOS under the Porter Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements (WDR), depending on the level of impact and the properties of the waterway. The project would need to obtain a WDR for impacts on WOS.

#### **Response to Item e): No Impact**

##### San Bernardino County Development Code – Plant Protection and Management

Chapter 88.01 of the San Bernardino County Development Code (SBCDC) provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. The intent of the regulations is to promote and sustain the health, vigor, and productivity of plant life and aesthetic values within the County through appropriate management techniques. Section 88.01.060 provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. Desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with Section 88.01.050 (Tree or Plant Removal Permits). However, removal of regulated trees or plants shall not apply to lands owned by the United States or State of California and is exempt under Section 88.01.030. Therefore, Caltrans is exempt under Section 88.01.030. Furthermore, a majority of the vegetation communities on site are moderately to greatly disturbed with the vegetation communities present being located within a few feet of the median shoulder and several small access roads between the eastbound and westbound lanes. Additionally, some areas have been partially cleared or are also highly disturbed where only some patches of sparse native herbaceous vegetation occurs.

**Response to Item f): No Impact.** Areas of Critical Environmental Concern (ACECs) is a BLM program established to protect natural resources on public lands under the Federal Lands Policy and Management Act. The following areas listed under the ACEC are adjacent to the BSA: Patton Military Camps, Chemehuevi, Piute-Fenner, and Bigelow Cholla. The BSA is located entirely on Caltrans right of way and does not fall within any areas of the ACEC.

The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) is an amendment to the BLM California Desert Conservation Area Plan. NECO is a multi-agency planning effort that protects and conserves natural resources of the California portion of the Sonoran Desert Ecosystem. The area consists of over five million acres and is home to over 60 sensitive plant and animal species. The BSA of the proposed project falls within the NECO Planning Area; however, it is located entirely on Caltrans right of way and not federal lands. Therefore, the proposed project is not subject to NECO.

The Northern and Eastern Mojave Desert Management Plan (NEMO) is an amendment to the BLM California Desert Conservation Area Plan. The area encompasses 3.3 million acres, of which 2.7 million acres are public lands. Nineteen sensitive plants, animals, and natural communities can be found within NEMO terrain. The BSA of the proposed project falls within the NEMO Planning Area but is located entirely on Caltrans right of way, not on federal lands. Therefore, the proposed project is not subject to NEMO.

Desert Wildlife Management Areas (DWMAs) are part of the California Desert Conservation Area Plan. DWMAs establish high quality habitat and usually overlap with areas designated as critical habitat for desert tortoise. The BSA is bordered by the Northern and Eastern Mojave Planning Area DWMA to the north from approximately PM 107.1 to PM 123.15. The BSA is almost entirely bordered by the Northern and Eastern Colorado Planning Area DWMA to the south, except for approximately 1.85 miles of the easternmost portion of the project limits. The BSA of the proposed project is within Caltrans right of way; therefore, it is not subject to DWMA management plans.

Although all project-related work will occur within the Caltrans right of way and outside of conservation areas, work in the vicinity may indirectly affect habitat and wildlife in these areas through increases in dust, noise, lighting, debris, and trash. However, with implementation of the below measures, impacts on conservation areas are not anticipated to occur.

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

With implementation of measures BIO-1, BIO-2, BIO-5 to BIO-28, and BIO-38, impacts on desert tortoise are not anticipated. No impacts are anticipated on desert bighorn sheep with implementation of measures BIO-1, BIO-2, BIO-20, BIO-22, and BIO-38. The project would implement measures BIO-1, BIO-2, BIO-20 to BIO-22, BIO-30, and BIO-31 for bats, and measures BIO-1, BIO-2, BIO-20, BIO-21, BIO-22, BIO-32, BIO-33, and BIO-38 would ensure avoidance of impacts on nesting birds.

**BIO-1:** BMPs: Caltrans Best Management Practices (BMPs) will be implemented to control dust, potential spills, leaks, runoff, and other potential construction-related impacts. Caltrans Standard Specification 2018-13-1.01.

**BIO-2:** Equipment Staging: Only previously disturbed areas, such as turnouts and paved areas, will be used for construction staging, storage, and batch plant areas to the extent feasible. The

Resident Engineer and Caltrans Biologist shall coordinate on all sites prior to their approval/use. Caltrans Standard Specification 2018-13-4.03E(3).

**BIO-3:** Materials and Spoils Control: Project materials will not be cast from the project site, and project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Caltrans Standard Specification 2018-5-1.31.

**BIO-4:** Preconstruction Special Status Plant Surveys: A preconstruction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project. Caltrans Standard Specification 2018-14-6.03.

**BIO-5:** Caltrans will submit the names and qualifications of biologists that they believe meet the minimum requirements to serve as Authorized Biologists to the USFWS for review and authorization under the biological opinion prior to beginning onsite activities (forms at [http://www.fws.gov/ventura/speciesinfo/protocols\\_guidelines/](http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/)). Once a biologist has been authorized by the USFWS, that individual may work on subsequent projects pursuant to the biological opinion without additional approval, provided that his or her performance remains satisfactory. Caltrans will maintain a record of all authorized biologists who work on its projects. Caltrans Standard Specification 2018-14-6.03D.

**BIO-6:** Caltrans will designate, on a project-by-project basis, an Authorized Biologist to be responsible for overseeing compliance with all protective measures and for coordination with the USFWS. The Authorized Biologist will immediately notify the resident engineer of project activities that may be in violation of the biological opinion. In such an event, the resident engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Authorized Biologist. Caltrans Standard Specification 2018-14-6.03D.

**BIO-7:** A Resident Engineer is, according to Caltrans' May 2006 Standard Specifications, "the Chief Engineer, Department of Transportation, acting either directly or through properly authorized agents, the agents acting within the scope of the particular duties delegated to them." The Resident Engineer has authority over the contract and is responsible for all aspects of the specific projects to which he or she is assigned. The Resident Engineer has the authority to stop work on a project. The Authorized Biologist will have the authority to halt any activity, through the Resident Engineer or other identified authority in charge of implementation, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury to or mortality of desert tortoise. Caltrans Standard Specification 2018-14-6.03.

**BIO-8:** When handling desert tortoises, Authorized Biologists (and trained individuals) must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2010), Chapters 6 and 7. The manual is available on the web through the Ventura Fish and Wildlife Office website ([www.fws.gov/ventura](http://www.fws.gov/ventura)). Caltrans Standard Specification 2018-14-6.03.

**BIO-9:** Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, clearance surveys for the desert tortoise will be conducted by the Authorized Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their burrows by an Authorized Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities, following the 2018 field survey protocol (USFWS 2018) or more current approved protocol. If burrows are found, they will be examined by an Authorized Biologist to determine if desert tortoises are present. If a tortoise is present and the burrow cannot be avoided, it will be relocated in accordance with USFWS protocol (USFWS 2018). If the Authorized Biologist determines clearance surveys are not needed, clearance surveys would not be required. If desert tortoises are found at a project site where Caltrans (or the Authorized Biologist) had previously concluded they were unlikely to occur, Caltrans will contact the USFWS to determine if the implementation of additional protective measures would be appropriate. Caltrans Standard Specification 2018-14-6.03.

**BIO-10:** For construction projects determined likely to affect desert tortoise, an education program will be developed and presented by the Authorized Biologist prior to the onset of ground-disturbing activities to be conducted under the auspices of this consultation. All onsite personnel—including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel—employed for a project will be required to participate in an education program regarding the desert tortoise before performing onsite work. The program will consist of a class presented by an Authorized Biologist or a video, provided the Authorized Biologist is present to answer questions. Wallet-sized cards or a one-page handout with important information for workers to carry are recommended as a future reference and a reminder of the program's content. The program will cover the following topics at a minimum: Caltrans Standard Specification 2018-14-6.03:

- The distribution, general behavior, and ecology of the desert tortoise;
- Its sensitivity to human activities;
- The protection it is afforded by the Endangered Species Act;
- Penalties for violations of state and federal laws;
- Notification procedures by workers or contractors if a tortoise is found in a construction area; and
- Protective measure specific to each project.

**BIO-11:** Whenever project vehicles are parked outside of a fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Authorized Biologist or an approved desert tortoise monitor to relocate the tortoise. If an Authorized Biologist is not present on site, the Resident Engineer or supervisor must notify an Authorized Biologist. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported. Caltrans Standard Specification 2018-14-6.03.

**BIO-12:** The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other

limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly and distinctly delineated with flagging or other marking to minimize surface disturbance associated with vehicle movement. Special habitat features, such as desert tortoise burrows, will be identified and marked as environmentally sensitive areas by the Authorized Biologist if they are to be avoided and will be discussed and identified during the worker education program. To the extent possible, a previously disturbed area within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where feasible. Project-related vehicle traffic will be restricted to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Authorized Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary. Caltrans Standard Specification 2018-14-6.03D.

**BIO-13:** Caltrans will require all contractors to comply with the Endangered Species Act in the performance of work necessary for project completion. Evidence of compliance is required prior to Caltrans accepting or receiving materials or goods produced from outside of the right of way or through the use of facilities located outside of the right of way, including but not limited to, non-commercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the worksite by the resident engineer. Caltrans Standard Specification 2018-8-1.02.

**BIO-14:** The resident engineer is responsible for ensuring that all protective measures are being fully implemented. If the resident engineer determines, or is notified by the Authorized Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, authorized biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The resident engineer must always be able to contact an approved Biological Monitor or Authorized Biologist to resolve any unforeseen issues.

**BIO-15:** When work is occurring in areas where desert tortoise exclusion fencing is present, Caltrans will determine whether the presence of Authorized Biologists and approved biological monitors will be required during project activities as outlined in the ‘criteria for use in reaching appropriate determination’ section of the programmatic biological opinion and the Appendix I notification form submitted to the USFWS. In general, where the risk to desert tortoises is low, the Authorized Biologist or an approved Biological Monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance. Caltrans Standard Specification 2018-8-1.02.

**BIO-16:** When work is occurring in areas where desert tortoise exclusion fencing is absent, the Authorized Biologist, or approved biological monitors working under the direction of the Authorized Biologist, will be present onsite daily to ensure the work area is clear of desert tortoises.



**BIO-17:** The project will repair and replace existing permanent desert tortoise exclusion fencing, as needed, to minimize impacts on desert tortoise. If required, exclusion fencing will be installed following Caltrans Standard Specifications, which include USFWS guidelines. The Authorized Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Authorized Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Authorized Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground-disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed. .

**BIO-18:** Upon locating a dead or injured tortoise within a project site, the resident engineer will immediately notify the Authorized Biologist, who then will notify the USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury (if known), and other pertinent information (e.g., size, sex, recommendations to avoid future injury or mortality). Caltrans Standard Specification 2018-14-6.03D.

**BIO-19:** Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the Authorized Biologist or an approved Desert Tortoise Biological Monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final disposition of the animal. Caltrans Standard Specification 2018-14-6.03D.

**BIO-20:** If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped. Caltrans Standard Specification 2018-14-6.03D.

**BIO-21:** Any fuel or other hazardous materials spills will be promptly cleaned up, and any leaks from equipment will be stopped and repaired immediately. Vehicle and equipment fluids that are no longer useful will be transported to an appropriate offsite disposal location. Fuel and lubricant storage and dispensing locations will be constructed to fully contain spilled materials until disposal can occur. Hazardous waste, including used motor oil waste and coolant, will be stored and transferred in a manner consistent with applicable regulations and guidelines. Caltrans Standard Specification 2018-13-1.01.

**BIO-22:** Upon completion of construction, all refuse—including, but not limited to, equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes—will be removed from the site and disposed of properly. Caltrans Standard Specification 2018-13-1.01.

**BIO-23:** To preclude attracting predators, such as the common raven (*Corvus corax*) and coyotes (*Canis latrans*), food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife. Caltrans Standard Specification 2018-13-1.01.

**BIO-24:** Desert tortoise exclusion fence construction will follow Caltrans Standard Specifications, which include USFWS guidelines for desert tortoise fencing. Caltrans Standard Specification 2018-14-6.03.

**BIO-25:** All desert tortoise fences, gates, and cattle guards will be regularly maintained at a frequency sufficient to ensure that they will continually provide an effective barrier to passage of desert tortoises. Caltrans Standard Specification 2018-14-6.03.

**BIO-26:** Desert tortoise-proof fencing will not cross washes. When washes and culverts are encountered, the desert tortoise-proof fence will follow the wash to the roadway and either tie into the existing bridge or cross over the top of a culvert. Caltrans Standard Specification 2018-14-6.03.

**BIO-27:** During fence inspections and repairs, if any desert tortoises are observed, workers are to notify the Authorized Biologist because only Authorized Biologists and Approved Biological Monitors are permitted to handle tortoises. All desert tortoises encountered within the roadway side of the fence will be relocated across the fence to safety in accordance with USFWS protocol (USFWS 2010). Any such incident will be reported in the annual report. Caltrans Standard Specification 2018-14-6.03.

**BIO-28:** On a case-by-case basis, individual active burrows may be fenced if the Authorized Biologist determines this protective measure is necessary to prohibit desert tortoises from repeatedly entering work areas. Fencing around individual burrows will be removed when adjacent construction is complete. Caltrans Standard Specification 2018-14-6.03D.

**BIO-29:** After each shift, surveyor flagging tape shall be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Authorized Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift. Caltrans Standard Specification 2018-14-6.03.

**BIO-30:** Preconstruction Burrowing Owl Surveys: Preconstruction burrowing owl surveys will be performed within the project limits within 14 days prior to ground disturbing activities. If burrowing owls are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance and minimization measures required for the project. The following avoidance, minimization, and mitigation measures contain recommendations from the 2012 Staff Report on Burrowing Owl Mitigation. Any and/or all of these measures are subject to change based on the results of preconstruction nesting bird surveys and at the request of CDFW. Caltrans Standard Specification 2018-14-6.03B.

1. Clearly marking areas supporting occupied burrowing owl burrows and buffer zone setback areas as determined by a qualified biologist. Disturbance to and project activities in these areas must be avoided.
2. Avoid direct destruction of unoccupied burrows to the extent feasible.
3. Occupied burrows and the established buffer zone setback area surrounding each of the occupied burrows shall not be disturbed during the nesting season (February 1–August 31), unless a biologist can verify through noninvasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
4. Where possible, avoid disturbance to occupied burrows and the established buffer zone area during the non-breeding season (September 1–January 31).
5. A Worker Environmental Awareness Program (WEAP) will be developed and provided by a qualified biologist to all involved project personnel. A description of the burrowing owl, its ecology, and its onsite status will be summarized. Measures developed for burrowing owl protection and reporting will be outlined. A record of all personnel attending this training will be kept by Caltrans and updated as staff changes necessitate additional training.
6. Where direct disturbance to burrowing owls and their habitat can be avoided, the incorporation of buffer zones, visual screens, or other measures will minimize the effects on owls. CDFW-recommended restricted activity dates and setback distances by level of disturbance for burrowing owl nesting sites (CDFW 2012) are listed in the table below. The nest buffers listed below will be used as a baseline; however, if site conditions are such that nesting buffers could be decreased yet still be biologically defensible, a qualified biologist may use their discretion to decrease the buffer distance. Nest location, behavior, disturbance tolerance, and existing disturbance should all be taken into account when adjusting the size of an active burrowing owl nest buffer. The minimum nesting buffer distance shall be 500 feet (152 meters), as it is for other sensitive nesting bird species for the project.

#### **CDFW Burrowing Owl Buffer Zone Setback Distances**

<b>Time of Year</b>	<b>Level of Disturbance (in meters)</b>		
	<b>Low</b>	<b>Med</b>	<b>High</b>
Apr 1–Aug 15	200	500	500
Aug 16–Oct 15	200	200	500
Oct 16–Mar 31	50	100	500

7. When avoidance of disturbance to occupied burrowing owl burrows during the non-breeding season is not possible, a Burrowing Owl Exclusion Plan approved by CDFW may be required.

8. For unavoidable impacts on occupied burrowing owl burrows, the burrows must be excluded and closed by a qualified biologist to permanently exclude burrowing owls. One-way doors would need to be temporarily installed in burrow openings during the non-breeding season (September 1–January 31) and before breeding behavior has begun. Suitable habitat (including suitable burrows) must be available adjacent to or near the disturbance site, or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows will be excavated using hand tools and filled to prevent reoccupation. All burrowing owls associated with occupied burrows that will be directly affected (temporarily or permanently) by the project will be passively relocated.
9. All burrowing owl relocation and monitoring shall be approved by CDFW. A report summarizing the results of the relocation and monitoring shall be submitted to CDFW following completion of the relocation and monitoring of the owls.

**BIO-31: Bat Protection.** Prior to modifying or extending culverts or prior to work on, under, or adjacent to bridges, suitable areas and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Surveys are recommended as follows: Caltrans Standard Specification 2018-14-6.03D.

1. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of culvert modification and work on, under, or adjacent to bridges, ideally during the maternity season (typically March 1–August 31), to allow time to prepare mitigation and/or exclusion plans if needed.
2. Preconstruction surveys are recommended to be conducted by a qualified bat biologist no more than two weeks prior to the initiation of culvert modification activities and work on, under, or adjacent to bridges.

Surveys may entail direct inspection of the bridges, culverts, or other suitable habitat or nighttime surveys.

**BIO-31(a):** If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special status species and the roost is not being used as a maternity roost, then the bat biologist will determine appropriate measures to minimize and avoid potential impacts on bats. Appropriate measures may include evicting bats from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans. Caltrans Standard Specification 2018-14-6.03 and 2-1.06B.

**BIO-31(a)(i):** If special status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost. Caltrans Standard Specification 2018-14-6.03.

**BIO-31(a)(ii):** If special status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by CDFW and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed. Caltrans Standard Specification 2018-14-6.03.

**BIO-31(b):** If the preconstruction survey determines that no active roosts are present, then work activities shall commence within two weeks following the preconstruction survey. Caltrans Standard Specification 2018-14-6.03.

**BIO-31(c):** All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor. Caltrans Standard Specification 2018-14-6.03.

**BIO-31(d):** All construction activity in the vicinity of an active roost shall be limited to daylight hours. Caltrans Standard Specification 2018-14-6.03.

**BIO-32: Artificial Lighting:** Artificial lighting shall be focused only on the area of direct work, and light spillover into the adjacent foraging areas shall be minimized to the greatest extent feasible. Caltrans Standard Specification 2018-14-6.03.

**BIO-33: Vegetation Clearing and Grubbing:** Vegetation clearing and grubbing will be conducted outside of the nesting bird season (February 15–September 1). If this is not feasible, then BIO-34 will implemented. Caltrans Standard Specification 2018-14-6.03B.

**BIO-34: Preconstruction Nesting Bird Survey:** If construction occurs within nesting bird season (February 15–September 1), then preconstruction surveys will be conducted immediately prior (within 3 days) to construction by a qualified biologist in order to locate and avoid nesting birds. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when the nest is no longer active. Alternatively, a qualified

biologist may determine that certain work can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Caltrans Standard Specification 2018-14-6.03B.

**BIO-35: Vegetation Transport:** Trucks with loads carrying vegetation shall be covered, and vegetative materials removed from the site shall be disposed of in accordance with all applicable laws and regulations.

**BIO-36: Landscaped Native Vegetation:** Bare soil will be landscaped with a Caltrans-recommended seed mix from locally adopted species, where feasible, to preclude the invasion of noxious weeds. For widespread native herbaceous species that are more likely to be genetically homogenous, site specificity is a less important consideration and seed from commercial sources may be used.

- Seed purity shall be certified by planting seed labeled under the California Food and Agricultural Code or that has been tested within a year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists.
- Plant species listed in Lists A and B of the California Exotic Pest Plant Council's list of exotic pest plants (latest edition) will not be used to restore or stabilize areas.

**BIO-37: Vehicle Washing:** Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds.

**BIO-38: Soils and topsoil** will be stockpiled in either disturbed areas lacking native vegetation or areas delineated for project-related disturbance. Topsoil will be respread following compaction.

**BIO-39: Biological Monitor:** A biological monitor will be present during ground-disturbing activities to ensure any wildlife that is unearthed or enters the work area during project activities is out of harm's way. This monitor will inspect all excavations at the beginning and end of each day to ensure wildlife has not become trapped and will conduct required preconstruction surveys.

## V. Cultural Resources

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

**Response to Items a), b): Less Than Significant Impact.** Information from this section was taken from the Historic Property Survey Report (HPSR)(Caltrans 2020b), Historical Resources

Evaluation Report (HRER)(Caltrans 2020b), and Archaeological Survey Report (ASR) (Caltrans 2020b). Caltrans uses a single process to fulfill both its National Historic Preservation Act Section 106 and CEQA responsibilities. The Area of Potential Effects (APE) for the project includes all areas that may be potentially directly and indirectly affected by the proposed project. The APE includes work limits within the existing right of way and encompasses areas of construction, construction signage, staging, and storage areas. The APE is centered on the median of I-40 between PM R100.0 and PM R125.0. The APE is approximately 25 miles long and encompasses an area of approximately 14,818 acres. The vertical limits of the APE are limited to the area of ground-disturbing activities within the limits of the area of direct impacts, including grading work, drainage modifications, and gore areas, and they may reach a depth of no more than 10 feet below the current ground surface. The surficial deposits throughout much of the APE have been extensively disturbed by previous roadway construction and maintenance activities associated with I-40. Based on the HPSR findings, construction activities associated with the project are unlikely to encounter intact or significant buried archaeological deposits.

The Native American Heritage Commission (NAHC) was contacted to request pertinent cultural resource information available in the Sacred Lands File. The NAHC stated that the Sacred Lands File search for the project was completed with negative results.

Four Native American Tribes were contacted under Assembly Bill (AB) 52. Letters were sent on October 7, 2019 to the Chemehuevi Indian Reservation (Charles Wood, Chairperson), Colorado River Indian Tribes (Dennis Patch, Chairperson), Fort Mojave Indian Tribe (Timothy Williams, Chairperson), and the Twenty-Nine Palms Band of Mission Indians (Anthony Madrigal, Tribal Historic Preservation Officer). Follow-up phone calls were conducted on November 12, 2019 and December 11, 2019.

Two responses were received as a result of this correspondence. The Fort Mojave Indian Tribe (Dawn Hubbs, Archaeologist) responded by email on December 13, 2019 requesting additional project information. In response, Caltrans re-sent all scoping and correspondence information. The Fort Mojave Indian Tribe confirmed receiving this information and had no further requests. On December 13, 2019, the Twenty-Nine Palms Band of Mission Indians (Sarah Bliss, Cultural Resources Manager) responded by email requesting cultural resources reports related to the undertaking. The approved ASR was sent to the Twenty-Nine Palms Band of Mission Indians on April 9, 2020. No other responses have been received.

Field survey results and background records searches conducted for the proposed project indicated that surficial deposits throughout the center median have been extensively disturbed by previous roadway construction. Although the exact depth of the prior disturbance is unknown, it is likely that at least the upper five feet of sediment within the APE was previously disturbed. However, given the age and type of mapped soils in the APE, the potential for buried resources exists. Plans for the proposed project indicate a maximum excavation depth of approximately 10 feet.

Caltrans Professionally Qualified Staff has determined that there are resources in the project area that are historical resources for the purposes of CEQA. Specifically, there are four historic period cultural resources within the project APE. There are three historical resources for the purposes of CEQA. As indicated in the HPSR, four historic-period cultural resources were documented within the APE—a historical can scatter (Æ-4090-01H), Desert Training Center/California-Arizona Maneuver Area (DTC/C-AMA), Route 66/National Old Trail Road (CA-SBR-2910H), and Camp Clipper/Camp Essex Divisional Training Camp Complex (CA-SBR-12917H). The small segment of National Old Trails Highway/Route 66 (Goffs Road) (CA-SBR-2910H), a portion of the Camp Clipper/Camp Essex Divisional Training Complex (CA-SBR-12917H), and the DTC/C-AMA were presumed eligible for the project and as such are considered historical resources for the purposes of CEQA. In addition, the entire APE is located within the 18,000-square-mile DTC/C-AMA. Based on the ESA Action Plan prepared for the project, an ESA boundary will be established around the east and west boundaries of CA-SBR-12917H. Furthermore, the Environmentally Sensitive Area (ESA) Action Plan indicated CA-SBR-12917H, in its entirety, will be protected through the establishment of an ESA. An ESA shall also be established around the extant C-Block feature within CA-SBR-2910H, and this feature will be protected in place during implementation of the project. Archaeological monitors will also be present to ensure that ESA barriers are not breached and to enforce the ESA by monitoring project activities within the Archaeological Monitoring Area (AMA). Furthermore, to avoid potential cultural resources during grading and earthwork, no project related activities will occur between PM R102.4 and PM R107.0.

The undertaking will result in No Adverse Effect on CA-SBR-12917H, CA-SBR-62910H, or the DTC/C-AMA. In a letter dated May 28, 2020, SHPO concurred that site AE04090-01H is not eligible for the NRHP and had no objections to Caltrans' finding of No Adverse Effect. Refer to Appendix G for the SHPO concurrence documentation.

**Response to Item c): No Impact.** No human remains were discovered during field surveys conducted for the proposed project, and no formal cemeteries are located within the project site. If buried cultural materials, including human remains, are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. If human remains are discovered, California Health and Safety code (H&SC) Section 7050.5 will be followed, which, in summary, 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 to be Native American, the Native American Heritage Commission will be contacted, who pursuant to PRC Section 5097.98 will then notify the Most Likely Descendent (MLD), as further detailed in measure CR-2.

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

The following measures will be included with implementation of the proposed project.



**CR-1: Treatment of Previously Unidentified Cultural Resources.** If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

**CR-2: Treatment of Human Remains.** In the event that human remains are found, the county coroner shall immediately be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who will then notify the Most Likely Descendent. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

**CR-3: Conduct Archaeological Sensitivity Training for Construction Personnel.** Prior to the initiation of construction, all construction personnel shall be trained, by a qualified archaeologist, regarding the recognition of possible cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources (i.e., ESAs) during construction. The training session will include a handout and will focus on how to identify archaeological resources that may be encountered during earthmoving activities. The training shall inform all construction personnel of the procedures to be followed upon the discovery of cultural materials. All personnel shall be instructed that unauthorized removal or collection of artifacts is a violation of state law.

**CR-4: Environmentally Sensitive Areas.** The entirety of CA-SBR-12917H (Camps Clipper/Essex Divisional Training Camp Complex) and a portion of CA-SBR-2910H shall be protected through the establishment of an Environmentally Sensitive Area (ESA). Fencing will be used as appropriate as determined by the Professional Qualified Staff archaeologist and the Resident Engineer. An ESA exists at PM 119.9 in the northwestern gore area of the Water Road offramp. A C-Block will be protected in place through the establishment of an ESA and will be completely fenced to ensure protection during staging and storage activities.

**CR-5: Periodic Archaeological Resource Spot-Check Monitoring.** Periodic archaeological resource spot-check monitoring shall be conducted by a qualified archaeologist to ensure the ESA fencing around the portions of CA-SBR-12917H (Camps Clipper/Essex Divisional Training Camp Complex) and CA-SBR-2910H (C-Block at PM 119.9 Water Road) within the Area of Direct Impact (ADI) is not breached during ground-disturbing activities associated with the project.

## VI. Energy

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

**Response to Item a), b): No Impact.** The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, as the project involves regrading of existing median cross slopes. The proposed project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency.

Caltrans promotes energy-efficient development by incorporating statewide goals from California's Energy Efficiency Strategic Plan, setting policies, codes, and actions. Implementing these actions would assist in energy conservation and would minimize the impact on climate change.

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

No measures are required for Energy.

## VII. Geology and Soils

Would the project:

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

**Response to Item a.i), a.ii): No Impact.** None of the project segments are near an Alquist-Priolo Special Studies Zone; therefore, no impacts are anticipated. The project site, like most of Southern California, is located in a seismically active area. According to the California Department of Conservation Seismic Hazard Program map, the nearest active faults are the Lavic Lake Fault and the Pisgah-Bullion Fault Zone approximately 60 miles west of the proposed project.

Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, is anticipated to avoid or minimize any significant impacts related to seismic ground shaking. Seismic design would also meet county requirements under the Uniform Building Code. Therefore, through the incorporation of standard seismic design practices, the proposed project would result in no impact because project construction and operation would have no opportunity to rupture a known earthquake fault or cause seismic shaking as the project would consist of regrading the median cross slopes.

**Response to Item a.iii), a.iv), c): No Impact.** The San Bernardino County Land Use Plan General Plan Geological Hazard Overlays Map does not identify any geologic hazards for the project. The project area is not located in an area designated for landslide susceptibility or liquefaction susceptibility. Furthermore, the project is not in an area designated for rockfall or debris flow hazard areas. Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, is anticipated to avoid or minimize any significant impacts related to liquefaction and seismic risk. Seismic design would also meet County requirements under the Uniform Building Code. Therefore, through the incorporation of standard seismic design practices, the proposed project would result in no impact because construction or operation would not cause any seismic-related ground failure, including liquefaction.

**Response to Item b): Less-Than-Significant Impact.** Grading and fill activities during the construction phase of the project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Erosion control measures would be used to address site soil stabilization and reduce deposition of sediments in adjacent surface waters. Typical measures would include the application of soil stabilizers such as soil binders, rock slope protection, velocity dissipation devices, and flared end sections for culverts. To minimize erosion from slopes, existing slopes would only be disturbed when necessary, cut and fill areas would be minimized to reduce slope lengths, soils or formations that would be difficult to restabilize would be avoided, cut and fill areas would be minimized to allow revegetation and limit erosion to preconstruction rates, and slope would be rounded and shaped to reduce concentrated flow. Concentrated flow from the site would be directed to stabilized drains and channels from the project site. The construction schedule would also consider minimizing soil disturbing work during the rainy season.

State jurisdictions require that an approved Storm Water Pollution Prevention Plan (SWPPP) be prepared for projects that involve greater than one acre of disturbance. A SWPPP specifies BMPs that would minimize erosion and keep all products of erosion from moving off site into receiving waters. Earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications, the project SWPPP, and the requirements of applicable government agencies; therefore, the proposed project would result in less-than-significant impacts.

**Response to Item d): No Impact.** The San Bernardino County Land Use Plan General Plan Geological Hazard Overlay Map does not identify any geologic hazards for the project. The proposed project would not create substantial direct or indirect risks to life or property. Any earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications; therefore, the proposed project would result in no impact.

**Response to Item e): No Impact.** Due to the nature of the proposed project, which involves the regrading of the existing median cross slopes along the I-40 median, the proposed project would not affect existing or proposed septic tanks or alternate wastewater disposal systems, nor would the use of septic tanks be involved during construction. Therefore, no impacts would occur.

**Response to Item f): No Impact.** Based on previous land use practices of the area, the surficial deposits through much of the area of direct impact has been extensively disturbed by construction and maintenance associated with I-40. Geological data indicates undisturbed sediments as being characterized by soils that have a low to moderate sensitivity for paleontological resources. The geologic soils of the areas of direct impact are summarized in the table below.

**Table 2. Paleontological Sensitivity**

Soil Series	Possible Age	Sensitivity
Arizo	Young, but older than Tecopa, Rositas, and Carrizo	Low
Cajon	Late Pleistocene or younger	Low-Moderate
Tecopa	Very young	Low
Rositas	Very young	Low
Carrizo	Very young	Low
Nickel	Older than Arizo and Rillito	Low-Moderate
Bitter	Late Pleistocene	Low-Moderate
Rillito	Possibly comparable to Arizo	Low
Gunsight	Older than Arizo and Rillito	Low-Moderate

As the proposed project consists of regrading the median cross slopes of an existing roadway, and the fact that the excavation involved with the median grading and drainage modifications are planned to extend no more than 10 feet below the current ground surface, it is expected that the project would have no effect on paleontological resources.

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

No measures are required for Geology and Soils.

## VIII. Greenhouse Gas Emissions

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

**Response to Items a), b): Less-Than-Significant Impact.** See extensive climate change discussion below.

## IX. Hazards and Hazardous Materials

Would the project:

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

**Response to Items a), b): Less-Than-Significant Impact.** Implementation of the Build Alternative is not expected to result in the creation of any new health hazards or expose people to potential new health hazards, because the project involves regrading the median to flatter slopes. No storage of toxic materials or chemicals would occur, and the project is not anticipated to increase the potential for hazardous materials in the project area. Gore areas within the project limits would be considered for storage of construction equipment during the construction phase. However, no ground disturbance would occur in gore areas, and construction personnel and equipment would access the project site using existing roadways.

Based on the Initial Site Assessment (ISA) prepared for the proposed project, as I-40 has been utilized as a major roadway since 1970, there is potential for aerially deposited lead (ADL) to be

present in soil within the project footprint from historic leaded gasoline emissions, which includes areas of undisturbed soil within the median. Furthermore, multiple bridges and culverts are present along I-40. As such, it is possible that asbestos-containing materials (ACM) were used in components of these structures and that lead based paint (LBP) was applied during construction. Guardrails and signs exist at multiple locations within the project area, primarily occurring at the locations of bridges and intersections. These guardrails and signs are assumed to contain treated wood. Treated wood is typically treated with hazardous preserving chemicals that protect the wood from insect predation and fungal decay.

As indicated in the ISA prepared for the project and based upon the findings of the ISA Checklist completed in 2014, additional investigation for ADL was not required by Caltrans. The ISA Checklist concluded that Standard Special Provisions (SSPs) for Earth Material Containing Lead for non-hazardous soils within the median may be used for the project. The SSPs will require a Lead Compliance Plan. A hazardous materials survey is required for demolition of any structures that are potentially affected by ACMs or LBP. If required, the survey should be conducted under the oversight of a Cal/OSHA Certified Asbestos Consultant and California Department of Public Health (CDPH) lead Inspector/Assessor and will serve to confirm the presence or absence of ACM and LBP through collection of bulk samples and laboratory analysis. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials such as ACMs or LBPs, during demolition.

**Response to Item c): No Impact.** The nearest school to the project site is Needles High School, located approximately 15 miles to the southeast of the project area in the city of Needles. There are no schools within one-quarter mile of the project site; therefore, no impacts would occur.

**Response to Item d): Less Than Significant Impact.** A records search was conducted for preparation of the ISA. The records search was conducted to identify known or suspected environmental concerns or Recognized Environmental Conditions (RECs) that may be associated with the project. As concluded in the ISA, no RECs were associated with the proposed project and the project location is not listed as a Cortese site. Two sites were listed in the database radius search as being within the project footprint:

- N55 Watson (Caltrans), Route 40 Post Mile 105 through 106, Essex, CA. This site was listed as an active National Pollutant Discharge Elimination System (NPDES) site as of March 2018. The NPDES program is a permitting system created to help address water pollution by regulating point sources that discharge pollutants to waters of the United States. The site was listed as a permitted facility for the stormwater control measures implemented for current construction at this site. No violations were found with regards to the listing. Additionally, the site was listed under the California Integrated Water Quality System (CIWQS) database for the current construction of the N55 Watson construction areas of the site. The CIWQS database is used by the State and Regional Water Quality Control Boards to track places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities. The site was listed as a “Construction” project type. No violations were found with regard to this listing.

- Pistol Range Complex, Essex, CA. The database search indicated that a portion of the project was listed on the unexploded ordinance (UXO) sites database. The site is identified as a small arms range at Camp Essex. The Department of Defense lists the site as a Formerly Used Defense Sites (FUDS) listing. The FUDS database includes locations of FUDS properties where the USACE is actively working or will take necessary cleanup actions. An area including and surrounding the project area along the western extent of the I-40 is noted as the Camp Essex-Cantonment Area, which was used by the military between 1942 and 1944 for the training and conditioning of troops and the testing of military equipment as part of the California-Arizona Maneuver Area. The Camp Essex-Cantonment Area contained 19 firing ranges, including ranges for small arms, hand grenades, and mortars. The current alignment of I-40 traverses the former Camp Essex Pistol Range #1 just west of the John Wilkie Rest Stop. Pistol Range #2 was located adjacent to and southwest of Pistol Range #1 and 1,000 feet south of I-40. I-40 also traverses the former Camp Essex encampments, including both the former Camp Clipper Encampment and Camp Essex Encampment. Explosives were not detected in soils samples collected from Pistol Range #1 and #2. As no munition constituents contamination was noted within the area surrounding the project, the areas are not expected to present an environmental concern. However, munitions debris was observed in and just outside three of the munitions response sites, and historical findings in the area indicate that the potential presence of munitions debris is considered likely by the USACE.

Seven sites were listed in the database search as being within the project vicinity. Four of the seven sites were not found to pose hazardous waste impacts, and the remaining three sites are described below. The radius search area included the project limits and a one-mile radius from the project limits.

- American Tower Corp – Fenner Spring, CA. The site is located approximately 400 feet south of the project. The site is listed as an active “hazardous materials 1-3 chemicals special.” The San Bernardino County Permit database includes information regarding the site as having a hazardous materials permit, underground storage tanks (USTs), medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers. There are no notices of violations indicating releases or spills of hazardous materials at the site. The site is not considered to be a REC or environmental concern to the proposed project.
- Impact Area/Grenade Court Complex/Rifle Known Distance Range/Ward Valley Anti-Tank Mines, Essex, CA. As previously mentioned, the area surrounding the project area along the western extent of I-40 was noted as the Camp Essex-Cantonment Area, which was used by the military between 1942 and 1944 for the training and conditioning of troops and the testing of military equipment as part of the California-Arizona Maneuver Area.
- High Desert Oasis Chevron, 31251 Goffs Road, Essex, CA. This site is located approximately 877 feet north of the proposed project. The site was listed on the UST database with San Bernardino County. The site is listed as a hazardous waste generator and underground storage tank facility. No violations were noted regarding this site.

As included below, and based on the findings of the ISA prepared for the project, implementation of measure HAZ-1 and HAZ-2 would be required.

**Response to Items e), f): No Impact.** The project is not in the vicinity of any airports, and the proposed project would not result in a safety hazard or excessive noise for people residing or working in the area. A small portion on the western end of the project site is located within an area designated as an Airport Safety Review Area 4 (AR4) based on the San Bernardino County Land Use Plan General Plan Hazard Overlays map. Based on the County of San Bernardino General Plan Safety Element, Table S-5, a variety of land uses—including residences, schools, sports arenas, parks, office buildings, commercial centers, agriculture, and recreation—in the AR4 safety area are considered Normally Acceptable or Clearly Acceptable. The project consists of regrading the median cross slopes of an existing roadway. As such, the project would not be incompatible with an Airport Safety Review area. Additionally, the project would not contain any skyward features that would interfere with any air traffic flight paths or other airport activities. As the proposed project would result in the regrading of the existing median cross slopes of an existing roadway, the proposed project is not anticipated to impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Applicable traffic controls, such as signage and flag person, as identified in the Transportation Management Plan (TMP), would be implemented to minimize potential interference with any adopted emergency response plan or evacuation plan. No impacts would occur.

**Response to Item g): No Impact.** The project consists of rural desert flora and fauna, with limited sources or potential to result in fires. Based on the California Department of Forestry and Fire Protection (Cal Fire) Fire Hazard Severity Zones Map for the County of San Bernardino, the project is located in an area designated as Other Moderate and Local Responsibility Area (LRA) Moderate. The proposed project is not in or near any areas designated as LRA Very High, or LRA High areas of the fire hazard severity zones. Furthermore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

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

The following measures would be implemented for Hazards and Hazardous Materials:

**HAZ-1:** The following will be included in the PS&E package:

- HAZ-1A: SSP 14-11.14 For the Removal and Disposal of Treated Wood Waste Such as Sign Post and Guardrails
- HAZ-1B: SSP 36-4 Residue Containing Lead from Paint and Thermoplastic
- HAZ-1C: SSP 7-1.02K(6)(J)(iii) for Lead Compliance Plan

**HAZ-2:** Based upon discussions with the U.S. Army Corps of Engineers (USACE) and the California Department of Toxic Substances Control (DTSC), the Initial Site Assessment (ISA) prepared for the project recommends the following be implemented as related to the Camp Essex Formerly Used Defense Sites (FUDS) site:



- The contractor should be provided relevant documents pertaining to the FUDS site and prepare a site-specific health and safety plan for the project. As part of the contractor's health and safety program, it is recommended that contractor personnel undergo unexploded ordinance site (UXO) training prior to conducting earthwork.
- Construction monitoring and/or employing a UXO technician during earthwork at the FUDS site are at the discretion of Caltrans and not required. However, a UXO technician should be on the project team in some capacity to conduct training and perform site visits, if necessary.

**HAZ-3:** A hazardous materials survey is required for demolition of any structures that are potentially affected by ACMs or LBP. If required, a survey should be conducted under the oversight of a Cal/OSHA Certified Asbestos Consultant (CAC) and California Department of Public Health (CDPH) lead Inspector/Assessor and will serve to confirm the presence or absence of ACM and LBP through collection of bulk samples and laboratory analysis. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials during construction.

## **X. Hydrology and Water Quality**

Would the project:

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

**Response to Item a): Less-Than-Significant Impact.** The potential temporary effects of the proposed project on the quality of the water in the area would come from runoff during construction, including erosion. The NPDES permits issued by the RWQCB set limits on discharges, schedules for compliance, special conditions, and monitoring programs. These permits also limit discharges, set water quality standards, and establish a monitoring program of the waste discharge. Grading and trenching during the construction of the project would require the removal of vegetation and moving of soils. All grading improvements would occur within the median and limited to the inner edge of pavement to inner edge of pavement and before washes.

This would temporarily increase the exposure of soils to wind and water erosion and could increase the amount of sediments entering downstream drainages and waterways. Sediments can adversely affect water quality and negatively affect fish, aquatic plants, and other organisms. Gore areas within the project limits are considered for storage of construction equipment; however, no ground disturbance would occur in gore areas. Furthermore, construction personnel would access the project site using existing roadways.

As the project would be constructed within existing Caltrans right of way, the California Statewide NPDES Permit No. CAS000003 as amended in Order No. 2014-0077-DWQ would apply to this project. Coverage under the Construction General Permit (CGP) for stormwater discharges associated with construction activities and land disturbance activities NPDES No. CAS 000002 would also be required during the construction phase of the project. This project would require notification to the State Water Resources Control Board via the Stormwater Multi-Application Tracking System (SMARTS).

A SWPPP will be prepared for the project to control pollutants, and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction. Temporary construction site BMPs would be implemented to reduce or eliminate pollutants in storm water discharges. Temporary construction site BMPs may include, but are not limited to, temporary soil binders, temporary check dams, temporary fiber rolls, temporary hydraulic mulch, temporary drainage inlet protection, temporary construction entrances, street sweeping, rain event action plans, and storm water sampling and analysis. A site-specific Construction Site Monitoring Program will be developed as part of the SWPPP prior to the start of construction and revised as necessary to reflect project revisions.

The project would use stormwater controls, as required, to minimize the amount of roadway pollution from the project area during construction. Compliance with the NPDES requirements would further reduce such polluting impacts. Projects within Caltrans' right of way are obligated to comply with the latest Caltrans and RWQCB water quality standards relative to the treatment of post-construction stormwater runoff. Determination and implementation of BMPs within the right of way are defined based on the evaluation of existing site constraints, constituents of concern at the receiving waters, soil conditions, and hydraulic conditions. Prior to approval of the final design of the project, applicable post-construction BMPs would be identified to ensure that applicable Caltrans selection and siting criteria have been achieved. Deployment of BMPs would reduce long-term water quality impacts due to implementation of the proposed project. Therefore, less-than significant water quality impacts are anticipated.

**Response to Item b): No Impact.** According to the California Department of Water Resources, the project limits are within the Colorado River Basin and specifically located on the Fenner Valley groundwater basin and Ward Valley groundwater basin. Furthermore, according the Department of Natural Resources Water Data Library, the historic groundwater elevation at the site is approximately 530 feet below ground surface (bgs), as determined near the center of the project. The project would be within an area of rural desert without infrastructure or utilities. It is

not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project is not expected to affect the amount of water consumed regionally through increased withdrawals from groundwater sources.

**Response to Items c (i), (ii), (iii), iv): Less-Than-Significant Impact.** The natural topography of the project site contains a moderate number of hills throughout the project limits. The natural terrain generally flows from east to west in the southern direction. The project also contains a few washes that direct sediment and the flow of water downstream. The project would improve the existing median cross slope within the median of I-40. Cross slope standards require a median slope of 10:1 or flatter from edge of pavement to median in both directions. Drainage modifications and improvements would consist of extending existing culverts or adjusting existing risers as a result of changes in grading. Based on the hydrologic and hydraulic analysis conducted by the Drainage Evaluation Report for the project, the median regrade improvements are not expected to significantly affect the existing drainage flow or existing drainage structures. It was also determined by the Drainage Evaluation Report that the proposed improvements would not negatively affect downstream waterways because the proposed grading is greatly similar to the existing conditions and will have enough capacity to capture the design flow. Furthermore, BMPs would be designed and implemented to reduce the discharge of pollutants from the Caltrans storm drain system to the Maximum Extent Practicable (MEP). Permanent treatment controls would be implemented to address the stormwater impacts caused by the project. Erosion control measures also would be used to address site soil stabilization and reduce deposition of sediments into adjacent surface waters. Typical measures would include the application of soil stabilizers, such as soil binders, rock slope protection, velocity dissipation devices, and flared end sections for culverts. Temporary water pollution control and permanent erosion control plans will be provided during the PS&E design phase of the project.

To minimize erosion from slopes, existing slope would only be disturbed when necessary and cut and fill areas would be minimized to reduce slope lengths. The soil or formations that would be particularly difficult to stabilize would be avoided, and cut and fill areas would be minimized to allow revegetation and limit the erosion to preconstruction rates. The preservation of existing vegetation would be maximized to reduce the amount of clearing and grubbing that would be required. Furthermore, slopes would be rounded and shaped to reduce concentrated flows, and flows would be directed to stabilized drains and channels from the project site.

As the proposed project includes modifications and improvements to drainages and may result in runoff or discharge into waters of the United States, a Section 401 Water Quality Certification may be required from the Colorado River RWQCB. Additional permits that may be required include a Section 404 permit from the USACE, and a CDFW 1602 Streambed Alteration Agreement.

The project is not expected to have any significant impacts on water quality with implementation of measures **WQ-1** through **WQ-4**. A less-than-significant impact would occur as a result of increased runoff, altered drainage patterns, or water quality degradation.

**Response to Item d): No Impact.** Based on the FEMA Flood Insurance Rate Map (FIRM), the proposed project is located within an area designated as Zone D. Flood risk is indicated on FIRM maps with letters. Areas designated with letters B, C, or X represent moderate and low risk areas. Flood zones identified by letters A or V represent high risk areas. The Zone D designation is used for areas where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted. These are common in rural areas where no mapping has been prepared. Based on the nature of the project, which involves regrading of an existing median, the project would not risk the release of pollutants due to project inundation under these conditions.

**Response to Item e): No Impact.** As the project proposes to regrade the existing median cross slopes from existing gradient conditions, which vary from 2:1 gradient to 6:1 or steeper, to a proposed 10:1 gradient or flatter on I-40, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impervious surface is being added, and the project would not require modification or removal of any existing impervious surface area. Furthermore, all project improvements would occur within Caltrans right of way and no additional right of way would be required for the project.

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

The following standard measures will be included for Hydrology and Water Quality:

**WQ-1:** Prior to the start of construction, a SWPPP for reducing impacts on water quality shall be developed by the contractor and approved by the Department.

**WQ-2:** The SWPPP control measures shall address the following categories: soil stabilization practices, sediment control practices, sediment tracking control practices, wind erosion control practices, and non-storm water management and waste management and disposal control practices.

**WQ-3:** The contractor shall be required to comply with water pollution control provisions and SWPPP and conform to the requirements of the Department's Standard Specification Section 7-1.01G "Water Pollution," of the Standard Specifications.

**WQ-4:** If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted.

## **XI. Land Use and Planning**

Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

**Response to Items a): No Impact.** The proposed project would not physically divide an established community as none exists in the project area. The proposed project consists of regrading the median cross slopes. No additional right of way would be required. No impacts on existing established communities are anticipated.

**Response to Item b): No Impact.** As the proposed project involves the regrading of existing median cross slopes, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project improvements would occur within Caltrans right of way and no additional right of way or detours would be required for the project.

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

No measures are required for Land Use and Planning.

## **XII. Mineral Resources**

Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

**Response to Items a), b): No Impact.** The Mineral Land Classification Map of the Kerens, Flynn, and Colton Well 15 Minute Quadrangle Map and the Mineral Land Classification of the Kerens, Flynn, and Colton Well 15 Minute Quadrangles Special Report 168 indicate that a small portion of Clipper Mountain to the south of the project site is classified as MRZ-3a. The California State Mining and Geology Board has designated MRZ-3a as an area likely to contain undiscovered mineral deposits similar to known deposits in the same producing district or region. An area to the east of Clipper Mountain has a designation of MRZ-4, which is defined as areas where geologic information does not rule out either the presence or absence of mineral resources. There are no classified or designated mineral deposits of statewide or regional significance that are known to occur within the project area. Also, the project is located outside of mineral resource recovery sites; therefore, no impacts are anticipated to occur.

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

No measures are required for Mineral Resources.

### **XIII. Noise**

Would the project result in:

<b>Question</b>	<b>CEQA Determination</b>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

**Response to Item a): No Impact.** The John Wilkie Safety Rest Area at Fenner is located off eastbound and westbound of I-40 at approximately PM 105. The rest area provides bathrooms and parking for cars and large trucks. The Hi Sahara Oasis Gas Station is located off of Goffs Road along I-40 along with structures in an adjacent area. The project is not adjacent to or within a community. No construction noise impacts are anticipated to occur to visitors of the John Wilkie Safety Rest Area, Hi Sahara Oasis Gas Station, and adjacent structures because no construction would occur in this area. No disturbance of median material will occur between PM 100.8 and PM 107.8 to avoid potential cultural resources. No other construction-related noise impacts would occur because there are no other residence or businesses along the remaining project site. Construction personnel would access the project site using existing roadways. Additionally, construction noise would be short term and intermittent—only lasting during the construction period—and construction would be conducted in accordance with Caltrans Standard Specifications Section 14.8-02 (measure **NOI-1**).

The project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies.

**Response to Item b): No Impact.** Any groundborne noise or vibration would be limited to the construction period and would be short in duration. Because there are no noise- or vibration-sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specifications as outlined in **NOI-1**, no impacts would occur.

**Response to Item c): No Impact.** The proposed project is not located within two miles of a public airport; however, a small portion of the western end of the project site is located within an area designated as an Airport Safety Review Area 4 (AR4). The nearest public airport is the Needles Airport located in the city of Needles approximately 15 miles southeast of the project site. The project would not expose people residing or working in the project area to excessive noise levels, and no receptor locations would experience a substantial increase over their corresponding existing noise levels; therefore, no impacts are anticipated to occur.

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

The following Noise measures would be implemented to minimize potential impacts located in Caltrans' provisions in Section 14-8, "Noise Control," of the 2018 Standard Specifications and Special Provisions:

**NOI-1:** The contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.

**NOI-2:** Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler or a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

#### **XIV. Population and Housing**

Would the project:

<b>Question</b>	<b>CEQA Determination</b>
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

**Response to Item a): No Impact.** The project consists of regrading the median cross slopes and would not induce population growth in the area, either directly or indirectly. The project would not result in any construction of new homes businesses, nor would the project result in the need for roads or other infrastructure that would facilitate an increase in population. No impacts are anticipated in this regard.

**Response to Items b): No Impact.** The project would not require any additional right of way because the project would occur in the median of I-40. Furthermore, no residents or businesses would need to be relocated as a result of implementing the project. The proposed project would not necessitate the relocation of any existing developments and/or people. No impacts are anticipated in this regard.

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

No measures are required for Population and Housing.

## **XV. Public Services**

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

<b>Question</b>	<b>CEQA Determination</b>
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

### ***Fire Protection***

**Response to a) Fire Protection: No Impact.** The County of San Bernardino Fire Department provides fire protection in the project vicinity. The nearest fire stations are the Needles Station #32 located at 1113 East Broadway Street in the city of Needles and the Havasu Landing Station #18 located at 148808 Havasu Lake Road in the city of Needles. The proposed project involves safety improvements to an existing highway by providing a clear recovery zone area. Flattening the existing median cross slopes would improve the safety of the traveling public. The proposed project would not result in an increase in population and therefore would not increase the demand for community services. In addition, the proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. No fire stations would be acquired or displaced.

### ***Police Protection***

**Response to a) Police Protection: No Impact.** The San Bernardino County Sheriff's Department, and California Highway Patrol (CHP), as appropriate, provide police protection in the project vicinity. The nearest sheriff's station is the Colorado River Patrol Station located at 1111 Bailey Avenue in the city of Needles. The project would result in the regrading of the median cross slopes and result in a safer traversable and recoverable transition back onto I-40 for the traveling public. The proposed project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional police protection. No impacts on police protection from operation of the proposed project would occur.

Implementation of a construction-period TMP (**TRF-1**, refer to Section XVII for measure), which is prepared for all Caltrans highway projects, would ensure that access is maintained to and from the project area and that the police service providers are notified prior to the start of construction activities; therefore, there are no anticipated impacts.



### **Schools**

**Response to a) Schools: No Impact.** The nearest school site is the Needles High School, located more than 15 miles southeast in the city of Needles. The proposed project would not result in accessibility problems to existing schools in the vicinity of the project and is not expected to result in any other impacts on school services.

### **Parks**

**Response to a) Parks: No Impact.** The Mojave National Preserve, Piute Mountains Wilderness area, and the Bigelow Cholla Garden Wilderness area border the I-40 alignment but would not be affected by either construction or operation of the project. The majority of the surrounding land directly to the south of the alignment is owned by BLM. However, no right of way is expected for this project and there are no impacts on parks.

### **Other Public Facilities**

**Response to Other Public Facilities: No Impact.** There are no other public facilities in the immediate project area and, as such, there would be no impacts on public facilities as a result of construction or operation of the project.

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

No measures are required for Public Services.

## **XVI. Recreation**

<b>Question</b>	<b>CEQA Determination</b>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

**Response to Items a), b): No Impact.** The project consists of regrading the median cross slopes along I-40. As such, project implementation does not have the capacity to generate a substantial increase of use to any existing neighborhood, regional parks, or other recreational facilities such that substantial physical deterioration would occur, nor would it require the construction or expansion of existing recreational facilities.

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

No measures are required for Recreation.

## XVII. Transportation

Would the project:

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

**Response to Items a), b): No Impact.** The project is a safety improvement project that would regrade the median on I-40 to improve the Clear Recovery Zone (CRZ) and reduce the risk of overturn accidents in the median. No additional right of way or detour routes are required for this project. During the construction phase, construction personnel traveling to and from the construction site would access the project site using existing roadways; however, this slight increase in traffic is considered to be minor and similar to existing roadway conditions currently experienced along I-40. The project would not increase traffic because no new land uses are proposed. The project would accommodate existing traffic demand, but it would not create new demand, directly or indirectly. The project would also not reduce congestion and/or improve the level of service of traffic. The proposed project would not conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. No impacts are anticipated in this regard.

**Response to Item c): No Impact.** The project would consist of regrading the existing median cross slopes on I-40 and would not increase hazards due to a geometric design feature or incompatible uses as none are proposed for this project. The project would improve the safety of the traveling public by regrading the median cross slopes within the clear recovery zone. No impacts are anticipated in this regard.

**Response to Item d): Less-Than-Significant Impact.** Construction activities may have the potential to result in temporary, localized, site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles during construction; however, the proposed project would include the preparation and implementation of a TMP (measure **TRF-1**), which would avoid or minimize any potential impacts. No detour routes would be required during project construction. Impacts would be less than significant during the construction period. Upon completion of the project, the flattening of the existing median cross slopes would improve the safety of the traveling public and also improve access for emergency vehicles traveling through the area and result in a beneficial project impact.

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

The following avoidance and/or minimization measure would be implemented to minimize potential traffic impacts.

**TRF-1:** Prior to construction, a Traffic Management Plan will be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.

## **XVIII. 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:

<b>Question</b>	<b>CEQA Determination</b>
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	No Impact
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.	No Impact

**Response to Item a): No Impact.** The NAHC was contacted in September 2019 to obtain cultural resource information available in the Sacred Lands File. In a reply dated October 2019, the NAHC indicated that the Sacred Lands File search for the project was completed with negative results. Furthermore, four Native American tribes were contacted to obtain information regarding any cultural resources within the project area. The tribes contacted were the Chemehuevi Indian Reservation, Colorado River Indian Tribe, Fort Mojave Indian Tribe, and the Twenty-Nine Palms Band of Mission Indians. Initial letters were sent to the four tribes on October 7, 2019, and follow-up phone calls and emails were sent on November 12 and December 11, 2019. The Fort Mojave Indian Tribe responded on December 13, 2019 with a request for additional information. In response, associated project information was sent to the Fort Mojave Indian Tribe in December 2019. No additional responses have since been received from the Fort Mojave Indian Tribe. The Twenty-Nine Palms Band of Mission Indians responded on December 13, 2019 with a request that any cultural resources reports be provided when available. In response, the approved ASR was sent to the Twenty-Nine Palms Band of Mission Indians on April 9, 2020. No additional responses have since been received from the Twenty-Nine Palms Band of Mission Indians. No Tribal Cultural Resources have been identified as within the project site based on the records search conducted for the project. As such, no impacts on Tribal Cultural Resources are anticipated.

**Response to Item b): No Impact.** There are no significant resources for a California Native American tribe identified near or within the project study area.

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

No measures are required for Tribal Cultural Resources.

## **XIX. Utility and Service Systems**

Would the project:

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

**Response to Item a): No Impact.** The project consists of regrading the median cross slopes on I-40 from PM R100.0 to R125.0. As part of the project, drainage modifications and improvement work will consist of adjusting existing inlets and extending existing culverts within the median. However, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No impacts would occur in this regard.

**Response to Item b): No Impact.** Due to the nature and scope of the proposed improvements, which consist of regrading the existing median cross slopes, no impacts are anticipated to water supplies.

**Response to Item c): No Impact.** The project is not expected to increase the demand for wastewater treatment providers or result in inadequate capacity for wastewater treatment providers beyond their current existing commitments because the project would not require wastewater treatment. As the project consists of regrading the existing median cross slopes along I-40, construction activities would not be expected to increase capacity of existing wastewater treatment facilities. As such, no impacts are anticipated in this regard.

**Response to Item d): No Impact.** The proposed project consists of regrading the existing median cross slopes and would require fill material and modification to the existing drainage facilities. Due to the nature of the project improvements, the project would generate a minimal amount of solid waste. Furthermore, it is Caltrans' policy to recycle construction materials whenever possible. As such, the project would not impair the attainment of the state's solid waste reductions goals.

**Response to Item e): No Impact.** The proposed project would require the use of a local landfill, if applicable, to dispose of construction materials. The use of local landfills would be temporary

during construction. It is Caltrans' policy to recycle materials whenever possible, and the project is expected to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

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

No measures are required for Utility and Service Systems.

### **XX. Wildfire**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

**Response to Item a), b), c), d): No Impact.** The project would not impair an adopted emergency response plan or emergency evacuation plan. The project consists of regrading the median cross slopes and improve the clear recovery zone. Flattening of the existing median cross slopes would improve the safety of the traveling public. The project would not exacerbate wildfire risks and, as there are no structures proposed with the project, would not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the Cal Fire, Fire Hazard Severity Zones Map for the County of San Bernardino, the project is located in an area designated as Other Moderate and Local Responsibility Area (LRA) Moderate. The proposed project is not located in or near any areas designated as LRA Very High, or LRA High areas of the fire hazard severity zones. In addition, the project is not located in an area designated as High or Very High on the Fire Hazard Severity Zones in State Responsibility Areas map adopted by CALFIRE. Therefore, the proposed project is not anticipated to exacerbate wildfire risks. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk and would not result in temporary or ongoing impacts on the environment. Furthermore, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

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

No measures are required for Wildfire.

## XXI. Mandatory Findings of Significance

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

**Response to Item a): Less-than-Significant Impact with Mitigation Incorporated.** The project area contains suitable habitat for desert tortoise, a species listed as threatened by the USFWS and CDFW. During surveys, one desert tortoise was observed and other signs of desert tortoise presence were observed within the project median. Currently, exclusionary fencing exists between PM 108.0 to PM 125.0; however, desert tortoise have the potential to occur where no fencing exists. Caltrans is seeking a *may affect, likely to adversely affect* determination for desert tortoise. Impacts on desert tortoise are anticipated to be less than significant with the implementation of measures BIO-1, BIO-2, BIO5 to BIO-28, and BIO-38. Signs of desert bighorn sheep were observed during surveys; however, the project construction would not affect this species with the implementation of measures BIO-1, BIO-2, BIO-20, BIO-21, BIO-22, and BIO-38. No other fish or wildlife species were observed or detected during surveys. I-40 runs through the California Desert Linkage Network, which is an ecological connectivity network for wildlife to access essential habitat and resources. However, no bridge work will occur as part of the proposed project and no work is proposed within the channel washes that flow under the bridges.

**Response to Item b): No Impact.** The cumulative projects in the area include the Interstate 40 Regrade Existing Median Project, which consists of regrading the existing I-40 median cross slope along 29.6 miles between PM 125.0 and PM 154.6 on I-40. The public review period for the I-40 Regrade Existing Median Project ended in October 2018. As the project is located in a rural area of San Bernardino County, in conjunction with the relatively minor construction activities involving flattening of the median cross slopes, cumulatively considerable impacts as a result of the project are not anticipated to occur. A TMP would be implemented for each project during construction. No other cumulative projects are anticipated to occur in the vicinity. With implementation of measure TRF-1, cumulative impacts are not anticipated to occur.

**Response to Item c): No Impact.** The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. The project

would improve the safety for the traveling public by flattening the existing median cross slopes. The project would improve the safety of motorists by providing a clear recovery zone area.

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

No measures that have not already been identified for other topics are required for Mandatory Findings of Significance.

## Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), and various hydrofluorocarbons (HFCs). CO<sub>2</sub> is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO<sub>2</sub>.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

## Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

### ***Federal***

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom



line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

## **State**

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California’s GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB readopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor’s 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State’s long-range transportation plan to identify strategies to address California’s climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e).<sup>1</sup> Finally, it requires the Natural Resources Agency to update the state’s climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared “it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state’s greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies,

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<sup>1</sup> GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO<sub>2</sub> is the most important GHG, so amounts of other gases are expressed relative to CO<sub>2</sub>, using a metric called “carbon dioxide equivalent” (CO<sub>2</sub>e). The global warming potential of CO<sub>2</sub> is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO<sub>2</sub>.

regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands.”

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state’s goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California’s climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

## **Environmental Setting**

The proposed project is in a rural area, along I-40 from PM R100.0 to PM R125.0 within the County of San Bernardino. I-40 is the main transportation route to and through the area for both passenger and commercial vehicles. It traverses portions of California, Arizona, New Mexico, Texas, Oklahoma, Arkansas, Tennessee, and North Carolina, providing a major transcontinental transportation corridor linking southern California with the East Coast while carrying high volumes of truck traffic transporting goods across the nation. Within the project limits, I-40 consists of a four-lane divided freeway with a dirt median, which varies in width, separating the roadbeds. The surrounding area consists of undeveloped desert land.

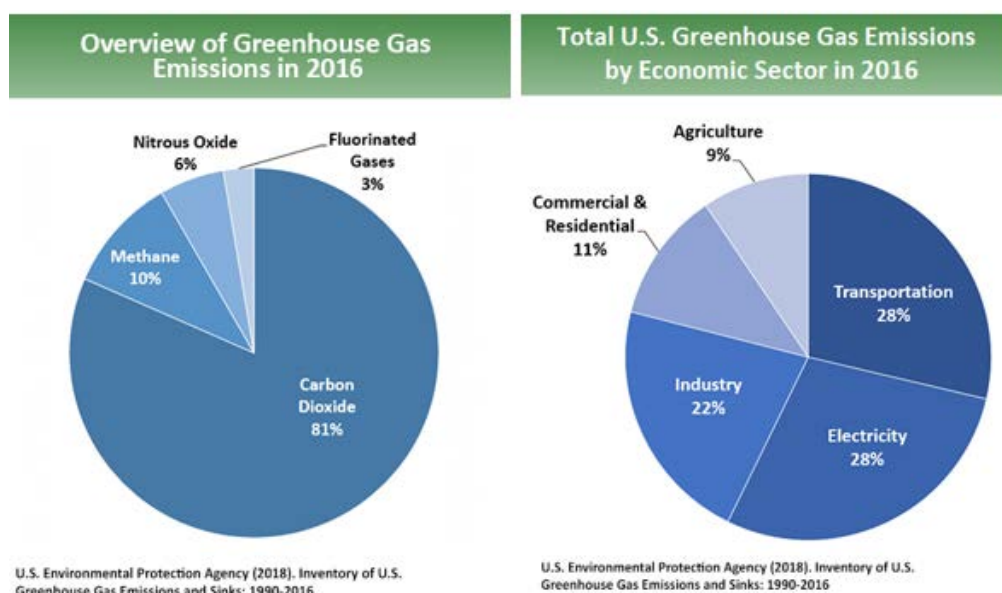
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for

documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

### **National GHG Inventory**

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, perfluorocarbons, SF<sub>6</sub>, and nitrogen trifluoride. It also accounts for emissions of CO<sub>2</sub> that are removed from the atmosphere by “sinks” such as forests, vegetation, and soils that uptake and store CO<sub>2</sub> (carbon sequestration). The 1990–2016 inventory found that of 6,511 MMTCO<sub>2</sub>e GHG emissions in 2016, 81% consist of CO<sub>2</sub>, 10% are CH<sub>4</sub>, and 6% are N<sub>2</sub>O; the balance consists of fluorinated gases (EPA 2018). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

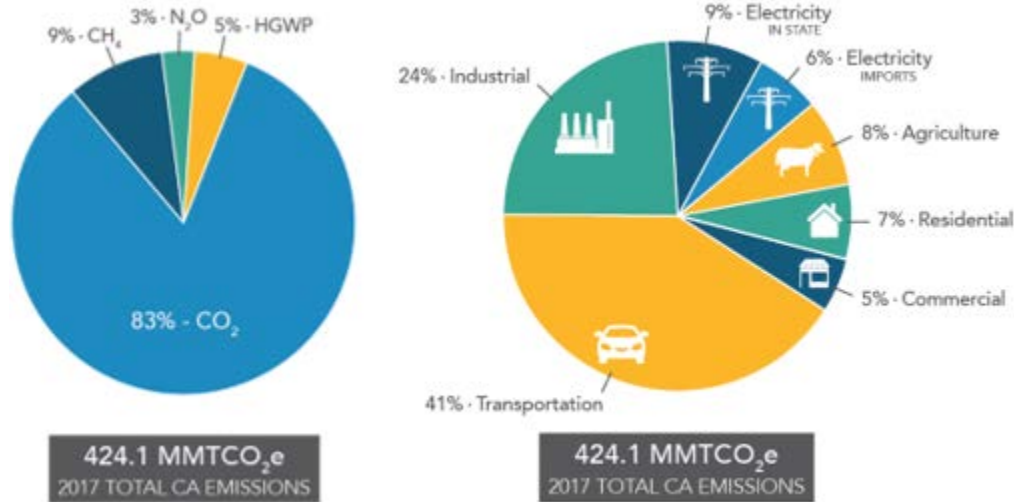
**Figure 4. U.S. 2016 Greenhouse Gas Emissions**



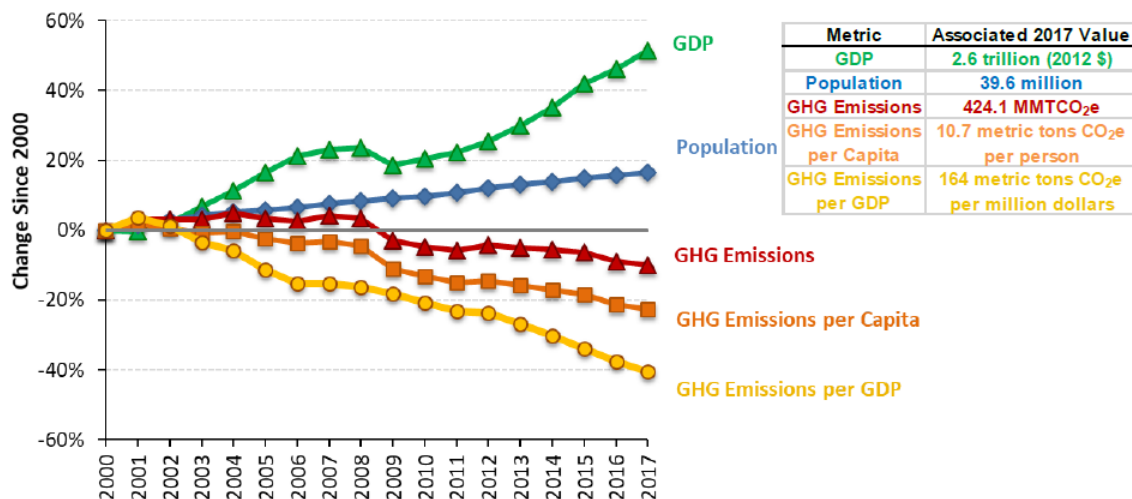
### **State GHG Inventory**

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state’s progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO<sub>2</sub>e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a).

**Figure 5. California 2017 Greenhouse Gas Emissions**



**Figure 6. Change in California GDP, Population, and GHG Emissions since 2000**  
(Source: ARB 2019b)



AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every five years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

### **Regional Plans**

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG

emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 8 percent and 19 percent for the years 2020 and 2035, respectively (ARB 2019c). SCAG and San Bernardino County policies directed at reducing GHG emissions include the following, among other measures.

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments <i>2016-2040 Regional Transportation Plan/Sustainable Communities Strategy</i> (adopted April 2016)	<ul style="list-style-type: none"> <li>• Encourage bicycle and pedestrian improvements and efficient transportation infrastructure.</li> <li>• Invest in adding capacity and improving critical road conditions.</li> <li>• Invest in long-term emission-reduction investments for trucks and rail.</li> <li>• Implement technology and mobility innovations.</li> <li>• Expand regional express lanes.</li> </ul>
<i>San Bernardino County Regional Greenhouse Gas Reduction Plan</i> (adopted March 2014)	<ul style="list-style-type: none"> <li>• Roadway improvements, including signal synchronization and transportation flow management.</li> <li>• Provide a comprehensive system of facilities for non-motorized transportation.</li> <li>• Expand renewable fuel/low-emission vehicle use.</li> <li>• Anti-idling enforcement.</li> <li>• Electric-powered construction equipment.</li> </ul>

## Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. CO<sub>2</sub> emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

## ***Operational Emissions***

The purpose of the proposed project is to regrade an existing median and will not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on I-40, it would not likely lead to a substantial or measurable increase in vehicle travel, and therefore does not require a travel analysis. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

## ***Construction Emissions***

Construction GHG emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved TMPs, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction-period GHG emissions were modeled using the Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model, version 9.0.0. Short-term construction activities would result in GHG emissions from fuel combustion associated with off and on-road construction equipment and vehicles, which would result in emissions of approximately 700 metric tons of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e)<sup>2</sup> during the project construction period, which was estimated at 132 working days.

The project would comply with all MDAQMD emissions control requirements during construction. In addition, All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. In addition, a TMP would be implemented to minimize traffic delays during construction.

## **CEQA Conclusion**

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed

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<sup>2</sup> Because GHGs differ in how much heat each traps in the atmosphere, and CO<sub>2</sub> is the most important GHG, amounts of other gases are expressed relative to CO<sub>2</sub>. Measurements are then summed to yield a total in metric tons of CO<sub>2</sub>-equivalent over a given time period. The Road Construction Emissions model calculates only CO<sub>2</sub>, methane, and nitrous oxide.

project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

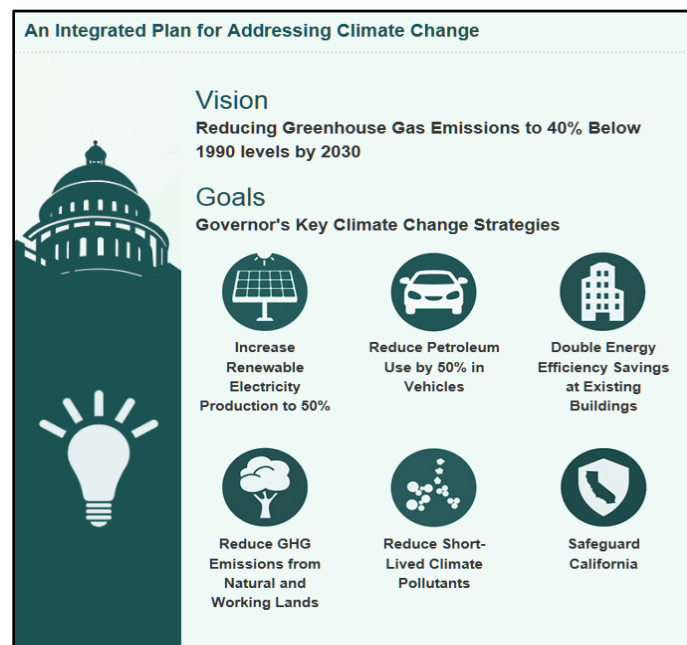
Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

## Greenhouse Gas Reduction Strategies

### Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

**Figure 7. California Climate Strategy**



The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. A key state



goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

### **Caltrans Activities**

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

### **California Transportation Plan (CTP 2040)**

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO<sub>2</sub> reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

### **Caltrans Strategic Management Plan**

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

### **Funding and Technical Assistance Programs**

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

### **Caltrans Policy Directives and Other Initiatives**

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

### **Project-Level GHG Reduction Strategies**

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

Grading will be accomplished by redistributing soil within project limits, thereby achieving earthwork balance and avoiding the need to transport earthen materials and the associated transportation emissions.

Standard project measures incorporated into the proposed project, such as the use and maintenance of construction equipment in accordance with Caltrans' Standard Specifications, Section 14-9.02, ARB commercial vehicle idle regulations, and manufacturers' specifications would reduce GHG emissions from diesel-powered construction vehicles.

### **Adaptation**

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

## **Federal Efforts**

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

## **State Efforts**

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California’s Fourth Climate Change Assessment* (2018) is the state’s effort to “translate the state of climate science into useful information for action” in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

*Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

- *Adaptive capacity* is the “combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.”

- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the “capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.” Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the “susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt.” Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate “sea-level rise (SLR) projections into planning and decision making for projects in California” in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

### ***Caltrans Adaptation Efforts***

#### **Caltrans Vulnerability Assessments**

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

### ***Project Adaptation Analysis***

Climate-change risk analysis involves uncertainties as to the timing and intensity of potential risks.

#### **Sea-Level Rise**

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts on transportation facilities due to projected sea-level rise are not expected.

#### **Floodplains**

The proposed project is not in or near a floodplain. The Caltrans Climate Change Vulnerability Assessment for District 8 maps projected changes in 100-year storm precipitation depths under climate change scenario. In the project area, storm depth is projected to change by less than 5%

through 2085. Drainage facilities and culverts will be modified to accommodate the new gradient and will retain capacity to capture design flows. Effects of climate change on precipitation are not likely to adversely affect the project.

### **Wildfire**

The area surrounding the proposed project is undeveloped desert with sparse vegetation. Based on the Cal Fire, Fire Hazard Severity Zones Map for the County of San Bernardino, the project is located in an area designated as Other Moderate and Local Responsibility Area (LRA) Moderate. The proposed project is not in or near any areas designated as LRA Very High, or LRA High fire hazard severity zones. The project would not introduce new structures or uses that would exacerbate fire risk or be vulnerable to fire damage. Caltrans 2018 revised Standard Specification 7-1.02M(2) mandates fire prevention procedures during construction, including a fire prevention plan. The project will not impair emergency response vehicles or emergency evacuation. Accordingly, the project is not anticipated to exacerbate the impacts of wildfires intensified by climate change.

# Public Involvement, Draft IS Circulation, and Response to Comments

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Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings and Project Development Team (PDT) meetings. This section summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

## **U.S. Fish and Wildlife Service**

A list of threatened and endangered species was obtained from the USFWS on November 5, 2019.

## **Native American Tribes**

On October 7, 2019, the following Native American Tribes were contacted: Chemehuevi Indian Reservation, Colorado River Indian Tribes, Fort Mojave Indian Tribe, and the Twenty-Nine Palms Band of Mission Indians. Follow-up phone calls and emails were conducted on November 12, 2019, with a second round of follow-up emails and phone calls conducted on December 11, 2019.

## **State of California, Office of Historic Preservation**

Caltrans initiated consultation with the SHPO and submitted copies of the HPSR, HRER, ASR, and Findings of Effect for the project. Caltrans determined that a Finding of No Adverse Effect is appropriate for the undertaking and sought concurrence from SHPO in the finding, pursuant to 36 CFR 800 (c) and Section 106 PA Stipulation X.B.1. Based on review of the submitted documentation, in a letter dated May 28, 2020, SHPO concurred with the determination of eligibility and had no other objections to Caltrans' finding of no adverse effect.

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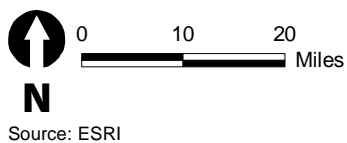
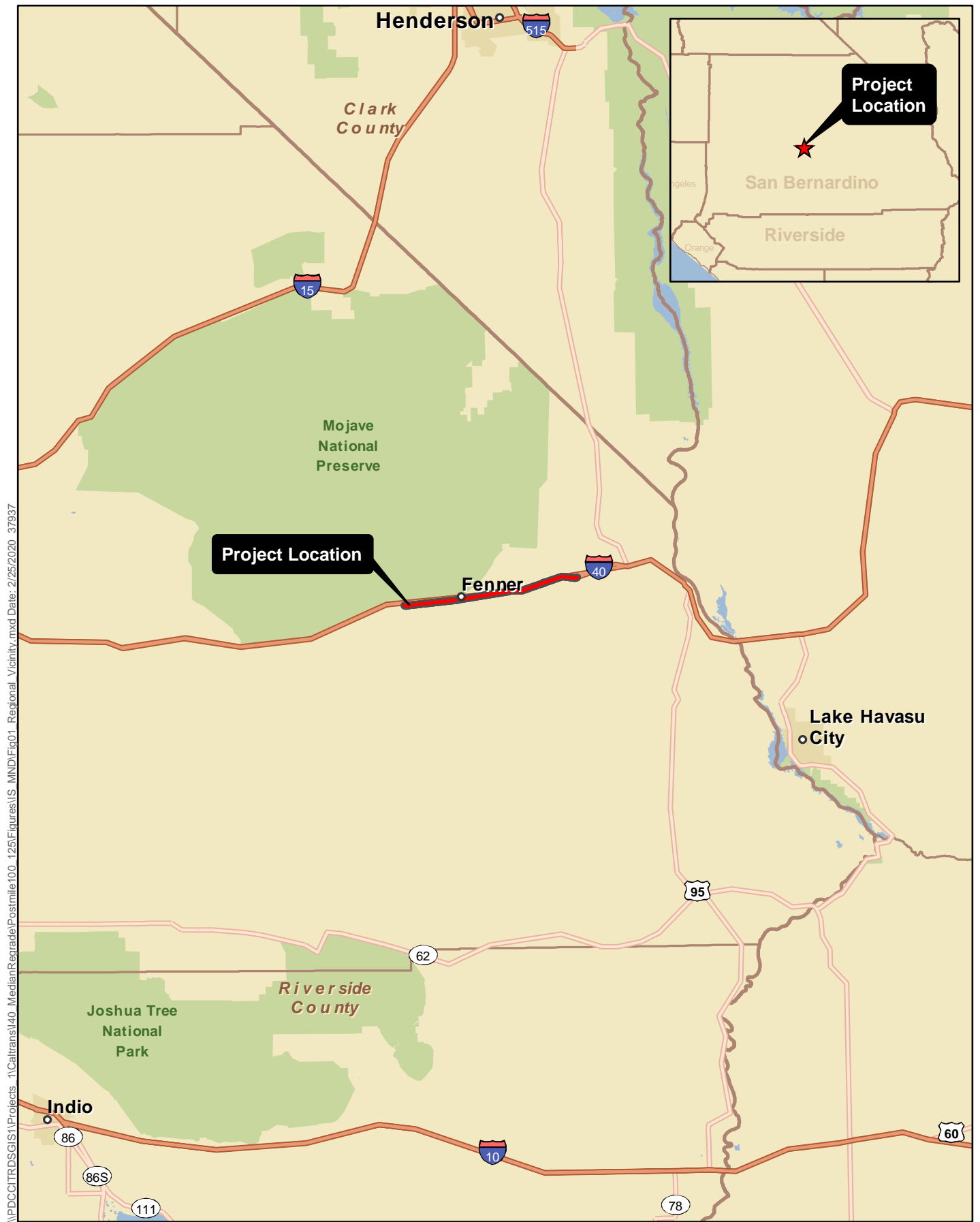
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## Appendix A    Maps

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- Figure 1. Project Vicinity Map
- Figure 2. Aerial Project Location Map
- Figure 3. Project Location Map

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**Figure 1**  
**Regional Vicinity Map**  
**I-40 Median Regrade Project**



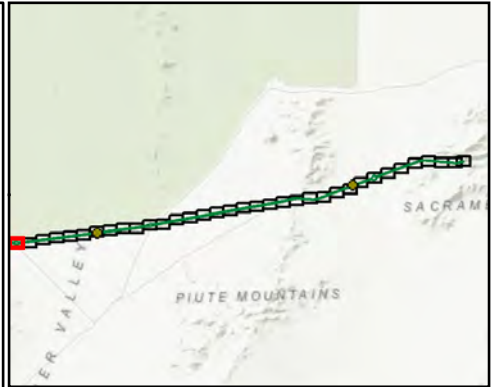
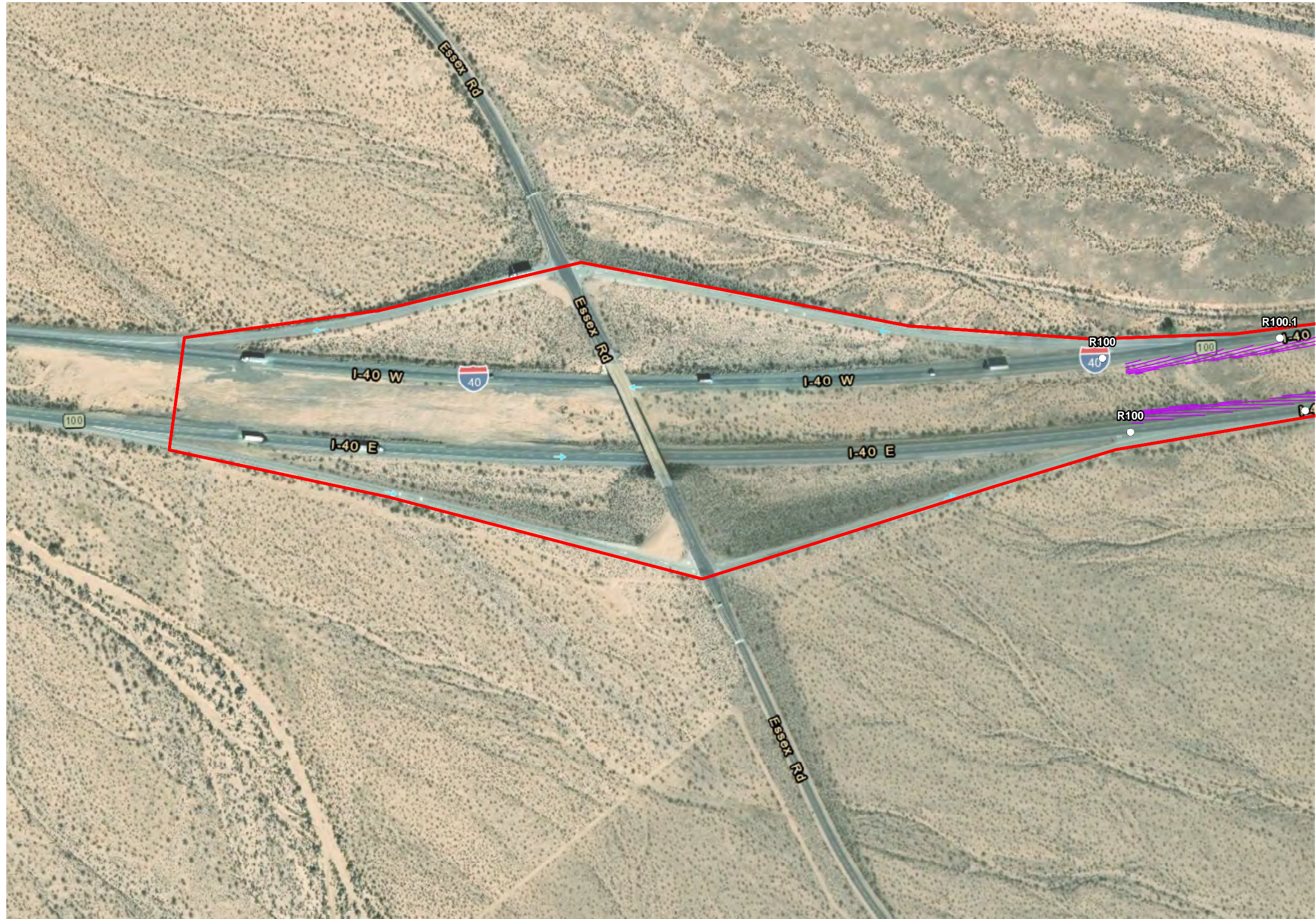


**Figure 2**  
**Project Location**  
**I-40 Median Regrade Project**



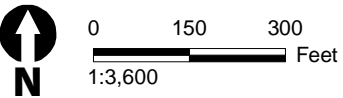


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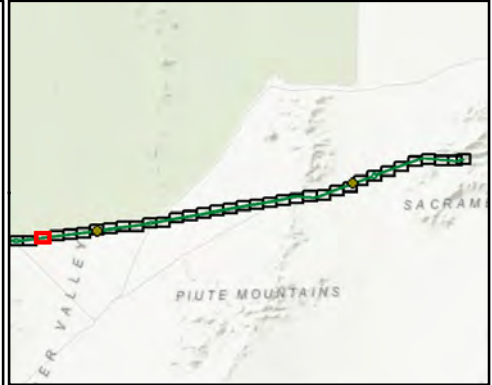








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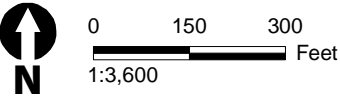


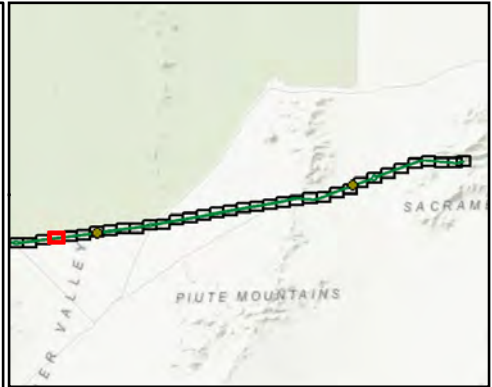
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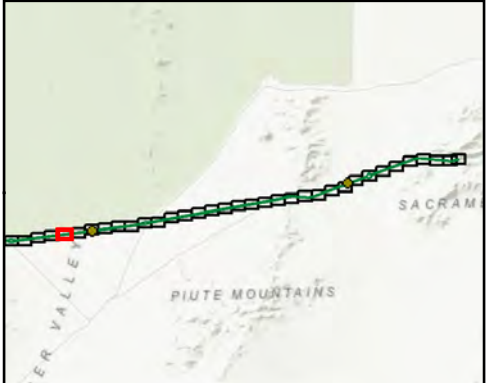
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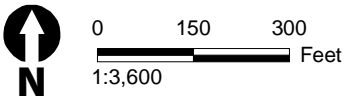


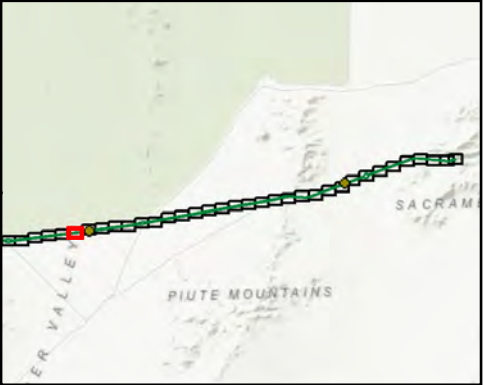
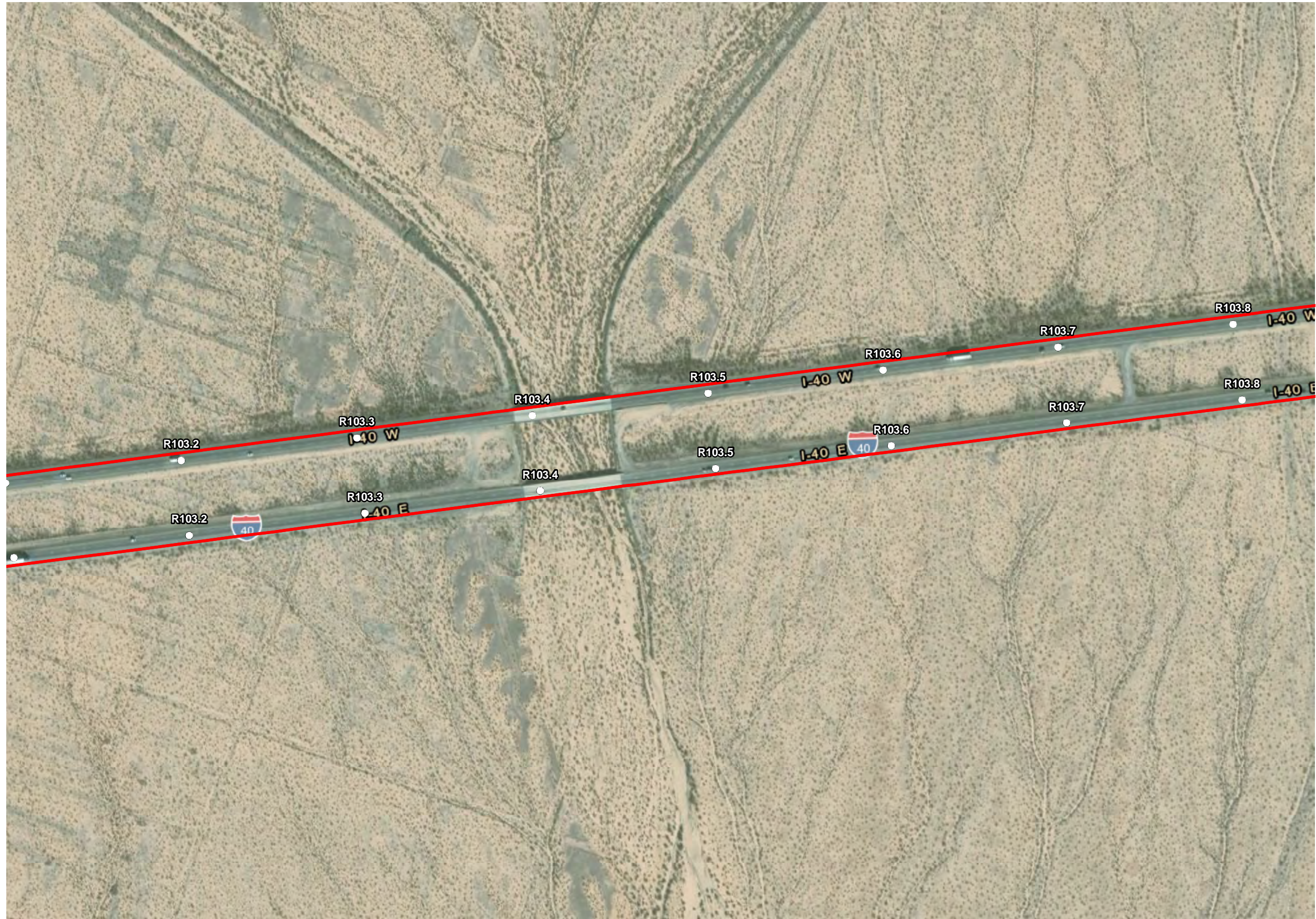
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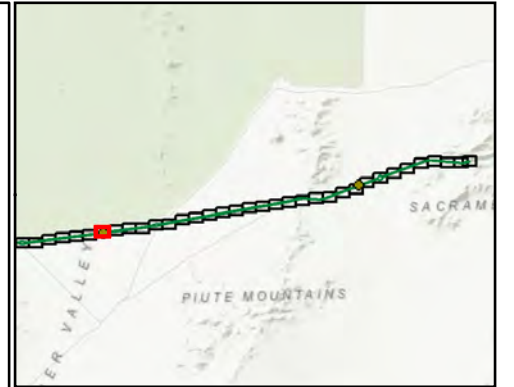
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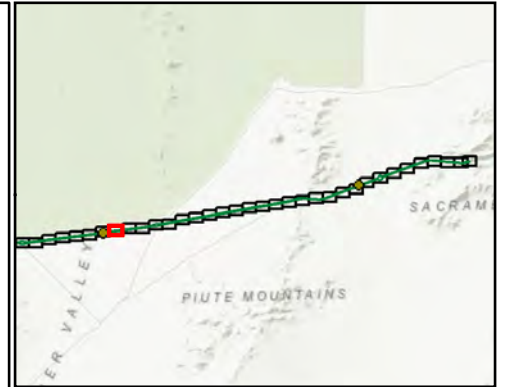
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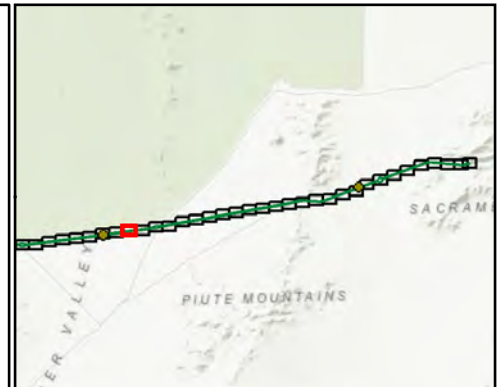
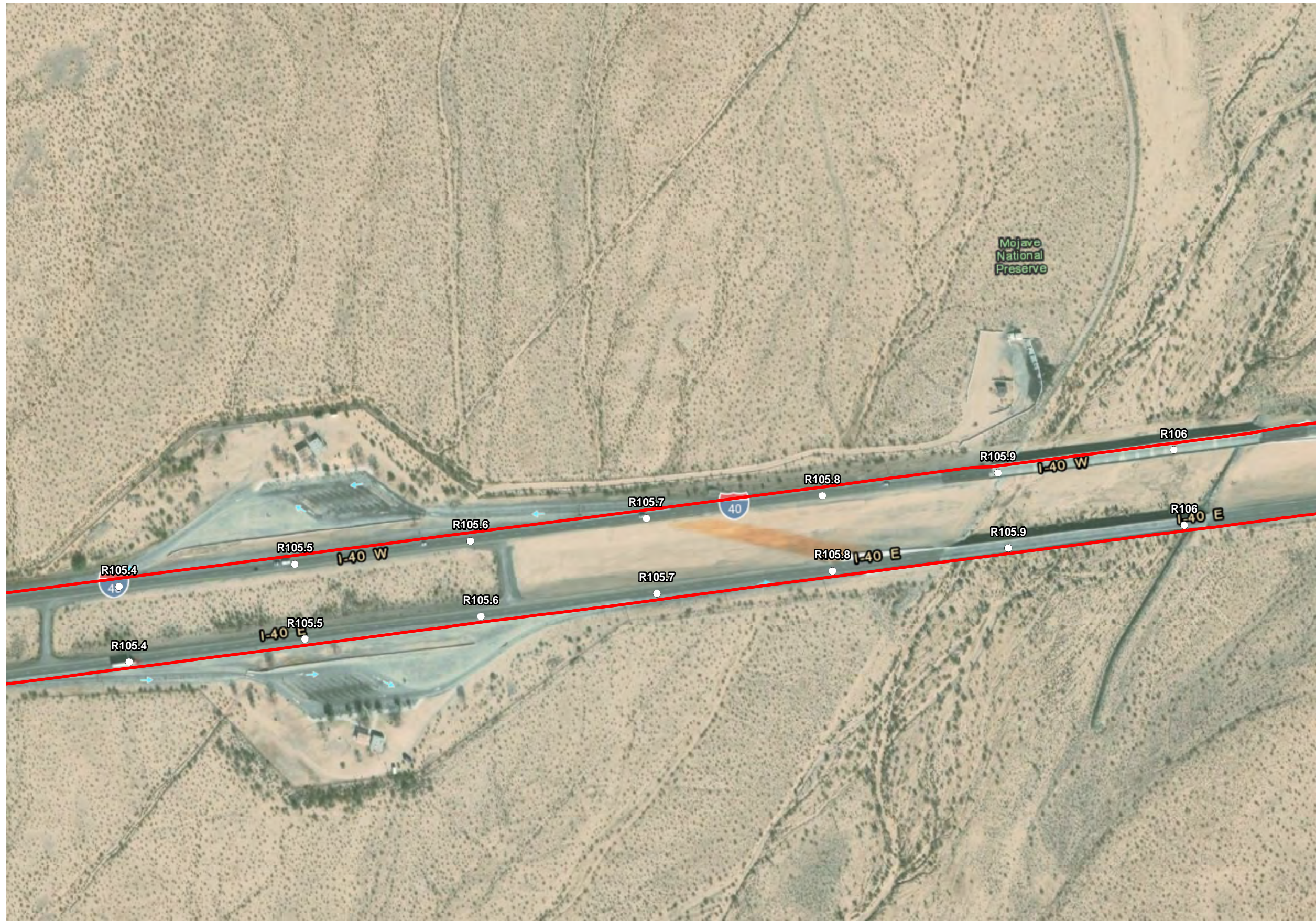
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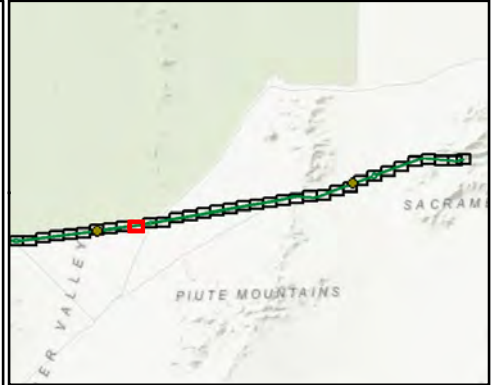
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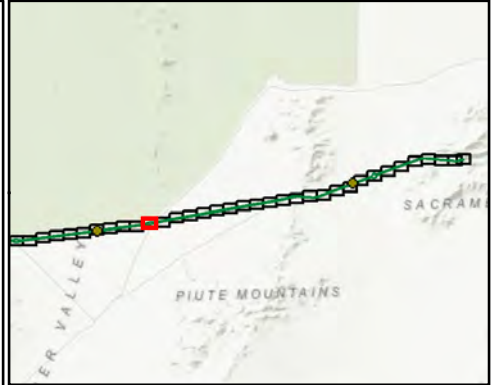
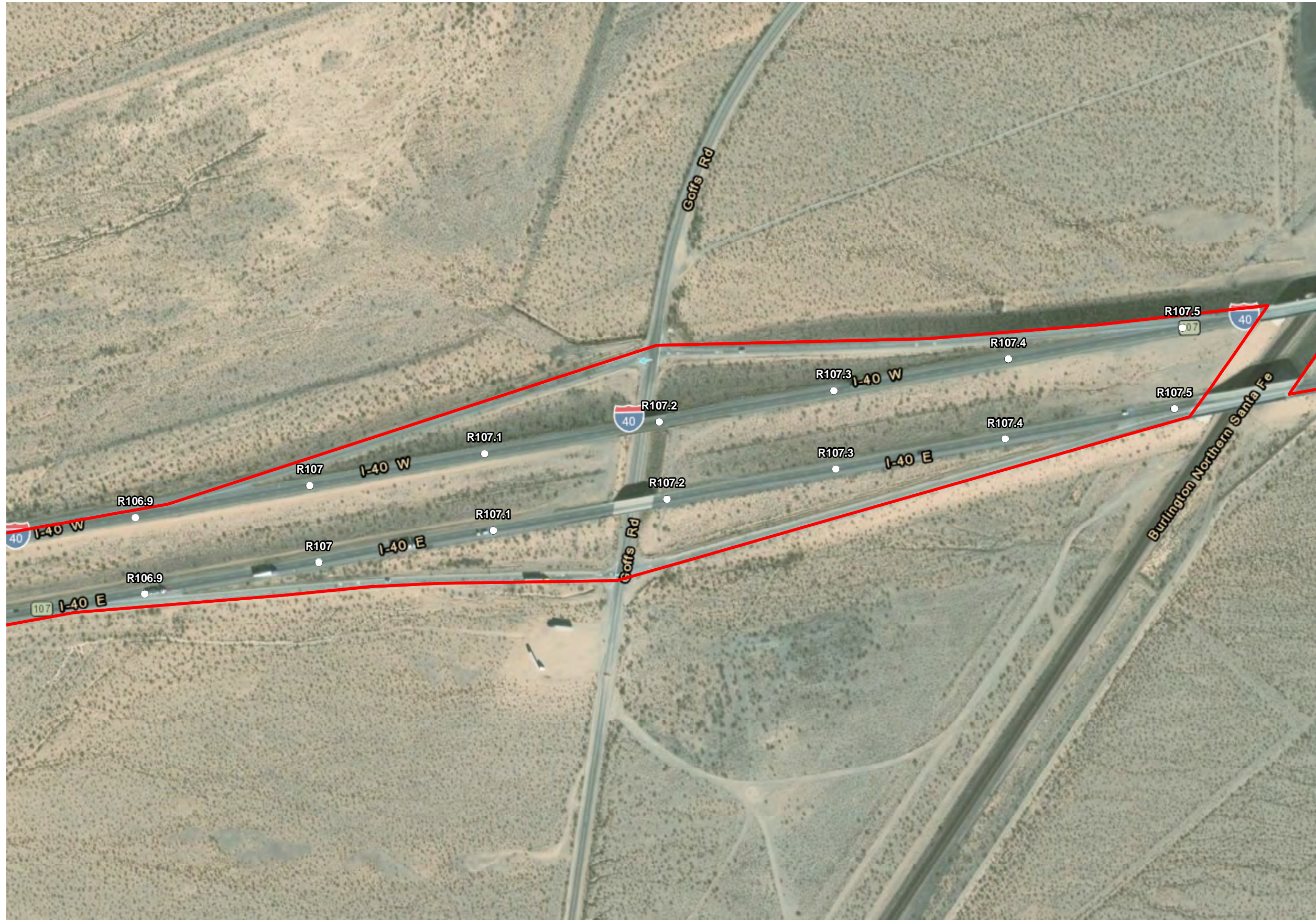
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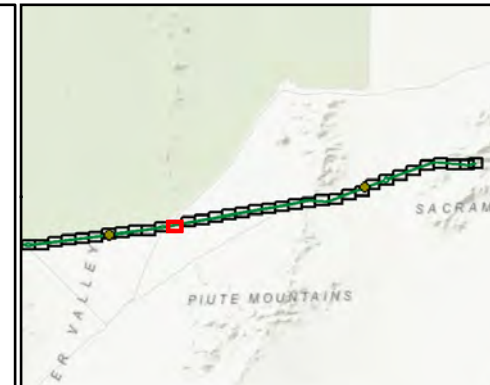
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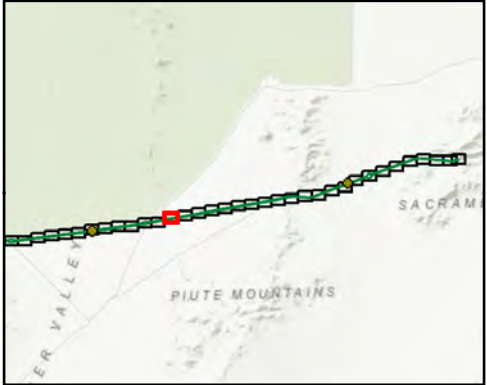
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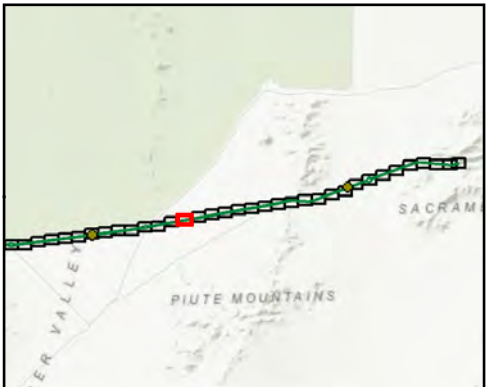
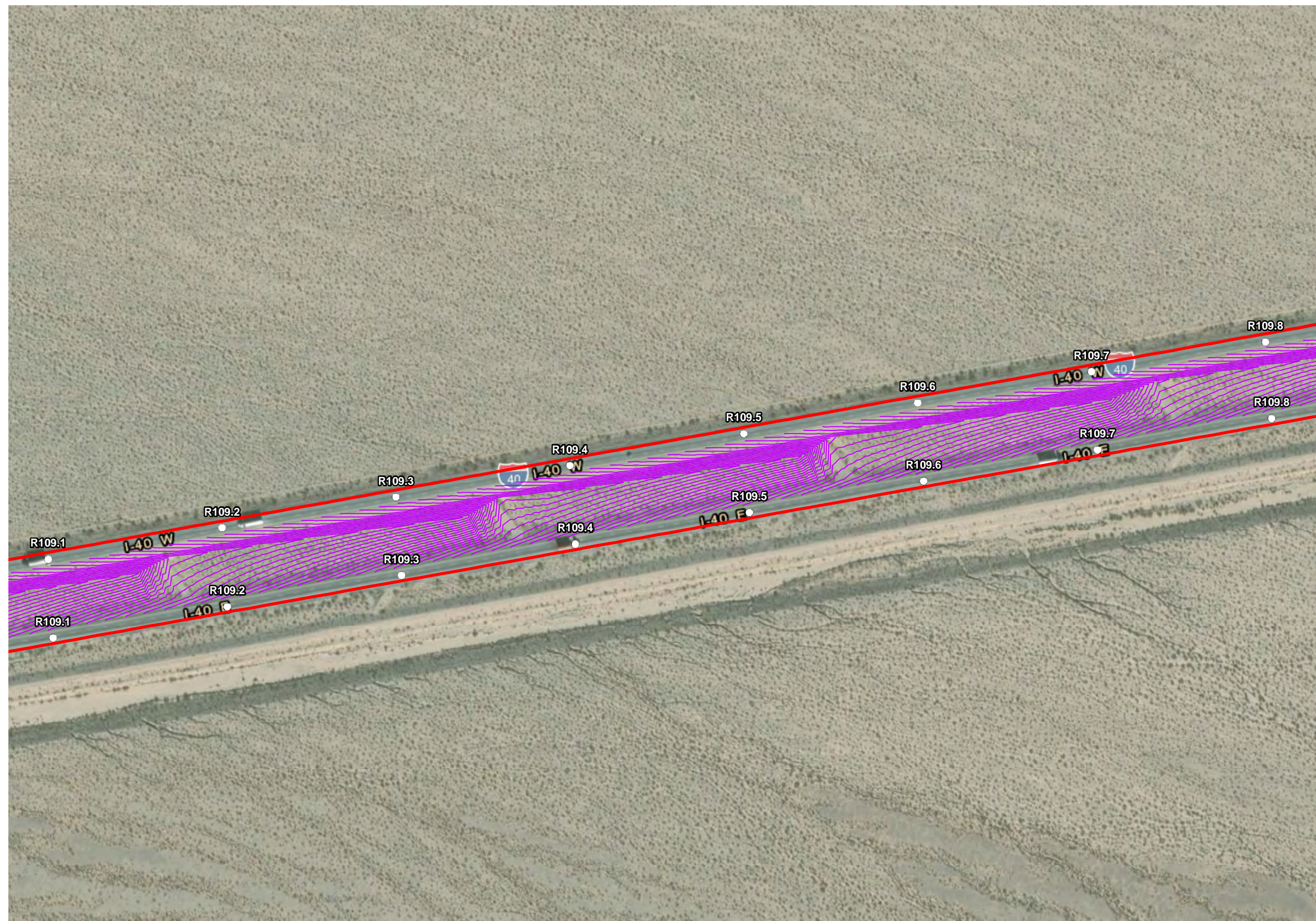
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Build Alternative  
I-40 Median Regrade Project







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Legend

- Post Miles
- Grading
- ▭ Project Limits

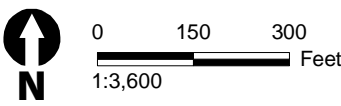


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- Legend**
- Post Miles
  - Grading
  - ▭ Project Limits

**Figure 3, Sheet 15 of 35**  
**Build Alternative**  
**I-40 Median Regrade Project**







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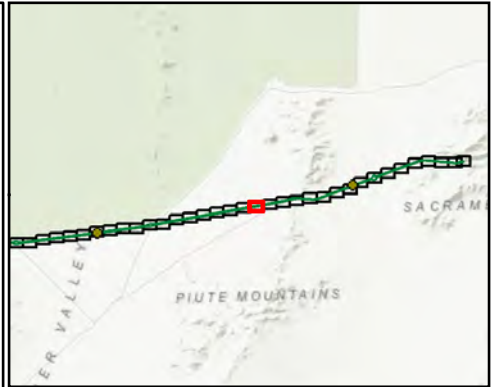
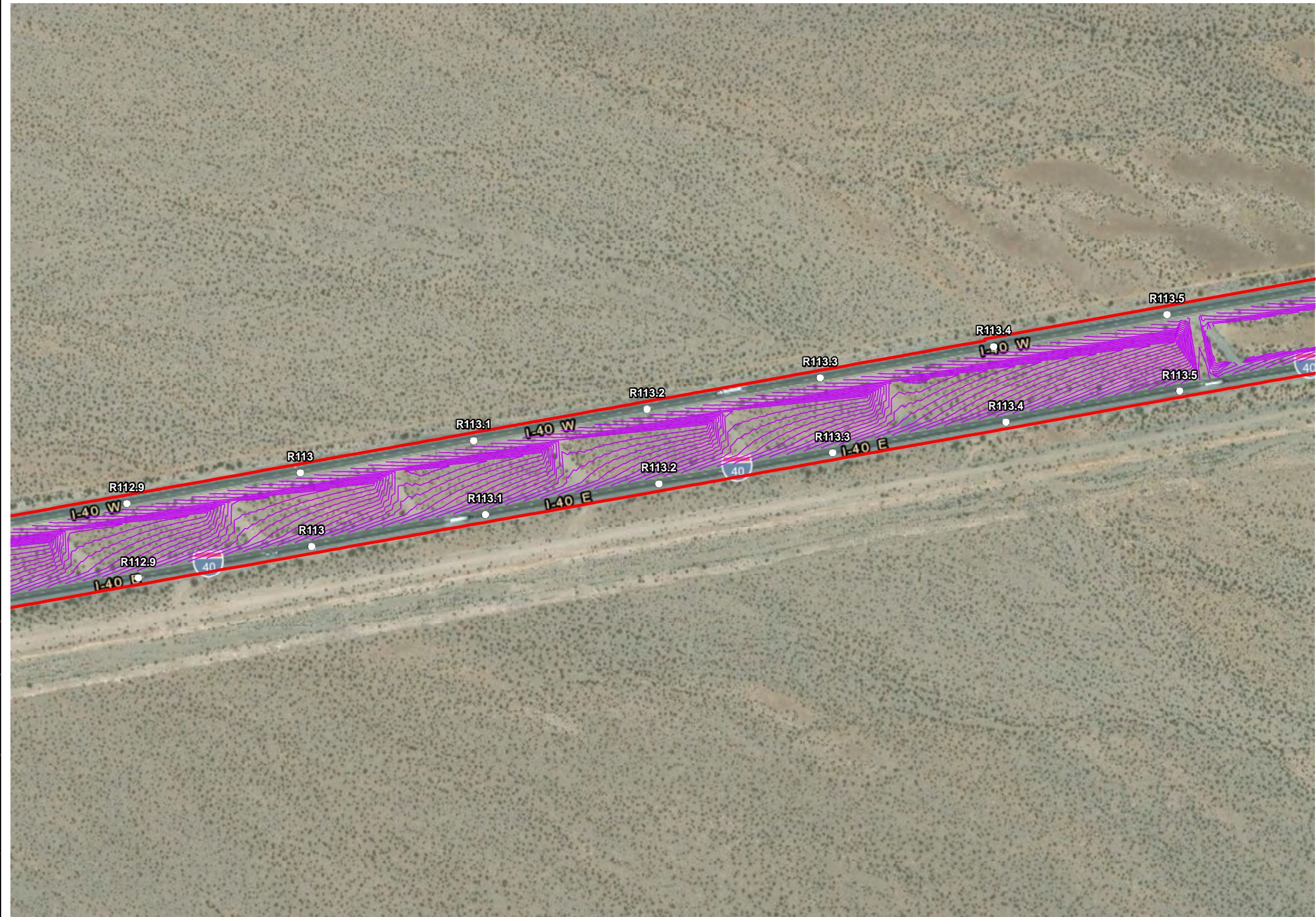








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- Grading
- ▭ Project Limits



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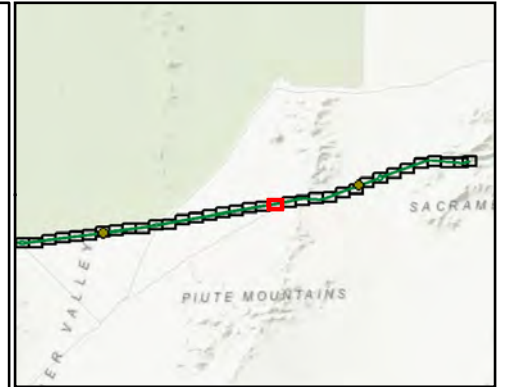
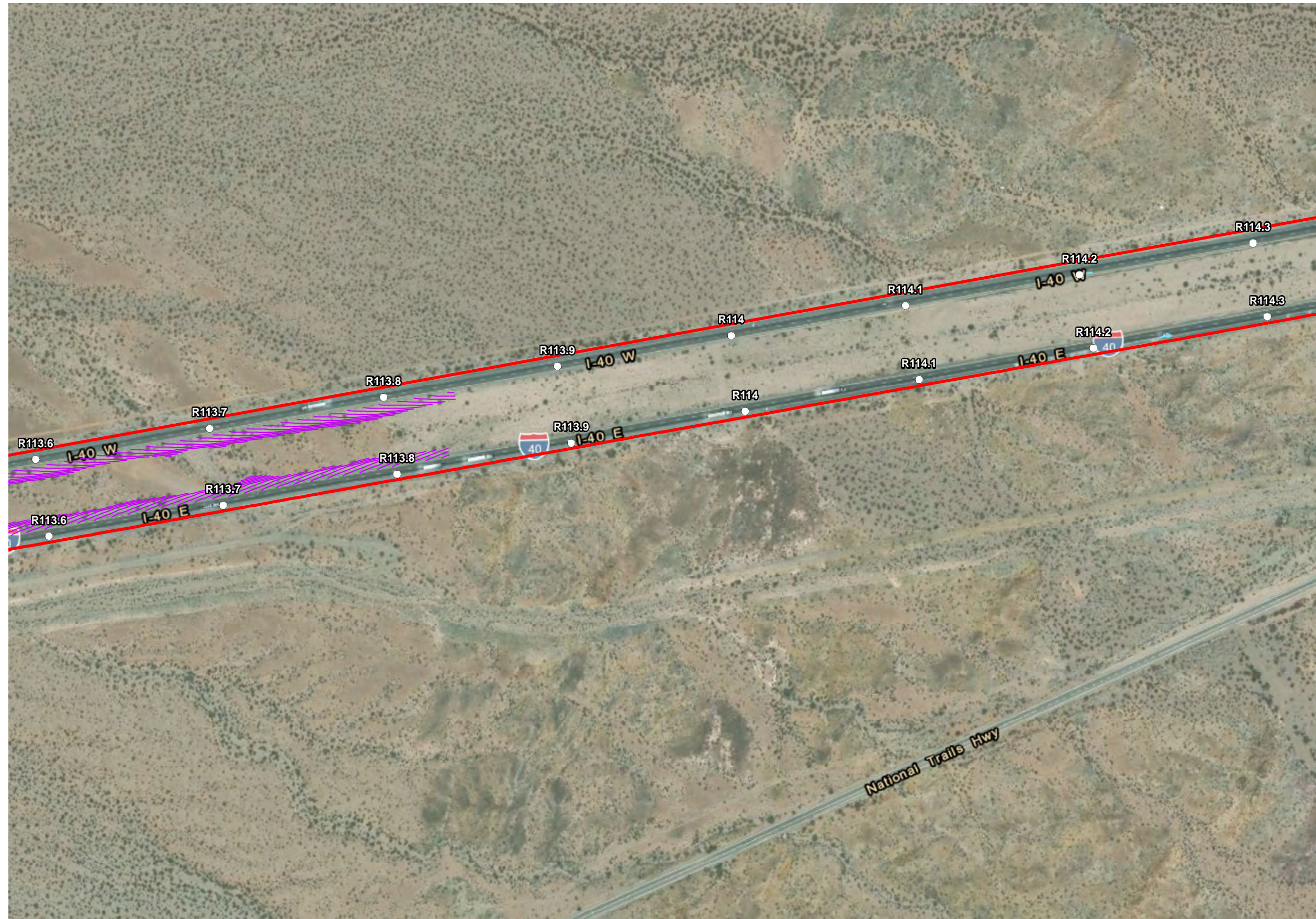
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**Legend**

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- Grading
- ▭ Project Limits



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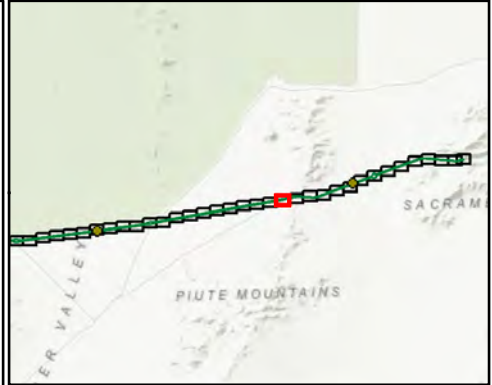
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Legend

- Post Miles
- Grading
- ▭ Project Limits



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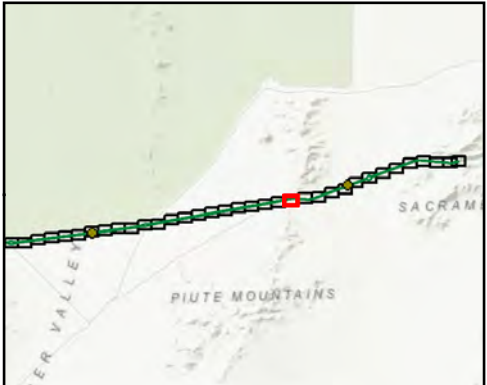
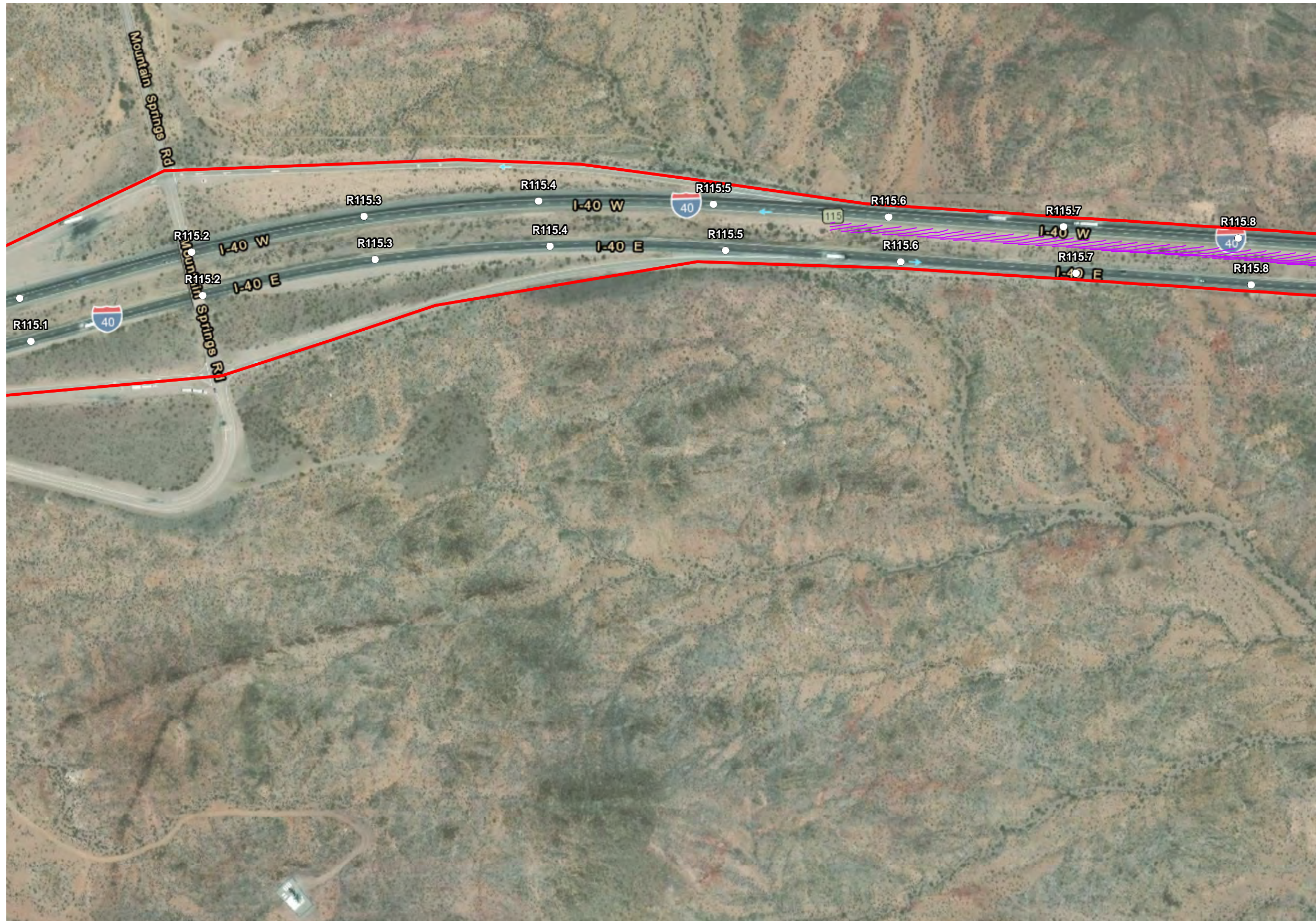
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Build Alternative  
I-40 Median Regrade Project







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- Post Miles
  - Grading
  - ▭ Project Limits

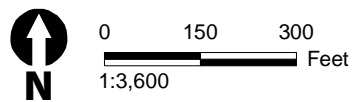


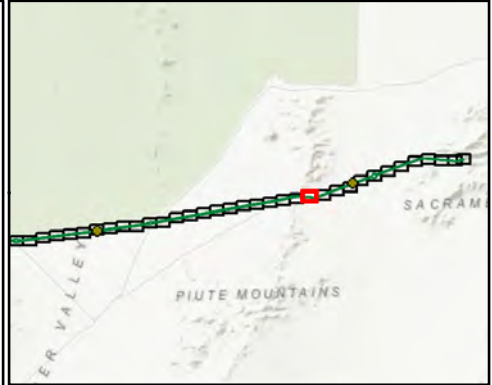
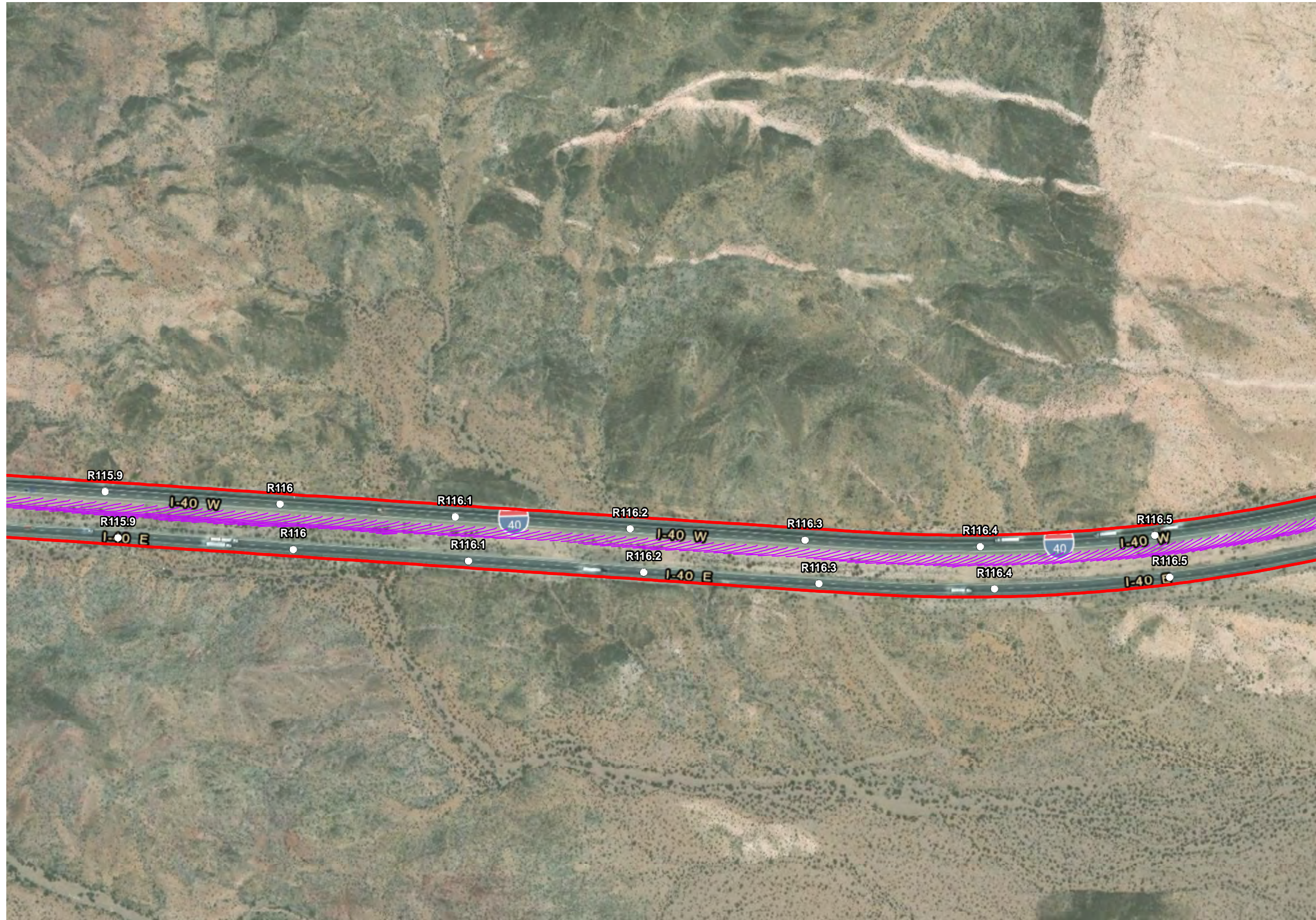
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Build Alternative  
I-40 Median Regrade Project







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**Legend**

- Post Miles
- Grading
- ▭ Project Limits



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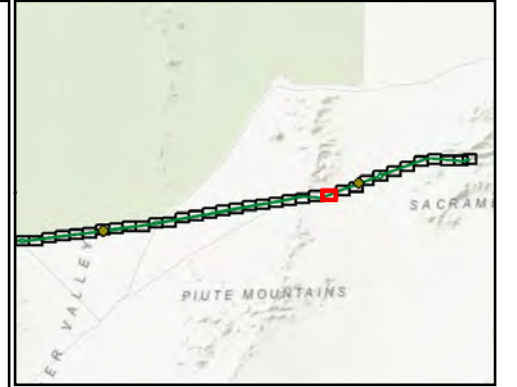
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**Build Alternative**  
**I-40 Median Regrade Project**







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**Legend**

- Post Miles
- Grading
- ▭ Project Limits



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1:3,600 Feet

**Figure 3, Sheet 24 of 35**  
**Build Alternative**  
**I-40 Median Regrade Project**







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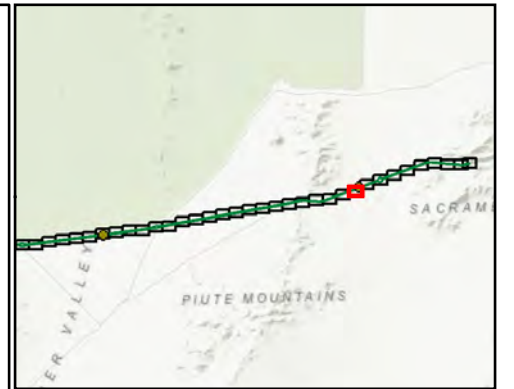








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- Post Miles
- Grading
- ▭ Project Limits



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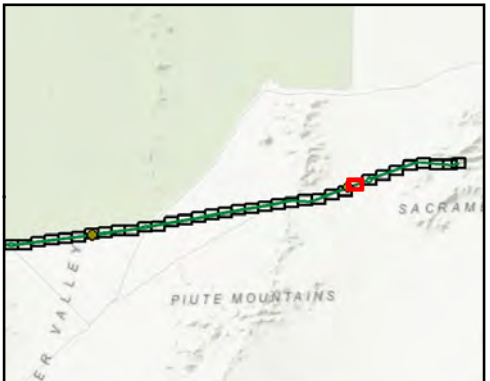
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**Build Alternative**  
**I-40 Median Regrade Project**



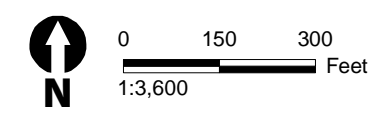




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- Legend**
- Post Miles
  - Grading
  - ▭ Project Limits



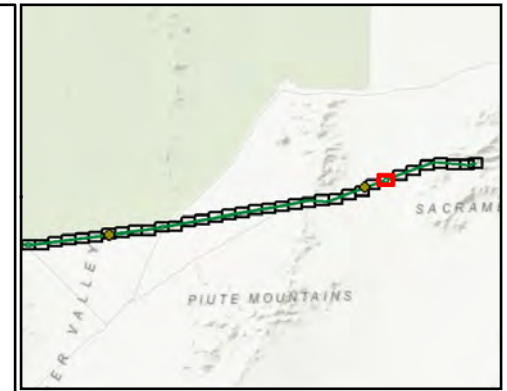
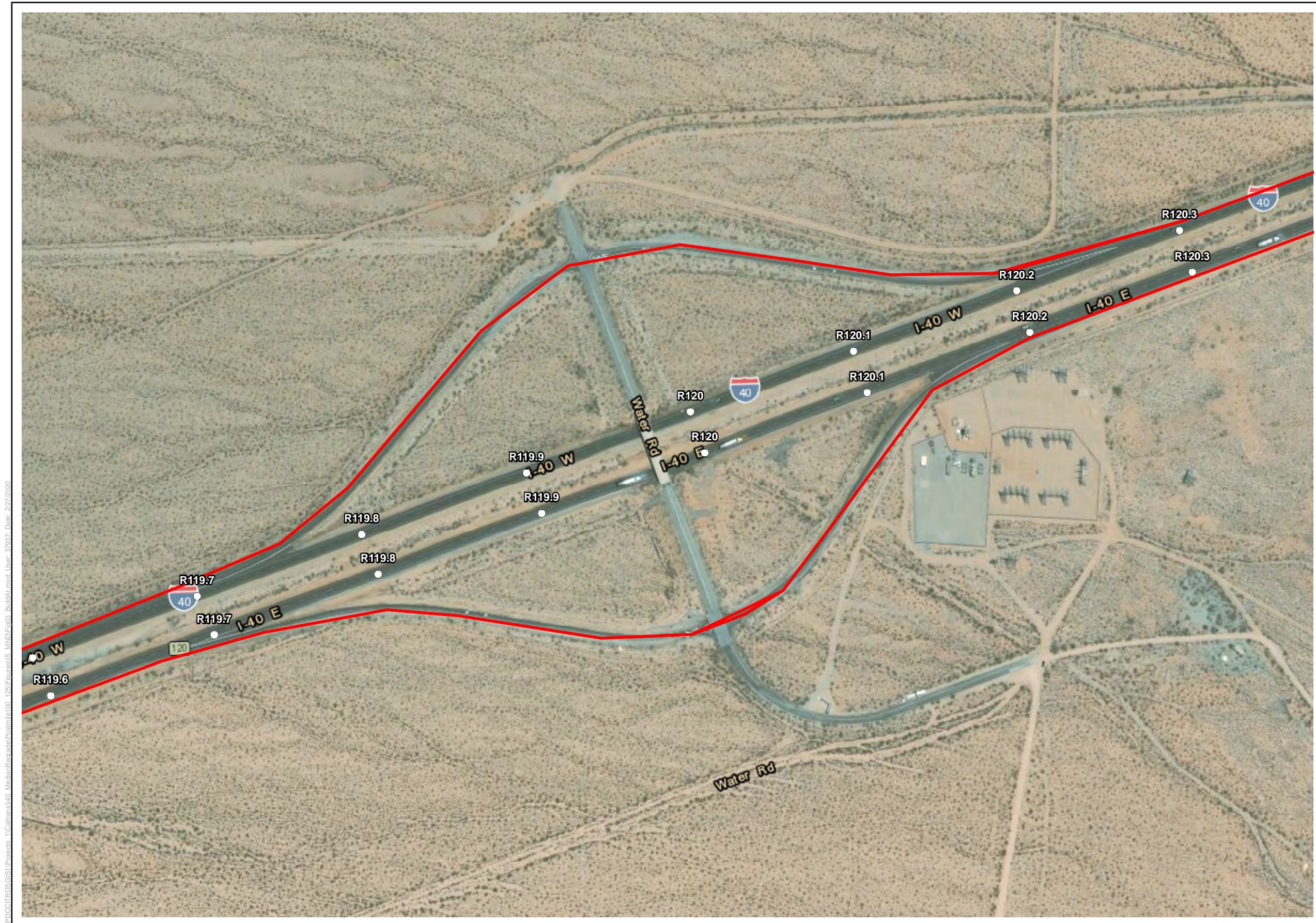
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**I-40 Median Regrade Project**





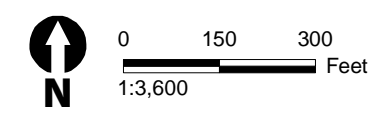


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- Post Miles
- Grading
- ▭ Project Limits



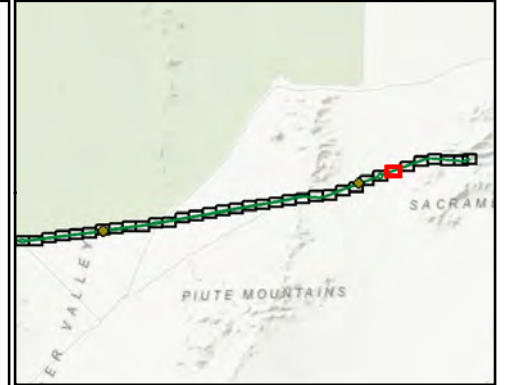
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**I-40 Median Regrade Project**





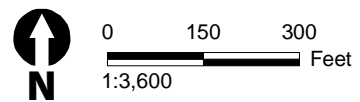


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- Post Miles
- Grading
- ▭ Project Limits



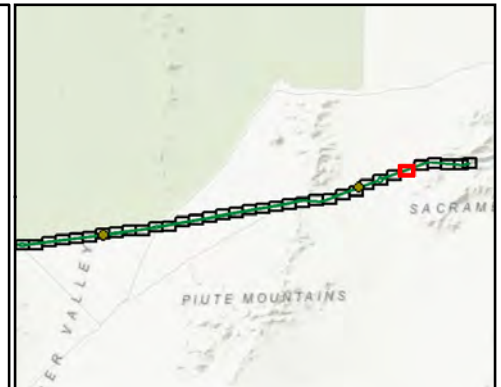
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**I-40 Median Regrade Project**







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- Post Miles
- Grading
- ▭ Project Limits



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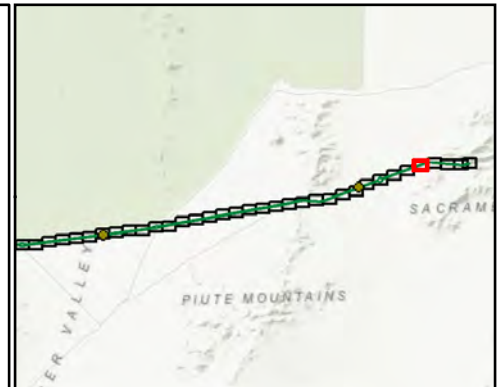
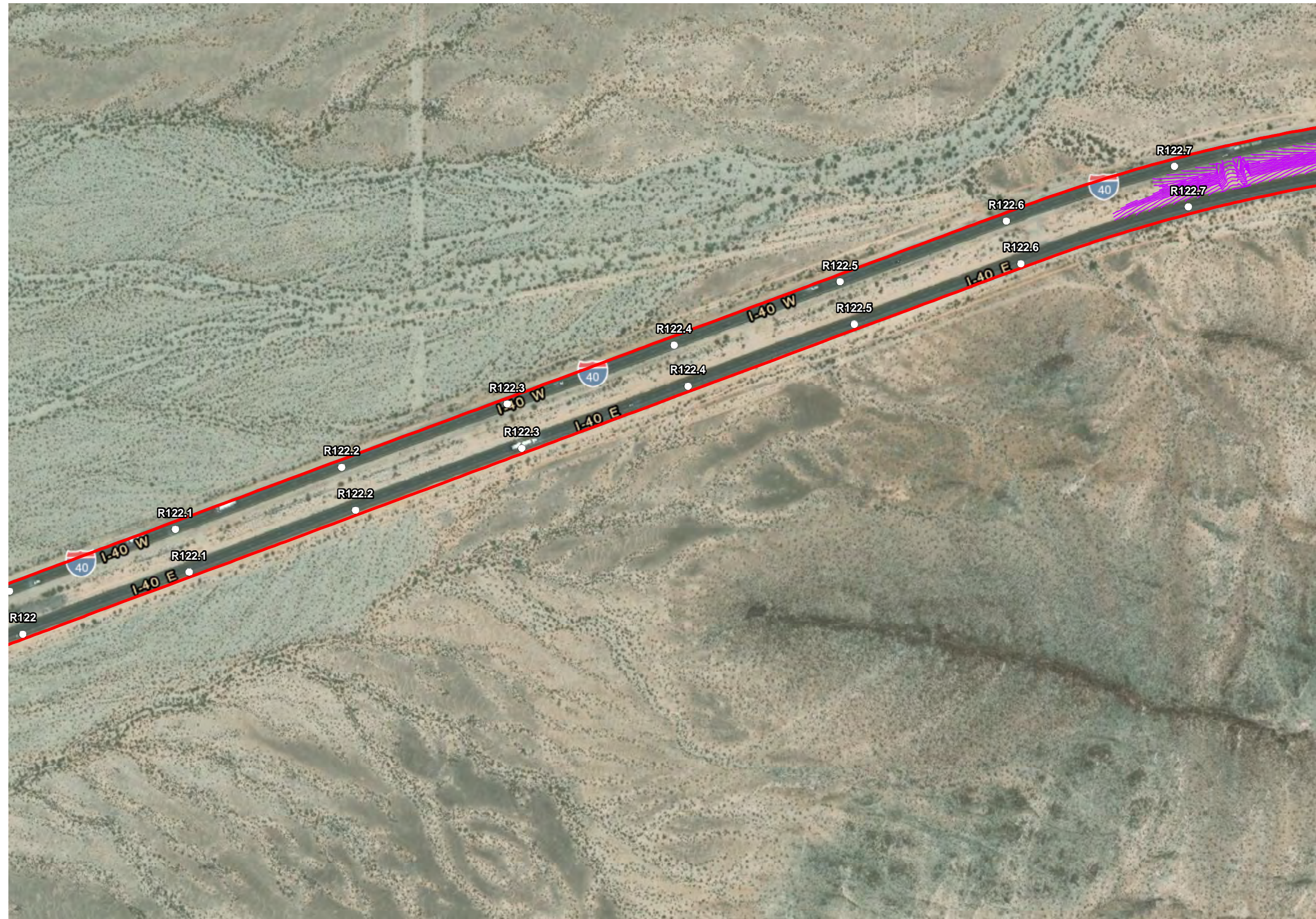
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**I-40 Median Regrade Project**







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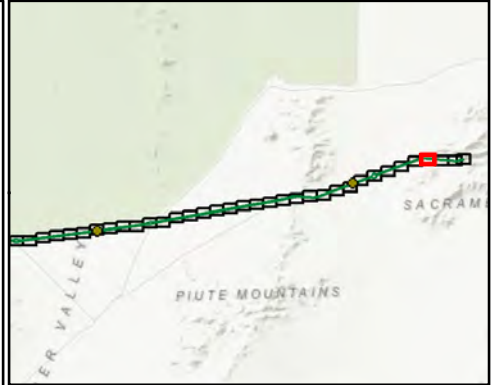
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- Grading
- ▭ Project Limits



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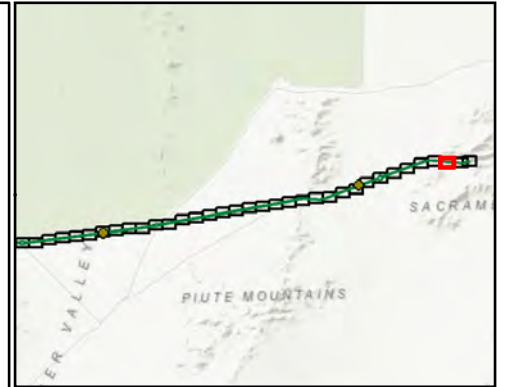
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I-40 Median Regrade Project







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- Post Miles
- Grading
- ▭ Project Limits



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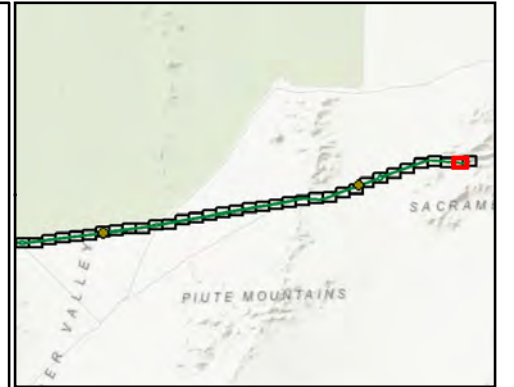
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**Build Alternative**  
**I-40 Median Regrade Project**







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- Grading
- ▭ Project Limits



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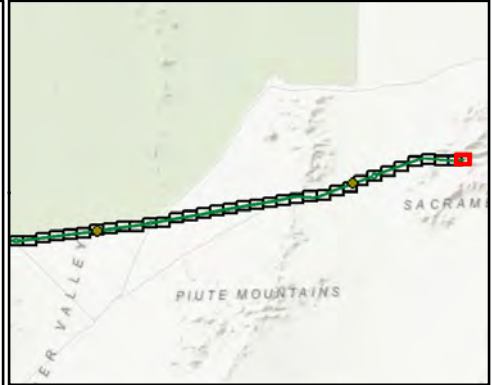
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**Build Alternative**  
**I-40 Median Regrade Project**





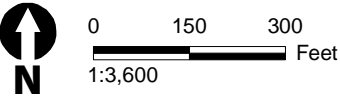


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**Legend**

- Post Miles
- Grading
- ▭ Project Limits



**Figure 3, Sheet 35 of 35**  
**Build Alternative**  
**I-40 Median Regrade Project**







## Appendix B    Distribution List

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A public notice of this IS and/or a Notice of Intent to Adopt a Mitigated Negative Declaration was distributed to federal, state, regional and local agencies, elected officials and utilities and service providers. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided the Notice of Intent.

### Public Agencies, Elected Officials, and Service Providers

Mr. Gary McBride Chief Executive Officer County of San Bernardino 385 North Arrowhead Avenue, 5th Floor San Bernardino, CA 92415-0120	Bill Webster Planning & Environmental Coordinator BLM Needles Field Office 1303 South U.S Hwy 95 Needles, CA 92363	Dr. Raymond Wolfe Executive Director San Bernardino County Transportation Authority 1170 W. 3rd St., 2nd Floor San Bernardino, CA 92410
Assembly Member Eduardo Garcia 48220 Jackson Street Suite A3 Coachella, CA 92236	Hon. Curt Hagman Supervisor, District 4 San Bernardino County Board of Supervisors 385 N. Arrowhead Ave., 5th Floor San Bernardino, CA 92415	Hon. Raul Ruiz Congress Member House of Representatives, California District 36 445 East Florida Ave - 2nd Floor Hemet, CA 92543
Hon. James Ramos Supervisor, District 3 San Bernardino County Board of Supervisors 385 N. Arrowhead Ave., 5th Floor San Bernardino, CA 92415	Mr. Tom Baumgarten, Superintendent Morongo Unified School District 1900 Erin Drive Needles, CA 92636	Mr. Ross Sevy District Director Office of Assembly Member Jay P. Oberholte 15901 Smoke Tree St., Ste. 125 Hesperia, CA 92346
Hon. Jean Fuller Senator California Senate, District 16 7248 Joshua Lane, Ste. B Yucca Valley, CA 92284	Hon. Josie Gonzales Supervisor, District 5 San Bernardino County Board of Supervisors 385 N. Arrowhead Ave., 5th Floor San Bernardino, CA 92401	Hon. Robert A. Lovingood Supervisor, District 1 San Bernardino County Board of Supervisors 385 N. Arrowhead Ave., 5th Floor San Bernardino, CA 92415
Hon. Janice Rutherford Supervisor, District 2 San Bernardino County Board of Supervisors 385 N. Arrowhead Ave., 5th Floor San Bernardino, CA 92415	Hon. Jay P. Oberholte Assembly Member California State Assembly, District 33 15900 Smoke Tree St., Ste. 125 Hesperia, CA 92345	California Highway Patrol 1916 J Street Needles, CA 92363
Ms. Lisa Marin Office Assistant San Bernardino County Fire - Division 5 6942 Airway Avenue, Suite A Yucca Valley, CA 92284	Hon. Jeff Stone Senator California Senate, District 28 45-125 Smurr St., Suite B Indio, CA 92201	San Bernardino County Sheriff Department 63665 Twenty Palms Highway Joshua Tree, CA 92252
Hon. Chad Mayes Assembly Member California State Assembly, District 42 41608 Indian Trail, Suite 1 Rancho Mirage, CA 92270	Cindy Semione, Associate Planner City of Needles 817 Third Street Needles, CA 92363	Mr. Steven Hernandez Chief of Staff Office of Supervisor V. Manuel Perez 73-710 Fred Waring Dr. Suite 222 Palm Desert, CA 92260

Richard Meyers  
Refuge Manager  
Havasu NWR  
U.S. Fish & Wildlife Service  
Lake Havasu NWR Complex  
317 Mesquite Avenue  
Needles, CA 92363

Mr. Dakota Higgins District Director  
Office of Congress Member Paul Cook  
14955 Dale Evans Pkwy.  
Apple Valley Town Hall  
Apple Valley, CA 92307

PG&E  
77 Beale Street  
San Francisco, CA 94105

Regents of the University of California  
2200 University Ave  
Berkeley, CA 94720

State Clearinghouse  
1400 Tenth Street  
Sacramento, CA 95814

## Interested Parties, Property Owners, and Members of the Public

Jensen, William F.  
P.O. Box 88  
Millville, CA 96062

Mountain Springs Oasis, LLC  
29290 Via Norte  
Temecula, CA 92591

Strachan, Bruce & Elizabeth Rev Liv  
P.O. Box 577  
Joshua Tree, CA 92252

Lee, William & Gloria Trust 9-29-00  
1306 College Way  
Ontario, CA 91764

Miller, Bonnie  
P.O. Box 2850  
Weaverville, CA 96093

Do, Van Hong  
12219 Chapman Ave  
Garden Grove, CA 92840

Taylor, Robert  
436 S. Sultana  
Upland, CA 91786

Giordano, OC  
5310 S Huntington Dr.  
Los Angeles, CA 90032

Miller, Bonnie  
P.O. Box 2853  
Weaverville, CA 96093



## Appendix C List of Preparers

---

The following personnel contributed to the preparation of this IS:

### **California Department of Transportation**

- JaShawn Combs, Environmental Planner (Generalist), Environmental Studies “B”
- Adam Compton, Senior Environmental Planner, Regulatory Permits
- Gabrielle Duff, Senior Environmental Planner, Environmental Studies “B”
- Steven Holm, Associate Environmental Planner, Cultural Studies
- Luz Quinnell, Associate Environmental Planner, Biological Studies
- Andrew Walters, Senior Environmental Planner, Cultural Studies
- Craig Wentworth, Senior Environmental Planner, Biological Studies
- Paul Phan, Civil Engineer/Environmental Engineering, Branch Chief: Environmental Engineering “A”
- Chandan Meenu, Civil Engineer/Environmental Engineering, Environmental Engineering “A”
- Pong Hoang, Civil Engineer/Environmental Engineering, Environmental Engineering “A”
- Edison Jaffery, Civil Engineer/Environmental Engineering, Environmental Engineering “A”
- Sarah Gallimore, Environmental Planner, Regulatory Permits

### **Parsons**

- Cristina Gaytan, Project Engineer
- Mike Roberts, Project Manager
- Angela Schnapp, Environmental Task Manager

### **ICF**

- Elizabeth Irvin, Technical Editor
- Court Morgan, Environmental QA/QC
- Youji Yasui, Environmental Document Preparation

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# Appendix D Title VI Policy Statement

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

## DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-6130  
FAX (916) 653-5776  
TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



*Making Conservation  
a California Way of Life.*

November 2019

## NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:  
<https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov).

A blue ink signature of Toks Omishakin, consisting of a stylized 'T' followed by a series of loops and a horizontal line.

Toks Omishakin  
Director



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## Appendix E List of Technical Studies

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Drainage Evaluation for Interstate 40 Re-Grade Median Cross Slope, EA 0R141, San Bernardino County, CA. November 2019. Parsons.

Historic Property Survey Report. April 2020. Applied EarthWorks, Inc.

Initial Site Assessment, Interstate 40 (Needles Freeway), SBD 40 Needles Regrade Median Project, San Bernardino County, California, EA 0R1410, Project No. 0815000200-0. December 2019. Group Delta Consultants, Inc.

Natural Environment Study, I-40 Median Regrade Project, Interstate 40 Median Regrade Project from Essex Road Overcrossing to East of Homer Wash Bridge, San Bernardino County, Post Mile 100.0 to 125.0. May 2020. VCS Environmental, Inc.

Project Study Report To Request for Programming in the 2016 SHOPP Long Lead Project On Route 40 Between Essex Road Overcrossing (PM R100.0) And California/Arizona State Line (PM R154.6). June 2015. California Department of Transportation.

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## Appendix F      Environmental Commitments Record

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In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

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Permit Type	Agency	Date Submitted	Date Received	Expiration	Fee	Notes	Permit Requirement Completed	
							Name	Date
1602	California Department of Fish & Wildlife							
401	Regional Water Quality Control Board							
2081 Incidental Take Permit	California Department of Fish & Wildlife							

Date of ECR: **September 2020**Date of ED: **September 2020****CEQA – Initial Study (IS)****NEPA – CE**

## ENVIRONMENTAL COMMITMENTS RECORD

### (Interstate 40 Median Regrade Project)

**08-SBd-40**  
**PM R100.0/ R125.0**
**EA 08-0R141**  
**PN 0815000200**
**Environmental Generalist:**  
**JaShawn Combs**  
**(909) 388-7636**
**Environmental**  
**Const. Liaison:**  
**TBD**

Project Phase:

☒ PA/ED (DED/FED)☐ PS&E Submittal \_\_\_\_\_ %☐ Construction☐ CEC/CCA

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Air Quality										
AQ-1: Fugitive Dust: Contractor must abide by Caltrans’ provisions in Section 14-9, Air Quality of the 2018 Standard Specifications and Special Provisions.	p.9	Initial Study/ Mitigated Negative Declaration (ISMND)	Resident Engineer/ Contractor	During Construction	Section 14-9					
AQ-2: Implement and follow Erosion Control and Air Quality Best Management Practices (BMPs).	p.9	ISMND	Resident Engineer/ Contractor	During Construction						



Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<b>AQ-3:</b> Comply with AQMD rule 403 for Fugitive Dust and Caltrans Standard Specification Section 14-9.	p.9	ISMND	Resident Engineer/ Contractor	During Construction						
<b>AQ-4:</b> Comply with the Caltrans Standard Specification Section 10.4.	p.9	ISMND	Resident Engineer/ Contractor	During Construction	SSP Section 10.4					
<b>Biological Resources</b>										
<b>BIO-1:</b> BMPs: Caltrans Best Management Practices (BMPs) will be implemented to control dust, potential spills, leaks, runoff, and other potential construction-related impacts. Caltrans Standard Specification 2018-13-1.01.	p.16	Natural Environmental Study (NES) (2020)	Resident Engineer / Contractor	During Construction	SSP 2018-13-1.01					
<b>BIO-2:</b> Equipment Staging: Only previously disturbed areas, such as turnouts and paved areas, will be used for construction staging, storage, and batch plant areas to the extent feasible. The Resident Engineer and Caltrans Biologist shall coordinate on all sites prior to their approval/use. Caltrans Standard Specification 2018-13-4.03E(3).	p.16	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction, During Construction	SSP 2018-13-4.03E(3)					
<b>BIO-3:</b> Materials and Spoils Control: Project materials will not be cast from the project site, and project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Caltrans Standard Specification 2018-5-1.31.	p.16	NES	Resident Engineer/ Contractor	During Construction	SSP 2018-5-1.31					

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							Date / Initials	Date / Initials	YES	NO
<b>BIO-4:</b> Preconstruction Special Status Plant Surveys: A preconstruction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project. Caltrans Standard Specification 2018-14-6.03.	p.16	NES	Resident Engineer/ Authorized Biologist	Pre-Construction	SSP 2018-14-6.03					
<b>BIO-5:</b> Caltrans will submit the names and qualifications of biologists that they believe meet the minimum requirements to serve as Authorized Biologists to the USFWS for review and authorization under the biological opinion prior to beginning onsite activities (forms at <a href="http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/">http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/</a> ). Once a biologist has been authorized by the USFWS, that individual may work on subsequent projects pursuant to the biological opinion without additional approval, provided that his or her performance remains satisfactory. Caltrans will maintain a record of all authorized biologists who work on its	p.16	NES	Resident Engineer/ Authorized Biologist	Pre-Construction	SSP 2018-14-6.03D					

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							Date / Initials	Date / Initials	YES	NO
projects. Caltrans Standard Specification 2018-14-6.03D.										
<b>BIO-6:</b> Caltrans will designate, on a project-by-project basis, an Authorized Biologist to be responsible for overseeing compliance with all protective measures and for coordination with the USFWS. The Authorized Biologist will immediately notify the resident engineer of project activities that may be in violation of the biological opinion. In such an event, the resident engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Authorized Biologist. Caltrans Standard Specification 2018-14-6.03D.	p.16	NES	Resident Engineer/ Authorized Biologist	Pre-Construction	SSP 2-2018-14-6.03D					
<b>BIO-7:</b> A Resident Engineer is, according to Caltrans' May 2006 Standard Specifications, "the Chief Engineer, Department of Transportation, acting either directly or through properly authorized agents, the agents acting within the scope of the particular duties delegated to them." The Resident Engineer has authority over the contract and is responsible for all aspects of the specific projects to which he or she is assigned. The	p.17	NES	Resident Engineer/ Authorized Biologist	Pre-Construction	SSP 2018-14-6.03					



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							Date / Initials	Date / Initials	YES	NO
Resident Engineer has the authority to stop work on a project. The Authorized Biologist will have the authority to halt any activity, through the Resident Engineer or other identified authority in charge of implementation, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury to or mortality of desert tortoise. Caltrans Standard Specification 2018-14-6.03.										
<b>BIO-8:</b> When handling desert tortoises, Authorized Biologists (and trained individuals) must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2010), Chapters 6 and 7. The manual is available on the web through the Ventura Fish and Wildlife Office website ( <a href="http://www.fws.gov/ventura">www.fws.gov/ventura</a> ). Caltrans Standard Specification 2018-14-6.03.	p.17	NES	Resident Engineer/ Authorized Biologist	During Construction	SSP 2018-14-6.03					
<b>BIO-9:</b> Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, clearance surveys for the desert tortoise will be conducted by the Authorized Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their	p.17	NES	Resident Engineer/ Authorized Biologist	Pre-Construction	SSP 2018-14-6.03					

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							Date / Initials	Date / Initials	YES	NO
burrows by an Authorized Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities, following the 2018 field survey protocol (USFWS 2018) or more current approved protocol. If burrows are found, they will be examined by an Authorized Biologist to determine if desert tortoises are present. If a tortoise is present and the burrow cannot be avoided, it will be relocated in accordance with USFWS protocol (USFWS 2018). If the Authorized Biologist determines clearance surveys are not needed, clearance surveys would not be required. If desert tortoises are found at a project site where Caltrans (or the Authorized Biologist) had previously concluded they were unlikely to occur, Caltrans will contact the USFWS to determine if the implementation of additional protective measures would be appropriate. Caltrans Standard Specification 2018-14-6.03.										
<b>BIO-10:</b> For construction projects determined likely to affect desert tortoise, an education program will be developed and presented by the Authorized Biologist prior to the onset of ground-disturbing activities	p.17	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction	SSP 2018-14-6.03					

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							Date / Initials	Date / Initials	YES	NO
<p>to be conducted under the auspices of this consultation. All onsite personnel—including surveyors, construction engineers, employees, contractors, contractor’s employees, supervisors, inspectors, subcontractors, and delivery personnel—employed for a project will be required to participate in an education program regarding the desert tortoise before performing onsite work. The program will consist of a class presented by an Authorized Biologist or a video, provided the Authorized Biologist is present to answer questions. Wallet-sized cards or a one-page handout with important information for workers to carry are recommended as a future reference and a reminder of the program’s content. The program will cover the following topics at a minimum: Caltrans Standard Specification 2018-14-6.03:</p> <ul style="list-style-type: none"> <li>• The distribution, general behavior, and ecology of the desert tortoise;</li> <li>• Its sensitivity to human activities;</li> <li>• The protection it is afforded by the Endangered Species Act;</li> <li>• Penalties for violations of state and federal laws;</li> </ul>										



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							Date / Initials	Date / Initials	YES	NO
<ul style="list-style-type: none"> <li>Notification procedures by workers or contractors if a tortoise is found in a construction area; and</li> <li>Protective measure specific to each project.</li> </ul>										
<b>BIO-11:</b> Whenever project vehicles are parked outside of a fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Authorized Biologist or an approved desert tortoise monitor to relocate the tortoise. If an Authorized Biologist is not present on site, the Resident Engineer or supervisor must notify an Authorized Biologist. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported. Caltrans Standard Specification 2018-14-6.03.	p.18	NES	Resident Engineer/ Authorized Biologist/ Contractor	During Construction	SSP 2018-14-6.03					
<b>BIO-12:</b> The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly	p.18	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction, During Construction	SSP 2018-14-6.03D					

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							Date / Initials	Date / Initials	YES	NO
and distinctly delineated with flagging or other marking to minimize surface disturbance associated with vehicle movement. Special habitat features, such as desert tortoise burrows, will be identified and marked as environmentally sensitive areas by the Authorized Biologist if they are to be avoided and will be discussed and identified during the worker education program. To the extent possible, a previously disturbed area within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where feasible. Project-related vehicle traffic will be restricted to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Authorized Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary. Caltrans Standard Specification 2018-14-6.03D.										
<b>BIO-13:</b> Caltrans will require all contractors to comply with the Endangered Species Act in the	p.18	NES	Resident Engineer/ Authorized	Pre-Construction,						

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							Date / Initials	Date / Initials	YES	NO
performance of work necessary for project completion. Evidence of compliance is required prior to Caltrans accepting or receiving materials or goods produced from outside of the right of way or through the use of facilities located outside of the right of way, including but not limited to, non-commercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the worksite by the resident engineer. Caltrans Standard Specification 2018-8-1.02.			Biologist/ Contractor	During Construction						
<b>BIO-14:</b> The resident engineer is responsible for ensuring that all protective measures are being fully implemented. If the resident engineer determines, or is notified by the Authorized Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, authorized biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The resident engineer must always be able to contact an approved Biological	p.19	NES	Resident Engineer/ Authorized Biologist/ Approved Biological Monitor/ Contractor	During Construction						



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							Date / Initials	Date / Initials	YES	NO
Monitor or Authorized Biologist to resolve any unforeseen issues.										
<b>BIO-15:</b> When work is occurring in areas where desert tortoise exclusion fencing is present, Caltrans will determine whether the presence of Authorized Biologists and approved biological monitors will be required during project activities as outlined in the 'criteria for use in reaching appropriate determination' section of the programmatic biological opinion and the Appendix I notification form submitted to the USFWS. In general, where the risk to desert tortoises is low, the Authorized Biologist or an approved Biological Monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance. Caltrans Standard Specification 2018-8-1.02.	p.19	NES	Resident Engineer/ Authorized Biologist/ Approved Biological Monitor/ Contractor	Pre-Construction	SSP 2018-8-1.02					
<b>BIO-16:</b> When work is occurring in areas where desert tortoise exclusion fencing is absent, the Authorized Biologist, or approved biological monitors working under the direction of the Authorized Biologist, will be	p.19	NES	Resident Engineer/ Authorized Biologist/ Approved Biological	During Construction						

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							Date / Initials	Date / Initials	YES	NO
present onsite daily to ensure the work area is clear of desert tortoises.			Monitor/ Contractor							
<b>BIO-17:</b> The project will repair and replace existing permanent desert tortoise exclusion fencing, as needed, to minimize impacts on desert tortoise. If required, exclusion fencing will be installed following Caltrans Standard Specifications, which include USFWS guidelines. The Authorized Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Authorized Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Authorized Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed.	p.19	NES	Resident Engineer/ Authorized Biologist	Pre-Construction, During Construction	SSP 2018-80-4-NSSP					

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							Date / Initials	Date / Initials	YES	NO
<b>BIO-18:</b> Upon locating a dead or injured tortoise within a project site, the Resident Engineer will immediately notify the Authorized Biologist, who then will notify the USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury (if known), and other pertinent information (e.g. size, sex, recommendations to avoid future injury or mortality). Caltrans Standard Specification 2018-14-6.03D.	p.19	NES	Resident Engineer/ Authorized Biologist	During Construction	SSP 2018-14-6.03D					
<b>BIO-19:</b> Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the Authorized Biologist or an approved Desert Tortoise Biological Monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final disposition	p.20	NES	Resident Engineer/ Authorized Biologist/ Desert Tortoise Biological Monitor/ Contractor	During Construction	SSP 2018-14-6.03D					



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							Date / Initials	Date / Initials	YES	NO
of the animal. Caltrans Standard Specification 2018-14-6.03D.										
<b>BIO-20:</b> If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped. Caltrans Standard Specification 2018-14-6.03D.	p.20	NES	Resident Engineer/ Authorized Biologist/ Contractor	During Construction	SSP 2018-14-6.03D					
<b>BIO-21:</b> Any fuel or other hazardous materials spills will be promptly cleaned up, and any leaks from equipment will be stopped and repaired immediately. Vehicle and equipment fluids that are no longer useful will be transported to an appropriate offsite disposal location. Fuel and lubricant storage and dispensing locations will be constructed to fully contain spilled materials until disposal can occur. Hazardous waste, including used motor oil waste and coolant, will be stored and transferred in a manner consistent with applicable regulations and guidelines. Caltrans Standard Specification 2018-13-1.01.	p.20	NES	Resident Engineer/ Contractor	SSP 2018-13-1.01						
<b>BIO-22:</b> Upon completion of construction, all refuse—including, but not limited to, equipment parts, wrapping material, cable, wire,	p.20	NES	Resident Engineer/ Contractor	Post Construction	SSP 2018-13-1.01					

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strapping, twine, buckets, metal or plastic containers, and boxes—will be removed from the site and disposed of properly. Caltrans Standard Specification 2018-13-1.01.										
<b>BIO-23:</b> To preclude attracting predators, such as the common raven ( <i>Corvus corax</i> ) and coyotes ( <i>Canis latrans</i> ), food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife. Caltrans Standard Specification 2018-13-1.01.	p.20	NES	Resident Engineer/ Contractor	During Construction	SSP 2018-13-1.01					
<b>BIO-24:</b> Desert tortoise exclusion fence construction will follow Caltrans Standard Specifications, which include USFWS guidelines for desert tortoise fencing. Caltrans Standard Specification 2018-14-6.03.	p.20	NES	Resident Engineer/ Contractor	During Construction	SSP 2018-14-6.03					
<b>BIO-25:</b> All desert tortoise fences, gates, and cattle guards will be regularly maintained at a frequency sufficient to ensure that they will continually provide an effective barrier to passage of desert tortoises. Caltrans Standard Specification 2018-14-6.03.	p.20	NES	Resident Engineer/ Authorized Biologist	During Construction	SSP 2018-14-6.03					
<b>BIO-26:</b> Desert tortoise-proof fencing will not cross washes. When washes and culverts are encountered,	p.20	NES	Resident Engineer/ Authorized	Pre-Construction,	SSP 2018-14-6.03					

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the desert tortoise-proof fence will follow the wash to the roadway and either tie into the existing bridge or cross over the top of a culvert. Caltrans Standard Specification 2018-14-6.03.			Biologist/ Contractor	During Construction						
<b>BIO-27:</b> During fence inspections and repairs, if any desert tortoises are observed, workers are to notify the Authorized Biologist because only Authorized Biologists and Approved Biological Monitors are permitted to handle tortoises. All desert tortoises encountered within the roadway side of the fence will be relocated across the fence to safety in accordance with USFWS protocol (USFWS 2010). Any such incident will be reported in the annual report. Caltrans Standard Specification 2018-14-6.03.	p.21	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction, During Construction	SSP 2018-14-6.03					
<b>BIO-28:</b> On a case-by-case basis, individual active burrows may be fenced if the Authorized Biologist determines this protective measure is necessary to prohibit desert tortoises from repeatedly entering work areas. Fencing around individual burrows will be removed when adjacent construction is complete. Caltrans Standard Specification 2018-14-6.03D.	p.21	NES	Resident Engineer/ Authorized Biologist	Pre-Construction, During Construction	SSP 2018-14-6.03D					



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							Date / Initials	Date / Initials	YES	NO
<b>BIO-29:</b> After each shift, surveyor flagging tape shall be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Authorized Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift. Caltrans Standard Specification 2018-14-6.03.	p.21	NES	Resident Engineer/ Authorized Biologist/ Contractor	During Construction						
<b>BIO-30:</b> Preconstruction Burrowing Owl Surveys: Preconstruction burrowing owl surveys will be performed within the project limits within 14 days prior to ground disturbing activities. If burrowing owls are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance and minimization measures required for the project. The following avoidance, minimization, and mitigation measures contain recommendations from the 2012 Staff Report on Burrowing Owl Mitigation. Any and/or all of these measures are subject to change based on the results of preconstruction nesting bird surveys and at the request of CDFW. Caltrans Standard Specification 2018-14-6.03B.	p.21	NES	Resident Engineer/ Biologist/ Contractor	Pre-Construction, During construction						

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							Date / Initials	Date / Initials	YES	NO
<p>1. Clearly marking areas supporting occupied burrowing owl burrows and buffer zone setback areas as determined by a qualified biologist. Disturbance to and project activities in these areas must be avoided.</p> <p>2. Avoid direct destruction of unoccupied burrows to the extent feasible.</p> <p>3. Occupied burrows and the established buffer zone setback area surrounding each of the occupied burrows shall not be disturbed during the nesting season (February 1–August 31), unless a biologist can verify through noninvasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.</p> <p>4. Where possible, avoid disturbance to occupied burrows and the established buffer zone area during the non-breeding season (September 1–January 31).</p> <p>5. A Worker Environmental Awareness Program (WEAP) will be developed and provided by a</p>										

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<p>qualified biologist to all involved project personnel. A description of the burrowing owl, its ecology, and its onsite status will be summarized. Measures developed for burrowing owl protection and reporting will be outlined. A record of all personnel attending this training will be kept by Caltrans and updated as staff changes necessitate additional training.</p> <p>6. Where direct disturbance to burrowing owls and their habitat can be avoided, the incorporation of buffer zones, visual screens, or other measures will minimize the effects on owls. CDFW-recommended restricted activity dates and setback distances by level of disturbance for burrowing owl nesting sites (CDFW 2012) are listed in the table below. The nest buffers listed below will be used as a baseline; however, if site conditions are such that nesting buffers could be decreased yet still be biologically defensible, a qualified biologist may use their discretion to decrease the buffer distance. Nest location, behavior, disturbance tolerance, and existing disturbance should all be taken into account when adjusting the size of</p>										



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							Date / Initials	Date / Initials	YES	NO																		
<p>an active burrowing owl nest buffer. The minimum nesting buffer distance shall be 500 feet (152 meters), as it is for other sensitive nesting bird species for the project.</p> <p><b>CDFW Burrowing Owl Buffer Zone Setback Distances</b></p> <table><thead><tr><th><u>Year</u></th><th colspan="3"><u>Level of Disturbance (in meters)</u></th></tr><tr><th></th><th><u>Low</u></th><th><u>Med</u></th><th><u>High</u></th></tr></thead><tbody><tr><td>Apr 1–Aug 15</td><td>200</td><td>500</td><td>500</td></tr><tr><td>Aug 16–Oct 15</td><td>200</td><td>200</td><td>500</td></tr><tr><td>Oct 16–Mar 31</td><td>50</td><td>100</td><td>500</td></tr></tbody></table> <p>7. When avoidance of disturbance to occupied burrowing owl burrows during the non-breeding season is not possible, a Burrowing Owl Exclusion Plan approved by CDFW may be required.</p> <p>8. For unavoidable impacts on occupied burrowing owl burrows, the burrows must be excluded and closed by a qualified biologist to permanently exclude burrowing owls. One-way doors would need to be temporarily installed in burrow openings during the non-breeding season (September 1–</p>	<u>Year</u>	<u>Level of Disturbance (in meters)</u>				<u>Low</u>	<u>Med</u>	<u>High</u>	Apr 1–Aug 15	200	500	500	Aug 16–Oct 15	200	200	500	Oct 16–Mar 31	50	100	500								
<u>Year</u>	<u>Level of Disturbance (in meters)</u>																											
	<u>Low</u>	<u>Med</u>	<u>High</u>																									
Apr 1–Aug 15	200	500	500																									
Aug 16–Oct 15	200	200	500																									
Oct 16–Mar 31	50	100	500																									

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<p>January 31) and before breeding behavior has begun. Suitable habitat (including suitable burrows) must be available adjacent to or near the disturbance site, or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows will be excavated using hand tools and filled to prevent reoccupation. All burrowing owls associated with occupied burrows that will be directly affected (temporarily or permanently) by the project will be passively relocated.</p> <p>9. All burrowing owl relocation and monitoring shall be approved by CDFW. A report summarizing the results of the relocation and monitoring shall be submitted to CDFW following completion of the relocation and monitoring of the owls.</p>										
<b>BIO-31:</b> Bat Protection. Prior to modifying or extending culverts or prior to work on, under, or adjacent to bridges, suitable areas and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Surveys are recommended as follows:	p.22	NES	Resident Engineer/ Authorized Biologist/ Qualified Bat Biologist	Pre-Construction, During Construction	SSP 2018-14-6.03					

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<p>Caltrans Standard Specification 2018-14-6.03D.</p> <p>1. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of culvert modification and work on, under, or adjacent to bridges, ideally during the maternity season (typically March 1–August 31), to allow time to prepare mitigation and/or exclusion plans if needed.</p> <p>2. Preconstruction surveys are recommended to be conducted by a qualified bat biologist no more than two weeks prior to the initiation of culvert modification activities and work on, under, or adjacent to bridges.</p> <p>Surveys may entail direct inspection of the bridges, culverts, or other suitable habitat or nighttime surveys.</p> <p><u>BIO-31(a)</u>: If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special status species and the roost is not being used as a maternity roost, then the bat biologist will determine appropriate measures</p>										



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							Date / Initials	Date / Initials	YES	NO
<p>to minimize and avoid potential impacts on bats. Appropriate measures may include evicting bats from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans. Caltrans Standard Specification 2018-14-6.03 and 2-1.06B.</p> <p><i>BIO-31(a)(i):</i> If special status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost. Caltrans Standard Specification 2018-14-6.03.</p> <p><i>BIO-31(a)(ii):</i> If special status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by CDFW and only when bats are not present in the roost. The</p>										

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<p>mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed. Caltrans Standard Specification 2018-14-6.03.</p> <p><u>BIO-31(b)</u>: If the preconstruction survey determines that no active roosts are present, then work activities shall commence within two weeks following the preconstruction</p>										

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survey. Caltrans Standard Specification 2018-14-6.03.  <u>BIO-31(c)</u> : All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor. Caltrans Standard Specification 2018-14-6.03.  <u>BIO-31(d)</u> : All construction activity in the vicinity of an active roost shall be limited to daylight hours. Caltrans Standard Specification 2018-14-6.03.										
<b>BIO-32:</b> Artificial Lighting: Artificial lighting shall be focused only on the area of direct work, and light spillover into the adjacent foraging areas shall be minimized to the greatest extent feasible. Caltrans Standard Specification 2018-14-6.03.	p.24	NES	Resident Engineer/ Contractor	Pre-Construction, During Construction	SSP 2018-14-6.03					
<b>BIO-33:</b> Vegetation Clearing and Grubbing: Vegetation clearing and grubbing will be conducted outside of the nesting bird season (February 15–September 1). If this is not feasible, then BIO-33 will implemented. Caltrans Standard Specification 2018-14-6.03B.	p.24	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction, Outside of Nesting Bird Season SSP 2918-14-6.03B						
<b>BIO-34:</b> Preconstruction Nesting Bird Survey: If construction occurs within nesting bird season (February	p.24	NES	Resident Engineer/ Authorized	Pre-Construction	SSP 2018-14-06.03B					



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15–September 1), then preconstruction surveys will be conducted immediately prior (within 3 days) to construction by a qualified biologist in order to locate and avoid nesting birds. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when the nest is no longer active. Alternatively, a qualified biologist may determine that certain work can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Caltrans Standard Specification 2018-14-6.03B.			Biologist/ Contractor							
<b>BIO-35:</b> Vegetation Transport: Trucks with loads carrying vegetation shall be covered, and vegetative materials removed from the site shall	p.24	NES	Resident Engineer/ Contractor	During Construction						

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be disposed of in accordance with all applicable laws and regulations.										
<b>BIO-36:</b> Landscaped Native Vegetation: Bare soil will be landscaped with a Caltrans-recommended seed mix from locally adopted species, where feasible, to preclude the invasion of noxious weeds. For widespread native herbaceous species that are more likely to be genetically homogenous, site specificity is a less important consideration and seed from commercial sources may be used. <ul style="list-style-type: none"> <li>Seed purity shall be certified by planting seed labeled under the California Food and Agricultural Code or that has been tested within a year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists.</li> <li>Plant species listed in Lists A and B of the California Exotic Pest Plant Council's list of exotic pest plants (latest edition) will not be used to restore or stabilize areas.</li> </ul>	p.24	NES	Resident Engineer/ Authorized Biologist/ Contractor	Pre-Construction, During Construction						
<b>BIO-37:</b> Vehicle Washing: Construction equipment will be cleaned of mud or other debris that	p.25	NES	Resident Engineer/ Contractor	During Construction						

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							Date / Initials	Date / Initials	YES	NO
may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds.										
<b>BIO-38:</b> Soils and topsoil will be stockpiled in either disturbed areas lacking native vegetation or areas delineated for project-related disturbance. Topsoil will be respread following compaction.	p.25	NES	Resident Engineer/ Authorized Biologist/ Contractor	During Construction						
<b>BIO-39:</b> Biological Monitor: A biological monitor will be present during ground-disturbing activities to ensure any wildlife that is unearthed or enters the work area during project activities is out of harm's way. This monitor will inspect all excavations at the beginning and end of each day to ensure wildlife has not become trapped and will conduct required preconstruction surveys.	p.25	NES	Resident Engineer/ Authorized Biologist/ Biological Monitor/ Contractor	During Ground Disturbing Activities						
<b><u>Cultural Resources</u></b>										
<b>CR-1:</b> Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	p.27	HPSR, HRER, ASR	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor	Final Design, During Construction	2018 SSP 14-2.03A					



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							Date / Initials	Date / Initials	YES	NO
<b>CR-2:</b> Treatment of Human Remains. In the event that human remains are found, the county coroner shall immediately be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who will then notify the Most Likely Descendent. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.	p.27	HPSR, HRER, ASR	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor	Final Design, Construction	2018 SSP 14-2.03A					
<b>CR-3:</b> Conduct Archaeological Sensitivity Training for Construction Personnel. Prior to the initiation of construction, all construction personnel shall be trained, by a qualified archaeologist, regarding the recognition of possible cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources (i.e., ESAs) during construction. The training session will include a handout and	p.27	HPSR, HRER, ASR	Resident Engineer/ Qualified Archaeologist/ Contractor	Pre-Construction						

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will focus on how to identify archaeological resources that may be encountered during earthmoving activities. The training shall inform all construction personnel of the procedures to be followed upon the discovery of cultural materials. All personnel shall be instructed that unauthorized removal or collection of artifacts is a violation of state law.										
<b>CR-4:</b> Environmentally Sensitive Areas. The entirety of CA-SBR-12917H (Camps Clipper/Essex Divisional Training Camp Complex) and a portion of CA-SBR-2910H shall be protected through the establishment of an Environmentally Sensitive Area (ESA). Fencing will be used as appropriate as determined by the Professional Qualified Staff archaeologist and the Resident Engineer. An ESA exists at PM 119.9 in the northwestern gore area of the Water Road offramp. A C-Block will be protected in place through the establishment of an ESA and will be completely fenced to ensure protection during staging and storage activities.	p.27	HPSR, HRER, ASR	Resident Engineer/ Qualified Archaeologist/ Contractor	Pre-Construction						
<b>CR-5:</b> Periodic Archaeological Resource Spot-Check Monitoring. Periodic archaeological resource spot-	p.27	HPSR, HRER, ASR	Resident Engineer/ Qualified	During Construction	2018 SSP 14-2.03B					

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check monitoring shall be conducted by a qualified archaeologist to ensure the ESA fencing around the portions of CA-SBR-12917H (Camps Clipper/Essex Divisional Training Camp Complex) and CA-SBR-2910H (C-Block at PM 119.9 Water Road) within the Area of Direct Impact (ADI) is not breached during ground-disturbing activities associated with the project			Archaeologist/ Contractor							
<b>Hazards and Hazardous Materials</b>										
<b>HAZ-1:</b> The following will be included in the PS&E package:  HAZ-1A: SSP 14-11.14 For the Removal and Disposal of Treated Wood Waste Such as Sign Post and Guardrails  HAZ-1B: SSP 36-4 Residue Containing Lead from Paint and Thermoplastic  HAZ-1C: SSP 7-1.02K(6)(J)(111) for Lead Compliance Plan	p.36	Initial Site Assessment (ISA)	Design/ Resident Engineer / Contractor	PS&E, Pre-Construction, During Construction	SSP 14-11.14, SSP 36-4, SSP 7-1.02K(6)(J)(111)					
<b>HAZ-2:</b> Based upon discussions with the U.S. Army Corps of Engineers (USACE) and the California Department of Toxic Substances Control (DTSC), the Initial Site Assessment (ISA) prepared for the project recommends the following be	p.36	ISA	Design/ Resident Engineer / Contractor	Final Design, Pre-Construction, During Construction						



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<p>implemented as related to the Camp Essex Formerly Used Defense Sites (FUDS) site:</p> <ul style="list-style-type: none"> <li>The contractor should be provided relevant documents pertaining to the FUDS site and prepare a site-specific health and safety plan for the project. As part of the contractor's health and safety program, it is recommended that contractor personnel undergo unexploded ordinance site (UXO) training prior to conducting earthwork.</li> <li>Construction monitoring and/or employing a UXO technician during earthwork at the FUDS site are at the discretion of Caltrans and not required. However, a UXO technician should be on the project team in some capacity to conduct training and perform site visits, if necessary.</li> </ul>										
<b>HAZ-3:</b> A hazardous materials survey is required for demolition of any structures that are potentially affected by ACMs or LBP. If required, a survey should be conducted under the oversight of a Cal/OSHA Certified Asbestos Consultant (CAC) and California Department of Public Health (CDPH)	p.36	ISA	Design/ Resident Engineer / Contractor	Final Design, Pre-Construction, Prior to demolition						

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lead Inspector/Assessor and will serve to confirm the presence or absence of ACM and LBP through collection of bulk samples and laboratory analysis. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials during construction.										
<b>Hydrology and Water Quality</b>										
<b>WQ-1:</b> Prior to the start of construction, a SWPPP for reducing impacts on water quality shall be developed by the contractor and approved by the Department.	p.40	ISMND	Resident Engineer	Pre-Construction						
<b>WQ-2:</b> The SWPPP control measures shall address the following categories: soil stabilization practices, sediment control practices, sediment tracking control practices, wind erosion control practices, and non-storm water management and waste management and disposal control practices.	p.40	ISMND	Resident Engineer	Pre-Construction						
<b>WQ-3:</b> The contractor shall be required to comply with water pollution control provisions and SWPPP and conform to the requirements of the Department's Standard Specification Section 7	p.40	ISMND	Resident Engineer/ Contractor	During Construction						

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1.01G "Water Pollution," of the Standard Specifications.										
<b>WQ-4:</b> If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted.	p.40	ISMND	Resident Engineer/ Contractor	During Construction						
<b>Noise</b>										
<b>NOI-1:</b> The contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.	p.43	ISMND	Resident Engineer/ Contractor	During Construction	2018 SSP Section 14-8 Noise Control					
<b>NOI-2:</b> Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler or a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.	p.43	ISMND	Resident Engineer/ Contractor	During Construction	2018 SSP Section 14-8 Noise Control					



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<u>Transportation</u>										
TRF-1: Prior to construction, a Traffic Management Plan will be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.	p.47	ISMND	Resident Engineer	Pre-Construction						



## Appendix G SHPO Concurrence Documentation

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**DEPARTMENT OF PARKS AND RECREATION  
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

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May 28, 2020

VIA EMAIL

In reply refer to: FHWA\_2020\_0428\_001  
CATRA\_2020\_0428\_001

Mr. David Price, Section 106 Coordinator  
Cultural Studies Office  
Caltrans Division of Environmental Analysis  
1120 N Street, PO Box 942873, MS-27  
Sacramento, CA 94273-0001

Subject: Finding of No Adverse Effect for the Proposed Interstate 40 Median Retrograde Project, San Bernardino County, CA

Dear Mr. Price:

Caltrans is initiating consultation about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92* (5024 MOU). As part of your documentation, Caltrans submitted a Historic Properties Survey Report (HPSR), a Historic Resources Evaluation Report, an Archaeological Survey Report, and a Finding of Effect (FOE) for the proposed project.

Caltrans District 3, is proposing grading and re-grading the center median (including cut and fill) and culvert work on I-40 from Post Mile (PM) 100 – 125. All work will occur within the center median and gore areas. All work will be within the Caltrans Right-of-Way (ROW).

In accordance with Stipulation VIII.C.6 of the PA Caltrans determined that AE-4090-01H is ineligible for listing in the National Register of Historic Places (NRHP).

Caltrans also determined that CA-SBR-2910H – Route 66/National Old Trails Road, a property previously determined eligible for the NRHP, is located within the area of potential effect for the project. In addition, Caltrans is assuming the two following properties are eligible for the NRHP for the purposes of the project:

- Desert Training Center – California Arizona Maneuver Area (CHL-985)
- CA-SBR-12917H – Camp Clipper/Essex

Caltrans has applied the Criteria of Adverse Effect and found pursuant to Stipulation X.B.2(a) of the PA, the project will have no adverse effect to the above historic properties. Caltrans will implement an Environmentally Sensitive Area Action Plan to avoid and protect the historic properties. As part of this an Archaeological Monitoring Area will be established.

Based on review of the submitted documentation, I concur with the above determination of eligibility. I also have no objection to Caltrans' finding of no adverse effect.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov) Jeanette Schulz at (916) 445-7031 with e-mail at [jeanette.schulz@parks.ca.gov](mailto:jeanette.schulz@parks.ca.gov).

Sincerely,



Julianne Polanco  
State Historic Preservation Officer