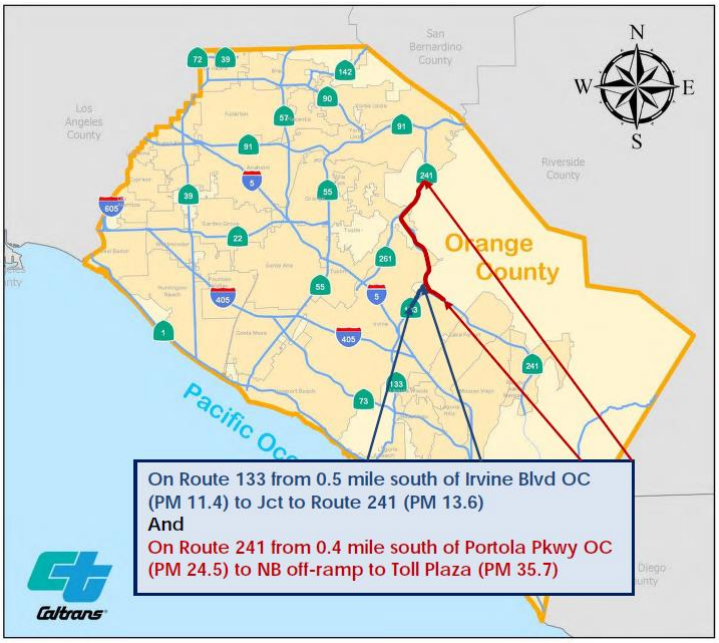
State Route 133/State Route 241 Permanent Restoration Project

ORANGE COUNTY, CALIFORNIA
DISTRICT 12 – ORA – 133 and 241 (PM 11.4/13.6 and 24.5/35.7)
EA 0T730 / 1222000083

Initial Study with [Proposed] Mitigated Negative Declaration



Prepared by the
State of California, Department of Transportation

Caltrans
May 2025

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General Information about This Document

What's in this document:

The California Department of Transportation (Department) has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Orange County, California. The Department is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of the document, as well as the technical studies are available for review at the district office and at the public libraries listed below:
    - California Department of Transportation

      District 12 Office

      (Hours: Mon - Fri: 8 am - 5 pm),

      1750 Fourth Street, Suite 100, Santa Ana, CA 92705
    - OC Library - Heritage Park Regional Branch Location

      (Hours: Mon - Thu: 10:00 am - 6:00 pm and Fri - Sat: 9:00 am - 5:00 pm),

      14361 Yale, Irvine, CA. 92604
    - OC Library – Foothill Ranch Branch

      (Hours: Mon - Thu: 10:00 am - 7:00 pm and Sat: 9:00 am - 5:00 pm),

      27002 Cabriole, Foothill Ranch, CA 92610
- Project information is available at: https://dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-133-sr-241-silverado-fire-restoration-project
- We'd like to hear what you think. If you have any comments about the proposed project (or request for a public hearing), please send your written comments via postal mail or email to the Department by the deadline.
    - Send comments via postal mail to:
      Department of Transportation District 12, Division of Environmental Analysis
      1750 East 4th Street, Suite 100
      Santa Ana, California 92705
      Attn: Carmen Lo
    - Send comments via email to: SR-133-241-SilveradoFireRestoration@dot.ca.gov
- Be sure to send comments by the deadline: May 30, 2025

What happens next:

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

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to the California Department of Transportation, District 12, Division of Environmental Analysis, 1750 East 4th Street, Suite 100, Santa Ana, California 92705, Attn: Carmen Lo; (949) 774-0756 (voice), or use the California Relay Service, 1 (800) 735-2929 (TTY), 1 (800) 735-2922 (voice), or 711.

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SCH#_____
12-ORA-133 and 241, PM 11.4/13.6 & 25.4/35.7
0T730 (EFIS 1222000083)

This project will make necessary repairs on the fire damaged guardrails, drainage facilities, traffic control devices, roadway signs, and electrical systems on Route 133 from 0.5 mile south of Irvine Blvd OC (PM 11.4) to the Jct. on Route 241 (PM 13.6) and Route 241 from 0.4 mile south of Portola Pkwy OC (PM 24.5) to NB off-ramp to Toll Plaza (PM 35.7) in the cities of Irvine, Orange, and Orange County, Unincorporated.

INITIAL STUDY WITH [PROPOSED] MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division 13, California Public Resources Code
THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency:

California Transportation Commission

April 25, 2025
Date

Smita Deshpande for CF
Chris Flynn
Deputy District Director
California Department of Transportation
CEQA Lead Agency

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

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Santa Ana, California 92705
(949) 774-0756

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SCH #_____

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Department) District 12 proposes to repair severely damaged Transportation assets caused by the 2020 Silverado Fire and to improve the resilience of other existing roadway assets considered to be within a fire hazard severity zone. The improvements will be in Orange County, California on State Route 133 (SR-133) from Post Mile (PM) 11.4 to PM 13.6, and on State Route 241(SR-241) from PM 24.5 to PM 35.7 in the cities of Irvine, Orange, and Orange County, Unincorporated. The proposed project build improvements would include improvements along SR-133 south of Irvine Boulevard (Blvd) Over Crossing (OC) to the Junction (Jct.) SR-241 and on SR-241 south of Portola Parkway (Pkwy) OC to NB off- ramp Toll Plaza. Two alternatives are being considered, The Build and No Build Alternative.

Determination

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

The Department 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 impact** on:
Aesthetics, Agricultural Resources, Land Use/Planning, Mineral Resources, Population/ Housing, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

In addition, the proposed project would have **less than significant impact** on: Air Quality, Cultural Resources, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, and Transportation/Traffic.

The Proposed project would have a **less than significant impact with mitigation incorporated** on: Geology and Soils (Paleontological Resources) and Biological Resources because the project will implement avoidance, minimization, and mitigation measures as discussed in Chapter 2.

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Chris Flynn
Deputy District Director
District 12
California Department of Transportation

Date

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Table of Contents

List of Tables and Figures

List of Figures

List of Tables

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Chapter 1 – Proposed Project

1.1 Introduction

The California Department of Transportation (Department) District 12 initiated a major damage permanent restoration improvement and promoting resilient operations project to repair severely damaged Transportation assets caused by the 2020 Silverado Fire and to improve the resilience of other existing roadway assets considered to be within a fire hazard severity zone. The improvements will be in Orange County, California on State Route 133 (SR-133) from Post Mile (PM) 11.4 to PM 13.6, and on State Route 241(SR-241) from PM 24.5 to PM 35.7 in the cities of Irvine, Orange, and Orange County, Unincorporated. The Department is the lead agency under the California Environmental Quality Act (CEQA). The proposed project build improvements would include improvements along SR-133 south of Irvine Boulevard (Blvd) Over Crossing (OC) to the Junction (Jct.) SR-241 and on SR-241 south of Portola Parkway (Pkwy) OC to NB off- ramp Toll Plaza. Two alternatives are being considered: the Build and No Build Alternative. The project Location (Figure 1) is shown in this chapter and project plans is included in Appendix E.

The proposed improvements of the build alternative include necessary repairs on the fire damaged guardrails, drainage facilities, roadway signs, and electrical systems. Moreover, the build alternative also aims to improve the existing infrastructure by making it more resilient to extreme weather and natural disasters. The project's proactive approach includes drainage improvements, upgrade traffic safety devices, replacement of pavement sections impacted by the culvert replacement, landscaping replacement, electrolier replacement, and conductor loop replacement.

The project area is mostly undeveloped. Land use West of SR-241 is mostly undeveloped with some residential development (both single and multi-family). East of SR-241 is mostly undeveloped. Land use West and East of SR-133 has mostly residential development (both single and multi-family) and commercial.

This project is a candidate for Programing in the 2022 SHOPP, under the "Major Damage - Permanent Restoration Program (131 Program) (20.10.201.131)" and under the Promoting Resilient Operations for Transformative, Efficient, and Cost- saving Transportation (PROTECT) program, under the "Infrastructure Improvement Job Act Program (IIJA Program)". The fund would be allocated in the year of Ready-to-List, FY2025/2026. This project is scheduled for construction in the FY 2026/2027. It has been determined that this project is eligible for Federal-aid funding and a Categorical Exclusion (CE) will be prepared and included as part of the Final Environmental Document (FED). The FED is anticipated to be approved in June 2025. The current cost estimate for the construction of the Build Alternative is $23,258,00.00. Project design is anticipated to be ready to list on May 2026. Construction will occur over a period of 16 months between December 2026 to April 2028. Night and weekend partial lane closure during construction will be required and detour will also be required for the project.

1.2 Purpose and Need

Purpose:

The purpose of this project is to restore the 2020 Silverado fire damaged remaining assets by upgrading to current standards essential to roadway operation and upgrading the facility to make existing infrastructure more resilient to extreme weather and natural disasters.

Need:

Due to the 2020 Silverado fire, the assets essential to roadway operation were burnt and damaged. The existing infrastructure of the facility are not resilient to extreme weather and natural disasters.

Figure 1-1 Project Location Map

Project EA: 0T731
Project No.: 1222000083

12-ORA-SR-241
Post Miles: 24.5/35.7
12-ORA-SR-133
Post Miles: 11.4/13.6

Legend

- Project Area
- 133 State Route 133
- 241 State Route 241

1:250,000

Project Location Map

0 2.5 5 10 Miles

N

0 2,500 5,000 10,000 Meters

Map Created: 11/4/2024
By: Judy Bernal (Caltrans D12)

Caltrans

1.3 Project Description

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the “Build Alternative” and the “No-Build Alternative”

PROJECT ALTERNATIVES

1.3.1.1 Proposed Build Alternative

The Build Alternative includes improvements along SR-133 and SR-241, and it satisfies the need and purpose of the project. The proposed scope improvements are listed below.

Roadway Improvements:

- Pavement Section Improvements
- Landscape improvements
- Electrical systems improvements
- Roadside sign improvements
- Drainage system improvements along SR-133 and SR-241
- Safety device improvements along SR-241

Pavement Section Improvements

Proposed pavement section improvements are in conjunction with anticipated disturbance caused by the installation of reinforced concrete pipe culverts. The proposed pavement will be like the existing with the following considerations.

- Top layer of the proposed pavement section is to be 0.2' of Rubberized Hot Mix Asphalt-Gap graded (RHMA-G) and it needs to extend one foot outside the trench width on each side (Saw-cut existing pavement section one foot on each side of the trench width to accommodate one foot of 0.2’ RHMA-G layer).
- Asphalt Treated Permeable Base Course (ATPB) or Concrete Treated Permeable Base (CTPB) should be replaced only when they are present. Some of the pipe’s replacement maybe in areas where there is no ATPB or CTPB. If they are not present, replace in kind with Aggregate Base (AB) or Asphalt Surface (AS) or just AB.

Existing pavement section consists of:

0.1’ RHMA (Type A) over 0.6’ Asphalt Concrete (AC) (Type B) over 0.25’ ATPB over 0.7’ Class 2 AB.

Proposed pavement section will consist of:

0.2’ RHMA-G over 0.5’ Hot Mix Asphalt (Type A) over 0.25’ ATPB or CTPB over 0.7’ Class 2 AB. See attachment, Sheet X-1, for proposed Typical Section.

Landscape Improvements

Roadside improvements proposed are in conjunction with anticipated disturbance caused by the installation of safety devices. Vegetation control in the form of inert ground cover or minor

concrete is proposed around Midwest Guardrail systems and Concrete Barriers locations. Vegetation control has been proposed around the safety barriers. This work is proposed to reduce maintenance activities and therefore reduce worker exposure to traffic.

Electrical Improvements

The electrical work will encompass several key modifications affected by the Roadway work: Modifying lighting systems, includes installing new conduit, relocating electroliers as needed and replacing existing electroliers. For Modifying Fiber Optic Cable Systems, the system shall be protected throughout the project as well as repair or replace where affected by Roadway work. Modifying Traffic Monitoring Stations and Modifying Ramp Metering Systems, will be completed by replacing or repairing existing detector loops, including those owned by OCTA. Finally, Modifying Camera Systems by installing new conduit and conductors to support project needs. Any systems impacted by the roadway improvements will need to be repaired in kind.

Roadside Signs Improvements

The table below shows the four (4) roadside signs that were damaged by the 2020 Silverado fire. For 3 locations the work is on SR-133. One location is on SR-241. All four roadside signs will be replaced with steel post and per current standards.

Table 1-1: Roadside Signs Upgrades

Location No.	Facility & Direction/PM	Location Description	Description
1	NB 133/ PM 11.6	Adopt a Highway Package Sign S32(CA), S32A(CA), S32-1	Sign 1: Adopt a Highway Package Sign
2	NB 133/ PM 11.9	At Irvine Blvd OC G11 Bridge Sign	Sign 2: G11 Bridge Sign
3	NB 133/ PM 12.8	G77 Two Post Guide Sign Toll Road, South Directional Arrow, 133 (Route Marker)	Sign 3: G77 Two Post Guide Sign Toll Road
4	NB 241/ PM 25.2	G77 Two Post Guide Sign Toll Road, North Directional Arrow, Toll California 241 (Route Marker)	Sign 4: G77 Two Post Guide Sign Toll Road

Source: The Department. Draft Project Report (2025).

Drainage Improvements

The drainage work entailed restoring the three (3) Drainage Systems damaged during the 2020 Silverado fire (131 program). In addition, there were twenty- eight (28) Drainage Systems that were identified within the fire severity zone (IIJA program). These systems would be upgraded with Reinforce Concrete Pipe to make them more resilient to extreme weather. The table below shows the three (3) Drainage Systems that were damaged by the 2020 Silverado fire (131 program). For 2 locations the work is on SR-133. One location is on SR-241.

See details on the Drainage Plans in Appendix E.

Table 1-2 Culvert Upgrades

Location No.	Facility & Direction/PM	Location Description	Description
1	NB 241/ PM 24.9	Portola Pkwy off-ramp	Replaced HDPE culvert with RCP and one FES.
4	NB 133/ PM 12.4	0.2 mi S/O Portola Pkwy UC	Replaced CSP culvert with RCP and one FES.

Source: The Department. Draft Project Report (2025).

In addition, the twenty-eight (28) upgraded Drainage system associated with resilience to extreme weather and natural disaster (IIJA) can be seen on the Drainage Plans included as part of Appendix E.

Safety Device Improvements

There are a total of 47 Safety Device combined locations between 131 (9) and IIJA (38) programs.
The Safety Devices that were damaged by the 2020 Silverado fire. All nine (9) locations are on SR-241. The table below summarizes the improvements.

The table below summarizes the improvements mentioned above:

Table 1-3: Traffic Safety Devices Upgrades (131 Program)

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-1, L-2	1	NB 241	Portola Pkwy off ramp Right Shoulder	24.7	CB GUARD RAIL	740	Regrade approx. 50' x 4' of cut slope in front of Crash Cushion. Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-2	2	NB 241	Right Shoulder	24.9	CB GUARD RAIL	145	Upgrading safety system to concrete barrier guardrail, Type 60MS.

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-3	3	NB 241	Right Shoulder	25	CB GUARD RAIL	170	Regrade approx. 50' x 4' of cut slope in front of Crash Cushion. Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-5	4	SB 241	Right Shoulder	25.6	CB GUARD RAIL	210	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-9	21	NB 241 to SB 133 Connector	Right Shoulder	26.85	Steel Post - MGS	250	Upgrade safety system to Steel Post MGS, AGT, and Anchor Block.
L-17	32	NB 241	Right Shoulder	27.4	CB GUARD RAIL	600	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-21	38	NB 241	Right Shoulder	28.6	CB GUARD RAIL	230	Extend existing MGS safety system with concrete barrier guardrail, Type 60MS.
L-22, L-23	41	NB 241	Right Shoulder	29.0	CB GUARD RAIL	160	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-23	42	NB 241	Right Shoulder	29.1	Wood Post MGS	50	Upgrading existing dike and end terminal system to current standard.

Source: The Department. Draft Project Report (2025).

In addition, thirty-five (35) traffic safety devices were identified as being within a fire hazard severity zone. All located on SR-241. Below is a description of the proposed improvements; see Layout Plans, Appendix E.

The table below summarizes the improvements mentioned above:

Table 1-4: Traffic Safety Devices Upgrades (IIJA Program)

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-6	5	241	Median	26	MGS - STEEL POST	675	Upgrading safety system in median to MGS and double MGS for NB and SB directions.
L-6	6	SB 241	Rt shld	26	CB GUARDRAIL	160	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-7, L-8	9	SB 241	Cash toll plaza entrance Rt shld	26.3	CB GUARDRAIL	1330	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-7, L-8	10	241	Median	26.35	MGS - STEEL POST	350	Upgrading safety system in median to MGS and double MGS for NB and SB directions. Regrade slope
L-8	11	NB 241	Rt shld	26.45	CB GUARDRAIL	307	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-8	12	241	Median	26.45	MGS - STEEL POST	375	Upgrading safety system in median to MGS and double MGS for NB and SB directions. Regrade slope
L-8	13	SB 241	Lt shld	26.5	CB GUARDRAIL	145	Upgrading safety system to concrete barrier guardrail, Type 60MS.

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-8	14	SB 241	Rt shld	26.5	MGS - STEEL POST	385	Upgrading safety system to MGS
L-8, L-9	15	NB 241	NB 241/SB 133 Rt shld @ gore	26.6	CB GUARDRAIL	151	Upgrading safety system to concrete barrier guardrail, Type 60MS. Grading required
L-9	16	NB 241	NB 241/SB 133 Lt shld @ gore	26.65	MGS – STEEL POST	312.5	Extend exist MGS per current standards.
L-9	17	SB 241	Lt shld	26.65	CB GUARDRAIL	230	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-9	18	SB 241	Rt shld	26.65	CB GUARDRAIL	139	Upgrading safety system to concrete barrier guardrail, Type 60MS. Regrade slope to achieve adequate bench. Regrading required.
L-9, L-10	19	SB 241	NB 133/SB 241 Rt shld	26.8	CB GUARDRAIL	510	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-9, L-10	20	SB 241	NB 133/SB 241 Lt shld	26.85	MGS - STEEL POST	350	Upgrading safety system to MGS
L-9, L10	22,23,25	NB 241	Rt shld	26.8	CB GUARDRAIL	881	Upgrading safety system to concrete barrier guardrail, Type 60MS. Regrade slope to achieve adequate

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
							bench. Regrading required.
L-10	24	NB 241	Median	26.9	MGS - STEEL POST	375	Upgrading safety system to MGS and double MGS
L-10, L-16	26,28	NB 241	Rt shld	27	CB GUARDRAIL	784	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-10, L-16, L-17	27,29,30	SB 241	Rt shld	27	MGS - STEEL POST	2690	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-16, L-17	30a	SB 241	median	27.4	MGS - STEEL POST	1137.5	Upgrading safety system to MGS and double MGS
L-17	34	SB 241	Lt shld	27.5	MGS - STEEL POST	212.5	Upgrading safety system to MGS
L-28, L-29	46	NB 241	Rt shld	30.6	CB GUARDRAIL	965	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-31	48	NB 241	Rt shld	31.2	CB GUARDRAIL	802	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-32	49	NB 241	Rt shld	31.35	CB GUARDRAIL	143	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-34	50	NB 241	Santiago Canyon off ramp Lt shld	31.9	MGS - STEEL POST	550	Upgrading safety system to MGS

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-34, L-35	51	SB 241	Rt shld	32.1	CB GUARDRAIL	913	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-35	52	NB 241	Rt shld	32.15	CB GUARDRAIL	252	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-41	69	NB 241	Rt shld	33.1	MGS - STEEL POST	162.5	Upgrading safety system to MGS
L-41	70	NB 241	Rt shld	33.1	CB GUARDRAIL	629	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-42	71	SB 241	Rt shld	33.4	CB GUARDRAIL	180	Upgrading safety system to concrete barrier guardrail, Type 60MS.
L-43	73	SB 241	Rt shld	33.6	CB GUARDRAIL	138	Upgrading safety system to concrete barrier guardrail, Type 60MS.

Source: The Department. Draft Project Report (2025).

During the Construction phase of EA 12-0H0474, the project ran out of funds and was not able to upgrade a few Safety Device locations. Three of those locations were identified as being within the fire hazard severity zone and within the project Post Mile limits of 12-0T730. In effect, Locations 4, 6, and 7 were brought into this project. The Location numbers from the EA 12-0H0474 have been updated to locations 74, 75, and 76, respectively. See Layout Plans, Appendix E.

The table below summarizes the improvements mentioned above:

Table 1-5: Traffic Safety Devices Upgrades

Location					Safety Device Type	Length (ft)	Description
Sheet No.	Location No.	Facility & Direction	Location Description	Approx Post Mile			
L-28	74	NB 241	Rt shld	30.3	CB GUARDRAIL	200	Upgrading safety system to concrete barrier guardrail, Type 60MS. Regrade slope to achieve adequate bench. Regrading required.
L-32	75	NB 241	Rt shld	31.6	CB GUARDRAIL	227	Upgrading safety system to concrete barrier guardrail, Type 60MS. Regrade slope to achieve adequate bench. Regrading required.
L-33	76	NB 241	Rt shld	31.7	CB GUARDRAIL	143	Upgrading safety system to concrete barrier guardrail, Type 60MS. Regrade slope to achieve adequate bench. Regrading required.

Source: The Department. Draft Project Report (2025).

Design Variations Considered but Eliminated from Further Discussion

Due to the scope of the project where the emphasis lies on upgrading safety devices that are within the fire hazard severity zones, there were safety devices that were removed from the project. Other reasons that safety devices were removed included environmental and right of way. In total, thirty (30) safety device locations were removed.

- Twenty-one (21) safety device locations were removed from the project since they were located outside of the Fire Hazard Severity Zones. All removed safety device locations were on SR-241. (Locations 36, 37, 39, 40, 43, 44, 45, 53 to 59, and 62 to 68).

- Seven (7) safety device locations had Cultural Tribal Concerns. These locations conditioned ESA with tribal and archeological monitoring and adding more time to the cultural studies risking the project PA&ED deadline. The decision to remove was made by the Project Development Team to not delay the project PA&ED. (Locations 7, 8, 31, 33, 35, 47, and 72)

Two (2) safety device locations were outside of State Right of Way. The decision to remove was made by the Project Development Team to not delay the project PA&ED. (Locations 60 and 61). The table below lists all the removed locations.

Table 1-6: Traffic Safety devices Upgrades Removed from Scope (IIJA Program)

Location					Safety Device Type	Description (Initial Proposed Design)
Location	**Facility & Direction**	**Location Description**	**Approx Station**	**Approx Post Mile**		
7	241	Median	N/A	26.1	MGS & DOUBLE MGS	Upgrading safety system in median to MGS and double MGS for NB and SB directions. Regrade slope
8	NB 241	Rt shld	N/A	26.1	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
31	SB 241	SB 241/SB 133 conn @ Bee OC Rt shld	328+00	27.4	MGS	Upgrading safety system to MGS
33	SB 241	SB 241/SB 133 conn @ Bee OC Rt shld	328+00	27.5	MGS	Upgrading safety system to MGS

Location					Safety Device Type	Description (Initial Proposed Design)
Location	**Facility & Direction**	**Location Description**	**Approx Station**	**Approx Post Mile**		
35	NB 241	NB 133/NB 241 conn Rt shld	9338+50	27.6	MGS & CB GUARDRAIL	Upgrading safety system to MGS and concrete barrier guardrail, Type 60MS
36	NB 241	Rt shld	375+50	28.3	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
37	SB 241	Rt shld	382+50	28.45	MGS	
39	SB 241	Rt shld	397+00	28.7		
40	NB 241	Rt shld	397+00	28.7	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
43	SB 241	Rt shld	436+75	29.45	MGS	Upgrading safety system to MGS
44	NB 241	Rt shld	438+00	29.45	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
45	NB 241	Rt shld	458+00	29.85	MGS	Upgrading safety system to MGS
47	NB 241	Rt shld	505+00	30.7	CB GUARDRAIL	Upgrading safety system to concrete

Location					Safety Device Type	Description (Initial Proposed Design)
Location	**Facility & Direction**	**Location Description**	**Approx Station**	**Approx Post Mile**		
						barrier guardrail, Type 60MS.
53	SB 241	Nb 261/SB 241 connector gore Rt shld	2585+00	32.2	MGS	Upgrading safety system to MGS
54	SB 241	Santiago Canyon on ramp Lt shld	2594+00	32.35	MGS	Upgrading safety system to MGS
55	SB 241	Rt shld	2595+00	32.35	-	
56	NB 241	Rt shld	1589+00	32.25	-	
57	NB 241	Rt shld	1597+00	32.4	-	
58	SB 241	Rt shld	2605+00	32.55	MGS	Upgrading safety system to MGS
59	NB 241	Rt shld	1604+00	32.55	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
60	SB Santiago Canyon Road	Lt shld	86+00	N/A	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.
61	NB Santiago Canyon Road	Rt shld	84+50	N/A	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 60MS.

Location					Safety Device Type	Description (Initial Proposed Design)
Location	**Facility & Direction**	**Location Description**	**Approx Station**	**Approx Post Mile**		
62	NB Santiago Canyon Road	NB 241 on ramp @ intersection Rt shld	94+00	N/A	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 736B.
63	NB Santiago Canyon Road	NB 241 on ramp @ intersection Lt shld	95+50	N/A	CB GUARDRAIL	Upgrading safety system to concrete barrier guardrail, Type 736B.
64	NB 241	NB 241 on ramp Rt shld	38+00	N/A	MGS	Upgrade MBGR to MGS Type 12DD layout. Install anchor block, end anchor assembly type SFT-M
65	NB 241	NB 241 on ramp Lt shld	38+00	N/A	MGS	Upgrade MBGR to MGS Type 12DD layout. Install anchor block, end anchor assembly type SFT-M
66	NB 241	NB 261/SB 241 connector gore Lt shld	4803+00	32.8	MGS	Upgrading safety system to MGS
67	NB 241	Rt shld	1618+00	32.8	MGS	Upgrading safety system to MGS

Location					Safety Device Type	Description (Initial Proposed Design)
Location	Facility & Direction	Location Description	Approx Station	Approx Post Mile		
68	NB 241	Rt shld	2812+00	33	MGS	Upgrading safety system to MGS
72	NB 241	Lt shld	651+00	33.55	MGG & DOUBLE MGS	Upgrading safety system to MGS and double MGS

Source: The Department. Draft Project Report (2025).

Other Project Elements (Standardized Project Measures)

The Build Alternative contains several standardized project measures that are employed on most, if not all, The Department projects. The use of these measures with the Build Alternative is described in more detail in Chapter 2 of this Initial Study as Project Features (PF) are numbered. For example, a Project Feature applicable to water quality would be titled and listed as PF-WQ-1.

Air Quality

- **The Department Standard Specifications in Section 14-9 Air Quality**

  PF-AQ-1: The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2024), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.

Biological Resources

- **The Department Standard Specifications in Section 14-6.05 Invasive Species Control**

  PF-BIO-1: Invasive Species Control. All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving at and leaving the project site.

- **The Department Standard Specifications in Section 14-6.04 Wetland Protection**

  PF-BIO-2: Best Management Practices (BMPs) During Construction. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated nonsensitive upland areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering

adjacent sensitive vegetation communities. Trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.

- **The Department Standard Specifications in Section 14-6.05 Invasive Species Control**

  PF-BIO-3: Erosion Control Material Sourcing. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

- **The Department Standard Specifications in Section 14-6.03B Bird Protection**

  PF-BIO-4: Avoidance of Breeding Season and Nesting Bird Surveys. Project activities shall occur outside the nesting season (February 1–September 30) to the fullest extent practicable. If project activities with potential to indirectly disturb suitable avian nesting habitat within 300 feet of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or the USFWS, no vegetation clearing, or work deemed by the biologist to have potential to disturb an active nest shall occur if listed or fully protected bird species are found to be actively nesting within 300 feet of construction activities.

Cultural Resources

- **The Department Standard Specification 14-2.03A: Discovery of Cultural Materials.**

  PF-CUL-1: If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

- **The Department Standard Specification 14-2.03A: Discovery of Human Remains.**

  PF-CUL-2: In the event that human remains are found, the county coroner shall 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 (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Alben Phung, Senior Environmental Scientist: (949)279-

8715 and Cheryl Sinopoli, DNAC: (949)483-1018. Further provisions of PRC 5097.98 are to be followed as applicable.

Greenhouse Gases Emissions

- **The Department Standard Specification 14-9.02:**
  PF-GHG-1: The construction contractor must comply with the Department's Standard Specifications in Section 14-9 (2024) to reduce impacts from construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

Paleontological Resources

- **The Department Standard Specification 14-7.03:**

  PF-PAL-1: California Department of Transportation (Department) Standard Specification 14-7.03; Discover of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered, all work within 60-feet of the discovery must cease and the construction Resident Engineer will be notified. Work cannot continue near the discovery until authorized.

Hazardous Materials

- **The Department Standard Specification 13.2:**

  PF-HAZ-1: The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, SSP for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.

- **The Department Standard Specification 14-11.14:**

  PF-HAZ-2: The proposed project includes removal of existing wood posts for MGS supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.

- **The Department Standard Specification 13-4.03E (2) and Unknown Hazards Procedures in the Department Construction Manual (most updated version):**

  PF-HAZ-3: During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction

contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Department) Construction Manual and 14-11.02 of The Department Standard Specification (2024).

- **The Department Standard Specification 84-9.03B**

  PF-HAZ-4: Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.

Water Quality and Storm Water Runoff

- **The Department Standard Specification 13-1.01D (2)-Regulatory Requirements:**

  PF-WQ-1: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003 and the and any subsequent permits in effect at the time of construction.

- **The Department Standard Specification 13-3.01D (2)-Regulatory Requirements:**

  PF-WQ-2: The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction

- **The Department Standard Specification 13-3 Storm Water Pollution Prevention Plan**:

  PF-WQ-3: The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

  PF-WQ-4: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

Noise

- **The Department Standard Specifications Section 14.8-02 Noise Control**

  PF-N-1: During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Contractor must comply with the Department' Standard Specification 14-8.02, "Noise Control" (2024) during construction. The specification states following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m. No mitigation is required.

Traffic

- **The Department Standard Specifications Section 12-4 Maintaining Traffic**

  PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

1.3.1.2 No-Build Alternative

Under the No-Build Alternative, no construction or improvements would be made to the existing SR-133 and SR-241 freeway. This alternative does not repair the damaged assets caused by the 2020 Silverado fire. This alternative would not provide to upgrade the facility to current standards essential to roadway operation and to make existing infrastructure more resilient to extreme weather and natural disasters on Route 133 and Route 241 and it is contrary to the Department's goal on state highways. It does not promote resilience of existing assets that fall within a very high fire hazard severity zone. As a result, the No-Build Alternative is not consistent with the need and purpose of this project. This alternative provides a baseline for comparison of environmental impacts under the Build Alternative. This alternative does not preclude the construction of future improvements.

1.4 Decision Making Process

After the public circulation period, all comments will be considered, and the Department will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if no unmitigable significant adverse impacts are identified, the Department will prepare a Mitigated ND.

1.5 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Table 1-7: Permits and Approvals Needed

Agency	PLAC	Status
Santa Ana Regional Water Quality Control Board (RWQCB)	Clean Water Act Section 401 Water Quality Certification	Coordination with the agency will occur during the Design Phase i.e. Plans, Specifications & Estimates (PS&E) phase
U.S. Army Corps of Engineers (USACE)	Clean Water Act Section 404 Nationwide Permit	Coordination with the agency will occur during the Design Phase
California Department of Fish and Wildlife (CDFW)	CA Fish and Game Code Section 1602 Streambed Alteration Agreement	Coordination with the agency will occur during the Design Phase
U.S. Fish & Wildlife Service (USFWS)	Section 7 Consultation	Coordination with the agency will occur during the Design Phase
California Transportation Commission (CTC)	Funding approval	Approval will be obtained after approval of the Final Environmental Document.

Chapter 2 – CEQA Environmental Checklist

2.1 Determining Significance Under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.
CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

The environmental factors checked below would be potentially affected by this project.

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

DETERMINATION:
On the basis of this initial evaluation:

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

Signature:	**Date:**
Printed Name:	**For:**

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a resource. A NO IMPACT answer in the last column reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most the Department projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

2.2 Aesthetics Visual Resources

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

2.2.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to aesthetics was based on a Visual Impact Assessment (VIA) Questionnaire (February 2025) that was prepared for the project.

a) **No Impact:** The project will not have a significant adverse effect on scenic vistas because there are no scenic vistas within the project limits.

b) **No Impact**: The proposed project will not substantially damage scenic resources because there are minimal scenic resources within the project limits and no work is anticipated that would cause substantial damage to these resources.

c) **No Impact:** The proposed project will not substantially degrade the existing visual character or quality of public views of the state and its surroundings, or conflict with applicable zoning and other regulations governing scenic quality. This is because the project area is flat and lacks substantial visual character and quality views.

d) **No Impact**: The proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area because there will be minimal changes to the existing landscape and driving views within the project limits. In addition, there are no residential areas in the close vicinity of the project limits.

2.2.2 Avoidance, Minimization and/or Mitigation:

None Required

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

2.3.1 Discussion of Environmental Evaluation Questions

The project area is mostly undeveloped. Land use West of SR-241 is mostly undeveloped with some residential development (both single and multi-family). East of SR-241 is mostly undeveloped. Land use West and East of SR-133 has mostly residential development (both single and multi-family) and commercial. The potential for the Build Alternative to result in significant impacts related to Agriculture and Forest Resources is assessed in the following discussion.

a) **No Impact**: According to the Department of Conservation California Important Farmland Finder database[1] and County of Orange General Plan Resource Element[2], there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project area.

b) **No Impact:** The project area does not conflict with existing zoning for agricultural use, or a Williamson Act Contract. Per the City of Orange General Plan Land Use Element[3] and County of Orange General Plan Land Use Element[4], the project area's surrounding land is designated as open space, low-medium residential and open space reserve.

c) **No Impact**: There is no land within the project area zoned as forest land or timberland; the project will be within the Department ROW and therefore, it will have no conflict with the forest land or timberland.

d) **No Impact:** See response to c).

e) **No Impact:** The project will be within the Department ROW and would not involve other changes in the existing environment resulting in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

2.3.2 Avoidance, Minimization, and/or Mitigation Measures

None Required.

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[1] California Department of Conservation. https://maps.conservation.ca.gov/dlrp/ciff/, accessed December 4, 2024.

[2] County of Orange General Plan. https://ocds.ocpublicworks.com/sites/ocpwocds/files/import/data/files/40235.pdf, accessed December 4, 2024.

[3] City of Orange. 2010. https://www.cityoforange.org/home/showpublisheddocument/208/637698172555630000, accessed December 4, 2024

[4] County of Orange. 2024. https://ocds.ocpublicworks.com/sites/ocpwocds/files/import/data/files/58442.pdf, accessed December 4, 2024.

2.4 Air Quality

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

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

The potential for the proposed project to result in significant impacts related to Air Quality is assessed in the following discussion. This discussion below is based on review of the Technical Document from Environmental Engineering Branch (April 2025) prepared for this project:

2.4.1 Discussion of Environmental Evaluation Questions

a) **No Impact:** The proposed project is located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with SCAG, local governments, and the private sector. In addition, there are no sensitive receptors in the project vicinity. The AQMP provides the blueprint for meeting state and federal ambient air quality standards. This project is not a capacity-increasing transportation project. It will have no impact on traffic volumes and would generate a less than significant number of pollutants during construction project construction. The proposed project is included in SCAG's most recent RTP and RTIP both of which were found to be conforming. No mitigation is required.

b) **Less Than Significant Impact:** The Build Alternative would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). Thus, impacts for the Build Alternative would be less than significant. No mitigation is required.
c) **Less Than Significant Impact:** The Build Alternative would not expose sensitive receptors to substantial pollutant concentrations. Any impacts associated with the Build Alternative would be less than significant. No mitigation is required.
d) **Less Than Significant Impact:** Temporary construction activities including clearing, grading, and paving could generate fugitive dust from soil disturbance and other emissions from the operation of construction equipment. The Build Alternative would comply with construction standards adopted by the South Coast Air Quality Management District (SCAQMD) as well as the Department standardized procedures for minimizing air pollutants

during construction. See Chapter 1 of this report for a list of standardized Project Features (PF-AQ-1) that would avoid and/or minimize air quality impacts resulting from construction activities. Objectionable odors are not currently present within the project limits and construction activities, including the use of diesel equipment, would be temporary and are not anticipated to emit significant odors. Similarly, impacts from the Build Alternative would be less than significant with the Project Features listed above. No mitigation is required.

2.4.2 Avoidance, Minimization and/or Mitigation Measures:

Although no mitigation will be required for the project, the following project feature will be implemented as part of the project:

PF-AQ-1 The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2024), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.

2.5 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

2.5.1 CEQA Significance Determinations for Biological Resources

The potential for the Build Alternative to result in significant impacts related to biological resources is assessed in the following discussion. The following discussions are based on the information described in the *Natural Environment Study* (NES) (April 2025) prepared for this project.

Impacts to vegetation communities are summarized below in Table 2-1.

a) **Less Than Significant Impact with Mitigation Incorporated**: The Biological Study Area (BSA) is primarily coastal sage scrub (CSS) with ruderal or developed land. Much of the BSA consists of urban development and other disturbed sites adjacent to a busy highway. There are prominent or natural drainage features (e.g., rivers, creeks, or wetlands) within the BSA, including the Agua Chinon Wash, Hicks Canyon

Wash, Peters Canyon Wash, Bee Canyon Wash, and Santiago Creek. Undeveloped areas within the BSA are a mix of natural vegetation communities and pockets of ornamental vegetation and ruderal areas along State Route 241 (SR-241) and surrounding residential and commercial developments.

Mapped vegetation communities and land cover types in the BSA include disturbed scrub, chaparral, CSS, annual grassland, willow riparian scrub, coast live oak woodland, Mexican elderberry woodland, ornamental, developed, ruderal, and bare ground. The area surrounding the BSA includes land uses that are residential, commercial, transportation, and undeveloped open space, which provide linkages to areas within the Santa Ana Mountains.

The following electronic databases were consulted for species that could potentially occur within the vicinity of the BSA:

- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (March 2025)
- National Oceanic and Atmospheric Administration (NOAA) (March 2025)
- California Natural Diversity Database (CNDDB), Rarefind 5 (March and April 2025)
- California Native Plant Society (CNPS) *Online Inventory of Rare and Endangered Plants* (February 2025)

A Biological Study Area (BSA) was established to evaluate potential direct and indirect project-related effects on sensitive biological resources. The BSA encompasses the project location as well as the Caltrans right-of-way (ROW) and a buffer of 200 feet (ft) to account for potential indirect construction-related effects such as noise and vibration. The results presented in this NES are based on recent literature searches, field surveys, habitat assessments, and a Jurisdictional Delineation conducted in March 2025. The Jurisdictional Delineation was conducted within the Caltrans ROW where direct modifications to existing aquatic resources are proposed. Habitat suitability assessments and focused surveys for special-status animal species were conducted throughout the BSA.

Vegetation communities and land cover mapped within the BSA include disturbed scrub, chaparral, CSS, annual grassland, willow riparian scrub, Mexican elderberry woodland, coast live oak woodland, ornamental, developed, ruderal, and bare ground. Six of these vegetation communities are considered sensitive natural communities: willow riparian scrub, CSS, coast live oak woodland, Mexican elderberry woodland, disturbed scrub, and chaparral. A majority of the proposed work would occur within bare ground and previously disturbed developed areas as work is proposed within Caltrans right-of-way (ROW), which undergoes routine maintenance. Mapped vegetation within the area of permanent impacts is limited to annual grassland (up to 0.11 acres), chaparral (up to 0.15 acres), coastal sage scrub (up to 0.56 acre), and disturbed scrub (up to 0.05 acre). Mapped vegetation within the area of temporary impacts is limited to annual grassland (up to 0.18 acres), chaparral (up to 1.15 acres), coastal sage scrub (up to 1.17 acres), disturbed scrub (up to 0.16 acres), and riparian willow scrub (up to 0.01 acres). All other permanent impact areas (approximately 11.45 acres) and temporary impact areas

(approximately 4.79 acres) are within bare ground, ruderal, ornamental, or otherwise developed sites. No other sensitive natural communities are anticipated to be permanently or impacted as part of the project.

There were 34 special-status plant species considered for their potential to occur in the BSA. No listed or non-listed special-status plant species were observed in the BSA during field surveys. An additional five non-listed special-status plant species have potential to occur within the project disturbance limits given the presence of potentially suitable habitat. The remaining special-status plant species are not expected to occur within the proposed work areas due to lack of suitable habitats, ongoing disturbances, and lack of occurrence records in the vicinity of the proposed work areas. Therefore, project implementation is not anticipated to have direct impacts to listed special-status plant species. Indirect impacts to these species may consist of dust, erosion, or the introduction of invasive species.

Direct impacts to any large populations of special-status plant species are not anticipated with the implementation of avoidance, minimization, and mitigation measures. A No Effect determination has been made for Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), thread-leaved brodiaea (*Brodiaea filifolia*), and Santa Monica dudleya (*Dudleya cymosa ssp. ovatifolia*).

There were 54 special-status wildlife species considered for their potential to occur in the BSA. One listed special-status animal species, coastal California gnatcatcher (*Polioptila californica californica*), was observed during focused surveys in 2025. An additional two listed special-status animals were identified as having potentially suitable habitat within the BSA including least Bell's vireo (*Vireo bellii pusillus*), and Crotch's bumble bee (*Bombus crotchii*). With the exception of the coastal California gnatcatcher, a No Effect determination was made for each species listed under the Federal Endangered Species Act (FESA) including Santa Ana sucker (*Catostomus santaanae*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), light-footed Ridgeway's rail (*Rallus obsoletus levipes*), California least tern (*Sternula antillarum browni*), Pacific pocket mouse (*Perognathus longimembris pacificus*), southwestern willow flycatcher (*Empidonax traillii extimus)*, least Bell's vireo, western pond turtle (*Emys marmorata* [*Actinemys*] *marmorata*), arroyo toad (*Anaxyrus* [*Bufo*] *californicus*), western spadefoot (*Spea hammondii*), Southern California steelhead DPS (*Oncorhynchus mykiss irideus*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), monarch butterfly (*Danaus plexippus*), Quino checkerspot butterfly (*Euphydryas editha quino*), and Riverside fairy shrimp (*Streptocephalus woottoni*).

No non-listed wildlife species were observed during surveys in 2025. Sixteen non-listed special-status wildlife species were identified as having moderate or high potential to occur within the BSA that include: orange throated whiptail (*Aspidoscelis hyperythra*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), Cooper's hawk (*Accipiter cooperii*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), ferruginous hawk (*Buteo regalis*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), California horned lark (*Eremophila alpestris actia*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), southern grasshopper mouse (*Onychomys torridus ramona*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus frantzii*),

and western yellow bat (*Lasiurus xanthinus*). To avoid potential impacts to non-listed special-status wildlife species, avoidance and minimization measures will be implemented.

Coastal sage scrub, disturbed scrub, chaparral, and annual grassland areas anticipated to be impacted are relatively small in size and generally provide low suitability for listed and non-listed special-status species as they are located adjacent to SR-241, in between paved and unpaved paths associated with Caltrans ROW within the BSA and contain at least partially disturbed areas. There is low potential for most of these special-status animal species to be directly affected by the project given the limited work and access proposed within or near suitable habitat areas. Indirect temporary effects to suitable habitat for special-status species may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to special-status status that have the potential to occur may include increased noise, vibration, lighting, and predation during project activities. Because project activities will be performed adjacent to highly traveled portions of SR-241, and dust, noise, and vibration are already at elevated levels due to traffic along SR-241, indirect impacts to special-status species and their habitats are expected to be minimal. Table 2-1 below shows impacts to vegetation communities and land cover in the BSA. Avoidance and minimization measures are included as part of the project to avoid effects to special-status animal species. With project features PF-BIO-1 through PF-BIO-3 and implementation of measures BIO-1 through BIO-6, and BIO-10 impacts to Crotch's bumble bee would be less than significant.

Portions of the BSA are within the Planning Areas of the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (OC NCCP/HCP) as well as the Orange County Transportation Authority M2 NCCP/HCP. Project work will occur within Caltrans ROW and no project work will occur within NCCP/HCP conservation areas. As such, the proposed project is consistent with the NCCP/HCP and M2 NCCP/HCP, and no further compliance besides that described in this document is required. Caltrans is not a participant of the OC NCCP/HCP and is a Participating Special Entity of the M2 NCCP/HCP; however, maintenance of Caltrans infrastructure within the OC NCCP/HCP and M2 NCCP/HCP is allowed.

Similarly, portions of the BSA and project site are within the Conservation Habitat Area (CHA). Areas referred to as Conservation Habitat Areas (CHAs) are designated wildlife conservation and habitat protection areas. These areas contain land that was restored to offset the construction of SR-241. While CHAs are mitigation sites that were conserved in perpetuity to offer habitat to wildlife, the 1996 Biological opinion issued for the construction of SR-241 details that 14 ft from the edge of pavement and 10ft from the ROW fence are not included as part of the CHA. Through project implementation there will be permanent impacts of up to 0.08 ac and temporary impacts of up to 0.80 acre of vegetation communities/land cover within the CHA. Due to the project impacts to the CHA areas, the project will require mitigation and section 7 consultation with USFWS.

Table 2-1: Impacts to Vegetation Communities/Land Cover in the BSA

Vegetation Communities/ Land Cover	BSA (ac)			NCCP (ac)	CHA (ac)	
	Area	Permanent Impacts	Temporary Impacts	Temporary Impacts	Permanent Impacts	Temporary Impacts
Disturbed Scrub	6.79	0.05	0.16	0	0	0.01
Chaparral	27.63	0.15	1.15	0	<0.01	0.34
Coastal Sage Scrub	90.37	0.56	1.17	0.01	0.04	0.40
Annual Grassland	21.04	0.11	0.18	0	0	0
Willow Riparian Scrub	0.18	0	0.01	0	0	0
Coast Live Oak Woodland	0.14	0	0	0	0	0
Mexican Elderberry Woodland	0.13	0	0	0	0	0
Ornamental	19.98	0.07	0.30	0	0	0
Developed	101.19	2.61	2.49	0.01	<0.01	0.01
Ruderal	56.76	4.27	1.53	0	0.01	0.02
Bare Ground	27.60	4.50	0.47	0	<0.01	0.01
TOTAL	**351.78**	**12.27**	**7.46**	**0.02**	**0.06**	**0.76**

Source: Compiled by LSA Associates, Inc. (2025).
ac = acre(s)
BSA = Biological Study Area
CHA = Conservation Habitat Area
NCCP = Natural Community Conservation Plan

Coastal Sage Scrub: A large portion of the CSS slopes within the project limit were restored with CSS when the SR-241 was constructed. While some of the slopes were designated as CHAs and are mitigation sites for impacts that resulted from the SR-241 roadway construction, not all of the restored CSS slopes are mitigation sites. Based on the 1996 SR-241 Biological Opinion issued for the construction of the roadway, buffers of 14 ft from the edge of pavement and 10 ft from the right of way fence are not included as part of the CHA or restored CSS. Furthermore, these buffer zones were vegetated with little to no vegetation when the freeway was constructed and have been routinely mowed and maintained by Caltrans maintenance for fire prevention purposes.

The quality of disturbed scrub is characterized as low due to the sparse vegetation cover and elevated nonnative species component. The low quality of disturbed scrub creates only marginal habitat for special-status bird species.

The project is anticipated to temporarily impact 1.17 acres of CSS habitat and permanently impact 0.56 acres. Additionally, 0.16 acres of disturbed scrub will be temporarily impacted, and 0.05 acres will be permanently impacted. No impacts to CSS or disturbed scrub within the NCCP/HCP Reserve are anticipated. Of the total CSS impacts and disturbed scrub impacts, 0.37 acres of temporary impacts and 0.04 acres of permanent impacts to CSS habitat and <0.01 acres of temporary impacts to disturbed scrub would occur within CHAs.

Areas of natural habitat that are temporarily affected by construction activities will be restored with native shrubs and grasses. The restoration effort will emulate surrounding vegetation characteristics. For State highway construction projects, revegetation plans will be part of the project design following California Department of Transportation (Caltrans) landscape architecture guidelines and requirements. During Section 7 Consultation with the USFWS, a restoration plan for the temporary impact areas will be prepared.

Due to the impacts to CSS habitat within the CHA areas, Section 7 Consultation with the USFWS will be required. Proposed impact areas are within Caltrans ROW and are outside of NCCP/HCP areas. However, the permanent impacts to CSS within the CHA areas will require mitigation (BIO-2).

Chaparral: This habitat occurs in various locations throughout the BSA. This vegetation type consists of a mix of vegetation, including CSS components, where at least 50 percent of the shrub cover that is composed of evergreen, dark green sclerophyll-leaved, medium-height to tall shrubs that are preadapted to occasional wildfires. Chaparral is a covered habitat type in the NCCP/HCP. A total, 27.63 acres of chaparral habitat occurs in the BSA, of which 1.12 acres are inside the NCCP/HCP Reserve and 4.64-acre of chaparral occurs within the CHA.

A total of 1.15 acres of chaparral habitat will be temporarily impacted by drainage and culvert activities, while 0.15 acres will be permanently affected due to drainage/culvert work, lighting installation, and safety device placement. No impacts to chaparral within the OC NCCP/HCP Reserve are anticipated as the project footprint is not within the OC NCCP/HCP Reserve. However, of the total impacts approximately 0.34 acres of temporary impacts and <0.01 acres of permanent impacts are expected within the CHA. Indirect temporary impacts include those generated from construction-related activities (e.g., dust, potential fuel spills from construction equipment, construction-related runoff, or erosion). These impacts would not be new to the work site but would temporarily increase the level of indirect disturbance near the chaparral habitats during project activities.

Because chaparral habitats are considered a sensitive natural community, avoidance and minimization efforts are the same as those described for the CSS habitat impacts (i.e., Measures BIO-1 through BIO-6).

Willow Riparian Scrub: Willow riparian scrub is typically within the jurisdiction of the USACE under the Section 404 permitting requirements and the RWQCB under the Section 401 certification requirements; this vegetation is typically within the jurisdiction of the CDFW under the Section 1600 permitting requirement. Willow riparian scrub is considered high-

quality wildlife habitat because it provides protective cover, water, and food for a variety of species. Willow riparian scrub is a covered habitat type in the NCCP/HCP.

In total, 0.18 acres of willow riparian scrub associated with Drainage 18 occurs in the BSA, none of which is inside the OC NCCP/HCP Reserve. No willow riparian scrub occurs within the CHAs.

A total of 0.01 acres to willow riparian scrub due to drainage and culvert activities. No impacts to willow riparian scrub within the OC NCCP/HCP Reserve are anticipated as the project footprint is not within the OC NCCP/HCP Reserve. Additionally, no impacts to willow riparian scrub within the CHAs will occur with project implementation.

Because Willow scrub habitats are considered a sensitive natural community, avoidance and minimization efforts are the same as those described or the CSS habitat impacts (i.e., Measures BIO-1 through BIO-6).

Coastal California Gnatcatcher. One coastal California gnatcatcher was observed within the BSA during the 2025 field surveys as documented in Appendix C of the NES, Coastal California Gnatcatcher Survey Report. The individual gnatcatcher was observed within mature undisturbed CSS along the northbound side of SR-241 north of Irvine Haul Road. Additionally, there are numerous documented historical occurrences of coastal California gnatcatcher along SR-241, and suitable foraging and nesting habitat areas are present in the BSA. The CNDDB records for this species are noted as various polygons that overlap SR-241 and the project limits. While CSS within the BSA may be suitable for foraging and nesting, CSS within the project site is considered marginal for foraging as it occurs immediately adjacent to SR-241 where high levels of human activity occur.

Disturbed scrub is considered unsuitable for nesting and foraging. In addition, a substantial portion of the CSS and disturbed scrub within the BSA has been disturbed by adjacent activities and ongoing routine maintenance within Caltrans ROW. Critical habitat for the species is not present within the project site or BSA.

Direct impacts to coastal California gnatcatcher are not expected to occur as this species was not detected within the portions of the site that will be impacted and they are not anticipated to nest within the CSS habitat that would be removed by the project. Direct impacts to marginal suitable foraging habitat within the CHA areas are not anticipated to affect the species' ability to find foraging habitat or nest because the amount to be impacted is small and higher quality habitat is present in other portions of the BSA and outside of the BSA.

Indirect temporary effects to suitable coastal California gnatcatcher habitat may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to the species and potentially suitable habitat may include increased noise, vibration, dust, lighting, and predation during project activities. No direct take of coastal California gnatcatcher or removal of occupied habitat or designated critical habitat is expected.

Since there is suitable foraging habitat present on site, CSS habitat designated as CHA will be impacted, and gnatcatcher have been observed within the BSA, May Affect, but Not Likely to Adversely Affect for the coastal California gnatcatcher has been made. Therefore, Section 7 consultation with the USFWS will be required.

Measures BIO-1 through BIO-6 and project feature PF-BIO-4 will be implemented during construction. With project features PF-BIO-1 through PF-BIO-4 and implementation of minimization measures BIO-1 through BIO-6, impacts to coastal California gnatcatcher would be less than significant.

Least Bell's Vireo: No least Bell's vireos were observed during surveys conducted in 2025, and there is a limited amount of suitable foraging habitat present for this species in the BSA. No suitable nesting habitat is located within the project site or disturbance limits, but some is present outside of the project site within the BSA (i.e., Feature 18, an earthen drainage within the Jurisdictional Delineation Study Area). Direct impacts to least Bell's vireo are not expected to occur as a result of the project because temporary impacts to Feature 18 do not include suitable habitat for this species. No habitat documented as being historically occupied by least Bell's vireo would be removed by the project. Indirect temporary effects to suitable least Bell's vireo habitat may include increased noise, vibration, dust, and lighting during construction activities in proximity to riparian habitats. Furthermore, construction activities are limited to the existing Caltrans ROW adjacent to SR-241 within areas subject to routine maintenance. With the implementation of avoidance and minimization measures, the project will avoid indirect impacts to suitable least Bell's vireo habitat.

Measures BIO-1 through BIO-6 and project feature PF-BIO-4 will be implemented during construction. With project features PF-BIO-1 through PF-BIO-4 and implementation of minimization measures BIO-1 through BIO-6, impacts to least Bell's vireo would be less than significant.

Crotch's Bumble Bee: This species was designated as a candidate species for listing under CESA on June 18, 2019, following a petition from the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and the Center for Food Safety filed in October 2018. However, in the Sacramento Superior Court for Case No. 34-2019-80003216 (Almond Alliance of California v. California Department of Fish and Wildlife, Sacramento Superior Court, November 13, 2020), the Candidate listing was not deemed valid because it was noted that insects are not eligible for listing under CESA. Later in 2022, the Third Appellate Court District in California ruled that the bumble bee could be listed under the definition of fish, as the term "fish" was already broadly applied, inclusive of invertebrates. This reversed the 2020 ruling and, as such, the Crotch's bumble bee is now considered a candidate species for listing as threatened under CESA.

Crotch's bumble bee was not observed during the 2025 field surveys. There are no documented occurrences of Crotch's bumble bee near the project vicinity or BSA. While CSS and chaparral within the BSA may be suitable for Crotch's bumble bee, CSS and chaparral within the project site is considered marginal habitat for this species as it occurs immediately adjacent to SR-241 where high levels of human activity occur. Areas mapped as disturbed scrub are considered unsuitable for Crotch's bumble bee. In addition, a substantial portion of the CSS, chaparral, and disturbed scrub within the BSA has been disturbed by adjacent activities and ongoing routine maintenance within Caltrans ROW.

Construction activities are limited to the existing ROW adjacent to SR-241 within areas that are subject to regular disturbance. Therefore, direct impacts to Crotch's bumble bee are not expected as a result of the project. Indirect temporary impacts to suitable Crotch's bumble bee habitat may include increased noise, vibration, dust, lighting, and predation during construction activities associated with the project.

With the implementation of BIO-10 and the remainder of avoidance and minimization measures, potential impacts to Crotch's bumble bee from project construction would be less than significant.

b) **Less Than Significant Impact with Mitigation Incorporated:** The BSA contains the following vegetation communities/land covers: disturbed scrub, chaparral, CSS, annual grassland, willow riparian scrub, Mexican elderberry woodland, coast live oak woodland, ornamental, developed, ruderal, and bare ground. Willow riparian scrub is considered riparian habitat under Section 1602 of the California Fish and Game Code. CSS, disturbed scrub, willow riparian scrub, Mexican elderberry woodland, and coast live oak woodland are considered sensitive natural communities by the CDFW. No remaining vegetation communities/land covers are identified as sensitive natural communities by the USFWS, CDFW, CNDDB, or other local or regional plans.

The project would result in permanent impacts to the following sensitive natural communities within the BSA: CSS (0.56 acres), disturbed scrub (0.05 acre), and chaparral (0.15 acre). The project would also result in temporary impacts to CSS (1.17 acres), disturbed scrub (0.16 acre), chaparral (1.15 acres), and willow riparian scrub (up to 0.01 acres). Temporary indirect impacts to sensitive natural communities during project activities may include an increase or change in off-site runoff, erosion, and spread of invasive species. Based on the 1996 SR-241 Biological Opinion issued for the construction of the roadway, buffers of 14 feet from the edge of pavement and 10 feet from the ROW fence are not included as part of the Conservation Habitat Area (CHA) or restored habitat. Furthermore, these buffer zones were vegetated with little to no vegetation when the freeway was constructed and have been routinely mowed and maintained by Caltrans for fire prevention purposes. Proposed impact areas are within Caltrans ROW and outside of NCCP/HCP areas. Due to the impacts to CSS habitat within the CHA areas, Section 7 Consultation with the USFWS will be required. Proposed impact areas are within Caltrans ROW and are outside of NCCP/HCP areas. However, the temporary and permanent impacts to CSS within the CHA areas may require mitigation (BIO-2).

With project features PF-BIO-1 through PF-BIO-3 and implementation of Measures BIO-1 through BIO-6, impacts to sensitive natural communities would be less than significant with mitigation incorporated.

c) **Less Than Significant Impact:** In total, 69 drainage features and an Erosional Feature were delineated within the Jurisdictional Delineation Study Area (JDSA). Of those 69 features, 1 feature was delineated as wetland waters of the U.S. under the jurisdiction of the United States Army Corps of Engineers (USACE) and wetland waters of the State regulated by the RWQCB, and 68 features are considered non-wetland waters regulated by the RWQCB under Section 401 of the Clean Water Act (CWA) or the California Porter-Cologne Water Quality Control Act. A total of 69 features are subject to jurisdiction by the CDFW under Section 1600 of the California Fish and Game Code. One feature is mapped as non-jurisdictional due to consisting of collapsed asphalt features that were caused by a large stormwater effect. Drainage pipes, which are the focus of the proposed project, are considered non-jurisdictional as they are located underground. Drainage pipes that are currently under the road are made of Corrugated Steel Pipe (CSP) and one Flared End

Section (FES); they will be replaced with Reinforced Concrete Pipe (RCP) and one FES. Impacts to adjacent jurisdictional drainages may occur through project implementation and are discussed below. Of the delineated features, the prominent features include Santiago Creek, Hicks Canyon Wash, Peters Canyon Wash, Bee Canyon Wash, and Agua Chinon Creek. The total area of delineated features within the JDSA includes 0.02 acres of wetland waters of the U.S., 1.97 acres of non-wetland waters of the U.S. and waters of the State, and 2.18 acres of CDFW stream/river and riparian habitats. The non-jurisdictional features delineated total approximately 0.01 acres.

The focus of the proposed project is non-jurisdictional features that have been installed underground to convey storm water flows. Based on the current alignment and on-site conditions, the project would temporarily impact 0.002 acres of wetland waters of the U.S. The project would temporarily impact 0.181 acres of non-wetland waters of the State and 0.002 acres of wetland waters of the State, and permanently impact 0.081 acres of non-wetland waters of the State. The project would temporarily impact 0.190 acres of CDFW jurisdiction and permanently impact 0.081 acres of CDFW jurisdiction.

Temporary indirect impacts during construction activities include the potential for water quality-related impacts (e.g., loose soil or pollutants inadvertently entering the drainage features located within and adjacent to the BSA). Such impacts would be avoided or minimized with implementation of Measures BIO-7 through BIO-9.

With implementation of Measures BIO-7 through BIO-9, impacts to federally protected wetlands or other jurisdictional aquatic resources would be less than significant.

d) **Less Than Significant Impact:** Wildlife movement of species such as bobcats and coyotes is expected within the BSA, particularly in the riparian habitats. The project area is adjacent to the Santa Ana Mountains, which provides habitat and cover for movement of animals within the Central-Coastal NCCP/HCP Reserve. Active construction activities may temporarily deter wildlife movement due to increased noise and human activity, but wildlife is expected to continue to use corridors when construction work is not occurring, particularly at dawn and dusk. No permanent barriers would be placed within any known wildlife movement corridors. As such, implementation of the proposed project is not expected to permanently affect wildlife movement or decrease the functionality of any wildlife crossings; therefore, no project-specific mitigation would be required. Therefore, implementation of the project would have a less than significant impact on wildlife movement through the BSA.

Caltrans is required by Senate Bill (SB) 857 to construct projects without presenting barriers to fish passage or to remediate existing barriers. There is no essential fish habitat or critical habitat for any fish species within the BSA. No anadromous fish habitat exists within the BSA.

The BSA contains potentially suitable habitat for migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. These species may nest in the vegetation or structures within the BSA.

Impacts to nesting birds could occur in the form of direct mortality, particularly from the destruction of nests and mortality of young if construction occurs during the breeding season, or from habitat loss. Indirect temporary effects to suitable nesting habitats may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect effects to nesting birds may include increased noise, vibration, lighting, and predation during project activities. If construction activities are scheduled during the breeding season, pre-construction nesting bird surveys would be required in order to prevent any impacts to nesting birds, as specified in project feature PF-BIO-4. Therefore, potential construction-related impacts to nesting birds would be less than significant.

e) **No Impact**: No tree removal or trimming is anticipated as part of the project. Therefore, the project would not conflict with such policies, and no impacts would result.

f) **No Impact:** Portions of the BSA are within the Planning Areas of the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (OC NCCP/HCP) as well as the Orange County Transportation Authority (OCTA) Measure 2 (M2) NCCP/HCP. Project work will occur within Caltrans ROW, and no project work will occur within OCTA M2 NCCP/HCP conservation areas. Caltrans is not a participant of the OC NCCP/HCP and is a Participating Special Entity of the OCTA M2 NCCP/HCP; however, maintenance of Caltrans infrastructure within the OC NCCP/HCP and OCTA M2 NCCP/HCP is allowed. As such, the proposed project would not conflict with the OC NCCP/HCP or OCTA M2 NCCP/HCP, and no further compliance besides that described in this document is required.

2.5.2 Avoidance, Minimization and/or Mitigation Measures:

The following project feature and measures would be implemented as part of this project:

PF-BIO-1 Invasive Species Control. All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving at and leaving the project site.

PF-BIO-2 Best Management Practices (BMPs) During Construction. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated nonsensitive upland areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering adjacent sensitive vegetation communities. Trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.

PF-BIO-3 Erosion Control Material Sourcing. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

PF-BIO-4 Avoidance of Breeding Season and Nesting Bird Surveys. Project activities shall occur outside the nesting season (February 1–September 30) to the

fullest extent practicable. If project activities with potential to indirectly disturb suitable avian nesting habitat within 300 feet of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or the USFWS, no vegetation clearing, or work deemed by the biologist to have potential to disturb an active nest shall occur if listed or fully protected bird species are found to be actively nesting within 300 feet of construction activities.

BIO-1 Delineation of Environmentally Sensitive Areas. Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.

BIO-2 Restoration of Temporary and Permanent Impacts to Native Vegetation. Areas of natural habitat that are temporarily affected by construction activities will be restored with native shrubs and grasses. The restoration effort will emulate surrounding vegetation characteristics. For State highway construction projects, revegetation plans will be part of the project design following California Department of Transportation (Caltrans) landscape architecture guidelines and requirements. During Section 7 Consultation with the USFWS, a restoration plan for the temporary and permanent impact areas will be prepared. In addition to temporary impact areas, mitigation for the permanent Coastal Sage Scrub impacts within the CHA will be mitigated in coordination with USFWS.

BIO-3 Pre-Construction Clearance Surveys. A qualified biologist will conduct pre-construction surveys to confirm the absence of sensitive biological resources within the work areas. The pre-construction surveys will take place no more than 24 hours prior to commencement of different work activities (utility work, signage installation, etc.). If listed species are observed within the work area (or areas potentially indirectly affected by project activities, as determined by the qualified biologist) and the work cannot be postponed until the species is

no longer present, Caltrans will obtain written approval from the USFWS or the CDFW, as applicable, prior to completing project work at these locations.

BIO-4 Biological Monitoring. A qualified biologist will monitor construction activities prior to and during vegetation removal for the duration of the project to ensure that practicable measures are being employed to avoid and minimize incidental disturbance of habitat and covered species inside and outside the project footprint.

BIO-5 On-Site Training. All personnel involved in on-site project construction will be required to participate in a pre-construction environmental training program to ensure they understand the avoidance and minimization measures and environmental regulations pertinent to the project.

BIO-6 Permanent Lighting Fixtures. Permanent project lighting will be of the lowest illumination necessary for safety and will be directed toward the roadway and away from sensitive habitats and wildlife crossing areas. Light glare shields will be used to reduce the extent of illumination into sensitive habitat.

BIO-7 Letter of Permission and/or Nationwide Permit. Prior to initiation of construction, a permit will be obtained through the USACE pursuant to Section 404 of the Clean Water Act. A number of drainages occur within the San Diego Creek Watershed, and additional coordination with the USACE will need to be done to determine if a Letter of Permission and/or a Nationwide Permit will be required. Any conditions and measures identified in the Section 404 Permit will be implemented.

BIO-8 Streambed Alteration Agreement. Prior to initiation of construction, a Streambed Alteration Agreement (SAA) with the CDFW will be obtained, and any specifications conditions and measures identified in the SAA will be implemented.

BIO-9 Water Quality Certification. Prior to initiation of construction, a Section 401 Water Quality Certification from the Santa Ana RWQCB will be obtained, and any specifications, conditions, and measures identified in the certification will be implemented.

BIO-10 Seasonal Avoidance. Vegetation removal will occur between September 1 and January 31, outside of the Colony Active Period, to avoid impacts to active nests. If vegetation removal must occur during the Crotch's bumble bee potential nesting period, pre-construction surveys will be conducted. All cleared areas will be monitored to ensure that vegetation does not become reestablished so that Crotch's bumble bee will be discouraged from nesting on the project site.

BIO-11 Focused Daytime Bat Roosting Habitat Assessment. At least 1 year prior to project construction, a qualified bat biologist will conduct a focused daytime bat roosting habitat assessment to identify suitable bat roosting habitat within the drainage structure.

BIO-12 Focused Nighttime Acoustic and Emergence Survey. If suitable bat roosting habitat is identified during the daytime bat roosting habitat assessment, a qualified bat biologist will conduct a focused nighttime acoustic and emergence survey at the locations where suitable bat roosting habitat has been identified. The focused nighttime emergence survey(s) will occur at least 1 year prior to project construction and will be conducted during the bat maternity season (June through August) to assess potential for use as a maternity roost. The survey(s) will occur from 30 minutes prior to sunset to 1 hour after sunset. Upon completion of the survey, if impacts to occupied habitat will occur, additional avoidance and minimization measures will be included in the project.

BIO-13 Night Lighting During Construction. During nighttime work for project construction, night lighting shall be used only in the area actively being worked on and shall be focused on the direct area of work.

BIO-14 Tree Removal Bat Surveys. If mature trees or snags are removed for the project, a CDFW-approved bat biologist will conduct a nighttime acoustic and emergence survey for the trees within 3 days prior to removal to determine whether they are suitable for use by bats prior to their removal.

BIO-15 Two-Step Tree Removal. Trees and snags that have been identified as confirmed or potential roost sites require a two-step removal process and the involvement of a bat biologist to ensure that no roosting bats are killed during this activity. This two-step removal shall occur over 2 consecutive days as follows: on Day 1, branches and limbs not containing cavities, as identified by a qualified bat biologist, will be removed. On Day 2, the remainder of the tree may be removed without supervision by a bat biologist. The disturbance caused by limb or frond removal, followed by an interval of one evening, will allow bats to safely abandon the roost.

BIO-16 Seasonal Tree Removal Avoidance. The removal of any mature trees and snags suitable for use by bats shall be performed outside the bat maternity season (April 1 through August 31) to avoid direct impacts to nonvolant (flightless) young. This period also coincides with the bird nesting season. If trimming or removal of trees during the bat maternity season cannot be avoided, a CDFW-approved bat biologist will conduct a nighttime acoustic and emergence survey for the trees to determine whether they serve as maternity roosts. If a maternity roost is found, a buffer will be established based upon the species present, and the tree will not be removed until the conclusion of the maternity season.

2.6 Cultural Resources

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

2.6.1 CEQA Significance Determination for Cultural Resources

The potential for the Build Alternative to result in significant impacts related to cultural resources was assessed in the Historic Property Survey Report (HPSR; March 2025).

a) **Less Than Significant Impact:** CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Places (California Register); (2) listed in a local register of historical resources as defined in the California Public Resources Code (PRC) §5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC §21084.1 and State CEQA Guidelines §15064.5(a)). A record search of the Area of Potential Effects (APE) and a 1/2-mile radius around the APE was conducted on October 29, 2024. The record and literature search identified 22 historic properties within a ½ mile of the project area. Of the identified historic properties, 7 are determined to be within the APE, however all 7 are outside of the planned work locations, hence, no historic properties will be affected by the Project and these properties are exempt from further review. The proposed project would not cause a substantial change in the significance of a historical resource as defined in §15064.5. No mitigation is required.

b) **Less Than Significant Impact:** Based on the results of the background research, no known archaeological resources will be affected by the Project. The record and literature search identified 22 historic properties within a ½ mile of the project area. Of the identified historic properties, 7 are determined to be within the APE, however all 7 are outside of the planned work locations, hence, no historic properties will be affected by the Project and these properties are exempt from further review.

   While not anticipated, if cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature of the find. Project Feature PF-CUL-1 addresses the possibility of discovery of cultural materials during construction.

c) **Less Than Significant Impact:** A Sacred Lands File (SLF) search was previously requested from the Native American Heritage Commission (NAHC) for the initial

project limits on October 31, 2024. The NAHC responded on November 19, 2024, that the results of the SLF search were Positive for the presence of Native American cultural resources in the Area of potential Effects (APE). A record search of the Area of Potential Effects (APE) and a 1/2-mile radius around the APE was conducted on October 29, 2024. The record and literature search identified 22 historic properties within a ½ mile of the project area. Of the identified historic properties, 7 are determined to be within the APE, however all 7 are outside of the planned work locations, hence, no historic properties will be affected by the Project. Both the records search and the pedestrian survey failed to identify any intact surface or buried archaeological resources within the project APE.

While not anticipated, if human remains are discovered during construction, all earthmoving activity within and around the immediate discovery area would be diverted until the Orange County Coroner can assess the nature of the find. Project Feature PF-CUL-2 addresses the possibility of discovery of human remains during construction.

2.6.2 Avoidance, Minimization and/or Mitigation Measures:

Although no mitigation will be required for the project, the following project features will be implemented as part of the project:

PF-CUL-1 Discovery of Cultural Materials. If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

PF-CUL-2 Discovery of Human Remains. In the event that human remains are found, the county coroner shall 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 (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Alben Phung, Senior Environmental Scientist: (949) 279-8715 and Cheryl Sinopoli, DNAC: (949) 483-1018. Further provisions of PRC 5097.98 are to be followed as applicable.

2.7 Energy

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

2.7.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to Energy is discussed below.

a) Less Than Significant Impact: The proposed project is not capacity increasing project, thus operational energy consumption is not needed. Based on the available information, energy consumption during the construction of this project is calculated using the Cal-CET 2021 (v 1.03). There would be energy consumption of 5,603 MMBTU during the construction period. The construction of the proposed project will primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to increase the short-term energy demand through related construction activities. This short-term energy demand would cease once the construction of the project is complete. Regarding long-term and permanent energy consumption, it would be limited to some electricity for lighting and occasional maintenance activities. The impact would be less than significant, and no mitigation is required.

b) No Impact: The project would be consistent with regional and State energy conservation plans and the Southern California Association of Governments' (SCAG) Connect SoCal, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[1]. The result of the project will not conflict with or obstruct local plans for renewable or energy efficiency.

2.7.2 Avoidance, Minimization, and/or Mitigation Measures

None Required.

[1] Southern California Association of Governments (SCAG). https://scag.ca.gov/connect-socal, accessed on December 4, 2024.

2.8 Geology and Soils

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

2.8.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to paleontological resources was assessed in the Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER, January 2025). Potential for the Build Alternative to result in significant impacts related to Geology and Soils was assessed Geotechnical Design Report (March 2025).

i) **No Impact**: The project site is not located within an Alquist-Priolo Earthquake Fault Zone (EFZ) as defined by the California Geologic Survey, nor is it within 1000 feet of an un-zoned fault that is Holocene (11,000 years) or younger in age and have surface rupture potential. Therefore, there is no risk of surface fault rupture hazard for this project. No mitigation is required.

ii) **No Impact**: The location of the project site is an area that could experience moderate seismic ground shakings from possible earthquakes. However, the project would not cause strong seismic ground shaking and none of the structures need to be designed with special design considerations for seismic features. Therefore, there is no impact, and no mitigation is required.

iii) **No Impact**: Groundwater levels are not high enough to allow liquefaction to occur during a seismic event. Therefore, there is no impact, and no mitigation is required.

iv) **No Impact**: The project is not located in an area with high steep slopes that would be potentially vulnerable to deep-seated landslides. None of the project components will destabilize the existing slopes.

b) **No Impact**: No cuts or fill slopes are planned as part of the project and the planned structures do not increase the rate or risk of erosion; no mitigation is required.

c) **No Impact:** The potential for landslides, liquefaction, lateral spreading, collapse and subsidence is minimal at the project site. No mitigation is required.

d) **No Impact:** As-built Geotechnical investigatory boring results have shown that structure locations have non-expansive soil. No mitigation is required.

e) **No Impact**: There are no soils incapable of supporting the use of septic tanks or alternative waste water disposal systems within the project limits. No mitigation is required.

f) **Less Than Significant Impact with Mitigation Incorporated**: Build Alternative is not anticipated to have direct impact to any potentially sensitive paleontological resources with the exception of Project-related excavations that would occur on Artificial Fill (Qaf) and younger Holocene Alluvial deposits (Qal, Qyl. Qyc) as these deposits are not likely to encounter scientifically significant fossils because these deposits have no to low paleontological sensitivity. The high paleontological potential to impact Paleontological resource would occur within the majority of the Project Area at surface or shallow depths, specifically within those deposits located along SR-241 that belong to older deposits belonging to undetermined Holocene to Late Pleistocene-age landslide (Qls), the Tertiary-age Puente (Soquel and La Vida Members), Vaqueros and Sespe Formations, and the Cretaceous-age Williams (Pleasant Member) Formation (SVP, 2010). Additionally, the presence of paleontological collection localities within the immediate and 1-mile vicinity of the Project Area, suggest the potential for construction of the proposed Project to result in impacts to paleontological resources. Any proposed excavation activities that have the potential to encounter high Paleontologically sensitive units at surface level or within greater depths in undisturbed deposits of these geologic units (i.e., below the depth of any previously imported artificial fill or disturbed sediments present along the Project alignment) have the potential to impact the paleontological resources preserved therein. Project Feature PF-PAL-1 addresses the possibility of discovery of paleontological resources during construction. However, with the implementation of Measure PAL-1 and PAL-2, which would require the preparation and implementation of a Paleontological Mitigation Plan (PMP) and a Worker Environmental Awareness Program Training, potentially significant impacts to paleontological resources would be reduced to a less than significant level.

2.8.2 Avoidance, Minimization and/or Mitigation Measures:

The following project feature and measures would be implemented as part of this project:

PF-PAL-1 Discover of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered, all work within 60-feet of the discovery must cease and the construction Resident Engineer will be notified. Work cannot continue near the discovery until authorized

PAL-1 A qualified paleontologist shall prepare a Paleontological Mitigation Plan (PMP) following the guidelines in the California Department of transportation (Department) Standard Environmental Refence (SER), environmental Handbook, Volume 1, Chapter 8- Paleontology (June 2016 or more current) and the guidelines developed by the Society of Vertebrate Paleontology (SVP: 2010). The PMP shall be prepared concurrently with final design plans during the Plans, Specification, and Estimates (PS&E) phase. Implementation of the PMP during Construction and post-construction will reduce impacts to potential paleontological resources to less than significant. SSP 14-7.04 for Paleontological resources mitigation.

PAL-2 Worker Environmental Awareness Program Training Session: Prior to construction (any ground-disturbing activity) construction contractor personnel will attend a WEAP training session. Training will address measures required to avoid or protect environmental resources, and to educate crews on fossils, artifacts, and archaeological features they may encounter and the mandatory procedures to follow should potential environmental resources be exposed during construction. Translation services will be provided by the contractor for non-English-speaking participants. Upon completion of training, crews will complete proper documentation and will comply with WEAP requirements. Full details related to WEAP training can be located within the PIR/PER and PMP.

2.9 Greenhouse Gas Emissions

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

Assembly Bill 32 (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 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. 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 *2022 Scoping Plan for Achieving Carbon Neutrality,* adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (ARB 2022a).

CEQA Guidelines Section 15064.4 states that when assessing the significance of impacts from Greenhouse Gas (GHG) emissions on the environment, the lead agency should consider, among other factors, the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting. While comparing future build to future no-build conditions may be useful in determining significant and in establishing the extent of project-level measures to reduce GHG emissions from the project, CEQA and the CEQA Guidelines remain in focused on the comparison of future conditions with the project compared to existing conditions.

This discussion is based on the Environmental Engineer PAED Review Memo (April 2025).

2.9.1 Discussion of Environmental Evaluation Questions

a) **Less Than Significant Impact:** The purpose of the project is to restore the 2020 Silverado fire damaged remaining assets such as guardrails, drainage facilities, traffic control devices, roadway signs, and electrical systems by upgrading to current standards essential to roadway operation that occurs in this segment of SR-133 and SR-241. The proposed project will not add vehicle capacity and no increase in operational GHG emissions are expected... Based on the available information, construction GHG emissions is calculated using the Cal-CET 2021 (v 1.03). There would be 476 MT of GHG emission from the project during the construction of this project. The construction contractor must comply with the Department' Standard Specifications in Section 14-9 (2024) to reduce impacts from construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. No Mitigation is required.

b) **No Impact:** The project limits are within the South Coast Air Basin, within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The project is included in 2020 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and the 2023 Federal Transportation Improvement Program (FTIP), both of which are conforming to State and Federal ambient air quality standards provided in the Air Quality Management Plan (AQMP). In addition, PF-AQ-1 and PF-GHG-1 requires the contractor to comply with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances. Therefore, the project would not conflict with the AQMP or violate any air quality standards and have no impacts. No mitigation is required.

2.9.2 Avoidance, Minimization and/or Mitigation Measures:

In addition to PF-AQ-1, the following project feature will be implemented; and no other measures are required.

PF-GHG-1 The construction contractor must comply with the Department's Standard Specifications in Section 14-9 (2024) to reduce impacts from construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

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2.10 Hazards and Hazardous Materials

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

2.10.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to Hazards and Hazardous Materials is assessed in the following discussion and is based on the Initial Site Assessment (ISA) Checklist (April 2025).

a) **Less Than Significant Impact**: Although the project will require transportation and/or disposal of hazardous materials, the Contractor will be required to comply with the Department Standards and Special Provisions for Hazardous Waste Management.

An Aerially Deposited Lead Investigation (ADL; PF-HAZ-1) will be conducted at areas of excavation such as guardrail replacement, signposts and drainage facilities improvements. Contractor will follow the appropriate the Department Standard Specifications for ADL deposited soil. Existing yellow traffic stripe and other pavement markings are found non-hazardous waste, the contractor will follow the Department Standard Specifications for the

removal of non-hazardous paint (PF-HAZ-4). The impacts will be less than significant, and no mitigation required.

In addition, the proposed project includes removal of existing wood posts for MGS supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the design phase of the project (PF-HAZ-2).

b) **Less Than Significant Impact**: The project would not 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. Impacts will be less than significant, and no mitigation is required.

c) **No Impact:** There is no significant contamination sites within or adjacent to the project; any hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste will be temporary in nature and last only for duration of construction of the project. The contractor will comply with the Department Construction Manual and the Department standards for Hazardous Waste and Contamination which includes discovery of unanticipated asbestos and hazardous substances, dust control, stockpiling, contractor generated hazardous waste, storage of hazardous waste, the transport and disposal of hazardous waste. There are no impacts, and no mitigation required.

d) **No Impact:** The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create any significant hazard to the public or environment. There are no impacts, and no mitigation required.

e) **No Impact:** The project is not located within an airport land use plan or, where such a plan has not within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impacts are anticipated, and no mitigation is required.

f) **Less Than Significant Impact:** The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Safety Plans. Access for Emergency Response must always be maintained throughout construction of the project, and a Traffic Management Plan (TMP, PF-TRA-1) will be prepared and implemented to keep traffic moving efficiently through the project area during the construction. Less than significant impacts are anticipated to occur with no mitigation is required.

g) **No Impact:** The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, even though the project is located in very high fire hazard severity zone because the project will comply with the Department standards for Fire Protection. No impacts are anticipated, and no mitigation is required.

2.10.2 Avoidance, Minimization, and/or Mitigation Measures:

In addition to PF-TRA-1 the following project features will be implemented:

PF-HAZ-1 The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be

completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, SSP for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.

PF-HAZ-2 The proposed project includes removal of existing wood posts for MGS supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.

PF-HAZ-3 During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Department) Construction Manual and 14-11.02 of the Department Standard Specification (2024).

PF-HAZ-4 Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.

2.11 Hydrology and Water Quality

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

2.11.1 Discussion of Environmental Evaluation Questions

The proposed project is located on State Route 133 and State Route 241 and within Santa Ana Regional Water Quality Control Board. The project is within the Lower Santa Ana River Hydrological Area (801.11) and lies within the San Diego Creek and Santiago Creek Watersheds. Water bodies within the project limits include Bee Canyon channel and Round Canyon channel which are tributaries to Marshburn Channel. Hicks Channel within the project limits discharges to Peters Canyon Channel downstream. Peters Canyon Channel and Marshburn Channel ultimately discharge to San Diego creek (F05) approximately 5 miles downstream from the project location. Other water bodies within the project limits include Santiago Creek and the Santa Ana River. The potential for the Build Alternative to

result in significant impacts was based on the Water Quality Technical Memorandum (March 2025) and the Location Hydraulic Study Form (March 2025).

a) **Less Than Significant Impact:**

Construction

Under the build alternative, the proposed project would include necessary repairs on the fire damaged guardrails, drainage facilities, roadway signs, and electrical systems. Moreover, the build alternative would also aim to improve the existing infrastructure by making it more resilient to extreme weather and natural disasters. The project's proactive approach would include drainage improvements, upgrade traffic safety devices, replacement of pavement impacted by the culvert replacement, landscaping replacement, electrolier replacement, and conductor loop replacement. The proposed project is anticipated to have a Disturbed Soil Area (DSA) of 2.03 acres.

Potential temporary impacts to water quality anticipated during construction include possible sediment transport caused by disturbed soil areas created by construction activities such as clearing, grubbing and excavation and grading to construct the guardrails and concrete barriers as well as the modifications to drainage facilities. The project can also have temporary water quality impacts from minor concrete waste, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, sanitary wastes from portable toilets and any other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds. The Build Alternative will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and determine a Risk Level based on potential erosion and transport to receiving waters. The SWPPP will identify temporary Best Management Practices (BMPs) to address the potential temporary impacts to water quality. The BMPs identified in the project SWPPP will include measures such as temporary soil stabilization measures, linear sediment barriers (i.e. silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e. concrete washout, construction materials storage, litter/ waste management).

The Build Alternative will have a DSA greater than 1.0 acre and will be required to comply with the Statewide NPDES Construction General Permit and prepare and implement SWPPP. The SWPPP will identify temporary Best Management Practices (BMPs) to address the potential temporary impacts to water quality. The BMPs identified in the project's SWPPP will include measures such as temporary soil stabilization measures, linear sediment barriers (i.e. silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e. concrete washout, construction materials storage, litter/ waste management). The project features (PF-WQ-2, and PF-WQ-3) would address any temporary impacts to water quality.

Operation

The proposed project will include necessary repairs on the fire damaged guardrails, drainage facilities, roadway signs, and electrical systems. Moreover, the build alternative would also aim to improve the existing infrastructure by making it more resilient to extreme weather and natural disasters. The project's proactive approach would include drainage improvements, upgrade traffic safety devices, replacement of pavement impacted by the culvert replacement, landscaping replacement, electrolier replacement, and conductor loop replacement.

The proposed project is repairing damaged facilities from the Santiago fire. There will be no new or replaced impervious surface that would require post construction treatment Best Management Practices (BMP) per the Department NPDES permit. Long term

impacts to water quality would be addressed for areas of Disturbed Soil Area (DSA) created by the project. Design Pollution Prevention BMPs (source control BMPs) will be implemented such as permanent soil stabilization measures (landscaping) to prevent the discharge of soil and sediments upon completion of construction as well as velocity dissipation devices for the updated drainage facilities. Since the project does not require post construction treatment BMPs, the project will address long term impacts to water quality with the implementation of post construction Design Pollution Prevention BMPs. To address the build alternative long-term impacts, the Department will incorporate Design Pollution Prevention (source control) BMPs to ensure that adequate measures are included to minimize pollutant sources such as erosion from the project improvements.

The project features (PF-WQ-4) would address any permanent impacts to water quality.

b) No Impact: It is not anticipated that the build alternative will encounter groundwater during construction.

c)

(i) Less than Significant Impact: The project will not result in substantial erosion or siltation on-or off-site. Any erosion and siltation that can occur during construction will be from Disturbed Soil Areas (DSA) created by the project's excavation/grading. The potential erosion/siltation will be addressed by the installation and implementation of temporary Best Management Practices (BMPs) identified in the project's SWPPP (PF-WQ-3). Post construction erosion/ siltation is addressed by the installation of permanent soil stabilization BMPs (PF-WQ-4).

(ii) Less than Significant Impact: The project will not substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on- or offsite. The project does not increase the impervious surface based on the build alternative.

(iii) Less than Significant Impact: The proposed project will not exceed the capacity of the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. As indicated previously, the project may contribute additional sources of pollutants during construction. Potential temporary impacts to water quality that can be anticipated during construction include sediments from grading and excavation operations, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, concrete waste, sanitary wastes from portable toilets and any other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds.

The project may contribute additional sources of pollutants upon completion of construction. Pollutants typically generated during the operation of a transportation facility include sediment/ turbidity, nutrients, trash and debris, bacteria and viruses, oxygen demanding substances, organic compounds, oil and grease, pesticides and metals. The project will incorporate Design Pollution Prevention (source control) BMPs as required by the Department NPDES permit to ensure that adequate measures are included to minimize any potential long-term impacts.

With the implementation of a SWPPP and selected temporary BMPs during construction (WQ-PF-3) as well as evaluating and implementing post construction BMP (WQ-PF-4), the project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff.

With the implementation of the Department NPDES Permit, the Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP) and temporary and permanent BMPs, the project will not substantially degrade water quality (PF-WQ1, PF-WQ-2, PF-WQ-3, PF-WQ-4).

(iv) No Impact: The project is not within the 100-year floodplain zone; and will not impede or redirect flood flows.

d) No Impact: The project is not in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

e) No Impact: The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The project will comply with the Department Statewide NPDES Storm Water Permit (PF-WQ-1) and the Statewide Construction General Permit for temporary impacts to water quality (PF-WQ-2).

2.11.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the following project features will be implemented as part of the project:

PF-WQ-1 The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003 and the and any subsequent permits in effect at the time of construction

PF-WQ-2 The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.

PF-WQ-3 The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control

and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs

PF-WQ-4 Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

2.12 Land Use and Planning

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

2.12.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to land use and planning is assessed in the following discussions**.**

a) **No Impact:** Existing land uses around the project study area include a mix of open space and residential uses; however, the project limits are within the existing freeway and the Department ROW. With the implementation of PF-TRA-1 any construction impacts to surrounding areas would be minimized. No mitigation is required.

b) **No Impact:** The project is a permanent restoration project that repair the damages caused by the natural fire; therefore, the project does not conflict with any land use plans, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect, nor will the project cause any significant environmental impact pertaining to any land use plan, policy or regulation. No mitigation is required.

2.12.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the project feature PF-TRA-1 will be implemented as part of the project:

2.13 Mineral Resources

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

2.13.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to mineral resources was assessed based on information from the County of Orange General Plan (2013).

a) and b) **No Impact:** A review of the Surface Mining and Reclamation Act of 1975 maps[1] indicates that there are no aggregate production areas within the project limits. In addition, Figure VI-3 in the Resources Element of the County of Orange General Plan[2] does not display any mineral resource areas within or near the project limits. Therefore, there will be no impact to mineral resources from the Build Alternative. No mitigation required.

2.13.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

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[1] California Geological Survey. 2012. Aggregate Sustainability in California. Website: http://www.conservation.ca.gov/cgs/information/publications/ms/Documents/MS_52_2012.pdf (accessed July 12, 2019).

[2] County of Orange General Plan. 2013. Chapter VI. Resources Element. Website: https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40235 (accessed January 25, 2019)

2.14 Noise

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

2.14.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant noise impacts is discussed below and is based on the Environmental Engineer PAED Review Memo (April 2025).

a) **Less Than Significant Impact:** The proposed project is not capacity increasing thus, a traffic noise study and abatement evaluation was not needed. A short-term construction-related noise impacts would occur during the construction of the build alternative. However, construction noise will be controlled by the Department's standard specifications section 14-8.02 (2024) as outlined in Project Feature PF-N-1; and therefore, temporary noise impacts are also considered less than significant.

b) **No Impact:** see response above.

c) **No Impact:** The project is located within the vicinity of a private airstrip. The airstrip, Marine Corps Air Station El Toro, has been decommissioned since 1999. No other airport or airport land use plan is located within 2 miles from the proposed project. Therefore, implementation of the project would not expose people residing or working in the project area to excessive noise levels. No impact and no mitigation measures are required.

2.14.2 Avoidance, Minimization and/or Mitigation

Although no mitigation will be required for the project, the following project feature will be implemented as part of the project:

PF-N-1 Contractor must comply with the Department's Standard Specification 14-8.02, "Noise Control" (2024) during construction. The specification states following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.

2.15 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.15.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to population and housing is assessed the following discussion.

a) and b) **No Impact:** The proposed project is not a capacity increasing project; rather it proposes permanent restoration of the existing highway facility due to fire damage; therefore, it will not increase the capacity of highway facilities. The proposed project will not require any Temporary Construction Easements (TCEs) partial or full acquisitions; therefore, there will be no impacts to populations and housing. No mitigation required.

2.15.2 Avoidance, Minimization, and/or Mitigation Measures

None Required.

2.16 Public Services

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

2.16.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to Public Services is assessed in the following discussions.

i. **Fire Protection — Less Than Significant Impact:** Orange County Fire Authority (OCFA) provides fire protection and emergency response services for the project study area. The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for fire protection. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, fire protection services may be temporarily impacted. However, with the implementation of PF-TRA-1 construction activity-related delays would be minimized by the effective application of traditional traffic handling practices. As part of the PF-TRA-1 TMP, the Department District 12 Orange County office would coordinate with emergency response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

ii. **Police Protection — Less Than Significant Impact:** City of Irvine Police Department and Orange County Sheriff Department provide police protection for the project study area. The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for police protection. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, police protection services may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. As part of the TMP, the Department District 12 Orange County office would coordinate with emergency

response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

iii. **Schools — Less Than Significant Impact:** The proposed project will not permanently impact accessibility to schools within the vicinity of the project limits. Loma Ridge Elementary is located within the vicinity of the project. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, accessibility may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. Therefore, no mitigation is required.

iv. **Parks — Less Than Significant Impact:** The proposed project is within the vicinity of Irvine Regional Park and Limestone Canyon Regional Park. However, none of these will be impacted. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, accessibility may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. Therefore, no mitigation is required.

v. **Other Public Facilities—No Impact:** There are no other public facilities in the project. Therefore, no other public facilities will be impacted. No mitigation is required.

2.16.2 Avoidance, Minimization, and/or Mitigation Measures

In addition to PF-TRA-1, no other measures are required.

2.17 Recreation

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

2.17.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to Recreation is assessed in the following discussions.

a) **No Impact:** The Build alternative will not require any TCEs and the project is a permanent restoration project and will not be increasing the use of the existing neighborhood and regional parks or other recreational facilities. Therefore, there will be no impact.

b) **No Impact**: The Build alternative does not include the construction or expansion of recreational facilities.

2.17.2 Avoidance, Minimization, and/or Mitigation Measures

None Required.

2.18 Transportation/Traffic

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? NOTE: While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for the Department projects is still under development. The PDT may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which an NOP will be issued any time after December 28th, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of OPR's updated SB 743 Technical Advisory), particularly if the project will be approved after July 2020.	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

2.18.1 Discussion of Environmental Evaluation Question

The potential for the Build Alternative to result in significant impacts related to Transportation/Traffic is assessed in the following discussions.

a) **Less Than Significant Impact:** The project complies with Goals 1.0 and 2.0 of the City of Orange's General Plan Circulation and Mobility Element and Goal 1 of the City of Irvine's General Plan Circulation element and Goal 3 of the County of Orange General Plan to provide safe transportation facilities to the communities. Overnight lane closures are expected during an 8-to-12-hour work window and at least one lane will be open in each direction allowing the continued use of the facility. In addition, temporary staging is expected during the construction of the safety devices and or culvert replacement.

b) **No Impact:** The purpose of the project is repairing the fire damages; and the improvements are not considered capacity increasing. The project will have no impact on Vehicle Miles Travelled (VMT).

c) **No Impact**: The project will not introduce any new or substantial hazards due to geometric design features or incompatible uses. All components of the project will meet the Department design standards. Therefore, no impact and no mitigation is required.

d) **Less Than Significant Impact:** The project will not result in inadequate emergency access. Transportation Management Plan (TMP) will be prepared and implemented so that traffic (e.g. emergency vehicles) will be able to pass through the project area during construction, at all times.

2.18.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the following project feature will be implemented as part of the project:

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

2.19 Tribal Cultural Resources

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

2.19.1 CEQA Significance Determinations for Tribal Cultural Resources

The potential for the Build Alternative to result in significant impacts related to tribal cultural resources was assessed as part of Native American consultation conducted during preparation of the Historic Property Survey Report (HPSR; March 2025).

a) No Impact: The Department Cultural Resource Database (CCRD) was utilized during the literature and records search by the Department (District 12) Archaeologist, Judy Bernal, Co-Principal Investigator (PI) [Prehistoric Archaeology]. A Phase I Archaeological Survey was conducted by the Department PQS on October 29, 2024, to identify the accuracy of the records searches and to ensure no additional Cultural resources were present or extant in the Area of Potential Effects (APE). No new or existing archaeological resources were identified during the survey. The record and literature search identified 22 historic properties within a ½ mile of the project area. Of the identified historic properties, 7 are determined to be within the APE, however all 7 are outside of the planned work locations, hence, no historic properties will be affected by the Project and these properties are exempt from further review.

b) No Impact: Native American consultation per Assembly Bill 52 was conducted for this project. The Native American Heritage Commission (NAHC) was contacted on October 30, 2024 with a request to conduct a Sacred Lands File (SLF) search and provide a Native American Tribal Consultation List for the Project site. The NAHC responded on November 19, 2024, stating that an SLF search was completed for the APE with positive results. The NAHC also recommended that 26 Native American individuals representing the Cahuilla, Gabrielino, Juaneño, Cupeño, and Luiseño groups be contacted for information regarding cultural resources that could be affected by the proposed project.

The following Native American tribes, groups, and individuals were contacted via letter sent on December 3, 2024; email on December 4, 2024; and emailed with a revised scope of work and two added cultural resources on January 7, 2025:

- Cahuilla Band of Indians, Ray Esparza, Cultural Director
- Cahuilla Band of Indians, Anthony Madrigal, Tribal Historic Preservation Officer
- Cahuilla Band of Indians, Erica Schenk, Chairperson
- Gabrieleno Band of Mission Indians - Kizh Nation, Andrew Salas, Chairperson
- Gabrieleno Band of Mission Indians - Kizh Nation, Christina Swindall Martinez, Secretary
- Gabrieleno/Tongva San Gabriel Band of Mission Indians, Anthony Morales, Chairperson
- Gabrielino Tongva Indians of California Tribal Council, Robert Dorame, Chairperson
- Gabrielino Tongva Indians of California Tribal Council, Christina Conley, Cultural Resource Administrator
- Gabrielino/Tongva Nation, Sandonne Goad, Chairperson
- Gabrielino-Tongva Tribe, Charles Alvarez, Chairperson
- Gabrielino-Tongva Tribe, Sam Dunlap, Cultural Resource Director
- Juaneno Band of Mission Indians Acjachemen Nation – Belardes, Joyce Perry, Cultural Resource Director
- Juaneno Band of Mission Indians Acjachemen Nation 84A, Heidi Lucero, Chairperson, THPO
- Pala Band of Mission Indians, Christopher Nejo, Legal Analyst/Researcher
- Pala Band of Mission Indians, Shasta Gaughen, Tribal Historic Preservation Officer
- Pala Band of Mission Indians, Alexis Wallick, Assistant THPO
- Pechanga Band of Indians, Tuba Ebru Ozdil, Pechanga Cultural Analyst
- Pechanga Band of Indians, Steve Bodmer, General Counsel for Pechanga Band of Indians
- Rincon Band of Luiseno Indians, Laurie Gonzalez, Tribal Council/Culture Committee Member
- Rincon Band of Luiseno Indians, Joseph Linton, Tribal Council/Culture Committee Member
- Rincon Band of Luiseno Indians, Cheryl Madrigal, Cultural Resources Manager/Tribal Historic Preservation Officer
- Rincon Band of Luiseno Indians, Denise Turner Walsh, Attorney General
- Santa Rosa Band of Cahuilla Indians, Vanessa Minott, Tribal Administrator
- Santa Rosa Band of Cahuilla Indians, Steven Estrada, Tribal Chairman
- Soboba Band of Luiseno Indians, Jessica Valdez, Cultural Resource Specialist
- Soboba Band of Luiseno Indians, Joseph Ontiveros, Tribal Historic Preservation Officer

Seven responses were received as a result of the initial project notification letters. These responses were from the Gabrieleno Band of Mission Indians – Kizh Nation, Juaneno Band of Mission Indians Acjachemen Nation- Belardes, Juaneno Band of Mission Indians Acjachemen Nation- 84A, Pala Band of Mission Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians.

<u>Gabrieleno Band of Mission Indians – Kizh Nation</u>

On December 9, 2024,Tribal administration from the Gabrieleno Band of Mission Indians – Kizh Nation requested contact information regarding the Project's lead Agency. Ms. Bernal responded that the Department was the CEQA/NEPA lead agency, and she would serve as the point of contact for consultation. On December 30, 2024, Ms. Brandy Salas responded with a request for formal consultation. Ms. Bernal responded on January 7, 2025 and scheduled a virtual meeting scheduled for January 30, 2025 at 11 A.M. The response letter noted the four cultural resources that had the potential to be affected by the project (CA-ORA-1241, CA-ORA-1371/H, CA-ORA=649 and CA-ORA-1460. Subsequent meetings with The Department's Engineering and Design staff were held on January 17, 2025 and January 21, 2025 to discuss cultural and historic tribal concerns regarding the Project. Per Ms. Bernal's request all project elements located within the previously identified seven historic properties were removed from the scope of work. On January 21, 2025, Ms. Bernal contacted the Tribe with these changes and provided the site record forms for the four historic properties for their review.

On January 28, 2025, tribal administration replied via email that the meeting planned for January 30, 2025, was to be cancelled due to the recent Los Angeles County fires shifting their priorities to focus on tribal resources affected by the fire and that they would like to continue consultation via email as they had evidence to support mitigation measures in the Project area (letter). Ms. Bernal requested documentation to be sent by February 7, 2025, for inclusion into the cultural study period. No further reply was received from the tribe on the date stated regarding these resources, and on February 14, 2025, Ms. Bernal sent the tribe an email and formal letter stating that the project's cultural studies are to be concluded in February 2025 and the Department would not require any cultural mitigation measures as the proposed construction would not have an impact to historic properties in the APE. Additionally, the letter and email stated that standard cultural resource measures (PF-CR-1 and PF-CR-2) and WEAP training - prior to construction - would be conditions for the project. Ms. Bernal thanked the tribe for their time and stated any further consultation would continue during the planning phase. No further responses have been received to date. Consultation is ongoing for the lifespan of the project, however at this time, no further actions are needed at the conclusion of these studies.

Juaneno Band of Mission Indians Acjachemen Nation- Belardes

On January 7, 2025, Ms. Perry responded on behalf of the Juaneno Band of Mission Indians Acjachemen Nation- Belardes and that they would like to consult, "Due to the sensitivity of the area, our recommendation is that mitigation measures including Native American monitoring, and an inadvertent discovery plan are put in place to minimize the potential impacts on buried cultural resources." Ms. Bernal responded on January 7, 2025, with information on the previously identified historic properties and requested a formal meeting to discuss concerns. On January 21, 2025, Director Perry requested the two-remaining site records for further review. Ms. Bernal provided that information on January 23, 2025, as well as a follow up/update regarding the discussion she had with the Department Engineering and Design, that occurred on January 17, 2025, and January 21, 2025, in which work was removed from within previously identified historic properties.

On February 14, 2025, Ms. Bernal sent the tribe an email and formal letter stating that the project's cultural studies are to be concluded in February 2025 and the Department would not require any cultural mitigation measures as the proposed construction would not have an impact to historic properties in the APE, therefore the Department would not be adding tribal monitoring to the project as requested. Additionally, the letter and email stated that

standard cultural resource measures (CR-1 and CR-2) and WEAP training- prior to construction- would be conditions for the project. Ms. Bernal thanked the tribe for their time and stated any further consultation would continue during the planning phase. No further responses have been received to date. Consultation is ongoing for the lifespan of the project, however at this time, no further actions are needed at the conclusion of these studies.

Juaneno Band of Mission Indians Acjachemen Nation - 84A

On December 4, 2024, Chairperson Lucero of the Juaneno Band of Mission Indians Acjachemen Nation - 84A Tribe responded, via email, that the Tribe would like to consult on this project. Ms. Bernal responded, via email, on December 4, 2024, to request a consultation phone call or meeting. Email request was sent to Director Perry and Chairperson Lucero. On December 6, 2024, the Department received confirmation that the letter was received. On January 7, 2025, an email was sent with a revised scope of work and two added cultural resources were noted in the update. Ms. Bernal requested to set up a meeting during the weeks of January 13 through 17 and January 20 through 25. THPO Lucero stated she would like to schedule a site visit and would reply to the dates provided. Consultation is ongoing as of the conclusion of these cultural studies.

Pala Band of Mission Indians

On December 17, 2024, Patricia Sanchez, Cultural Resource Monitor and Archive Assistant, responded on behalf of the Dr. Gaughen and the Pala Band of Mission Indians, in an email thanking the Department for the letter regarding Native American consultation regarding the Silverado Fire Remaining Assessment Repair Project. The email had an attached letter from Dr. Gaughen, noting that the Project “as described is not within the boundaries of the recognized Pala Indian Reservation. Even though it is within the boundaries of the territory that the tribe considers its Traditional Use Area (TUA), or it is situated in close proximity to the reservation…, we decline AB-52 consultation at this time. However, we do not waive our right to request consultation under other applicable laws in the future.”

Rincon Band of Luiseno Indians

On December 13, 2024, Ms. Madrigal from the Rincon Band of Luiseno Indians responded, “We have no additional information to provide, and do not request consultation at this time.” Consultation is complete at this time.

Santa Rosa Band of Cahuilla Indians

On December 5, 2024, Ms. Minott of the Santa Rosa Band of Cahuilla Indians responded via email “That the tribe defers comments to the Soboba Band of Luiseno Indians Cultural Resources Department.” Consultation is complete at this time.

Soboba Band of Luiseno Indians

On December 9, 2024, the Department received confirmation that the letter was received. No response received to date.

No additional responses were received as a result of the initial letter or follow-up communications.

Following the receipt of the Sacred Lands File, A Phase I Archaeological Survey was conducted by the Department PQS on October 29, 2024, to identify the accuracy of the records searches and to ensure no additional Cultural resources were present or extant in the Area of Potential Effects (APE). No new or existing archaeological resources were identified during the survey. The record and literature search identified 22 historic properties within a ½ mile of the project area. Of the identified historic properties, 7 are determined to be within the APE, however all 7 are outside of the planned work locations. As such, there will be no potential impacts to tribal cultural resources as a result of the project.

12.19.2 Avoidance, Minimization, and/or Mitigation Measures

In addition to PF-CUL-1, PF-CUL-2, and PAL-2 no other measures will be implemented as part of the project.

2.20 Utilities and Service Systems

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

2.20.1 Discussion of Environmental Evaluation Questions

The potential for the Build Alternative to result in significant impacts related to Utilities and Service Systems is assessed in the following discussions.

a) **No Impact:** 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, the construction or relocation of which could cause significant environmental effects. There is no impact, and no mitigation required.

b) **No Impact:** The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. No mitigation is required.

c) **No Impact:** The project would not 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 mitigation is required.

d) **No Impact:** The project would not 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 mitigation is required.

e) **No Impact:** The project construction crew would be responsible for controlling and disposing of solid waste in accordance with federal, state and local statutes and regulations. No mitigation is required.

2.20.2 Avoidance, Minimization, and/or Mitigation Measures

None Required

2.21 Wildfire

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

2.21.1 Discussion of Environmental Evaluation Questions

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones.

The project occurs in a highly flammable area due to large quantities of combustible vegetation, poor access to fire hazard areas, and lack of water supply for fire protection in fire hazard areas. Orange County Fire Authority for fire-fighting services are serving within the project limits. The potential for the Build Alternative to result in significant impacts related to Wildfire is assessed in the following discussions.

a) **No Impact.** Based on the Cal-Fire Fire Hazard Severity Zone Viewer[1]**,** the proposed project is located within the very high Fire Hazard Severity Zones**.** Access through the project area will be maintained at all times during construction; and therefore, emergency response Plans or Emergency evacuation plans will not be impeded. Therefore, no impacts are anticipated, and no mitigation is required.

b) **No Impact.** Depending on what season the project goes into construction, there is an increased risk in the prevailing Santa Ana winds, which create hot and dry conditions in the winter and have the potential to help exacerbate the risk for wildfire. Therefore, there is a potential that in the event of a wildfire, project occupants could be exposed to pollutant concentrations of wildfire and/or be exposed to the spread of wildfire. However, based on the purpose and need of the project, the intention of the

[1] Fire Hazard Severity Zone Viewer. Cal Fire.
https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/

project is restoring features that were damaged by fire, and it will not expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; and the build alternative aims to improve the existing infrastructure by making it more resilient to extreme weather and natural disasters. Therefore, the proposed project would have no impact and no mitigation is required.

c) **No Impact**. The proposed project is considered as a restoration project and does not include roads, fuel breaks, emergency water sources, power lines or other utilities that may exacerbate fire risk or result in temporary or ongoing impacts to the environment as part of the project. Therefore, the proposed project would have no impact and no mitigation is required.

d) **No Impact.** The project is a restoration project and will 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. Project features PF-WQ-1 and PF-WQ-4 will be implemented to manage stormwater discharge. No impacts are anticipated, no mitigation is required.

2.21.2 Avoidance, Minimization, and/or Mitigation Measures

In addition to PF-WQ-1 and PF-WQ-4, no other measures are required.

2.22 Mandatory Findings of Significance

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

2.21.1 Discussion of Environmental Evaluation Questions

The California Environmental Quality Act (CEQA) requires the analysis of a project's mandatory findings of significance. The analysis of the mandatory findings of significance of the project is based on the findings of the project's impacts on all the required issue areas.

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

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

California Environmental Quality Act (CEQA) Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines.

a) **Less Than Significant with Mitigation Incorporated:** There were 34 special-status plant species considered for their potential to occur in the Biological Study Area (BSA). No listed or non-listed special-status plant species were observed in the BSA during field surveys. An additional five non-listed special-status plant species have potential to occur within the project disturbance limits given the presence of potentially suitable habitat. The remaining special-status plant species are not expected to occur within the proposed work areas due to lack of suitable habitats, ongoing disturbances, and lack of occurrence records in the vicinity of the proposed work areas. Therefore, project implementation is not anticipated to have direct impacts to listed special-status plant species. Indirect impacts to these species may consist of dust, erosion, or the introduction of invasive species.

Direct impacts to any large populations of special-status plant species are not anticipated with the implementation of avoidance and minimization measures. A No Effect determination has been made for Braunton's milk-vetch (Astragalus brauntonii), Nevin's barberry (Berberis nevinii), thread-leaved brodiaea (Brodiaea filifolia), and Santa Monica dudleya (Dudleya cymosa ssp. ovatifolia).

There were 54 special-status wildlife species considered for their potential to occur in the BSA. One listed special-status animal species, coastal California gnatcatcher (Polioptila californica californica), was observed during focused surveys in 2025. An additional two listed special-status animals were identified as having potentially suitable habitat within the BSA including least Bell's vireo (Vireo bellii pusillus), and Crotch bumblebee (Bombus crotchii). With the exception of the coastal California gnatcatcher, a No Effect determination was made for each species listed under the Federal Endangered Species Act (FESA).

No non-listed wildlife species were observed during surveys in 2025. Sixteen non-listed special-status wildlife species were identified as having moderate or high potential to occur within the BSA (Section 2.4: Biological Resources). To avoid potential impacts to non-listed special-status wildlife species, avoidance and minimization measures will be implemented.

Coastal sage scrub, disturbed scrub, chaparral, and annual grassland areas anticipated to be impacted are relatively small in size and generally provide low suitability for listed and non-listed special-status species as they are located adjacent to SR-241, in between paved and unpaved paths associated with Caltrans ROW within the BSA and contain at least partially disturbed areas. There is low potential for most of these special-status animal species to be directly affected by the project given the limited work and access proposed

within or near suitable habitat areas. Indirect temporary effects to suitable habitat for special-status species may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to special-status status that have the potential to occur may include increased noise, vibration, lighting, and predation during project activities. Because project activities will be performed adjacent to highly traveled portions of SR-241, and dust, noise, and vibration are already at elevated levels due to traffic along SR-241, indirect impacts to special-status species and their habitats are expected to be minimal. Avoidance and minimization measures are included as part of the project to avoid effects to special-status animal species. With implementation of Measures BIO-1 through BIO-9, and BIO-14 impacts to Crotch's bumble bee would be less than significant.

The project does have the potential to impact geologic units with high paleontological sensitivity (e.g. undetermined Holocene to Late Pleistocene-age landslide, the Tertiary-age Puente, Vaqueros and Sespe Formations, and the Cretaceous-age Williams Formation). This would result in scientifically significant, non-renewable paleontological resources. However, with the implementation of mitigation measures PAL-1 and PAL-2 all potential degradation impacts to paleontological resources will be reduced to the level of less than significant impact.

b) **Less Than Significant Impact:** Although the project may have impacts that are individually limited, these impacts will not be cumulatively considerable, and impacts will be less than significant. There are currently no capacity increasing or operational improvement projects currently in construction in this portion SR-133. There are a few scattered bridge maintenance projects near or around the project location and vicinity. However, these project work activities are for maintenance purposes minimal in scale, impact and duration of construction would be temporary and short in nature; thus having a less than significant impact relative to projects of the past, present in future in the project area.

c) **No Impact**: This project will not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Refer to the discussion in the other sections for additional information that supports this finding.

2.21.2 Avoidance, Minimization, and/or Mitigation Measures

With the implementation of the project feature and avoidance, minimization and/or mitigation measures as stated in the previous sections (BIO-1 through 9, BIO-14, PAL-1, PAL-2), impacts would be reduced to less than significant levels.

Chapter 3 – Climate Change

3.1 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

3.2 Regulatory Setting

For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to the Department' Standard Environmental Reference (SER), Chapter 16, Climate Change.

3.2.1 Federal

To date, no nationwide numeric mobile-source GHG reduction targets have been established; however, federal agencies are mandated to consider the effects of climate change in their environmental reviews.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) is the basic national charter for protection of the environment which establishes policy, sets goals, and provides direction for carrying out the policy. NEPA requires federal agencies to

assess the environmental effects of their proposed actions prior to making a decision on the action or project. In May 2024, the White House Council on Environmental Quality (CEQ) issued the National Environmental Policy Act Implementing Regulations Revisions Phase 2 (89 Fed. Reg. 35442). The CEQ regulations do not establish numeric thresholds of significance, but mandate that federal agencies consider the effects of climate change in their environmental reviews, including direct, indirect, and cumulative impacts. The CEQ regulations further require that agencies quantify greenhouse gas emissions, where feasible, from the proposed action and alternatives. The regulations also direct agencies to identify reasonable alternatives that reduce climate change-related effects.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level rise, 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 2022). 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.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces corporate average fuel economy (CAFÉ) standards for on-road motor vehicles sold in the United States. The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation’s energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

3.2.2 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).

In 2005, EO S-3-05 initially set a goal to reduce California’s GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (ARB) was directed to create a climate change scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b). In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human- caused GHG emissions by 85 percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors, and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state's GHG reduction goals.

3.3 Environmental Setting

The proposed project is in an urban area of Orange County with a well-developed road and street network. The California Department of Transportation (Department) is proposing to restore this segment of the project limits due to the fire damage. The Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation development in the project area.

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 CARB does so for the state, as required by H&SC Section 39607.4.

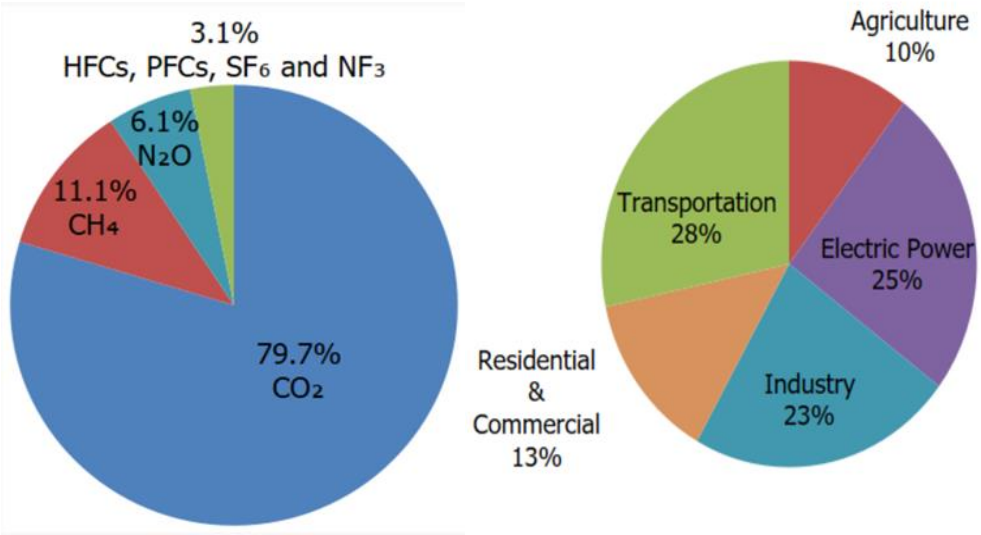
3.3.1 GHG Inventories

3.3.1.1 National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were 5,489.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80% were CO2, 11% were CH4, and 6% were N2O; the balance consisted of fluorinated gases. From 1990 to 2022, CO2 emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (See Figure 3-1). Transportation activities accounted for 37% of U.S. CO2 emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b)).

Figure: 3-1 U.S. 2022 Greenhouse Gas Emissions



(Source: U.S. EPA 2024b)

3.3.1.2 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. Overall statewide GHG emissions declined from 2000 to 2021 despite growth in population and state economic output (Figure 3-2). Transportation emissions remain the largest contributor to GHG emissions in the state (Figure 3-3) (ARB 2023).

Figure 3-2: California 2017 Greenhouse Gas Emissions by Economic Sector

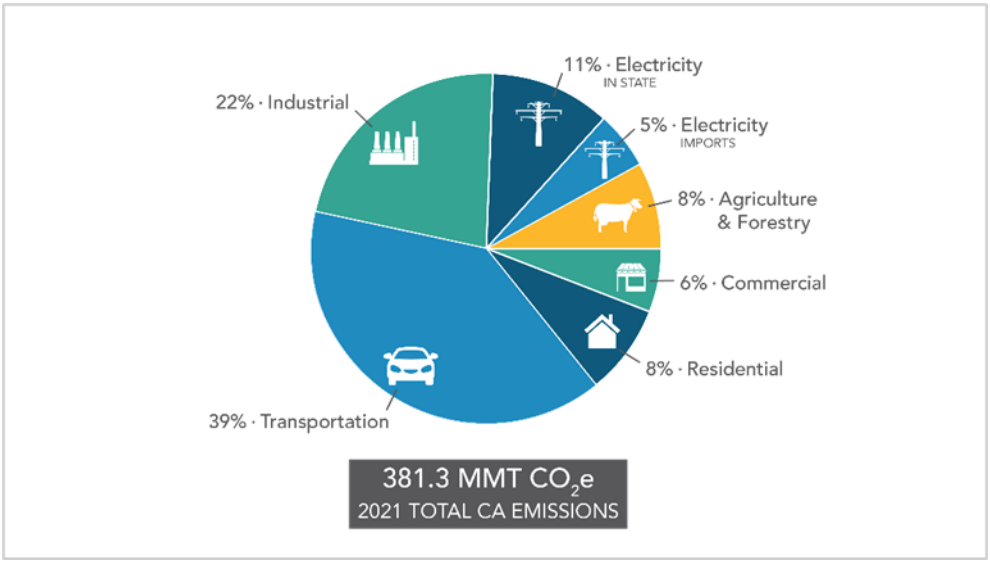
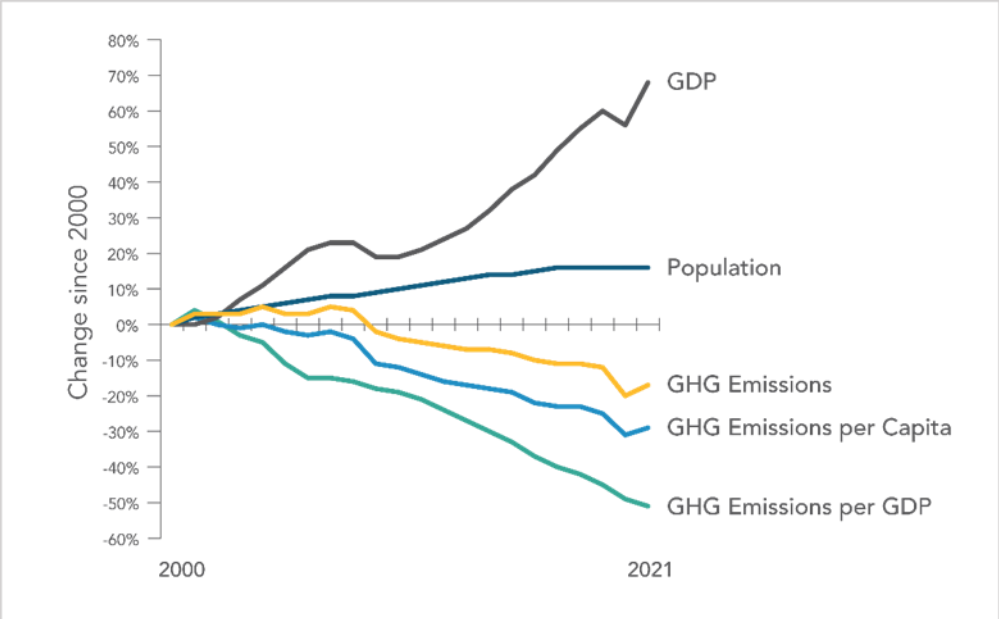


Figure 3-3: Change in California GDP, Population, and GHG Emissions since 2000



(Source: ARB, 2023)

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 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. 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 2022 Scoping Plan for Achieving Carbon Neutrality, adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (ARB 2022a).

3.3.1.3 Regional Plans

As required by *The Sustainable Communities and Climate Protection Act of 2008*, ARB sets regional GHG reduction targets for California's 18 metropolitan planning organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). 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 the Southern California Association of Governments. The reduction target for SCAG is 19% by 2035 (ARB 2021). Table 3.1 shows the regional and local greenhouse gas reduction plans.

The Orange County Transportation Authority and Orange County Council of Governments published the *Orange County Sustainable Communities Strategy* in 2011, developed to be integrated with the SCAG SCS. The Orange County SCS offers sustainability strategies to reduce GHG emissions from land use and transportation. In addition, the City of Irvine is in

the process of developing a Climate Action and Adaptation Plan and the County of Orange has developed a Draft Preliminary Climate Action Plan.

Table 3-1: Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments (SCAG) *Connect SoCal*, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy, Adopted April 2024	• System Preservation and Resilience • Complete Streets • Transit and Multimodal Integration Transportation Systems Management (TSM) Transportation Demand Management (TDM)
Southern California Association of Governments (SCAG) *Southern California Clean Cities Coalition Strategic Plan*, Adopted April 2024	• Support alternative fuel and advanced technology vehicle infrastructure. • Increase the number and accessibility of fueling and charging stations, especially in key transportation corridors. • Promote the adoption of clean and sustainable transportation technologies. • Facilitate the deployment of alternative fuel vehicles and advanced technology vehicles. • Advocate for standardized policies and regulations that support clean transportation. • Collaborate with policymakers to incentivize alternative fuels and cleaner technologies through regulations and financial incentives. • Increase public awareness and involvement in clean transportation initiatives.
Orange County Sustainable Communities Strategy (2011)	• Eliminate bottlenecks and reduce delay on freeways, toll roads, and arterials. • Managing the transportation system (TSM) through measures that maximize the efficiency of the transportation network.

3.4 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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.

3.4.1 Operational Emissions

The purpose of the proposed project is to restore the damage on the existing facilities caused by fire; 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 SR-133 and SR-241, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

3.4.2 Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered "temporary" in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

An estimate of the construction emissions was conducted using the Department Construction Emission Tool (CAL-CET2018). The results were used to quantify GHG emissions generated by construction of the Build Alternative and are presented in Table 3.2.

Table 3-2: Construction Greenhouse Gas Emissions for the Build Alternative

Project Phases	CO_2 (tons/phase)	CH_4 (tons/phase)	N_2O (tons/phase)	CO_2e (MT/phase)
Build Alternative				
Grubbing/Land Clearing	14	0	0.001	13
Roadway /Excavation	85	0.003	0.002	78
Structural Excavation	17	0.001	0.000	16
Base/Subbase/Imported Borrow	204	0.007	0.004	188
Structural Concrete	142	0.004	0.004	131
Paving	28	0.001	0.001	26
Drainage/Environment/Landscaping	38	0.001	0.001	35
Traffic Signalization/ Signage/Striping/Painting	21	0.001	0.001	19
Other operations	1	0.0	0.00	1
Maximum (pounds per day)	6167	0.21	0.36	6280
Total (MT/construction project)	**550**	**0.018**	**0.0293**	**507**

Source: Calculated by using CAL-CET2018.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/phase = Metric tons/phase
CO2e of the CO_2, CH_4 and N2O was obtained by multiplying them by their respective global warming potential (GWP) of 1, 25 and 298, respectively.
MT/phase = metric tons per phase
N_2O = nitrous oxide
tons/phase = tons per phase
1 t = 2,000 lbs., 1 MT = 2,204.6 lbs.

GHG emissions related to the roadway widening would be mainly from CO_2, nitrous oxide (N_2O), and methane (CH_4) (reported together as CO_2e) contained in exhaust from off-road diesel construction equipment/vehicles (e.g., idling and operation of backhoes, cranes, and drilling rigs), from on-road trucks used by vendors (to deliver materials to the site) and on-site workers, and from use of portable equipment (e.g., generators). Construction is expected to start in early 2022 and would continue for 12 to 16 months. Total GHG emissions from construction would be about 508 MT CO_2e for the construction period for the Build Alternative. The construction emission result calculated by using Cal-CET2018 model is included in Appendix F.

All construction contracts include the Department Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires 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. Section 14-9.02, Air Pollution Control, 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.

3.4.3 CEQA Conclusion

While the proposed project would result in GHG emissions during construction, is anticipated that the Build Alternative would show decreases in long-term regional GHG emissions compared to the Existing Condition due to improvements in motor vehicle fuel efficiency and engine technologies. The proposed 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. The Department is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

3.5 Greenhouse Gas Reduction Strategies

3.5.1 Statewide Efforts

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (ARB 2022b).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015).

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 vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

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.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To

support this order, the California Natural Resources Agency released Natural and Working Lands Climate Smart Strategy (California Natural Resources Agency 2022).

3.5.2 The Department Activities

The Department 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 the Department to help meet these targets.

3.5.2.1 Climate Action Plan for Transportation Infrastructure

The California Action Plan for Transportation Infrastructure (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

3.5.2.2 California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Department 2021a).

3.5.2.3 The Department Strategic Plan

The Department 2020–2024 Strategic Plan includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing the Department Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing the Department climate action activities (Department 2021b).

3.5.2.4 The Department Policy Directives and Other Initiatives

The Department Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into the Department decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit the Department to sustainability practices in all planning, maintenance, and operations. The Department Greenhouse Gas Emissions and Mitigation Report (Department 2020) provides a comprehensive overview of the Department' emissions and current the Department procedures and activities that track and reduce GHG emissions.

It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of the Department and State goals.

3.5.2.5 Project-Level GHG Reduction Strategies

The Build Alternative is designed to restore the damaged caused by the fire on the existing transportation facilities. The proposed improvements will not intentionally improve existing and future regional mobility and traffic flow on the SR-133 and SR-241, and the connectors. However, the following project feature will be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

PF-AQ-1 The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2024), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances. Many such required measures help to reduce GHG emissions.

3.6 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. The Department 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. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on vulnerable communities in a project area. Accordingly, the Department must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

3.6.1 Federal Efforts

Under NEPA Assignment, the Department is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The Fifth National Climate Assessment, published in 2023, presents the most recent science and "analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years … to support informed decision-making across the United States." Building on previous assessments, it continues to advance "an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate" (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector's major contribution of GHGs that cause climate change and has made climate action one of the department's top priorities (U.S. DOT 2023). FHWA's policy is 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 fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

3.6.2 State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale erosion of up to 67% of Southern California beaches due to sea level rise. These effects will have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published Paying it Forward: The Path Toward Climate-Safe Infrastructure in California. This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the 2009 California Climate Adaptation Strategy, the Safeguarding California Plan, and a series of technical reports on statewide sea level rise projections and risks, including the State of California Sea-Level Rise Guidance Update in 2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current California Climate Adaptation Strategy incorporates key

elements of the latest sector-specific plans such as the Natural and Working Lands Climate Smart Strategy, Wildfire and Forest Resilience Action Plan, Water Resilience Portfolio, and the CAPTI (described above). Priorities in the 2023 California Climate Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published Planning and Investing for a Resilient California: A Guidebook for State Agencies, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (Atkins 2021) established statewide goals to "anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone." As the legislation directed, the Ocean Protection Council collaborated with 17 state planning and coastal management agencies to develop the State Agency Sea-Level Rise Action Plan for California in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

3.6.2.1 The Department Adaptation Efforts

The Department Vulnerability Assessments

The Department completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

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 guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

The Department Sustainability Programs

The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at the Department. The Sustainability Roadmap is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy, and replacing fleet vehicles with zero-emission vehicles (Department 2023).

3.6.2.2 Project Adaptation Analysis

Sea Level Rise

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

Precipitation and Flooding

Transportation assets in California are affected by precipitation in a variety of ways—from inundation/flooding, to landslides, washouts, or structural damage from heavy rain events. Climate change can cause large fluctuations in precipitation, with dry years becoming dryer and wet years wetter. Study was conducted to determine how a 100-year storm precipitation event may change over time for the purposes of analyzing vulnerabilities of the Department State Highway System. The study forecast a change of less than 5 percent in 100-year storm precipitation depth in the project area in through 2085 based on the RCP 8.5 emissions scenario (Department 2018).

Wildfire

Dryer atmosphere and wind have caused wildfires in the state. In areas affected by wildfires, falling rocks, mud, and trees damaged by fire can wash down steep banks during periods of high intensity rain. This debris can cause road blocks and require detours. Increasing temperatures, changing precipitation patterns, and resulting changes to land cover, are expected to affect wildfire frequency and intensity. Human infrastructure, including the presence of electrical utility infrastructure, or other sources of fire potential (mechanical, open fire, accidental or intentional) may also influence the occurrence of wildfires. Wildfire is a direct concern for driver safety, system operations, and the Department infrastructure, among other issues. In the Orange County, 74.2 miles of State Highway would be exposed to wildfire in the year 2025, 73.7 miles in the year 2055, and 75.2 miles in the year 2085 at the RCP 8.5 emission scenario. However, the District Climate Change Vulnerability Assessment does not indicate temperature changes during the project's design life that would require adaptive changes in pavement design or maintenance practices

Temperature

The District Climate Change Vulnerability Assessment does not indicate temperature changes during the project's design life that would require adaptive changes in pavement design or maintenance practices.

3.7 Chapter 3 References

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Chapter 4 – Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. The process includes determining the necessary 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, public meetings, public notices, and Project Development Team (PDT) meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Project Development Team Meetings

During the preparation of the environmental document for the proposed project, PDT meetings were held to discuss the proposed project design, factors to be considered during the environmental study process, key issues, and project schedule.

Cultural Resources

As part of the cultural investigation, a record search was conducted on October 29, 2024 Using the Department Cultural Resource Database (CCRD).

The Native American Heritage Commission (NAHC) was contacted to conduct a Sacred Lands File (SLF) search and to request a California Environmental Quality Act Tribal Consultation List under AB 52. A total of 26 Native American individuals or groups were contacted on December 4, 2024, for cultural resource information regarding this project. Responses were received from the Gabrieleno Band of Mission Indians – Kizh Nation, Juaneno Band of Mission Indians Acjachemen Nation-Belardes, Juaneno Band of Mission Indians Acjachemen Nation- 84A, Pala Band of Mission Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians. Coordination was conducted with the Native American Heritage Commission (NAHC) on October 30th, 2024 and Sacred Lands File was received from the NAHC on November 19th, 2024. Outreach efforts to local historical societies was conducted on December 5th, 2024 and included contact with the Irvine Ranch Conservancy, Orange County Historical Society, and the Irvine Historical Society.

Biological Resources

Species lists were obtained from the USFWS' IPaC Resource List, the CNPS Rare Plant Inventory, California Natural Diversity Database (CNDDB) on March 19, 2025. Additionally, species list were obtained from the National Marine Fisheries Service (NMFS) database on March 20, 2025.

Public Participation

The Draft IS will be made available to the public and circulated to regional and local agencies to provide opportunity for their comments from May 1st to May 30th, 2025. The document will be available at the OC Library Heritage Park Regional Branch (14361 Yale, Irvine, CA 92604), OC Library Foothill Ranch Branch at (27002 Cabriole, Foothill Ranch, CA 92610), and at the California Department of Transportation - District 12 Office (1750 East 4th Street, Suite 100, Santa Ana, CA 92705). The Department will also advertise the availability of this IS in the newspapers of local circulation and an opportunity for a public hearing. In addition, a copy of the Notice of Availability will also be mailed out and is included in Appendix G.

Chapter 5 – List of Preparers

These persons were principally responsible for preparation of this Initial Study and supporting technical studies.

The Department

Bade, Rabindra, Environmental Engineer. Ph.D. in Environmental Engineering, Kumoh National Institute of Technology, South Korea. 25 years of experience in research, design, consulting, academics in the field of Environmental Engineering and Civil Engineering. Contribution: Environmental Engineer for the preparation of technical studies of Air Quality, Hazardous Waste, Noise, Greenhouse Gas, and Energy Analysis.

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Caraig, Ricardo, Senior Transportation Engineer (Civil), B.S. in Civil Engineering, California State University, Fullerton. 33 years of experience. Contribution: Senior review Air Quality, Hazardous Waste, Noise, Energy, and Climate Change sections.

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Lo, Carmen, Associate Environmental Planner. Bachelor of Environmental Analysis and Design. University of Irvine California. 18 years of experience. Contribution: Document Preparer.

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Consultants

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Virgil, Chantik, Senior Word Processor, LSA, Contribution: Reviewed and formatted JD and NES-MI.

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Chapter 6 – Distribution List

The Initial Study and the Notice of Availability was distributed to local, and regional agencies and utility providers affected by the proposed project.

FEDERAL AGENCIES

United States Army Corps of Engineers
Los Angeles District, Regulatory Division
915 Wilshire Blvd, Suite 1109
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Attn: Linjin Sun
lsun@aqmd.gov

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Attn: Nahal Mogharabi – Director of Communications
nmogharabi@aqmd.gov

Southern California Association of Governments – Orange County Regional Office
600 S. Main St., Ste. 1108
Orange, CA 92868
Attn: Jonathan Davis
davis@scag.ca.gov

Transportation Corridor Agencies
25 Pacifica, Suite 100
Irvine, CA 92618-3304
Attn: Michelle Miller
mmiller@thetollroads.com

Transportation Corridor Agencies
25 Pacifica, Suite 100
Irvine, CA 92618-3304
Attn: Michelle “Shelley” Kennedy
mkennedy@thetollroads.com

LIBRARIES

OC Library – Heritage Park Regional Branch
14361 Yale
Irvine, CA 92604

OC Library – Foothill Ranch Branch
27002 Cabriole,
Foothill Ranch, CA 92610

Orange Public Library
407 E Chapman Avenue,
Orange, CA 92866

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Office of Third District Supervisor
Orange County Board of Supervisors
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Santa Ana, CA 92701

Assembly (59th District)
Phillip Chen
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Brea, CA 92821

Assembly (73rd District)
Cottie Petrie-Norris
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Irvine, CA 92612

State Senate (Senate District 37)
Steven Choi
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Irvine, CA 92612

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APPENDICES

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Appendix A – Title VI Policy Statement

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CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS–49 | SACRAMENTO, CA 94273–0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov

September 2024

TITLE VI/NON-DISCRIMINATION POLICY STATEMENT

It is the policy of the California Department of Transportation (Caltrans), in accordance with Title VI of the Civil Rights Act of 1964 and the assurances set forth in the Caltrans' Title VI Program Plan, to ensure that no person in the United States shall on the grounds 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 non-discrimination authorities, remedies, and state law further those protections, including sex, disability, religion, sexual orientation, age, low income, and Limited English Proficiency (LEP).

Caltrans is committed to complying with 23 C.F.R. Part 200, 49 C.F.R. Part 21, 49 C.F.R. Part 303, and the Federal Transit Administration Circular 4702.1B. Caltrans will make every effort to ensure nondiscrimination in all of its services, programs, and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin (including LEP). In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

The overall responsibility for this policy is assigned to the Caltrans Director. The Caltrans Title VI Coordinator is assigned to the Caltrans Office of Civil Rights Deputy Director, who then delegates sufficient responsibility and authority to the Office of Civil Rights' managers, including the Title VI Branch Manager, to effectively implement the Caltrans Title VI Program. Individuals with questions or requiring additional information relating to the policy or the implementation of the Caltrans Title VI Program should contact the Title VI Branch Manager at title.vi@dot.ca.gov or at (916) 639-6392, or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

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Appendix B – RTP-FTIP

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SCAG
INNOVATING FOR A BETTER TOMORROW

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
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August 23, 2023

Kien Le, Office Chief
California Department of Transportation
Division of Financial Programming, MS-82
Office of Federal Programming and Data Management
P.O. Box 942873
Sacramento, CA 94273-0001

SUBJECT: ADMINISTRATIVE MODIFICATION #23-15 TO THE 2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (FTIP)

ATTN: Peter Kang

Dear Mr. Le:

The Southern California Association of Governments (SCAG) is transmitting Administrative Modification #23-15 for projects in the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Included in this administrative modification package are narratives describing the projects being amended and project listing reports. The projects meet the administrative modification criteria provided by the funding agencies in their letter dated December 18, 2019.

SCAG certifies that the projects in this administrative modification are not included in any other amendment that is currently open for public review. This administrative modification includes $157.6 million in programming capacity.

The projects included in this administrative modification have demonstrated they satisfy the requirements of 40 CFR 93.118 and 93.119 without a new regional emissions analysis in accordance with the provisions of 40 CFR 93.122(e)(2)(ii). Therefore, SCAG through its function as the designated Metropolitan Planning Organization (MPO) has found the attached projects conform to the applicable State Implementation Plan and are consistent with the 2020 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS). The update of these projects does not impact the conformity analysis of the financial constraints of the FY 2023 FTIP.

If you have any questions, please contact Pablo Gutierrez of my staff at (213) 236-1929 or via e-mail at gutierre@scag.ca.gov

Sincerely,

ANNIE NAM
Deputy Director, Transportation Planning and Programming

Enclosures

AN:pg

cc: Mr. Ray Tellis, FTA
Ms. Charlene Lorenzo, FTA
Mr. Vince Mammano, FHWA
Mr. Michael Morris, FHWA
Mr. Ted Matley, FTA
Ms. Karina O'Conner, EPA Region 9
Caltrans District 7, 8 and 12
Mr. Mark Yamarone, Los Angeles County Metropolitan Transportation Authority
Ms. Adriann Cardoso, Orange County Transportation Authority
Ms. Jillian Guizado, Riverside County Transportation Commission
Ms. Andrea Zuerick, San Bernardino County Transportation Authority
Mr. Peter DeHaan, Ventura County Transportation Commission

2023 Federal Transportation Improvement Program

Administrative Modification #23-15

ORANGE COUNTY

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
Orange County Transportation Authority
Administrative Modification #23-15
August 2023
(in $000's)

LOCAL HIGHWAY

LEAD AGENCY	PROJECT ID	PROJECT DESCRIPTION	PROGRAMMING DETAILS	CHANGE REASON
Brea, City of	ORA190906	OC Loop Brea Gap Closure - Class I, 1.30 mile bikeway along the existing railroad ROW between North Palm Street and the Brea Canyon Channel in the City of Brea.	**COST INCREASE:** CITY + Increase funds in FY 23/24 in PE from $25 to $88 + Increase funds in FY 23/24 in ROW from $469 to $869 - Decrease funds in FY 24/25 in CON from $3,717 to $3,511 CMAQ + Increase funds in FY 24/25 in PE from $0 to $137 - Decrease funds in FY 24/25 in CON from $2,356 to $2,219 S-PARK ► Add funds in FY 23/24 in PE for $225 *Total project cost increased from $14,046 to $14,528 (3.4%, +$482)*	Added Rivers and Mountains Conservancy grant funds and updated match amounts. Eligible for Administrative Modification per criteria: iii. Revise the funding amount listed for a project or a project phase: a. Additional funding to an individually listed project is limited to the lesser of 50 percent of the total project cost or $20 million.
Irvine, City of	ORA170801	Jeffrey Open Space Trail and I-5 Freeway Bicycle and Pedestrian Bridge Project - New Class I bicycle and pedestrian overcrossing with a direct connection across the I-5 freeway between the existing and proposed Jeffrey Open Space Trail segments	**RE-PROGRAMMED:** CITY ► Add funds in FY 22/23 in CON for $3,500 ► Delete funds in FY 23/24 in CON for $3,500 CMAQ ► Add funds in FY 22/23 in CON for $4,000 ► Delete funds in FY 23/24 in CON for $4,000 *Total project cost stays the same $18,700*	Move CMAQ funds into year of actual obligation Eligible for Administrative Modification per criteria: viii. Change the program year of funds within the current FSTIP/FTIP provided the MPO has an adopted EPSP that is developed in accordance with 23 CFR 450

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
Orange County Transportation Authority
Administrative Modification #23-15
August 2023
(in $000's)

STATE HIGHWAY				
LEAD AGENCY	**PROJECT ID**	**PROJECT DESCRIPTION**	**PROGRAMMING DETAILS**	**CHANGE REASON**
Caltrans	ORA001102	Grouped Projects for Safety Improvements - SHOPP Collision Reduction Program Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing,Shoulder imp, traffic control devices,ops assistance Intersection signalization projects Pavement marking, Lighting improvements	**COST INCREASE:** SHOPPAC + Increase funds in FY 23/24 in CON from $140,493 to $147,926 *Total project cost increased from $188,891 to $196,324 (3.9%, +$7433)*	Update project costs through approved Project Change Requests and new project amendment at June 2023 CTC. Eligible per Administrative Modification iii. b. Revise the funding amount listed for a project or a project phase: No limit on adding funds to a grouped project listing. Funding capacity must be available in the FSTIP/FTIP prior to processing programming changes and it must be stated in the supporting documentation.
Caltrans	ORA001103	Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow pavements or reconstructing bridges (no additional travel lanes)	**COST INCREASE:** SHOPPAC + Increase funds in FY 24/25 in CON from $117,930 to $120,870 + Increase funds in FY 25/26 in CON from $77,990 to $84,020 *Total project cost increased from $444,526 to $453,496 (2%, +$8970)*	Update project costs through approved Project Change Requests at June 2023 CTC. Eligible per Administrative Modification iii. b. Revise the funding amount listed for a project or a project phase: No limit on adding funds to a grouped project listing. Funding capacity must be available in the FSTIP/FTIP prior to processing programming changes and it must be stated in the supporting documentation.
Caltrans	ORA001105	Grouped Projects for Safety Improvements - SHOPP Mobility Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices ops assistance.Intersection signalization projects, Pavement marking demo,Lighting	**COST INCREASE:** SHOPPAC + Increase funds in FY 25/26 in CON from $27,583 to $30,013 *Total project cost increased from $67,564 to $69,994 (3.6%, +$2430)*	Update costs at June 2023 CTC action. Eligible per Administrative Modification iii. b. Revise the funding amount listed for a project or a project phase: No limit on adding funds to a grouped project listing. Funding capacity must be available in the FSTIP/FTIP prior to processing programming changes and it must be stated in the supporting documentation.

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
Orange County Transportation Authority
Administrative Modification #23-15
August 2023
(in $000's)

STATE HIGHWAY

LEAD AGENCY	PROJECT ID	PROJECT DESCRIPTION	PROGRAMMING DETAILS	CHANGE REASON
Caltrans	ORA001108	Grouped Projects for Safety Improvements - SHOPP Mandates Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices and ops assistance other than signalization projects, Lighting imp	**COST INCREASE:** SHOPPAC + Increase funds in FY 23/24 in CON from $3,312 to $4,265 *Total project cost increased from $8,801 to $9,754 (10.8%, +$953)*	Update costs through June 2023 CTC action. Eligible per Administrative Modification iii. b. Revise the funding amount listed for a project or a project phase: No limit on adding funds to a grouped project listing. Funding capacity must be available in the FSTIP/FTIP prior to processing programming changes and it must be stated in the supporting documentation.
Caltrans	ORA082603	Grouped Projects for Emergency Repair - SHOPP Emergency Response Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Repair damage caused by natural disasters, civil unrest, or terrorist acts. This applies to damages that do not qualify for Federal Emergency Relief funds or to damages that qualify for federal Emergency Relief funds but extend beyond the Federally declared disaster period	**COST INCREASE:** SHOPPAC + Increase funds in FY 25/26 in CON from $9,163 to $40,953 *Total project cost increased from $21,337 to $53,127 (149%, +$31790)*	Update project costs through approved CTC action at June 2023 CTC. Eligible per Administrative Modification iii. b. Revise the funding amount listed for a project or a project phase: No limit on adding funds to a grouped project listing. Funding capacity must be available in the FSTIP/FTIP prior to processing programming changes and it must be stated in the supporting documentation.

FOUND 7 PROJECTS

2023 Federal Transportation Improvement Program
Administrative Modification #23-15
Orange County
Project Listing
(in $000`s)

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA190906	Brea, City of	Orange	TCM Committed	SCAB	$14,528	2L220	Local

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
NCN26 - BICYCLE FACILITY-NEW	From North Palm Street to Brea Canyon Channel		23-15

DESCRIPTION

OC Loop Brea Gap Closure - Class I, 1.30-mile bikeway along the existing railroad ROW between North Palm Street and the Brea Canyon Channel in the City of Brea.

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
PE	CITY - City Funds	$0	$0	$88	$0	$0	$0	$0	$0	$88
PE	CMAQ - Congestion Mitigation Air Quality	$0	$0	$100	$137	$0	$0	$0	$0	$237
PE	S-PARK - State Park Funds	$0	$0	$225	$0	$0	$0	$0	$0	$225
ROW	2022 APPROPRIATIONS	$0	$2,000	$0	$0	$0	$0	$0	$0	$2,000
ROW	ATP - Active Transportation Program	$0	$1,787	$0	$0	$0	$0	$0	$0	$1,787
ROW	CITY - City Funds	$0	$0	$869	$0	$0	$0	$0	$0	$869
ROW	CMAQ - Congestion Mitigation Air Quality	$0	$0	$3,592	$0	$0	$0	$0	$0	$3,592
CON	CITY - City Funds	$0	$0	$0	$3,511	$0	$0	$0	$0	$3,511
CON	CMAQ - Congestion Mitigation Air Quality	$0	$0	$0	$2,219	$0	$0	$0	$0	$2,219
TOTAL	TOTAL	$0	$3,787	$4,874	$5,867	$0	$0	$0	$0	$14,528

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA170801	Irvine, City of	Orange	NON-REPORTABLE TCM	SCAB	$18,700	2L220	Local

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
NCN25 - BICYCLE & PEDESTRAIN FACILITIES-NEW	From Jeffrey Open Space Trail to Walnut Avenue		23-15

DESCRIPTION

Jeffrey Open Space Trail and I-5 Freeway Bicycle and Pedestrian Bridge Project - New Class I bicycle and pedestrian overcrossing with a direct connection across the I-5 freeway between the existing and proposed Jeffrey Open Space Trail segments

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
PE	CITY - City Funds	$144	$0	$0	$0	$0	$0	$0	$0	$144
PE	CMAQ - Congestion Mitigation Air Quality	$1,056	$0	$0	$0	$0	$0	$0	$0	$1,056
CON	CITY - City Funds	$0	$3,500	$0	$0	$0	$0	$0	$0	$3,500
CON	CMAQ - Congestion Mitigation Air Quality	$0	$4,000	$0	$0	$0	$0	$0	$0	$4,000
CON	STAL-S - State Legislature - State	$0	$10,000	$0	$0	$0	$0	$0	$0	$10,000
TOTAL	TOTAL	$1,200	$17,500	$0	$0	$0	$0	$0	$0	$18,700

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA001102	Caltrans	Orange	EXEMPT - 93.126	SCAB	$196,324	REG0701	State

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
SHP02 - ROADSIDE REHABILITATION	Post Miles: Begin 0.10 End 0.10		23-15

DESCRIPTION

Grouped Projects for Safety Improvements - SHOPP Collision Reduction Program Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing,Shoulder imp, traffic control devices,ops assistance Intersection signalization projects Pavement marking, Lighting improvements

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
CON	SHOPP- Collis. Reduction (S/O)	$0	$0	$0	$0	$2,971	$0	$0	$0	$2,971
CON	SHOPPAC - SHOPP - Collision Reduction (AC)	$0	$35,304	$147,926	$10,123	$0	$0	$0	$0	$193,353
TOTAL	TOTAL	$0	$35,304	$147,926	$10,123	$2,971	$0	$0	$0	$196,324

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA001103	Caltrans	Orange	EXEMPT - 93.126	SCAB	$453,496	REG0701	State

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
SHP03 - ROADWAY REHABILITATION			23-15

2023 Federal Transportation Improvement Program
Administrative Modification #23-15
Orange County
Project Listing
(in $000`s)

DESCRIPTION

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow pavements or reconstructing bridges (no additional travel lanes)

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
CON	SHOPPAC - SHOPP - Roadway Preservation	$0	$213,709	$34,897	$120,870	$84,020	$0	$0	$0	$453,496
TOTAL	TOTAL	$0	$213,709	$34,897	$120,870	$84,020	$0	$0	$0	$453,496

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA001105	Caltrans	Orange	EXEMPT - 93.126	SCAB	$69,994	REG0701	State

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
SHP01 - OPERATIONS			23-15

DESCRIPTION

Grouped Projects for Safety Improvements - SHOPP Mobility Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices ops assistance.Intersection signalization projects, Pavement marking demo,Lighting

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
CON	SHOPPAC - SHOPP - Mobility (AC)	$0	$36,459	$3,522	$0	$30,013	$0	$0	$0	$69,994
TOTAL	TOTAL	$0	$36,459	$3,522	$0	$30,013	$0	$0	$0	$69,994

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA001108	Caltrans	Orange	EXEMPT - 93.126	SCAB	$9,754	REG0701	State

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
SHP04 - SAFETY			23-15

DESCRIPTION

Grouped Projects for Safety Improvements - SHOPP Mandates Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices and ops assistance other than signalization projects, Lighting imp

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
CON	SHOPPAC - SHOPP - Mandates (AC)	$0	$0	$4,265	$5,489	$0	$0	$0	$0	$9,754
TOTAL	TOTAL	$0	$0	$4,265	$5,489	$0	$0	$0	$0	$9,754

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	AIR BASIN	PROJECT COST	RTP ID	SYSTEM
ORA082603	Caltrans	Orange	EXEMPT - 93.126	SCAB	$53,127	REG0701	State

PRIMARY PROGRAM CODE	PROJECT LIMITS	MODELING	FTIP AMENDMENT
SHP03 - ROADWAY REHABILITATION			23-15

DESCRIPTION

Grouped Projects for Emergency Repair - SHOPP Emergency Response Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Repair damage caused by natural disasters, civil unrest, or terrorist acts. This applies to damages that do not qualify for Federal Emergency Relief funds or to damages that qualify for federal Emergency Relief funds but extend beyond the Federally declared disaster period

PHASE	FUND SOURCE	PRIOR	22/23	23/24	24/25	25/26	26/27	27/28	FUTURE	TOTAL
CON	SHOPPAC - SHOPP - Emergency Response	$0	$12,174	$0	$0	$40,953	$0	$0	$0	$53,127
TOTAL	TOTAL	$0	$12,174	$0	$0	$40,953	$0	$0	$0	$53,127

ORANGE COUNTY
GROUPED PROJECT LISTINGS

Grouped Projects for Safety Improvements - SHOPP Collision Reduction Program Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing,Shoulder imp, traffic control devices,ops assistance Intersection signalization projects Pavement marking, Lighting improvements

COLLISION REDUCTION

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001102	On Route 1, in Laguna Beach, at the intersection of Cress St. Modify signals, add safety lighting, add protected left-turn signal, modify ped crosswalks & upgrade curb ramps to Americans with Disabilities Act (ADA) standards.	E	$ 760				$ 760
	EA 0R170 - New Safety project, January 2020 CTC approval	R	$ 325				$ 325
	Adopted in May 2020 SHOPP. Update PE costs from Mar 2021 CTC action.	C	$ 1,168				$ 1,168
ORA001102	In Dana Point, from Route 5 (PM R0.129) to north of Doheny Park Road. Improve worker safety by installing Maintenance Vehicle Pullouts (MVPs).	E	$ 1,150				$ 1,150
	EA 0Q990	R					
		C	$ 6,850				$ 6,850
ORA001102	On route 5, in and near the cities of Santa Ana and Orange, from south of Route 22 to north of The City Drive/State College Boulevard (PM 33.7/35.4). Upgrade signs and pavement delineation, lengthen lane reduction to improve merging, and install traffic count station.	E	$ 989				$ 989
	EA 0R750	R					
	New project amendment through August 2020 CTC action. Update costs through PCR action at December 2021 CTC.	C	$ 3,654				$ 3,654
ORA001102	On route 74, in the Cleveland National Forest, from 0.9 mile west of San Juan Fire Station to the Orange/Riverside County line (PM 11.5/16.6). Mitigation plant establishment and monitoring for EA 0P030. Split from 0P030 for mitigation work.	E		$ 119			$ 119
	EA 0P031	R					
	New project amendment through August 2020 CTC action. Update costs through March 2023 CTC action.	C		$ 1,400			$ 1,400
ORA001102	In Orange County in Brea and Fullerton, on Route 90, at the signalized intersection with Route 57 southbound on / off-ramp(s) and at Kraemer Blvd (PM R5.3/6.6). This project will modify signal, install lights, refresh pavement delineation, traffic data station, and sidewalk.	E	$ 942				$ 942
	EA 0R920	R	$ 10				$ 10
	New project amendment through October 2020 CTC action.	C	$ 1,812				$ 1,812
ORA001102	In Orange County in Orange and Santa Ana, on Westbound Route 22, from 0.1 mile west of Santiago Creek Bridge and 0.2 mile east of Cambridge Street Overcrossing (PM R11.6/R12.5). Widen WB SR 22 to accommodate an auxiliary lane and extend the No. 4 drop lane for 0.2 mile beyond Glassell Street off-ramp.	E		$ 3,231			$ 3,231
	EA 0S190	R					$ -
	New project amendment through October 2020 CTC action.	C		$ 9,138			$ 9,138
ORA001102	In Orange county, in Anaheim, on State Route 39 (SR 39) (Beach Boulevard) at the Orange Avenue signalized intersection (PM 12.2). The project proposes to modify existing traffic signals and remove and replace all pedestrian lighting over all crosswalk approach and departures.	E	$ 700				$ 700
	EA 0R740	R	$ 50				$ 50
	New project amendment through October 2020 CTC action. Update PE costs thru Oct 2021 CTC action.	C	$ 1,203				$ 1,203
ORA001102	In Orange County in San Clemente and Dana Point on Interstate 5 (I-5) from south of Camino De Estrella post-mile 5.3 to north of Route 1, postmile 7.3. The project proposes to install safety lighting in the median, upgrade existing concrete median barrier.	E	$ 1,383				$ 1,383
	EA 0S170	R	$ 4				$ 4
	New project amendment through October 2020 CTC action. Location and cost increase PCR amendment through June 2021 CTC action. Update PE costs thru Dec 2021 CTC action.	C	$ 6,540				$ 6,540
ORA001102	On Route 22, in Garden Grove, WB Rte 22 on-ramp from Brookhurst. Place High Friction Surface Treatment, barrier and upgrade curb ramps.	E	$ 748				$ 748
	EA 0R290 - New Safety project, March 2020 CTC approval	R					$ -
	Adopted in May 2020 SHOPP. Update PE costs thru Mar 2021 CTC action.	C	$ 1,252				$ 1,252

Grouped Projects for Safety Improvements - SHOPP Collision Reduction Program Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing,Shoulder imp, traffic control devices,ops assistance Intersection signalization projects Pavement marking, Lighting improvements

COLLISION REDUCTION

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001102	On Route 57 in the cities of Orange, Anaheim, Placentia, Fullerton, and Brea along State Route (SR) 57 from Chapman Avenue UC to Orange County Line/Los Angeles County Line. Replace pavement delineation, safety lighting, delineate median barrier and add pavement route shields.	E		$ 2,980			$ 2,980
	EA 0S330 - New Safety project, May 2020 CTC action.	R		$ 70			$ 70
	New amendment in May 2020 SHOPP	C		$ 11,948			$ 11,948
ORA001102	In Orange County, in La Palma and Buena Park, on westbound State Route 91 (SR-91) between Valley View Street (PM R0.8) and Knott Ave (PM R1.8). Construct overhead cantilever sign structures with high reflective sign panels, replace existing warning sign panels with high reflective sign panels and replace existing MBGR with MGS. Install Census Station in both directions of SR-91.	E	$ 840				$ 840
	EA 0R730	R					$ -
	New project amendment through October 2020 CTC action.	C	$ 1,870				$ 1,870
ORA001102	In and near Huntington Beach, and Seal Beach, on Route 1 (PCH), from Santa Ana River Bridge to Anderson Street; also at the intersection with Seal Beach Boulevard (PM 32.7). Construct and upgrade bicycle facilities, and upgrade a traffic signal pole to improve safety.	E		$ 3,130			$ 3,130
	EA 0S140	R		$ 1,398			$ 1,398
	New project amendment through January 2021 CTC action. Update description and costs through May 2022 CTC action PCR. Update costs through May 2023 CTC action.	C		$ 13,788			$ 13,788
ORA001102	In Orange and Los Angeles Counties in cities of Los Alamitos and Long Beach, on Route 605 from 0.2 mile North of Route 605/405 Separation to 0.2 mile North of Katella Ave UC. Install safety lighting and associated improvements along route.	E		$ 2,392			$ 2,392
	EA 0R680	R		$ 4			$ 4
	New project amendment through January 2021 CTC action.	C		$ 10,302			$ 10,302
ORA001102	On SR-55, in and near the cities of Costa Mesa, Santa Ana, Tustin, Orange, and Anaheim, from Route 405 to Route 91. Install safety lighting and striping.	E		$ 3,800			$ 3,800
	EA 0R670	R		$ -			$ -
	New project amendment through May 2021 CTC action. Update costs thru June 2023 CTC action.	C		$ 23,062			$ 23,062
ORA001102	On SR-22, in the cities of Garden Grove, Westminster, and Orange, from Bolsa Chica Road to Lewis Street. Install safety lighting and upgrade median barrier, drainage systems, and signs.	E		$ 5,392			$ 5,392
	EA 0S110	R		$ 12			$ 12
	New project amendment through August 2021 CTC action. Update costs thru June 2023 CTC action.	C		$ 35,444			$ 35,444
ORA001102	On Route 5, in San Juan Capistrano, from Route 74 to south of Junipero Serra Road. Add a second auxiliary lane, Changeable Message Sign (CMS), and overhead sign structures.	E		$ 2,119			$ 2,119
	EA 0S280	R		$ -			$ -
	New project amendment through October 2021 CTC action. Update PE costs thru May 2022 CTC action. Increase Con phase costs through CTC action in Jan 2023.	C		$ 9,029			$ 9,029
ORA001102	On Route 5, in and near the cities of Irvine, Tustin, Santa Ana, Orange, Anaheim, and Fullerton, from 0.3 mile south of Culver Drive to Route 91 (PM 42.2R/L). Reduce wrong-way driving by replacing signs, refreshing pavement delineation, constructing raised islands, and installing safety lighting.	E		$ 1,210			$ 1,210
	EA 0S310	R		$ -			$ -
	New project amendment through October 2021 CTC action. Update PE costs thru May 2022 CTC action. Update costs thru June 2023 CTC action.	C		$ 3,576			$ 3,576
ORA001102	On Route 5, in Fullerton, at the northbound offramp to Magnolia Avenue. Install High Friction Surface Treatment (HFST).	E	$ 436				$ 436
	EA 0S390	R	$ -				$ -
	New project amendment through December 2021 CTC action. Project schedule advanced to FY 22/23 from FY 23/24.	C	$ 768				$ 768

Grouped Projects for Safety Improvements - SHOPP Collision Reduction Program Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing,Shoulder imp, traffic control devices,ops assistance Intersection signalization projects Pavement marking, Lighting improvements

COLLISION REDUCTION

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001102	On Route 5, In Anaheim, Fullerton, and Buena Park, from Orangewood Avenue to south of Artesia Boulevard. Refresh and add new pavement delineation and install pavement markers at exit ramps to prevent wrong-way driving.	E		$ 1,070			$ 1,070
	EA 0S690	R					$ -
	New project amendment through June 2022 CTC action. Update costs thru June 2023 CTC action.	C		$ 3,312			$ 3,312
ORA001102	On Route 57, In the city of Orange, southbound near Chapman Avenue offramp. Regrade slope, replace guardrail, pavement delineation and signing.	E	$ 600				$ 600
	EA 0T590	R					$ -
	New Minor A project annual allocation at June 2022 CTC.	C	$ 1,250				$ 1,250
ORA001102	In Anaheim, at the Route 57 southbound connector to westbound Route 91. Extend the existing lane drop.	E			$ 1,820		$ 1,820
	EA 0S530	R			$ 4		$ 4
	New project amendment through August 2022 CTC action.	C			$ 4,709		$ 4,709
ORA001102	On Route 22, in Garden Grove, at the westbound on-ramp from Garden Grove Blvd. Install High Friction Surface Treatment (HFST).	E			$ 595		$ 595
	EA 0S700	R			$ 4		$ 4
	New project amendment through Oct 2022 CTC action.	C			$ 931		$ 931
ORA001102	On Route 39, in Garden Grove and Stanton, from SR-22 to intersection of Garden Grove Blvd. Upgrade traffic signal, add safety lighting and modify crosswalk.	E				$ 931	$ 931
	EA 0T160	R				$ 6	$ 6
	New project amendment through Oct 2022 CTC action.	C				$2,034	$ 2,034
ORA001102	On Route 5, In Anaheim, at Anaheim Boulevard and Anaheim Way. Upgrade signal and lighting, reconfigure right-turn movement onto the northbound Route 5 onramp, and upgrade faclities to ADA standards.	E			$ 789		$ 789
	EA 0S840	R					$ -
	New project amendment through May 2023 CTC action.	C			$ 1,271		$ 1,271
	Total SHOPP funds		$35,304	$147,926	$10,123	$2,971	$196,324

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP PROJECTS
(in $000's)

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow pavements or reconstructing bridges (no additional travel lanes)

ROADWAY PRESERVATION PROJECTS
SHOPP Projects

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001103	In Orange County on NB and SB SR-1 from Warner Avenue in the City of Huntington Beach to LA/ORA County Line. Proposes to resurface 27 lane miles of pavement. 0P680 & 0P590 combined into 0P68U for construction. PCR approved for concurrent delivery.	E	$ -				$ -
	EA0P5900	R	$ -				$ -
	May 2019 CTC, approved RW Support COS request at a higher amount of $1,482,000. Project Change request to increase R/W Cap to $503,000 and CON Cap to $11,804,000 approved at June 2019 CTC meeting. Allocation extension to Aug 2022 at June 2021 CTC action. Funded in FY 21/22 through May CTC action.	C	$ -				$ -
ORA001103	On route 405, in and near Irvine and Costa Mesa, from Route 5 to Harbor Boulevard. Rehabilitate pavement, replace bridge approach and departure slabs, upgrade bridge railings, improve highway worker safety, upgrade safety devices, and upgrade Transportation Management System (TMS) elements. This is a Design-Build project.	E	$ 22,100				$ 22,100
	EA 0Q970	R	$ 1,709				$ 1,709
	New 2020 SHOPP adopted project at May 2020 CTC. Update costs through PCR action at December 2021 CTC. $180,900 Construction phase costs updated to satisfy G13 constraint. R/W and CON phase cost update per Funds request amount for Aug 2022 CTC approval.	C	$189,900				$189,900
ORA001103	On Route 405, in Huntington Beach, Westminster, Garden Grove, and Seal Beach, from south of McFadden Avenue to the Los Angeles county line. Rehabilitate pavement. G13 contingency.	E		$ 8,162			$ 8,162
	EA 0R570	R		$ 21			$ 21
	New 2020 SHOPP adopted project at May 2020 CTC. $55,817 Construction to be programmed at future date.	C					$ -
ORA001103	In and near Buena Park, Fullerton, and Anaheim, from the Los Angeles county line to the Riverside county line (PM R18.905). Rehabilitate pavement,	E					$ -
	EA 0R310	R					$ -
	Project deleted. Original project split 5 ways to 0R311, 0R312, 0R313, 0R314 & 0R315. (0R314 & 0R315 under group ORA001105)	C					$ -
ORA001103	On route 91, in La Palma, Buena Park, Anaheim, and Fullerton, from the Los Angeles County line to Acacia Street. PM (R0.0/4.8) Rehabilitate pavement. G13 contingency.	E		$ 5,710			$ 5,710
	EA 0R311	R		$ 804			$ 804
	New 2020 SHOPP adopted project at May 2020 CTC. $43,680 Construction to be programmed at future date. Update costs through PCR action at December 2021 CTC.	C					$ -
ORA001103	On route 91, in Anaheim and Placentia, from Acacia Street to La Palma Avenue. PM (4.8/6.4) Rehabilitate pavement. G13 contingency.	E		$ 2,485			$ 2,485
	EA 0R312	R		$ 20			$ 20
	New 2020 SHOPP adopted project at May 2020 CTC. $22,264 Construction to be programmed at future date.	C					$ -
ORA001103	On route 91, in and near Anaheim, from La Palma Avenue to Route 55. PM (6.4/R9.2) Rehabilitate pavement. G13 contingency.	E		$ 4,730			$ 4,730
	EA 0R313	R		$ 29			$ 29
	New 2020 SHOPP adopted project at May 2020 CTC. $40,650 Construction to be programmed at future date. Oct 2021 CTC approve PCR to update R/W Cap.	C					$ -

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP PROJECTS
(in $000's)

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow pavements or reconstructing bridges (no additional travel lanes)

ROADWAY PRESERVATION PROJECTS
SHOPP Projects

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001103	On Route 55, in Newport Beach, Costa Mesa, Santa Ana, Tustin, Orange, and Anaheim, from Route 1 to Route 91. Rehabilitate pavement, rehabilitate drainage, upgrade lighting, rehabilitate bridge rail, rehabilitate landscaping, upgrade Transportation Management System (TMS) elements, add bike and pedestrian improvements as complete streets elements, and improve highway worker safety. (G13 Contingency)	E		$12,900			$ 12,900
	EA 0R320	R		$ 36			$ 36
	~~New 2020 SHOPP adopted project at May 2020 CTC: $83,908,000~~ Construction to be programmed at future date. Increase PS&E to $7,900,000, Con Support to $$8,400,000 and Con Capital to $75,508,000 through Complete streets elements augmentation at October 2020 CTC action. Increase CON costs to $88,532,000 to be programmed at a future date and reduce R/W cost through PCR and CTC action at May 2022 meeting. Update CON Cap to $93,490,000 and CON Sup to $9,320,000 costs thru June 2023 CTC action.	C		$ -		$ -	$ -
ORA001103	On Route 405, in and near Costa Mesa, Fountain Valley, Huntington Beach, and Westminster, from Harbor Boulevard to south of McFadden Avenue. Rehabilitate pavement and drainage systems, and add traffic census stations.	E			$ 1,618		$ 1,618
	EA 0R330	R			$ 21		$ 21
	New 2022 SHOPP adopted project at March 2022 CTC.	C		$ -	$ 10,827	$ -	$ 10,827
ORA001103	On Route 5, in San Clemente, Dana Point, and San Juan Capistrano, from the San Diego County line to north of Route 74. Rehabilitate pavement, enhance highway worker safety, upgrade bridge rail, overhead sign structure, and lighting, restore drainage systems, construct stormwater treatment Best Management Practices (BMPs), and upgrade facilities to Americans with Disabilities Act (ADA) standards.	E		$ -		$ 6,033	$ 6,033
	EA 0R970	R				$ 100	$ 100
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs through May 2023 CTC action. Update costs thru June 2023 CTC action.	C		$ -		$29,127	$ 29,127
ORA001103	On Route 5, in San Juan Capistrano, Mission Viejo, Laguna Niguel, and Irvine, from north of Route 74 to Route 405. Rehabilitate pavement and drainage systems, upgrade lighting, enhance highway worker safety, replace overhead sign panels, construct bicycle and pedestrian improvements, and construct stormwater treatment Best Management Practices (BMPs).	E		$ -	$ 9,943		$ 9,943
	EA 0S380	R					$ -
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru June 2023 CTC action.	C		$ -	$ 46,997	$ -	$ 46,997
ORA001103	On Route 5, in and near the cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, and Buena Park, from Route 55 to the Los Angeles County line. Rehabilitate roadway and drainage systems, upgrade guardrail and pump plant, enhance highway worker safety, replace overhead sign panels, and upgrade facilities to Americans with Disabilities Act (ADA) standards.	E		$ -		$ 8,630	$ 8,630
	EA 0S500	R				$ 4	$ 4
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru June 2023 CTC action.	C		$ -		$40,126	$ 40,126
ORA001103	On Route 5, in and near Irvine, from Route 405 to Yale Avenue. Rehabilitate roadway and drainage systems, enhance highway worker safety, replace roadside sign panels, and construct stormwater treatment Best Management Practices (BMPs).	E			$ 3,370		$ 3,370
	EA 0S051	R			$ 10		$ 10
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs through March 2023 CTC action.	C		$ -	$ 28,945	$ -	$ 28,945

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP PROJECTS
(in $000's)

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow pavements or reconstructing bridges (no additional travel lanes)

ROADWAY PRESERVATION PROJECTS
SHOPP Projects

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001103	On Route 5, in and near Irvine and Tustin, from Yale Avenue to Route 55. Rehabilitate roadway and drainage systems, enhance highway worker safety, and install census stations.	E			$ 2,610		$ 2,610
	EA 0S052	R					$ -
	New 2022 SHOPP adopted project at March 2022 CTC.	C		$ -	$ 16,529	$ -	$ 16,529
	Total SHOPP Projects		$213,709	$34,897	$120,870	$84,020	$453,496

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP PROJECTS
(in $000's)

Grouped Projects for Safety Improvements - SHOPP Mobility Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices ops assistance.Intersection signalization projects, Pavement marking demo,Lighting

MOBILITY PROJECTS

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001105	In Irvine, on Route 133, from 0.1 mile south of Route 405 to Route 5. Construct new Aux. lane	E	$4,853				$4,853
	EA 0N8900	R	$1,221				$1,221
	Increase PS&E and Con Cap by May 2020 CTC action. Description & cost update PCR amendment through June 2021 CTC action. Allocation extension by 18 months thru June 2022 CTC action. Current target delivery in Dec 2022. Update costs from approved funds request.	C	$30,385				$30,385
ORA001105	In Orange County, on SR-1 between Crystal Heights Drive and First Street in the cities of Newport Beach, Huntingt5on Beach and Seal Beach. Remove and replace all existing signal lights at 20 intersections along SR-1. 0P680 & 0P590 combined into 0P68U for construction. PCR approved for concurrent delivery.	E	$0				$0
	EA 0P6800	R	$0				$0
	RW COS request at a higher amount of $1,480,000 approved at the May 2019 CTC. Project Change request to increase R/W Cap to $745,000 approved at June 2019 CTC meeting. Allocation extension to Aug 2022 at June 2021 CTC action. Project delivered in May 2022.	C	$0				$0
ORA001105	On route 91, in Anaheim, from Route 55 to 0.7 mile west of Route 90. PM (R9.2/R10.8) Upgrade Transportation Management System (TMS) elements.	E		$ 980			$ 980
	EA 0R314 (Split from 0R310)	R		$ 24			$ 24
	New 2020 SHOPP adopted project at May 2020 CTC. $6,020 Construction to be programmed at future date.	C					$ -
ORA001105	On route 91, in Anaheim, from 0.7 mile west of Route 90 to Riverside County line. PM (R10.8/R18.9). Upgrade Transportation Management System (TMS) elements.	E		$1,830			$ 1,830
	EA 0R315 (Split from 0R310)	R		$ 688			$ 688
	New 2020 SHOPP adopted project at May 2020 CTC. $12,870 Construction to be programmed at future date. Update R/W capital thru Mar 2022 CTC action.	C					$ -
ORA001105	In Orange County, on SR-22, in and near the cities of Santa Ana and Orange, from west of Cambridge Street to Route 55; also at the Orange Maintenance Station at 691 South Tustin Street. Upgrade and install new Transportation Management System (TMS) elements, reconstruct buildings at the Orange Maintenance Station, and construct bicycle and pedestrian improvements, and construct stormwater treatment Best Management Practices (BMPs).	E		$0		$4,603	$4,603
	EA 0S080	R					$0
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru June 2023 CTC action.	C				$25,410	$25,410
	Total		$36,459	$3,522	$0	$30,013	$69,994

2021 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
LUMP SUM LISTING
(in $000's)

Grouped Projects for Safety Improvements - SHOPP Mandates Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Railroad/highway crossing, Safer non-Federal-aid system roads, Shoulder imp, traffic control devices and ops assistance other than signalization projects, Lighting imp

MANDATE PROJECTS

RTIP #	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA001108	In Dana Point, on Coast Highway (Route 1) from Park Lantern to Doheny Park Road and from Coast Highway to Las Vegas Boulevard. Upgrade facilities to Americans with Disabilities Act (ADA) standards and add Class II bike lanes, cross walks, and mixed-use sidewalk as complete streets elements.	E		$700			$ 700
	EA 0S750	R		$99			$ 99
	New project through June 2021 CTC action.Update costs through PCR and CTC action at Jan and May 2022 meeting. Update costs thru June 2023 CTC action.	C		$3,466			$ 3,466
ORA001108	In Anaheim, om Route 39, from south of Ball Road to Stanton Avenue. Financial Contribution Only (FCO) to the city of Anaheim to relinquish roadway.	E			$450		$ 450
	EA 0R400	R			$226		$ 226
	New project through August 2022 CTC action.	C			$4,813		$ 4,813
	Total		$0	$4,265	$5,489	$0	$9,754

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2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP PROJECTS
(IN $000'S)

Grouped Projects for Emergency Repair - SHOPP Emergency Response Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Repair damage caused by natural disasters, civil unrest, or terrorist acts. This applies to damages that do not qualify for Federal Emergency Relief funds or to damages that qualify for federal Emergency Relief funds but extend beyond the Federally declared disaster period

EMERGENCY RESPONSE PROJECTS

RTIP#	DESCRIPTION	PHASE	22/23	23/24	24/25	25/26	Total
ORA082603	In Orange County, in Orange and Anaheim, on SR-241 between Santiago Canyon Road OC and Route 91 (33.6/38.7) Reconstruct all timber jump out ramps (JORs) with steel soldier pile retaining walls, and replace the existing chain link fencing.	E	$2,450				$2,450
	EA 0S150	R					$0
	New project amendment through October 2020 CTC action.	C	$9,724				$9,724
ORA082603	In Orange County, in Irvine, on SR-241 from 0.5 mile south of Portola Pkwy OC to 0.3 mile north of NB SR-241 to SB SR-133 Connector and on SR-133 from 0.5 mile south of Irvine Blvd OC to end of NB SR-133 to SB SR-241 Connector. Restore the 2020 Silverado fire-damaged landscaping including vegetation and irrigation systems.	E				$2,034	$2,034
	EA 0T240	R					$0
	New project amendment through October 2022 CTC action.	C				$7,129	$7,129
ORA082603	On route 241, near Lake Forest, from 0.5 mile south of Portola Parkway to 0.4 mile south of Windy Ridge Toll Plaza; also on Route 133 from 0.5 mile south of Irvine Boulevard to Route 241(PM 11.4/13.6). Restore fire damaged assets, including guardrail, drainage systems, traffic control devices, signs, and electrical systems; also make drainage improvements to increase resiliency against natural disasters.	E				$5,781	$5,781
	EA 0T730	R				$10	$10
	New project amendment through June 2023 CTC action.	C				$25,999	$25,999
	Total		$12,174	$0	$0	$40,953	$53,127

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Appendix C – List of Technical Studies

Air Quality, and Noise, and Hazardous Waste Technical Memorandum (April 2025) – Prepared by the Department District 12

Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) (March 2025) – Prepared by the Department District 12

Location Hydraulic Study Form and Summary Floodplain Encroachment Report (March 2025) – Prepared by the Department District 12

Geotechnical Design Report (March 2025) – Prepared by the Department District 12

Natural Environment Study (NES) (April 2025) – Prepared by LSA Associates, Inc.

Paleontological Identification Report and Paleontological Evaluation Report (January 2025) – Prepared by the Department District 12

Initial Site Assessment Checklist (April 2025) – Prepared by the Department District 12

Visual Impact Assessment Questionnaire (February 2025) – Prepared by the Department District 12

Water Quality Technical Memorandum (March 2025) – Prepared by the Department District 12

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Appendix D – Avoidance, Minimization, and/or Mitigation Summary

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. Mitigation measures are used to lessen a significant impact under CEQA.

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Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
Project Feature	Air Quality	**PF-AQ-1**: The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2024), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.	Resident Engineer	Design Construction	No
Project Feature	Biology	**PF-BIO-1**: Invasive Species Control. All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving at and leaving the project site.	Resident Engineer	Construction	No
Project Feature	Biology	**PF-BIO-2**: Best Management Practices (BMPs) During Construction. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated nonsensitive upland areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering adjacent sensitive vegetation communities. Trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.	Resident Engineer	Construction	No
Project Feature	Biology	**PF-BIO-3**: Erosion Control Material Sourcing. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.	Project Engineer Resident Engineer	PS&E Construction	No
Project Feature	Biology	**PF-BIO-4**: Avoidance of Breeding Season and Nesting Bird Surveys. Project activities shall occur outside the nesting season (February 1–September 30) to the fullest extent practicable. If project activities with potential to indirectly disturb suitable avian nesting habitat within 300	Biologist Resident Engineer	Pre-construction Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		feet of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or the USFWS, no vegetation clearing, or work deemed by the biologist to have potential to disturb an active nest shall occur if listed or fully protected bird species are found to be actively nesting within 300 feet of construction activities.			
Avoidance	Biology	**BIO-1**: Delineation of Environmentally Sensitive Areas. Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental	Resident Engineer Biologist	Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.			
Mitigation	Biology	**BIO-2**: Restoration of Temporary and Permanent Impacts to Native Vegetation. Areas of natural habitat that are temporarily affected by construction activities will be restored with native shrubs and grasses. The restoration effort will emulate surrounding vegetation characteristics. For State highway construction projects, revegetation plans will be part of the project design following California Department of Transportation (Caltrans) landscape architecture guidelines and requirements. During Section 7 Consultation with the USFWS, a restoration plan for the temporary impact areas will be prepared.	Biologist	Construction	No
Avoidance/ Minimization	Biology	BIO-3: Pre-Construction Clearance Surveys. A qualified biologist will conduct pre-construction surveys to confirm the absence of sensitive biological resources within the work areas. The pre-construction surveys will take place no more than 24 hours prior to commencement of different work activities (utility work, signage installation, etc.). If listed species are observed within the work area (or areas potentially indirectly affected by project activities, as determined by the qualified biologist) and the work cannot be postponed until the species is no longer present, Caltrans will obtain written approval from the USFWS or the CDFW, as applicable, prior to completing project work at these locations.	Biologist Resident Engineer	Pre-construction Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
Avoidance	Biology	**BIO-4**: Biological Monitoring. A qualified biologist will monitor construction activities prior to and during vegetation removal for the duration of the project to ensure that practicable measures are being employed to avoid and minimize incidental disturbance of habitat and covered species inside and outside the project footprint.	Biologist Resident Engineer	Construction	No
Avoidance	Biology	**BIO-5**: On-Site Training. All personnel involved in on-site project construction will be required to participate in a pre-construction environmental training program to ensure they understand the avoidance and minimization measures and environmental regulations pertinent to the project.	Biologist Resident Engineer	Construction	No
Minimization	Biology	**BIO-6**: Permanent Lighting Fixtures. Permanent project lighting will be of the lowest illumination necessary for safety and will be directed toward the roadway and away from sensitive habitats and wildlife crossing areas. Light glare shields will be used to reduce the extent of illumination into sensitive habitat.	Project Engineer Resident Engineer	PS&E Construction	No
Avoidance/ Minimization	Biology	**BIO-7**: Letter of Permission and/or Nationwide Permit. Prior to initiation of construction, a permit will be obtained through the USACE pursuant to Section 404 of the Clean Water Act. A number of drainages occur within the San Diego Creek Watershed, and additional	Biologist	PS&E	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		coordination with the USACE will need to be done to determine if a Letter of Permission and/or a Nationwide Permit will be required. Any conditions and measures identified in the Section 404 Permit will be implemented.			
Minimization	Biology	**BIO-8**: Streambed Alteration Agreement. Prior to initiation of construction, a Streambed Alteration Agreement (SAA) with the CDFW will be obtained, and any specifications conditions and measures identified in the SAA will be implemented.	Biologist	PS&E	No
Minimization	Biology	**BIO-9**: Water Quality Certification. Prior to initiation of construction, a Section 401 Water Quality Certification from the Santa Ana RWQCB will be obtained, and any specifications, conditions, and measures identified in the certification will be implemented.	Biologist	PS&E	No
Avoidance	Biology	**BIO-10**: Seasonal Avoidance. Vegetation removal will occur between September 1 and January 31, outside of the Colony Active Period, to avoid impacts to active nests. If vegetation removal must occur during the Crotch's bumble bee potential nesting period, pre-construction surveys will be conducted. All cleared areas will be monitored to ensure that vegetation does not	Biologist Resident Engineer	Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		become reestablished so that Crotch's bumble bee will be discouraged from nesting on the project site.			
Avoidance	Biology	**BIO-11**: Focused Daytime Bat Roosting Habitat Assessment. At least 1 year prior to project construction, a qualified bat biologist will conduct a focused daytime bat roosting habitat assessment to identify suitable bat roosting habitat within the drainage structure.	Biologist	PS&E Pre-construction	
Avoidance/ Minimization	Biology	**BIO-12**: Focused Nighttime Acoustic and Emergence Survey. If suitable bat roosting habitat is identified during the daytime bat roosting habitat assessment, a qualified bat biologist will conduct a focused nighttime acoustic and emergence survey at the locations where suitable bat roosting habitat has been identified. The focused nighttime emergence survey(s) will occur at least 1 year prior to project construction and will be conducted during the bat maternity season (June through August) to assess potential for use as a maternity roost. The survey(s) will occur from 30 minutes prior to sunset to 1 hour after sunset. Upon completion of the survey, if impacts to occupied habitat will occur, additional avoidance and minimization measures will be included in the project.	Biologist Resident Engineer	Pre-construction Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
Minimization	Biology	**BIO-13**: Night Lighting During Construction. During nighttime work for project construction, night lighting shall be used only in the area actively being worked on and shall be focused on the direct area of work.	Resident Engineer	Construction	No
Avoidance	Biology	**BIO-14**: Tree Removal Bat Surveys. If mature trees or snags are removed for the project, a CDFW-approved bat biologist will conduct a nighttime acoustic and emergence survey for the trees within 3 days prior to removal to determine whether they are suitable for use by bats prior to their removal.	Biologist	Construction	No
Avoidance/ Minimization	Biology	**BIO-15**: Two-Step Tree Removal. Trees and snags that have been identified as confirmed or potential roost sites require a two-step removal process and the involvement of a bat biologist to ensure that no roosting bats are killed during this activity. This two-step removal shall occur over 2 consecutive days as follows: on Day 1, branches and limbs not containing cavities, as identified by a qualified bat biologist, will be removed. On Day 2, the remainder of the tree may be removed without supervision by a bat biologist. The disturbance caused by limb or frond removal, followed by an interval of one evening, will allow bats to safely abandon the roost.	Biologist Resident Engineer	Construction	No
Avoidance	Biology	**BIO-16**: Seasonal Tree Removal Avoidance. The removal of any mature trees and snags suitable for use by bats shall be performed outside the bat maternity season (April 1 through August 31) to avoid direct impacts to nonvolant (flightless) young. This period also coincides with the bird nesting season. If trimming or removal of trees during the bat maternity season cannot be avoided, a CDFW-approved bat biologist will conduct a nighttime acoustic and emergence survey for the trees to determine whether they serve as maternity roosts. If a	Biologist Resident Engineer	Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		maternity roost is found, a buffer will be established based upon the species present, and the tree will not be removed until the conclusion of the maternity season.			
Project Feature	Cultural Resources	**PF-CUL-1**: The Department Standard Specification Section 14-2.03A: Discovery of Cultural Materials. If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	Archae-ologist Resident Engineer Contractor	Construction	No
Project Feature	Cultural Resources	**PF-CUL-2**: The Department Standard Specification Section 14-2 Discovery of Human Remains. In the event that human remains are found, the county coroner shall 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 (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Alben Phung, Senior Environmental Scientist: (949) 279-8715 and Cheryl Sinopoli, DNAC: (949) 483-1018. Further provisions of PRC 5097.98 are to be followed as applicable.	Archaeologist Resident Engineer Contractor	Construction	No
Project Feature	Paleontology	**PF-PAL-1**: California Department of Transportation (Department) Standard Specification 14-7.03. Discover of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered, all work within 60-feet of the discovery must cease and the construction Resident Engineer will be notified. Work	Resident Engineer Archae-ologist	Construction Post-Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		cannot continue near the discovery until authorized.			
Mitigation	Paleontology	**PAL-1**: A qualified paleontologist shall prepare a Paleontological Mitigation Plan (PMP) following the guidelines in the California Department of transportation (Department) Standard Environmental Refence (SER), environmental Handbook, Volume 1, Chapter 8-Paleontology (June 2016 or more current) and the guidelines developed by the Society of Vertebrate Paleontology (SVP: 2010). The PMP shall be prepared concurrently with final design plans during the Plans, Specification, and Estimates (PS&E) phase. Implementation of the PMP during Construction and post-construction will reduce impacts to potential paleontological resources to less than significant. SSP 14-7.04 for Paleontological resources mitigation.	Project Engineer Paleont-ologist Resident Engineer	Design Construction Post-Construction	No
Avoidance	Paleontology	**PAL-2**: Worker Environmental Awareness Program Training Session: Prior to construction (any ground-disturbing activity) construction contractor personnel will attend a WEAP training session. Training will address measures required to avoid or protect environmental resources, and to educate crews on fossils, artifacts, and archaeological features they may encounter and the mandatory procedures to follow should potential environmental resources be exposed during construction. Translation services will be provided by the contractor for non-English-speaking participants. Upon completion of training, crews will complete proper documentation and will comply with WEAP	Paleont-ologist Resident Engineer	Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		requirements. Full details related to WEAP training can be located within the PIR/PER and PMP.			
Project Feature	GHG	**PF-GHG-1**: The construction contractor must comply with the Department's Standard Specifications in Section 14-9 (2024) to reduce impacts from construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.	Resident Engineer Project Engineer	Design Construction	No
Project Feature	Hazardous Materials	**PF-HAZ-1**: The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, SSP for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.	Resident Engineer	Design Construction	No
Project Feature	Hazardous Materials	**PF-HAZ-2**: The proposed project includes removal of existing wood posts for MGS supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the	Resident Engineer	Design Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.			
Project Feature	Hazardous Materials	**PF-HAZ-3**: During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Department) Construction Manual and 14-11.02 of The Department Standard Specification (2024).	Resident Engineer	Construction	No
Project Feature	Hazardous Materials	**PF-HAZ-4**: Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.	Project Engineer Resident Engineer	Design Construction	No
Project Feature	Water Quality	**PF-WQ-1**: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003	Project Engineer Resident Engineer	Design Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		and any subsequent permits in effect at the time of construction.			
Project Feature	Water Quality	**PF-WQ-2**: The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.	Project Engineer Resident Engineer	Design Construction	No
Project Feature	Water Quality	**PF-WQ-3**: The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.	Project Engineer Resident Engineer	Design Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
Project Feature	Water Quality	**PF-WQ-4**: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.	Project Engineer Resident Engineer	Design Construction	No
Project Feature	Traffic	**PF-TRA-1**: The Department Standard Specifications Section 12-4 Maintaining Traffic. A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.	Traffic Engineer Resident Engineer Project Engineer	Design Construction	No
Project Feature	Noise	**PF-N-1**: During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Contractor must comply with the Department' Standard Specification 14-8.02, "Noise Control" (2024) during construction. The specification states following: Control	Resident Engineer Project Engineer	Design Construction	No

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m. No mitigation is required.			

Appendix E – Layout Plans

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6, 24.5/35.7	X	XXX

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
X-X	TYPICAL CROSS SECTIONS
X	KEY MAP AND LINE INDEX
XX-XX	LAYOUTS
XX-XX	PROFILES AND SUPERELEVATION DIAGRAMS
XX-XX	CONSTRUCTION DETAILS
XX-XX	TEMPORARY WATER POLLUTION CONTROL PLANS
XX-XX	CONTOUR GRADING PLANS
XX-XX	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
XX-XX	UTILITY PLANS
XX	CONSTRUCTION AREA SIGNS
XX-XX	MOTORIST INFORMATION PLANS
XX-XX	STAGE CONSTRUCTION PLANS
XX-XX	TRAFFIC HANDLING PLANS AND QUANTITIES
XX-XX	PAVEMENT DELINEATION PLANS, DETAILS AND QUANTITIES
XX-XX	SIGN PLANS, DETAILS AND QUANTITIES
XX-XX	SUMMARY OF QUANTITIES
XX-XX	SOUND WALL PLANS
XX-XX	LANDSCAPE PLANS
XX-XX	ELECTRICAL PLANS
XX-XX	REVISED STANDARD PLANS

STRUCTURE PLANS

XX-XXX	NAME OF BRIDGE, Br No. XX-XXXX
XXX-XXX	NAME OF BRIDGE, BR No. XX-XXXXX

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

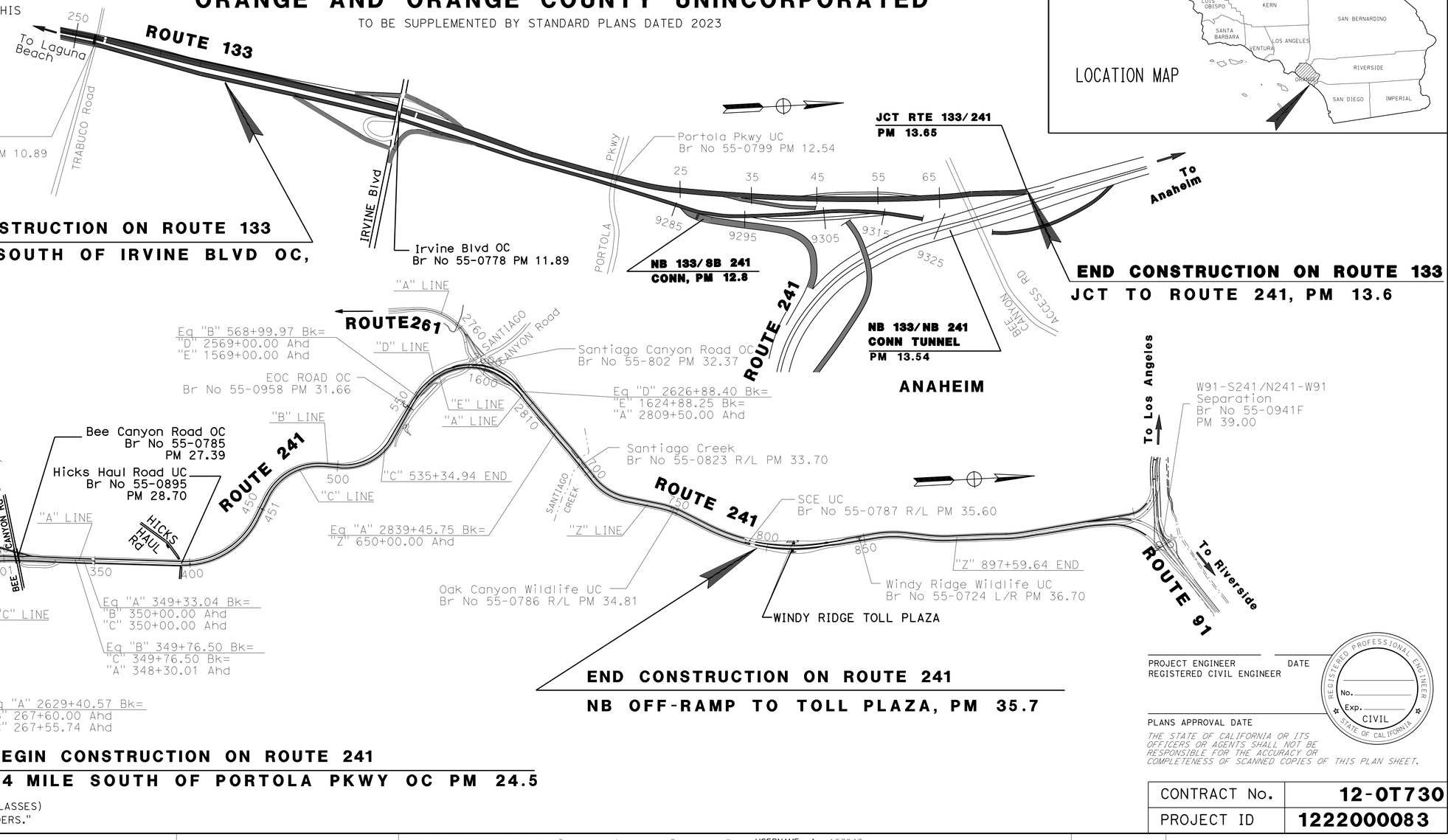
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN ORANGE COUNTY, ON ROUTE 133 FROM 0.5 MILE SOUTH OF IRVINE BLVD OC (PM 11.4) TO JCT TO ROUTE 241 (PM 13.6) AND ON ROUTE 241 FROM 0.4 MILE SOUTH OF PORTOLA PKWY OC (PM 24.5) TO NB OFF-RAMP TO TOLL PLAZA (PM 35.7) IN THE CITIES OF IRVINE, ORANGE AND ORANGE COUNTY UNINCORPORATED

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2023

LOCATION MAP



THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT ENGINEER _____ DATE _____
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE _____

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — No. _____ Exp. _____ CIVIL — STATE OF CALIFORNIA

CONTRACT No.	12-0T730
PROJECT ID	1222000083

PROJECT MANAGER: FARID NOWSHIRAVAN
DESIGN MANAGER: ANDREW OSHRIN

LAST REVISION: DATE PLOTTED => 17-MAR-2025 TIME PLOTTED => 08:01:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND:

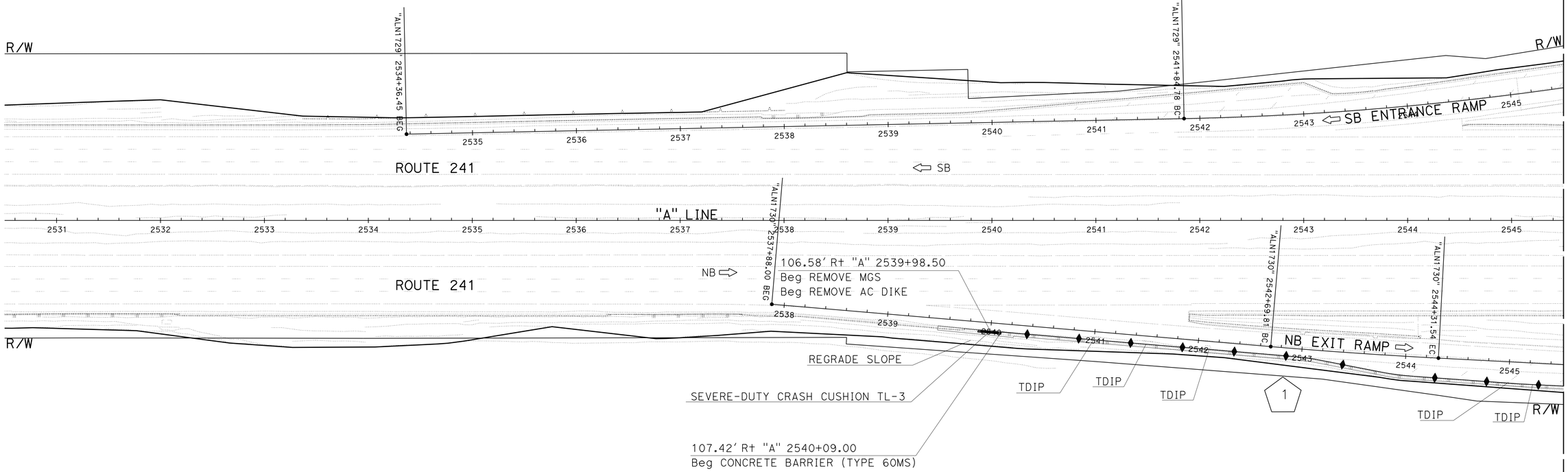
1 — LOCATION NUMBER

SEVERE-DUTY CRASH CUSHION TL-3

TEMPORARY DRAINAGE INLET PROTECTION

ABBREVIATION:

ABK	ANCHOR BLOCK/ CONCRETE BARRIER TRANSITION
TDIP	TEMPORARY DRAINAGE INLET PROTECTION
AITS	ALTERNATIVE IN-LINE TERMINAL TL-3



LAYOUT

SCALE: 1" = 50'

L-1

CALCULATED-DESIGNED BY: ENRIQUE BICHE
CHECKED BY: FARZANE SARPOOLAKI
REVISED BY / DATE REVISED
FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN D
Caltrans

LAST REVISION: DATE PLOTTED => 17-MAR-2025 TIME PLOTTED => 14:12
00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => s153243 | DGN FILE => 1222000083ea001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2995 | PROJECT NUMBER & PHASE 12220000830

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

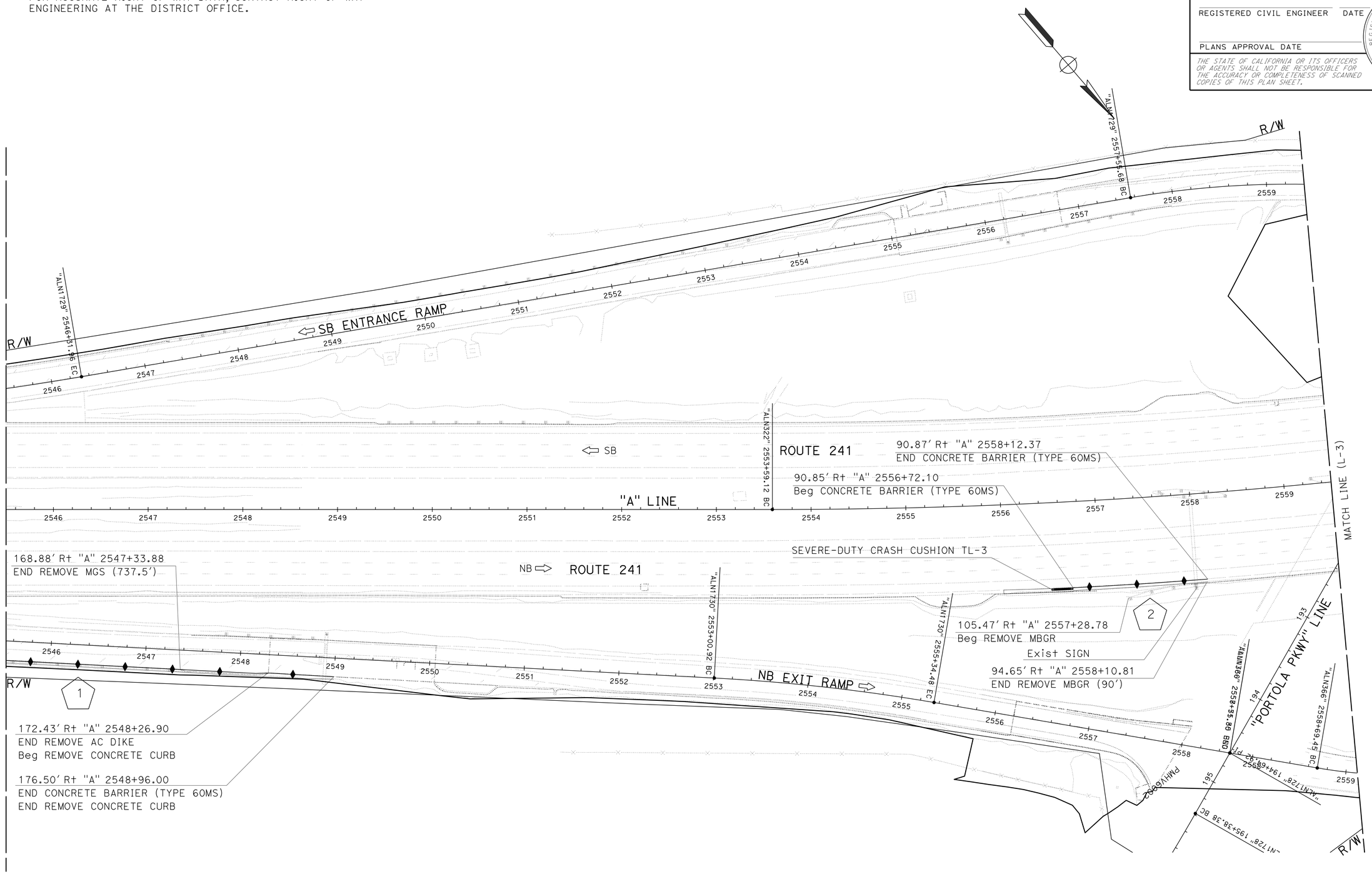
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LAYOUT

SCALE: 1" = 50'

L-2

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
ENRIQUE BICHE	FARZANE SARPOOLAKI		

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DESIGN D

Caltrans

LAST REVISION DATE PLOTTED => 17-MAR-2025
00-00-00 TIME PLOTTED => 14:13

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

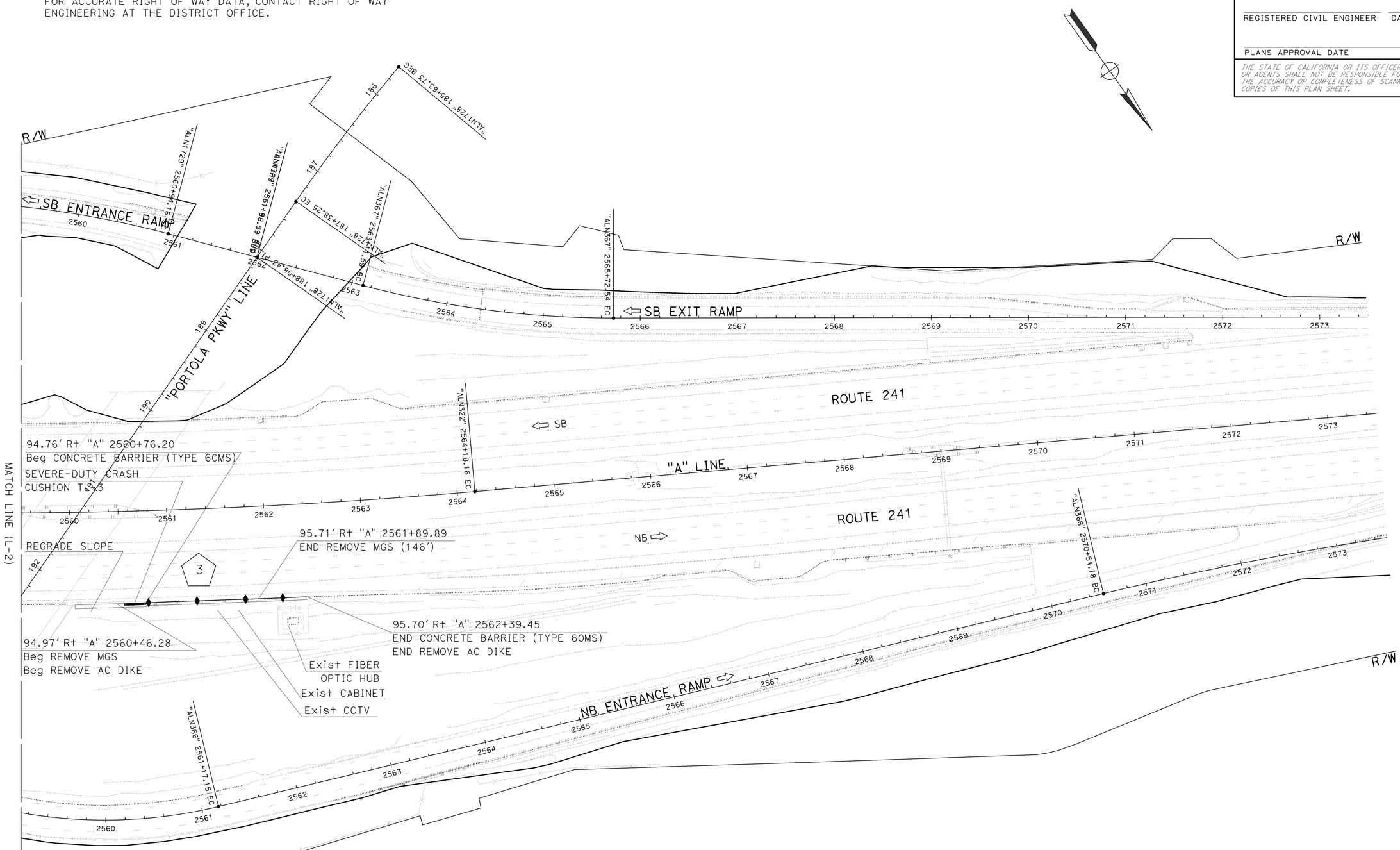
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LAYOUT

SCALE: 1" = 50'

L-3

CALCULATED-DESIGNED BY	
CHECKED BY	
REVISED BY	
DATE REVISED	
ENRIQUE BICHE	
FARZANE SARPOOLAKI	
FUNCTIONAL SUPERVISOR	
MONTASHEEMA AFROZE	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

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LAST REVISION: DATE PLOTTED => 17-MAR-2025
00-00-00 TIME PLOTTED => 14:13

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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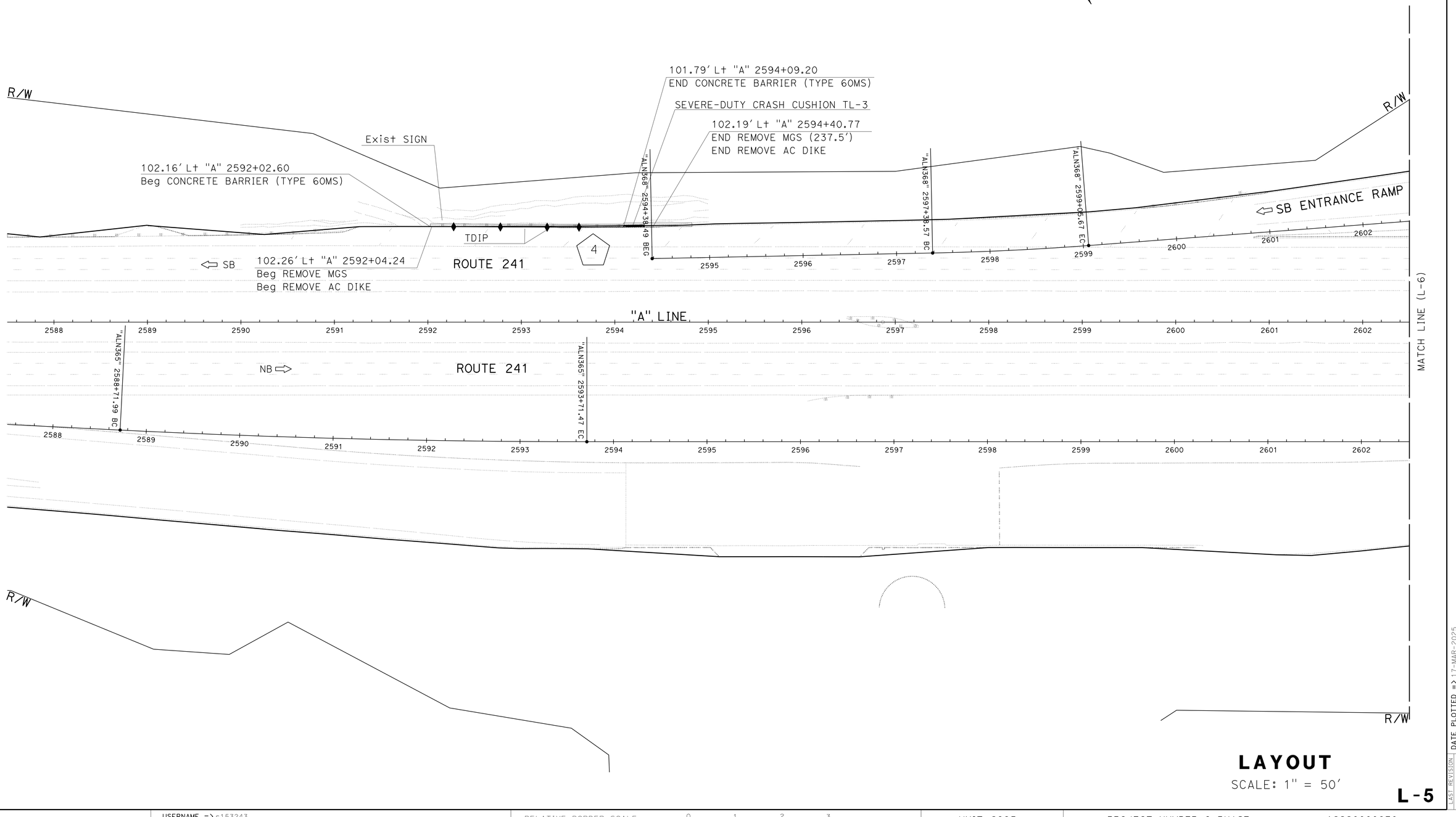

LAYOUT

SCALE: 1" = 50′

L-5

ENRIQUE BICHE — CALCULATED-DESIGNED BY

FARZANE SARPOOLAKI — CHECKED BY

MONTASHEEMA AFROZE — FUNCTIONAL SUPERVISOR

REVISED BY

DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION DATE PLOTTED => 17-MAR-2025
00-00-00 TIME PLOTTED => 14:14

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea005.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

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PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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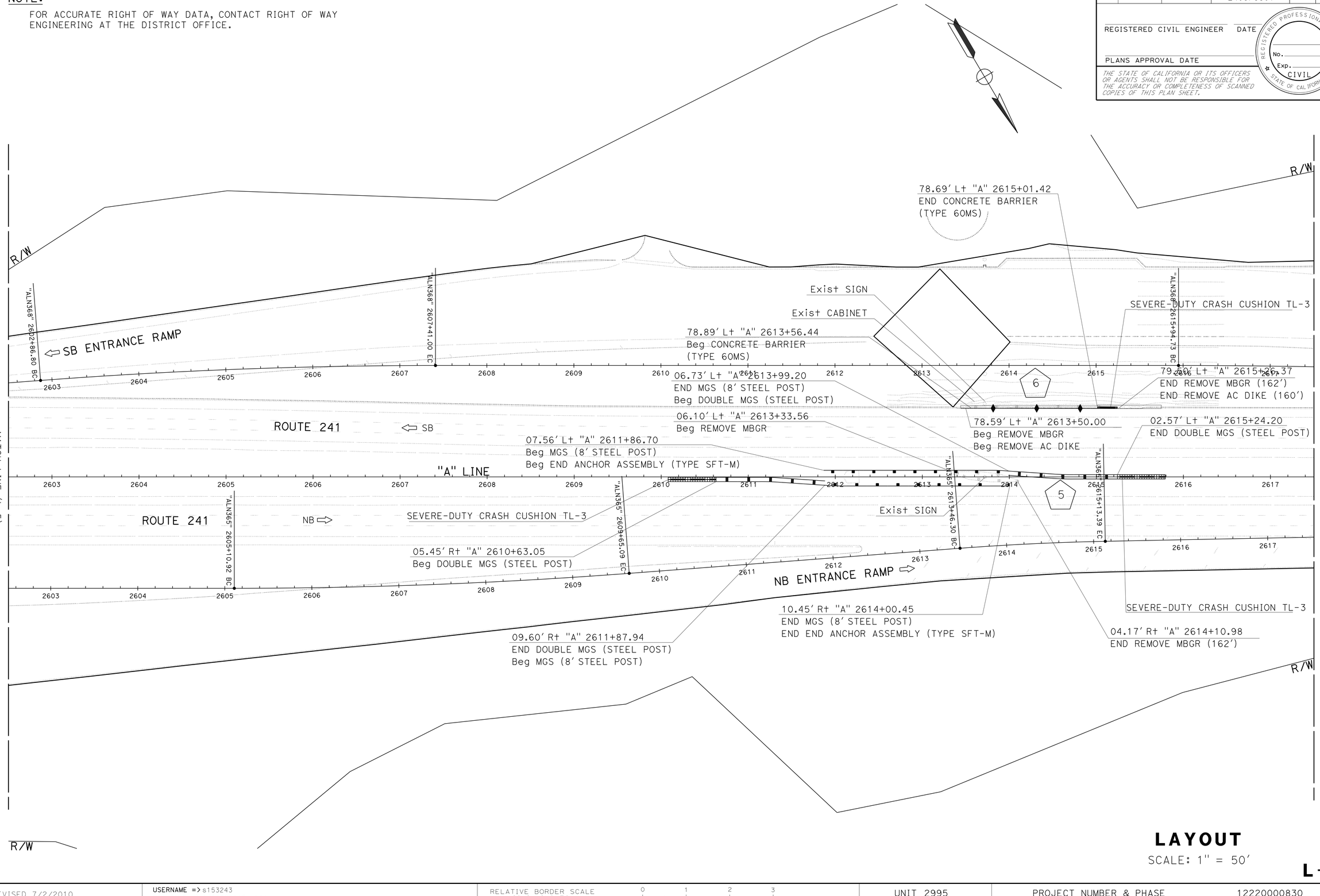

LAYOUT

SCALE: 1" = 50'

L-6

ENRIQUE BICHE — CALCULATED-DESIGNED BY
FARZANE SARPOOLAKI — CHECKED BY
MONTASHEEMA AFROZE — FUNCTIONAL SUPERVISOR
REVISED BY — DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN D

LAST REVISION 00-00-00
DATE PLOTTED => 17-MAR-2025
TIME PLOTTED => 14:14

BORDER LAST REVISED 7/2/2010
USERNAME => s153243
DGN FILE => 1222000083ea006.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2995
PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

04.19′ Lt "B" 280+02.83
END CONCRETE BARRIER (TYPE 60MS) TO TRANSITION RAILING (TYPE AGT), (14.5′)
END HMA DIKE (TYPE F)
Beg CONCRETE BARRIER (TYPE 60MS)

02.79′ Lt "B" 279+92.18
Beg REMOVE CONCRETE BARRIER

04.23′ Lt "B" 279+88.35
END TRANSITION RAILING (TYPE AGT), (25′)
Beg CONCRETE BARRIER (TYPE 60MS) TO TRANSITION RAILING (TYPE AGT)

SEVERE-DUTY CRASH CUSHION TL-3

70.91′ Lt "B" 274+46.93
END CONCRETE BARRIER (TYPE 60MS)

82.54′ Lt "B" 274+07.02
END REMOVE MBGR (1,500′)
END REMOVE AC DIKE

42.22′ Rt "B" 277+72.93
END MGS (8′ STEEL POST)
Beg DOUBLE MGS (STEEL POST)

38.00′ Rt "B" 277+09.72
Beg MGS (8′ STEEL POST)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)

69.89′ Lt "B" 279+18.39
Beg REMOVE MBGR
Beg REMOVE AC DIKE

70.80′ Lt "B" 279+15.00
Beg MGS (8′ STEEL POST)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)

46.71′ Lt "C" 276+97.31
Beg REMOVE MBGR

70.03′ Lt "B" 282+55.68
END REMOVE MBGR (350′)
END REMOVE AC DIKE

R/W

Exist SIGN

Exist CABINET

9

TDIP TDIP TDIP

"ALN374" 276+41.47 BC

06.73′ Lt "A" 2613+99.20
END MGS (8′ STEEL POST)
Beg DOUBLE MGS (STEEL POST)

Exist SIGN

02.27′ Lt "A" 2615+24.20
END DOUBLE MGS (STEEL POST)

"ALN368" 275+73.67 BC

SEVERE-DUTY CRASH CUSHION TL-3

MATCH LINE (L-7)

271 272 273 274 275 276 277 278 279 280 281 282 283

12

Exist SIGN

42.35′ Lt "C" 277+74.88
END REMOVE MBGR (162′)

"B" LINE

13

SB ROUTE 241

14

Exist SIGN

SEVERE-DUTY CRASH CUSHION TL-3

49.18′ Rt "B" 278+99.75
END DOUBLE MGS (STEEL POST)

"ALN373" 277+33.39 BCS

37.47′ Lt "C" 277+74.57
END MGS (8′ STEEL POST)
END END ANCHOR ASSEMBLY (TYPE SFT-M)

"C" LINE

MATCH LINE (L-9)

SEVERE-DUTY CRASH CUSHION TL-3

04.19′ Lt "B" 281+29.87
END CONCRETE BARRIER (TYPE 60MS)
END REMOVE AC DIKE

03.88′ Rt "B" 280+88.04
END REMOVE MBGR (65′)
END REMOVE AC DIKE

01.78′ Lt "B" 280+24.68
END REMOVE CONCRETE BARRIER (35′)
Beg REMOVE MBGR
Beg REMOVE AC DIKE

10

25.72′ Lt "C" 270+93.84
END REMOVE MBGR (162′)

ROUTE 241 NB

11

TDIP TDIP TDIP

R/W

10.45′ Rt "A" 2614+00.45
END MGS (8′ STEEL POST)
END END ANCHOR ASSEMBLY (TYPE SFT-M)

ROUTE 241/133 CONNECTOR

70.59′ Rt "C" 277+57.92
END CONCRETE BARRIER (TYPE 60MS)

70.67′ Rt "C" 277+44.40
END REMOVE MBGR (76′)
END REMOVE AC DIKE
Exist SIGN

15

TDIP

SEVERE-DUTY CRASH CUSHION TL-3

41.13′ Lt "C" 275+84.87
Beg DOUBLE MGS (STEEL POST)

36.94′ Lt "C" 277+08.60
END DOUBLE MGS (STEEL POST)
Beg MGS (8′ STEEL POST)

SEVERE-DUTY CRASH CUSHION TL-3

69.89′ Rt "C" 274+45.93
Beg CONCRETE BARRIER (TYPE 60MS)

73.94′ Rt "C" 276+67.57
Beg REMOVE MBGR
Beg REMOVE AC DIKE

93.32′ Rt "C" 282+65.37
Beg REMOVE MBGR
Beg REMOVE AC DIKE

96.58′ Rt "C" 282+37.84
Beg CONCRETE BARRIER (TYPE 60MS)

SEVERE-DUTY CRASH CUSHION TL-3

R/W

LAYOUT

SCALE: 1" = 50′

L-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN D
Caltrans

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE
CALCULATED-DESIGNED BY: FARZANE SARPOOLAKI
CHECKED BY: ENRIQUE BICHE
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 17-MAR-2025
TIME PLOTTED => 14:14
00-00-00

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea008.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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SEVERE-DUTY CRASH CUSHION TL-3
72.96' Lt "B" 289+82.53
END CONCRETE BARRIER (TYPE 60MS)

73.28' Lt "B" 289+32.89
END REMOVE MBGR (87.5')

84.72' Lt "B" 283+78.07
END MGS (8' STEEL POST)
AITS (BURRIED)

Exist SIGN

70.73' Lt "B" 288+46.47
Beg CONCRETE BARRIER (TYPE 60MS)
Beg REMOVE MBGR

90.56' Lt "B" 293+90.06
Beg REMOVE MGS
Beg REMOVE AC DIKE
Beg CONCRETE BARRIER (TYPE 60MS)

115.38' Lt "B" 296+97.08
Beg REMOVE MGS
Beg REMOVE AC DIKE

R/W

"ALN374" 284+15.27 PCC

"ALN371" 88+55.81 BEG

"ALN371" 91+53.12 EC

"ALN371" 95+24.66 EC

MATCH LINE (L-8)

MATCH LINE (L-10)

⇦ SB ROUTE 241
"B" LINE

⇦ ROUTE 133/241 CONNECTOR

TDIP

TDIP

06.79' Lt "B" 288+42.59
Beg CONCRETE BARRIER (TYPE 60MS)

06.79' Lt "B" 288+44.50
Beg REMOVE MGS
Beg REMOVE AC DIKE

05.86' Lt "B" 290+52.88
END REMOVE MGS (212.5')
END REMOVE AC DIKE (250')

Exist SIGN

06.23' Lt "B" 290+72.23
END CONCRETE BARRIER (TYPE 60MS)

SEVERE-DUTY CRASH CUSHION TL-3

46.90' Rt "C" 292+91.17
Beg REMOVE MGS
Beg REMOVE AC DIKE

83.00' Lt "B" 296+07.00
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)
Beg MGS (8' STEEL POST)
Beg HMA DIKE (TYPE F)

45.87' Rt "C" 294+52.40
END REMOVE MGS (160')
END REMOVE AC DIKE

"C" LINE

"ALN372" 284+94.81 PCC

ROUTE 241

NB ⇨

TDIP

"ALN375" 89+87.39 EC

SEVERE-DUTY CRASH CUSHION
TL-3
46.08' Rt "C" 292+38.32
Beg CONCRETE BARRIER (TYPE 60MS)

TDIP

Exist CABINET

"ALN375" 96+30.88 BC

AITS

ROUTE 241/133 CONNECTOR ⇨

Exist CABINET

TDIP

93.00' Rt "C" 287+02.10
Beg REMOVE AITS

95.58' Rt "C" 287+27.66
END MIDWEST GUARDRAIL SYSTEM (WOOD POST)
END REMOVE AITS

70.88' Rt "C" 284+21.68
Beg MIDWEST GUARDRAIL SYSTEM (WOOD POST)

107.46' Rt "C" 283+92.24
END CONCRETE BARRIER
(TYPE 60MS)

107.72' Rt "C" 283+93.12
END REMOVE MBGR (126')
END REMOVE AC DIKE

SEVERE-DUTY CRASH CUSHION
TL-3
168.95' Rt "C" 294+41.80
Beg CONCRETE BARRIER (TYPE 60MS)

160.00' Rt "C" 295+69.85
Beg REMOVE MGS
Beg REMOVE AC DIKE

R/W

MATCH LINE (L-10)

LAYOUT

SCALE: 1" = 50'

L-9

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: ENRIQUE BICHE
CHECKED BY: FARZANE SARPOOLAKI
FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN D
Caltrans

LAST REVISION DATE PLOTTED => 17-MAR-2025
TIME PLOTTED => 14:15
00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => s153243 | DGN FILE => 1222000083ea009.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2995 | PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

267.03′ Lt "B" 298+56.36
END REMOVE ABK (15′)
END ABK (15′)

257.45′ Lt "B" 298+45.77
END REMOVE MGS (515′)
END REMOVE AC DIKE
Beg REMOVE ABK
Beg ABK
END CONCRETE BARRIER (TYPE 60MS)

254.53′ Lt "B" 298+98.32
END REMOVE ABK (15′)
END ABK (15′)

244.68′ Lt "B" 298+87.73
END REMOVE MGS (240′)
END REMOVE AC DIKE
END MGS (8′ STEEL POST)
END HMA DIKE (TYPE F)
Beg REMOVE ABK
Beg ABK

44.00′ Lt "C" 299+97.17
END MGS (8′ STEEL POST)
Beg DOUBLE MGS (STEEL POST)

46.24′ Lt "B" 305+87.25
Beg MGS (8′ STEEL POST)
Beg HMA DIKE (TYPE F)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)

46.24′ Lt "B" 305+86.72
Beg REMOVE MBGR
Beg REMOVE AC DIKE

45.13′ Lt "C" 299+42.95
Beg MGS (8′ STEEL POST)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)

26.87′ Lt "C" 299+93.38
END DOUBLE MGS (STEEL POST)
Beg MGS (8′ STEEL POST)

28.88′ Lt "C" 299+05.54
Beg REMOVE MBGR

29.79′ Lt "C" 298+15.13
Beg DOUBLE MGS (STEEL POST)

SEVERE-DUTY CRASH CUSHION TL-3

45.51′ Rt "C" 296+98.93
Beg REMOVE MGS
Beg REMOVE AC DIKE

111.30′ Rt "C" 297+53.70
END REMOVE MGS (187.5′)
END REMOVE AC DIKE
Beg REMOVE ABK
END CONCRETE BARRIER (TYPE 60MS)
Beg ABK

105.52′ Rt "C" 297+68.00
END ABK (15′)
END REMOVE ABK (15′)

46.46′ Rt "C" 299+39.90
Beg REMOVE MGS
Beg REMOVE AC DIKE

57.40′ Rt "C" 298+97.28
END REMOVE MGS (200′)
END REMOVE AC DIKE

23.32′ Lt "C" 300+01.28
END MGS (8′ STEEL POST)
END END ANCHOR ASSEMBLY (TYPE SFT-M)

22.42′ Lt "C" 299+80.25
END REMOVE MBGR (76′)

42.34′ Lt "C" 301+20.70
END DOUBLE MGS (STEEL POST)
SEVERE-DUTY CRASH CUSHION TL-3

46.81′ Rt "C" 301+30.47
END CONCRETE BARRIER (TYPE 60MS)

48.94′ Rt "C" 301+13.88
END REMOVE MGS (175′)
END REMOVE AC DIKE

45.88′ Rt "C" 305+71.52
Beg REMOVE MGS
Beg REMOVE AC DIKE

46.26′ Rt "C" 304+17.85
Beg CONCRETE BARRIER (TYPE 60MS)

SEVERE-DUTY CRASH CUSHION TL-3

46.60′ Rt "C" 307+50.31
END REMOVE MGS (175′)
END REMOVE AC DIKE

MATCH LINE (L-15)
MATCH LINE (L-9)
MATCH LINE (L-16)
ROUTE 133/241 CONNECTOR
ROUTE 241/133 CONNECTOR
ROUTE 241
"B" LINE
"C" LINE
SB
NB
R/W
Exist CULOMN
TDIP
19
20
21
23
24
25
26
27

LAYOUT

SCALE: 1" = 50′

L-10

REVISED BY | DATE REVISED
ENRIQUE BICHE | FARZANE SARPOOLAKI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | MONTASHEEMA AFROZE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | DESIGN D

LAST REVISION | DATE PLOTTED => 17-MAR-2025 | TIME PLOTTED => 14:15 | 00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => s153243 | DGN FILE => 1222000083ea010.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2995 | PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

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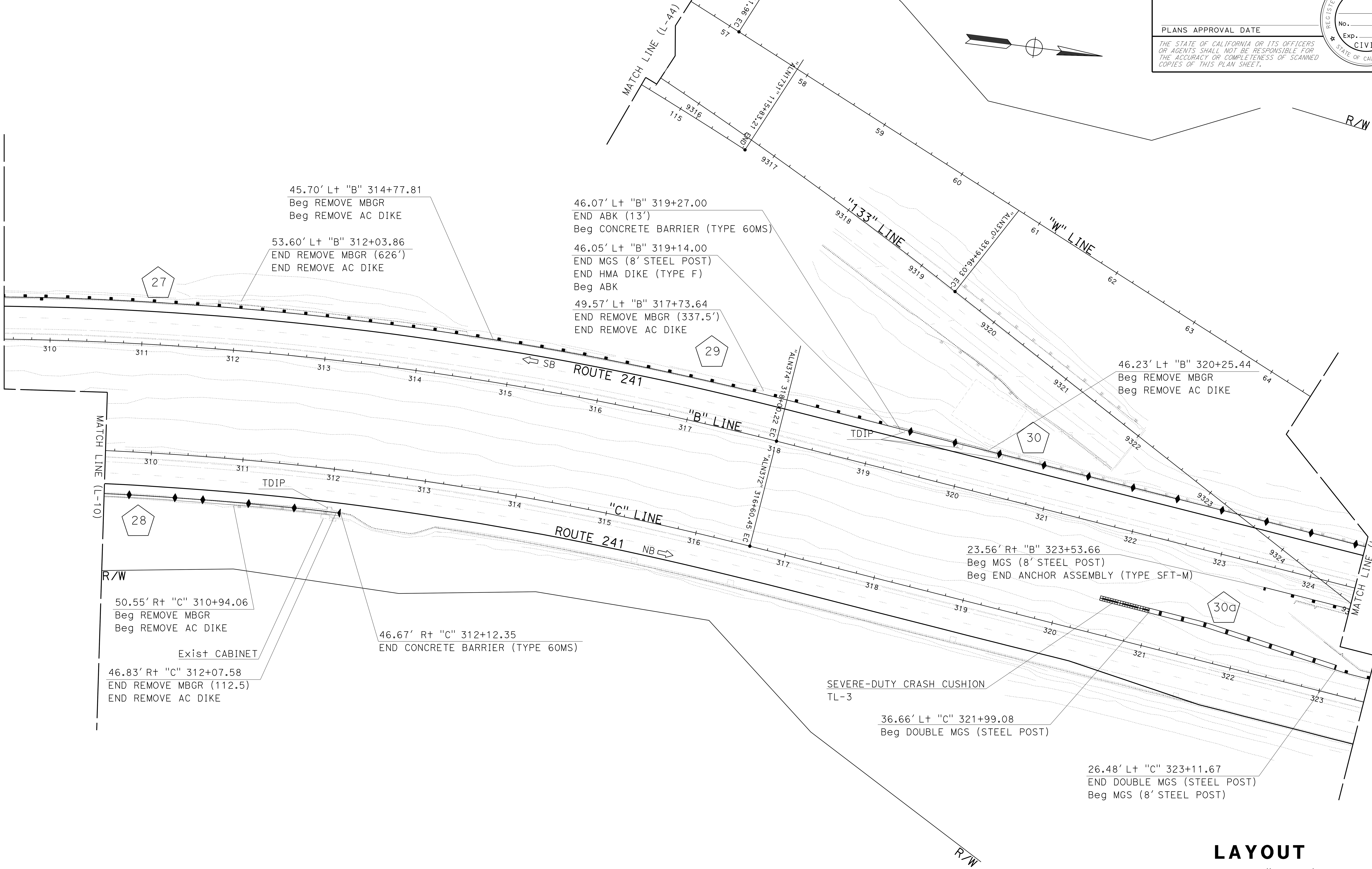
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



MATCH LINE (L-44)
R/W
"133" LINE
"W" LINE
45.70' Lt "B" 314+77.81
Beg REMOVE MBGR
Beg REMOVE AC DIKE
53.60' Lt "B" 312+03.86
END REMOVE MBGR (626')
END REMOVE AC DIKE
46.07' Lt "B" 319+27.00
END ABK (13')
Beg CONCRETE BARRIER (TYPE 60MS)
46.05' Lt "B" 319+14.00
END MGS (8' STEEL POST)
END HMA DIKE (TYPE F)
Beg ABK
49.57' Lt "B" 317+73.64
END REMOVE MBGR (337.5')
END REMOVE AC DIKE
46.23' Lt "B" 320+25.44
Beg REMOVE MBGR
Beg REMOVE AC DIKE
27
28
29
30
30a
SB
ROUTE 241
"B" LINE
TDIP
MATCH LINE (L-10)
"C" LINE
ROUTE 241
NB
MATCH LINE (L-17)
23.56' Rt "B" 323+53.66
Beg MGS (8' STEEL POST)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)
50.55' Rt "C" 310+94.06
Beg REMOVE MBGR
Beg REMOVE AC DIKE
Exist CABINET
46.83' Rt "C" 312+07.58
END REMOVE MBGR (112.5)
END REMOVE AC DIKE
46.67' Rt "C" 312+12.35
END CONCRETE BARRIER (TYPE 60MS)
SEVERE-DUTY CRASH CUSHION
TL-3
36.66' Lt "C" 321+99.08
Beg DOUBLE MGS (STEEL POST)
26.48' Lt "C" 323+11.67
END DOUBLE MGS (STEEL POST)
Beg MGS (8' STEEL POST)

LAYOUT

SCALE: 1" = 50'

L-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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DESIGN D

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

CALCULATED-DESIGNED BY: ENRIQUE BICHE

CHECKED BY: FARZANE SARPOOLAKI

REVISED BY

DATE REVISED

DATE PLOTTED => 17-MAR-2025
TIME PLOTTED => 14:16

LAST REVISION 00-00-00

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea016.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

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PLANS APPROVAL DATE

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R/W

86.83′ Lt "B" 326+70.54
Beg CONCRETE BARRIER (TYPE 60MS)

"ALN373" 65+53.23 BC

"W" LINE

54.36′ Lt "B" 323+54.96
END REMOVE MBGR (825′)
END REMOVE AC DIKE

Exist SIGN

Exist COLUMN

TDIP

"ALN370" 326+00.01 BC

37.62′ Rt "B" 327+90.79
END MGS (8′ STEEL POST)
Beg DOUBLE MGS (STEEL POST)

30

30a

Exist SIGN

Exist COLUMN

47.55′ Lt "B" 329+32.17
END CONCRETE BARRIER (TYPE 60MS)
Beg CB TRANSITION

47.69′ Lt "B" 329+48.06
END CB TRANSITION (16′)
Beg CB TRANSITION (TYPE 60MS TO CRASH CUSHION)

"ALN373" 70+91.88 EC

41.66′ Rt "B" 329+28.32
END DOUBLE MGS (STEEL POST)

SEVERE-DUTY CRASH CUSHION TL-3

TDIP

TDIP

Exist MH

TDIP

MATCH LINE (L-16)

SEVERE-DUTY CRASH CUSHION TL-3

46.18′ Rt "C" 325+31.94
Beg CONCRETE BARRIER (TYPE 60MS)

23.36′ Lt "C" 326+61.67
END MGS (8′ STEEL POST)
END END ANCHOR ASSEMBLY
(TYPE SFT-M)

59.21′ Rt "C" 326+68.98
Beg REMOVE MBGR
Beg REMOVE AC DIKE

R/W

"B" LINE

"C" LINE

"133" LINE

⇦ SB ROUTE 241

ROUTE 241 NB ⇨

46.90′ Lt "B" 329+61.06
END CB TRANSITION (TYPE 60MS TO CRASH CUSHION)

"ALN373" 75+55.93 END

"ALN374" 335+13.86 BC

00.42′ Lt "B" 336+31.68
END MGS (8′ STEEL POST)
END HMA DIKE (TYPE F)

AITS

Exist SIGN

04.16′ Lt "B" 334+30.60
Beg MGS (8′ STEEL POST)
Beg HMA DIKE (TYPE F)
Beg END ANCHOR ASSEMBLY
(TYPE SFT-M)

05.28′ Rt "B" 335+14.80
END REMOVE MBGR (87.5′)

03.16′ Rt "B" 334+32.44
Beg REMOVE MBGR

"ALN370" 9336+50.92 EC

"ALN370" 9338+06.75 BC

34

Exist CABINET

Exist CCTV

Exist CCTV

Exist VAULT

50.50′ Rt "C" 331+22.15
END REMOVE MBGR (462.5′)
END REMOVE AC DIKE

46.19′ Rt "C" 331+28.09
END CONCRETE BARRIER (TYPE 60MS)

R/W

LAYOUT

SCALE: 1" = 50′

L-17

REVISED BY	DATE REVISED
ENRIQUE BICHE	FARZANE SARPOOLAKI
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	MONTASHEEMA AFROZE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION: DATE PLOTTED => 17-MAR-2025
00-00-00 TIME PLOTTED => 14:16

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea017.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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NOTE:

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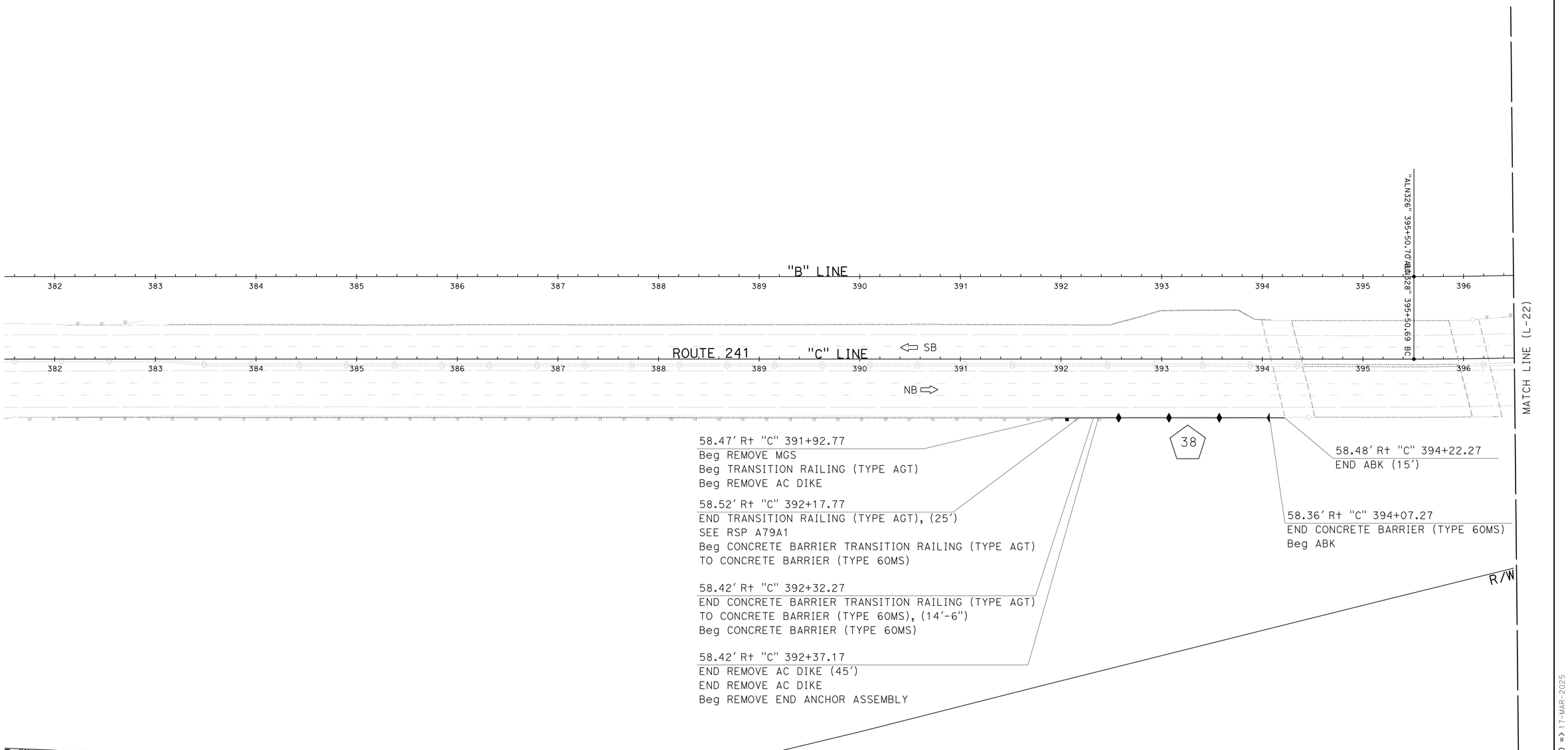
R/W

R/W



LAYOUT

SCALE: 1" = 50'

L-21

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: ENRIQUE BICHE

CHECKED BY: FARZANE SARPOOLAKI

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

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PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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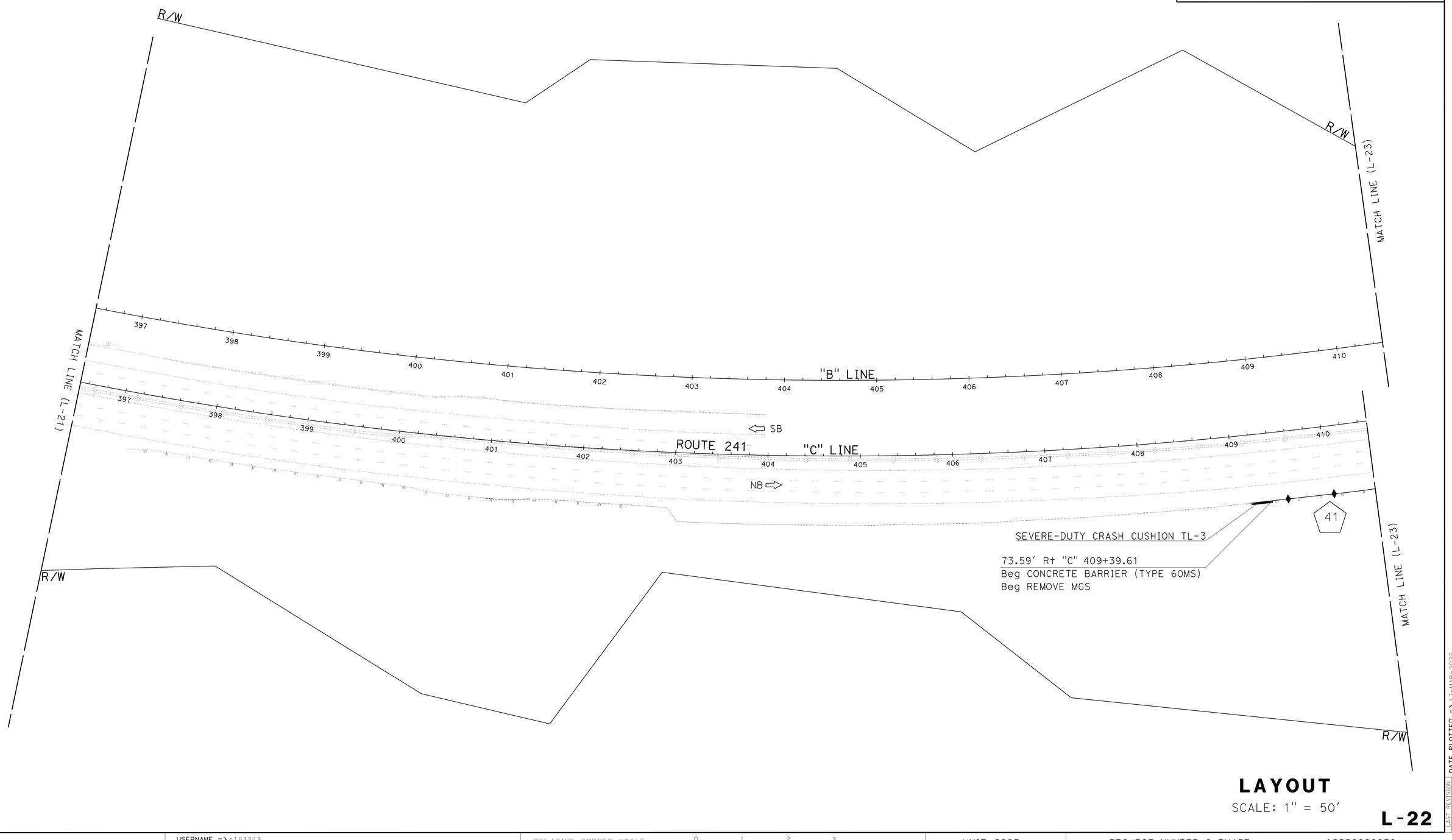

LAYOUT

SCALE: 1" = 50'

L-22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

CALCULATED-DESIGNED BY: ENRIQUE BICHE

CHECKED BY: FARZANE SARPOOLAKI

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BORDER LAST REVISED 7/2/2010

USERNAME => s153243

DGN FILE => 1222000083ea022.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

NOTE:

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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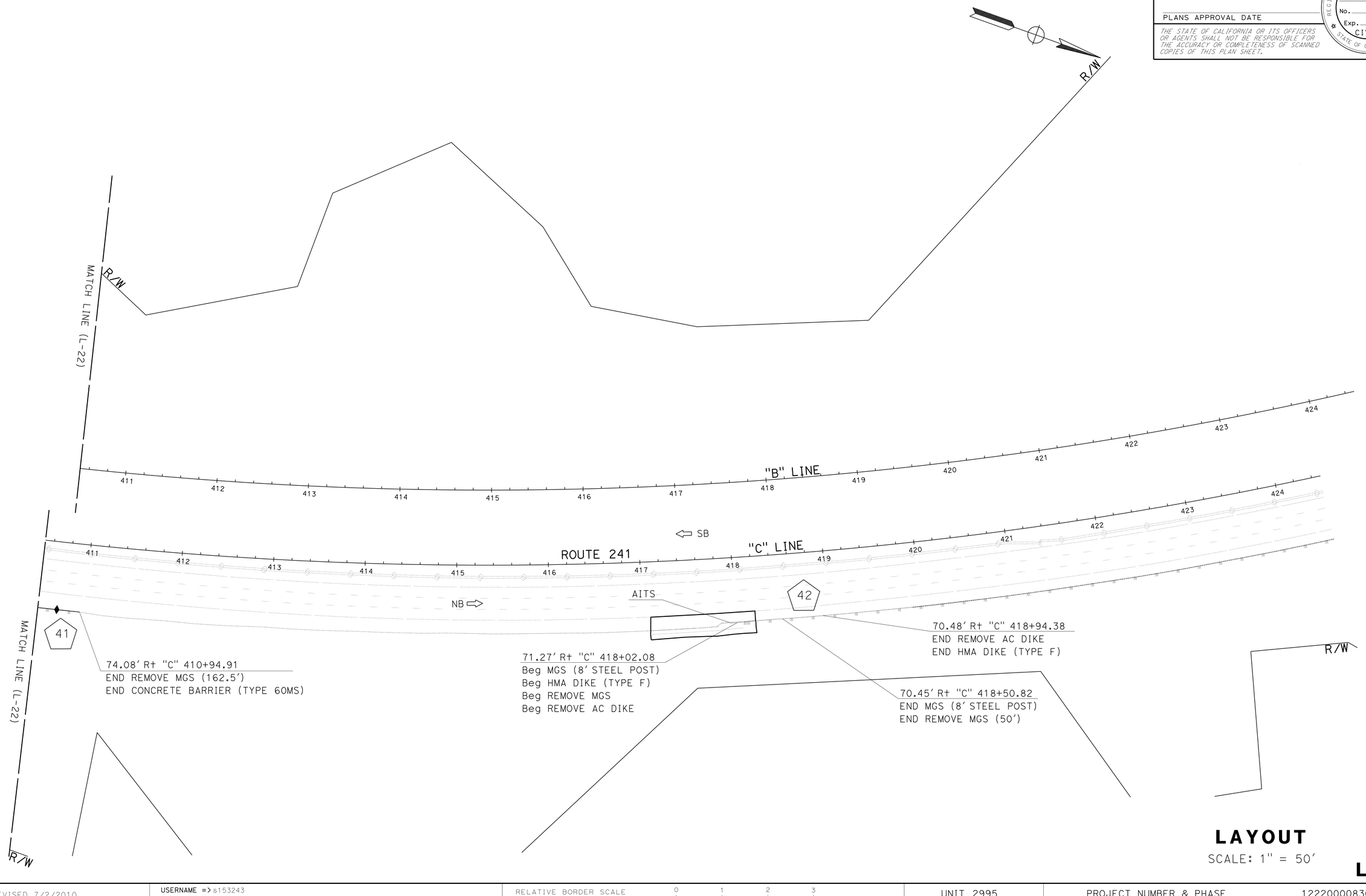

LAYOUT

SCALE: 1" = 50'

L-23

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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DESIGN D
FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE
CALCULATED-DESIGNED BY: ENRIQUE BICHE
CHECKED BY: FARZANE SARPOOLAKI
REVISED BY
DATE REVISED

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BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea023.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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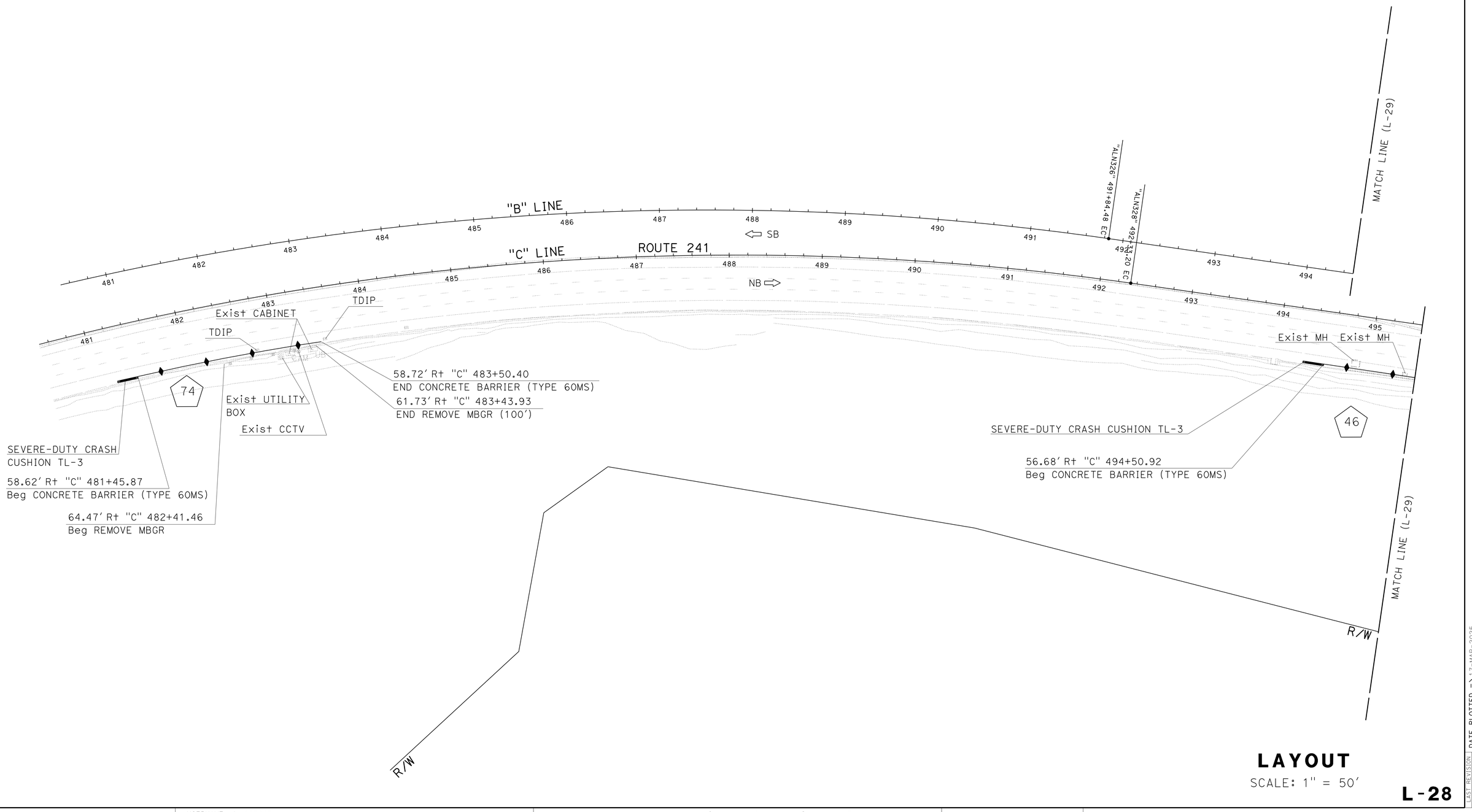

LAYOUT

SCALE: 1" = 50'

L-28

CALCULATED-DESIGNED BY	ENRIQUE BICHE
CHECKED BY	FARZANE SARPOOLAKI
FUNCTIONAL SUPERVISOR	MONTASHEEMA AFROZE
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DATE REVISED	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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LAST REVISION 00-00-00

DATE PLOTTED => 17-MAR-2025

TIME PLOTTED => 14:18

BORDER LAST REVISED 7/2/2010

USERNAME => s153243

DGN FILE => 1222000083ea028.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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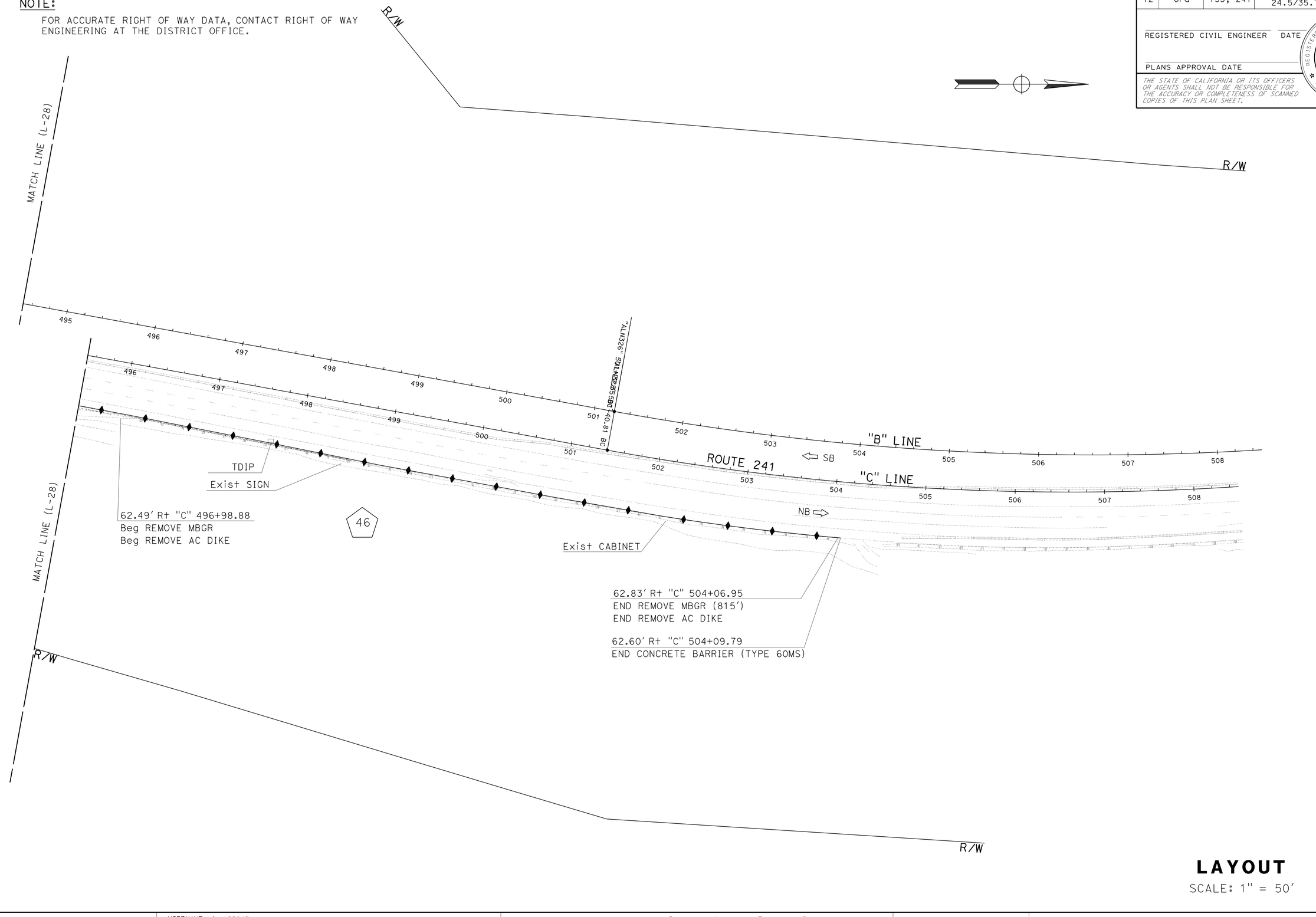

LAYOUT

SCALE: 1" = 50'

L-29

REVISED BY	DATE REVISED
ENRIQUE BICHE	FARZANE SARPOOLAKI

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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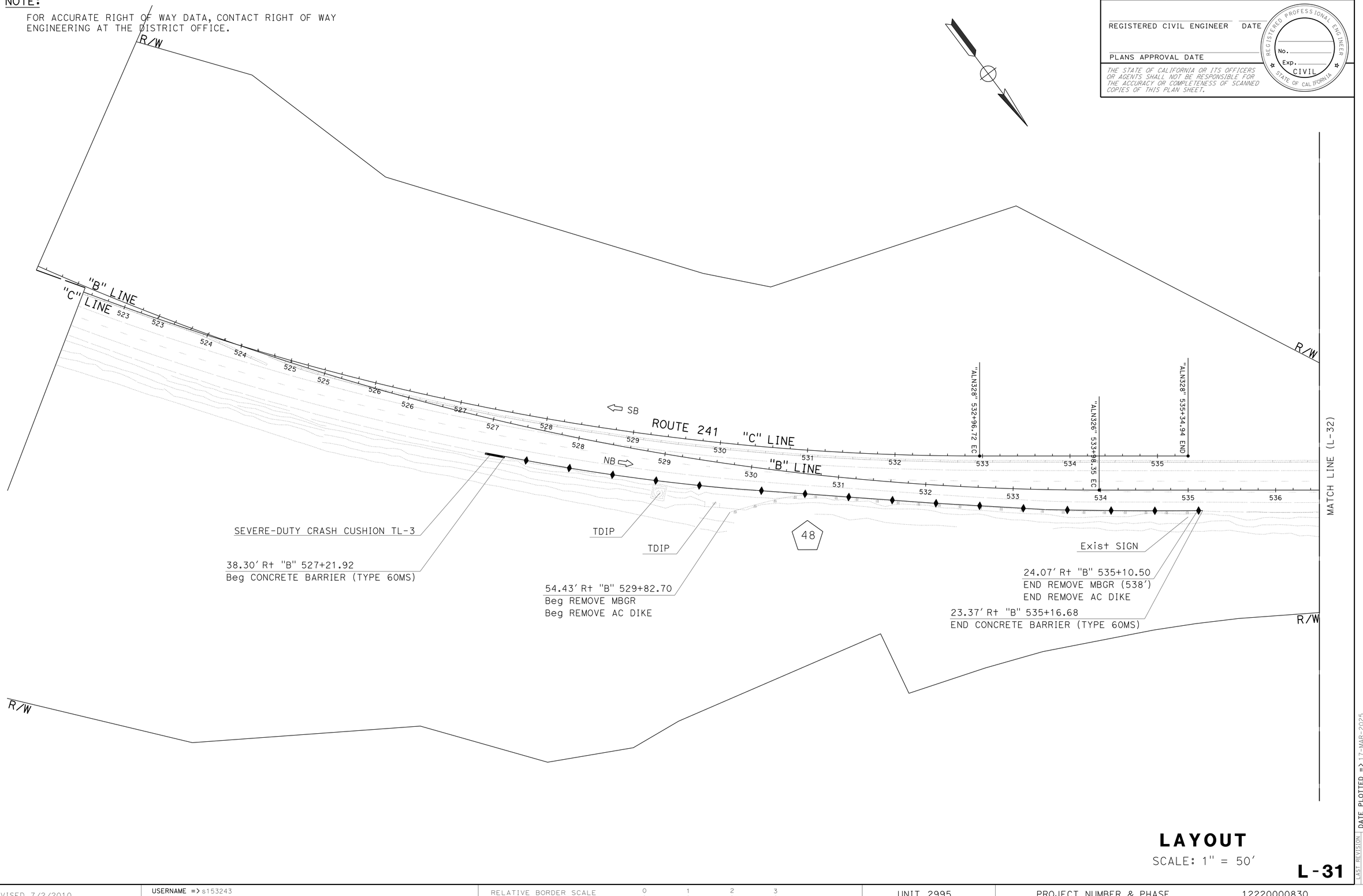

LAYOUT

SCALE: 1" = 50'

L-31

CALCULATED-DESIGNED BY: ENRIQUE BICHE
CHECKED BY: FARZANE SARPOOLAKI
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea031.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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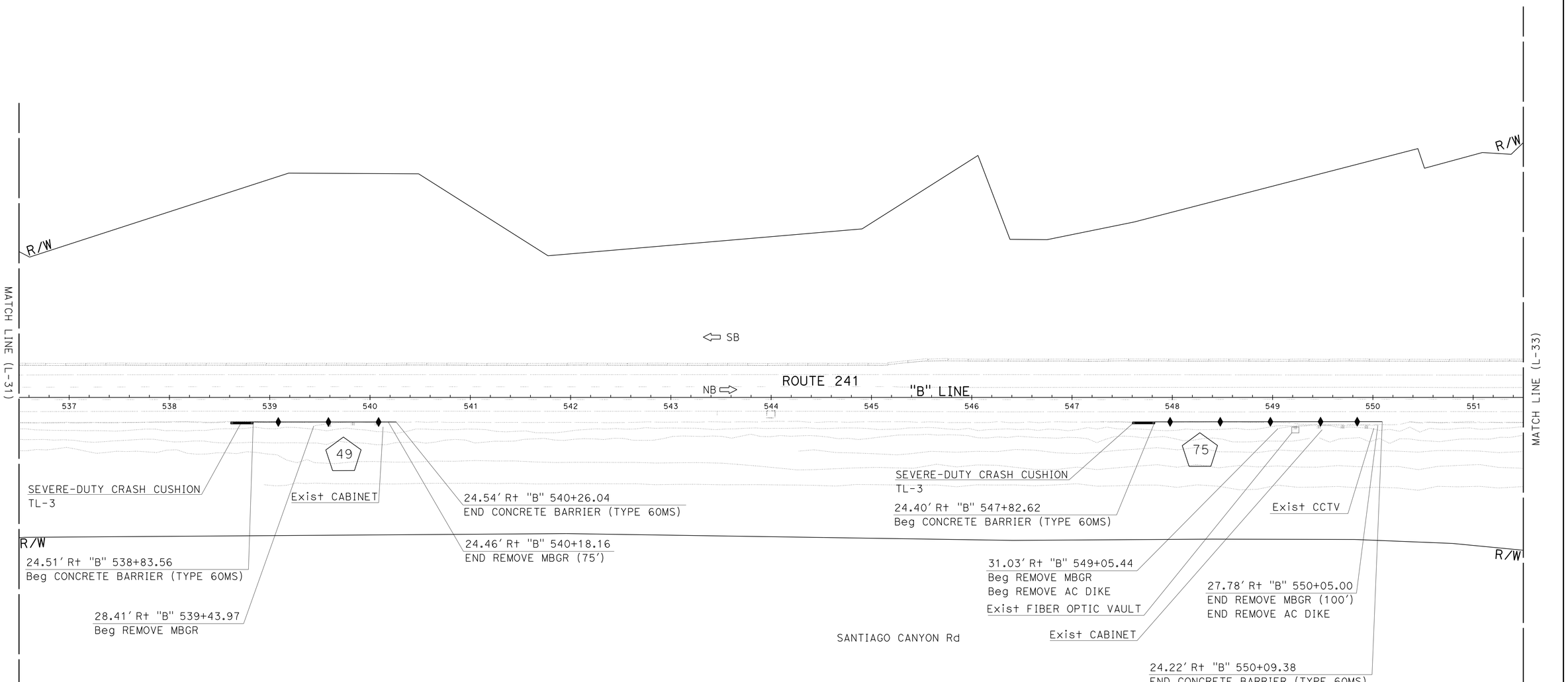

LAYOUT

SCALE: 1" = 50′

L-32

CALCULATED-DESIGNED BY: ENRIQUE BICHE
CHECKED BY: FARZANE SARPOOLAKI
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

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BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea032.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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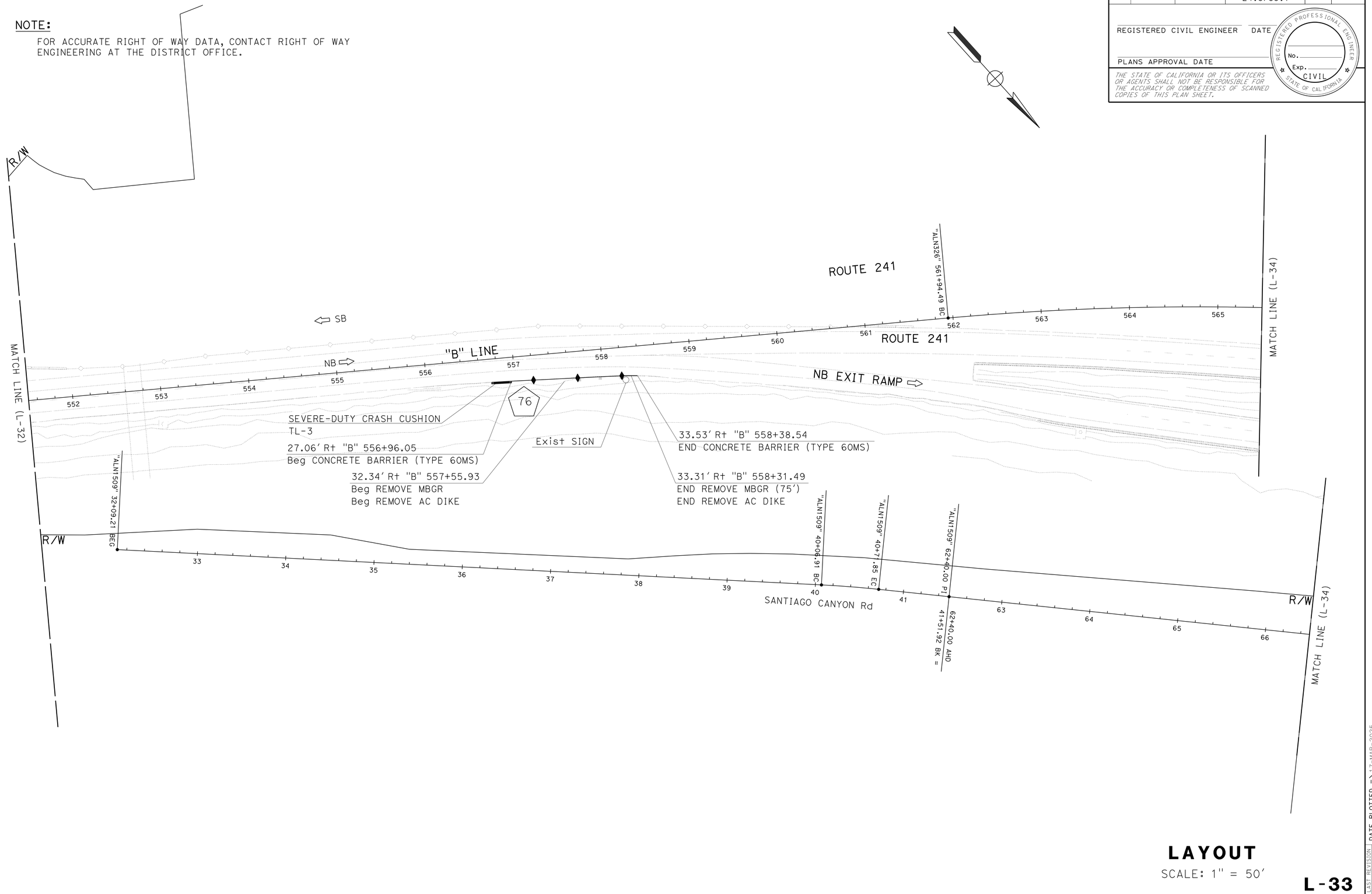

LAYOUT

SCALE: 1" = 50'

L-33

CALCULATED-DESIGNED BY	ENRIQUE BICHE
CHECKED BY	FARZANE SARPOOLAKI
FUNCTIONAL SUPERVISOR	MONTASHEEMA AFROZE
REVISED BY	
DATE REVISED	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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TIME PLOTTED => 14:19

BORDER LAST REVISED 7/2/2010

USERNAME => s153243

DGN FILE => 1222000083ea033.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

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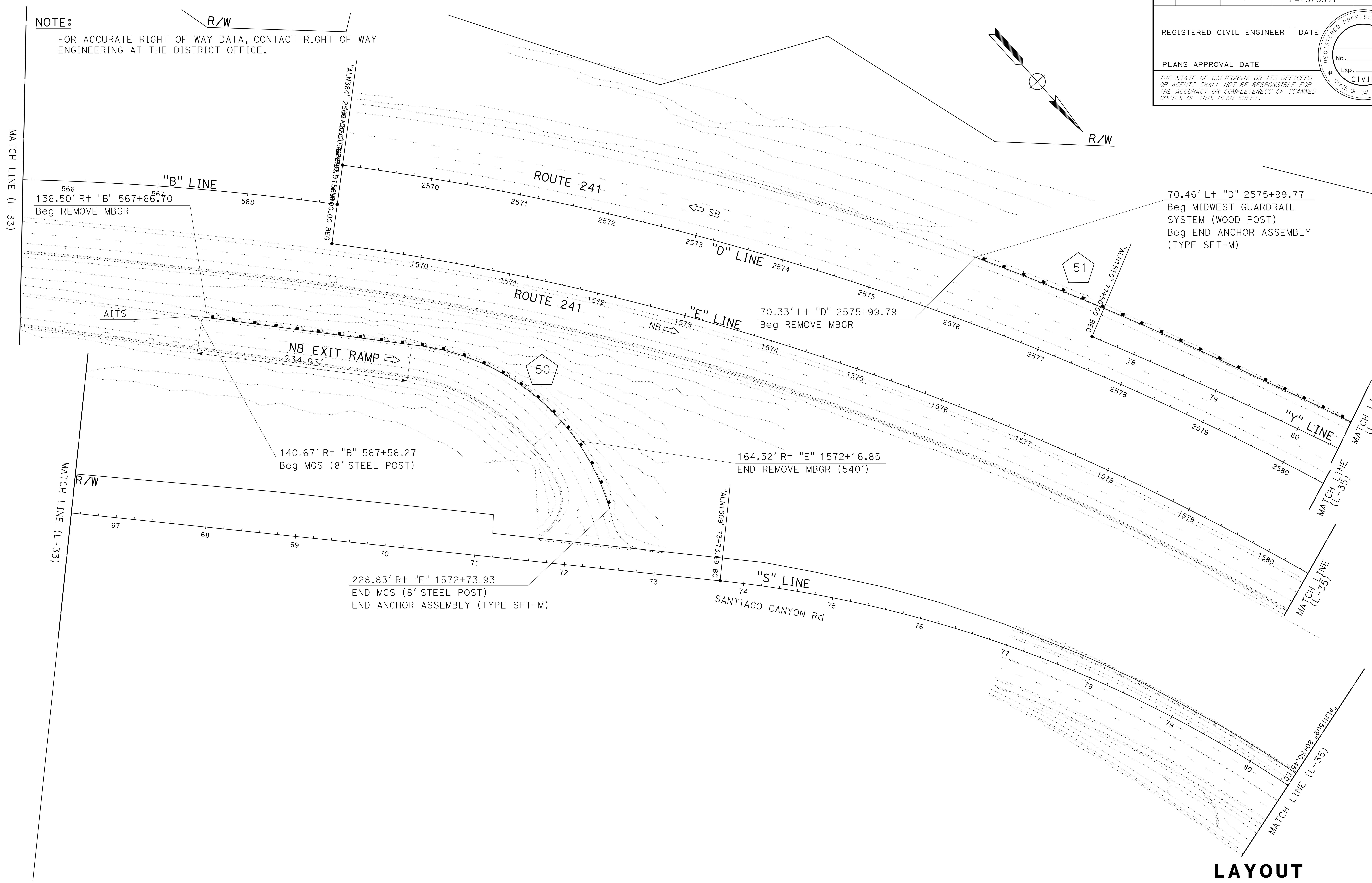

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
R/W
MATCH LINE (L-33)
"B" LINE
136.50' Rt "B" 567+66.70
Beg REMOVE MBGR
ROUTE 241
SB
"D" LINE
"E" LINE
NB
AITS
NB EXIT RAMP
234.93'
50
51
70.46' Lt "D" 2575+99.77
Beg MIDWEST GUARDRAIL SYSTEM (WOOD POST)
Beg END ANCHOR ASSEMBLY (TYPE SFT-M)
70.33' Lt "D" 2575+99.79
Beg REMOVE MBGR
140.67' Rt "B" 567+56.27
Beg MGS (8' STEEL POST)
164.32' Rt "E" 1572+16.85
END REMOVE MBGR (540')
228.83' Rt "E" 1572+73.93
END MGS (8' STEEL POST)
END ANCHOR ASSEMBLY (TYPE SFT-M)
"Y" LINE
"S" LINE
SANTIAGO CANYON Rd
MATCH LINE (L-35)

LAYOUT

SCALE: 1" = 50'

L-34

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DESIGN D

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

CALCULATED-DESIGNED BY: ENRIQUE BICHE

CHECKED BY: FARZANE SARPOOLAKI

REVISED BY / DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

R/W

R/W

85.00′ Lt "D" 2581+98.20
END REMOVE MBGR (612.5′)

100.00′ Lt "D" 2584+75.27
END MIDWEST GUARDRAIL SYSTEM (WOOD POST)
Beg MGS TRANSITION TO MBGR

100.90′ Lt "D" 2584+87.31
Beg REMOVE END ANCHOR ASSEMBLY

101.65′ Lt "D" 2584+99.47
END REMOVE END ANCHOR ASSEMBLY
END MGS TRANSITION TO MBGR (25′)
SEE RSP A77L4

MATCH LINE (L-34)

51

"ALN1510" 82+18.09 PCC

"Y" LINE

"D" LINE

"ALN1510" 88+07.56 ECC

SB ENTRANCE RAMP

SB

ROUTE 241

46.10′ Rt "E" 1584+54.33
END REMOVE MBGR (200)
END REMOVE AC DIKE

45.68′ Rt "E" 1584+65.73
END CONCRETE BARRIER (TYPE 60MS)

MATCH LINE (L-34)

TDIP

Exist MH

TDIP

"E" LINE

Exist MH

NB

ROUTE 241

SEVERE-DUTY CRASH CUSHION
TL-3

45.77′ Rt "E" 1582+10.35
Beg CONCRETE BARRIER (TYPE 60MS)

50.41′ Rt "E" 1582+54.33
Beg REMOVE MBGR
Beg REMOVE AC DIKE

52

Exist CCTV

Exist CABINET

Exist CABINET

REGRADE SLOPE

"ALN1509" 83+74.09 BC

R/W

MATCH LINE (L-34)

"S" LINE

SANTIAGO CANYON Rd

R/W

LAYOUT

SCALE: 1" = 50′

L-35

FUNCTIONAL SUPERVISOR	MONTASHEEMA AFROZE
CALCULATED-DESIGNED BY	ENRIQUE BICHE
CHECKED BY	FARZANE SARPOOLAKI
REVISED BY	
DATE REVISED	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION: DATE PLOTTED => 17-MAR-2025
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BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea035.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

R/W

120.49' Rt "A" 2819+02.95
Beg CONCRETE BARRIER (TYPE 60MS)

⇦ SB ROUTE 241

124.09' Rt "A" 2818+86.09
Beg REMOVE MBGR
Beg REMOVE AC DIKE

"A" LINE

2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827

SEVERE-DUTY CRASH CUSHION TL-3

NB ⇨ ROUTE 241

AITS

TDIP

TDIP

TDIP

Exist CABINET

Exist MH

TDIP

123.12' Rt "A" 2817+63.05
Beg MGS (8' STEEL POST)
Beg HMA DIKE (TYPE F)

120.45' Rt "A" 2817+81.72
Beg REMOVE MBGR
Beg REMOVE AC DIKE

69

70

Exist GATE

150.19' Rt "A" 2819+20.27
END MGS (8' STEEL POST)
END END ANCHOR ASSEMBLY (TYPE SFT-M)

144.12' Rt "A" 2818+93.16
END REMOVE MBGR (130')

120.56' Rt "A" 2818+27.35
END REMOVE AC DIKE
END HMA DIKE (TYPE F)

115.47' Rt "A" 2825+31.60
END CONCRETE BARRIER (TYPE 60MS)

113.24' Rt "A" 535+38.12
END REMOVE MBGR (775')
END REMOVE AC DIKE

Exist GATE

R/W

R/W

MATCH LINE (L-42)

LAYOUT

SCALE: 1" = 50'

L-41

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
ENRIQUE BICHE	FARZANE SARPOOLAKI		

FUNCTIONAL SUPERVISOR: MONTASHEEMA AFROZE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea041.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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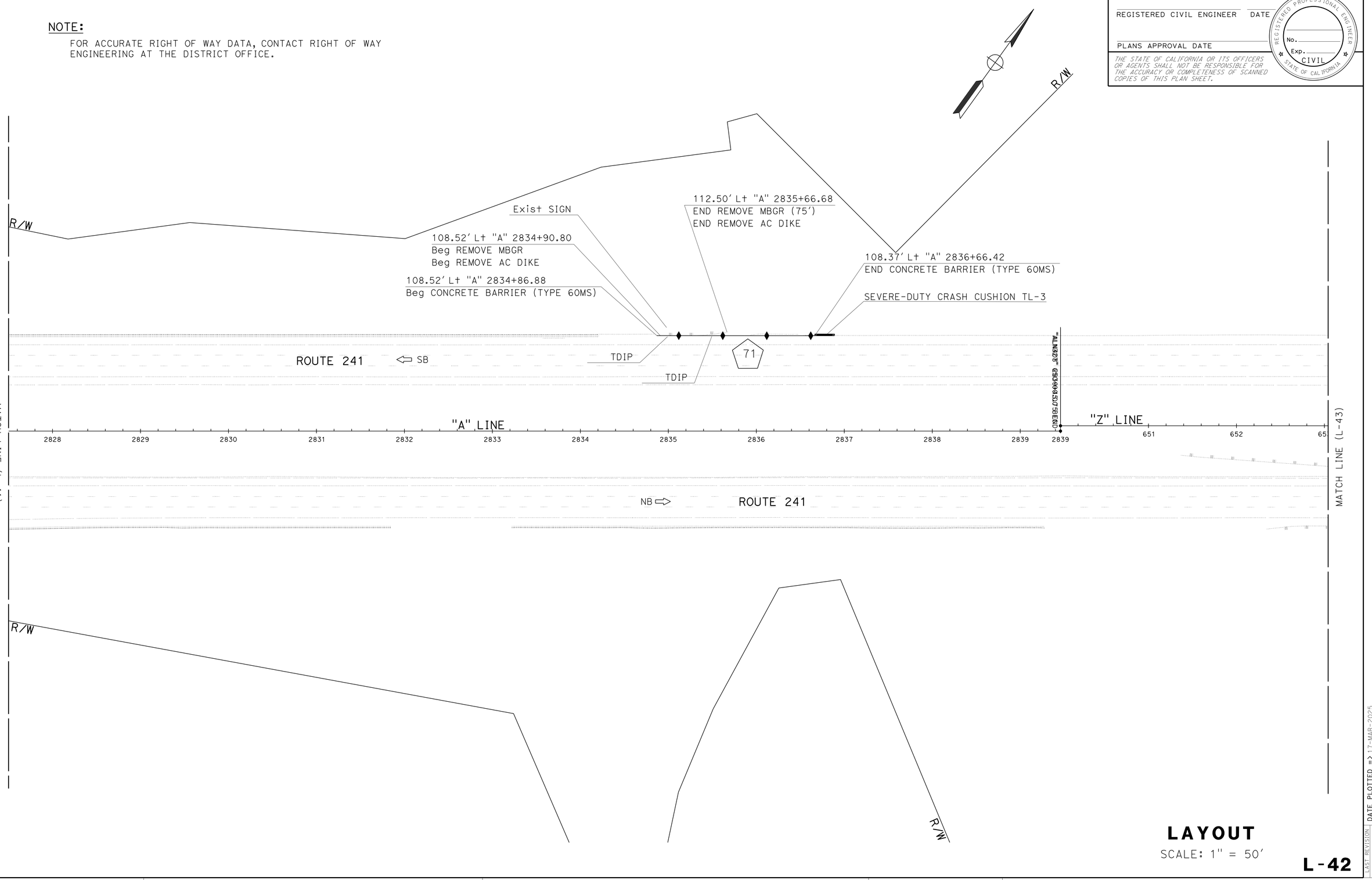

LAYOUT

SCALE: 1" = 50'

L-42

CALCULATED-DESIGNED BY	ENRIQUE BICHE
CHECKED BY	FARZANE SARPOOLAKI
FUNCTIONAL SUPERVISOR	MONTASHEEMA AFROZE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN D
REVISED BY	
DATE REVISED	

LAST REVISION DATE PLOTTED => 17-MAR-2025
00-00-00 TIME PLOTTED => 14:21

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea042.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133, 241	11.4/13.6, 24.5/35.7	XX	XXX

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

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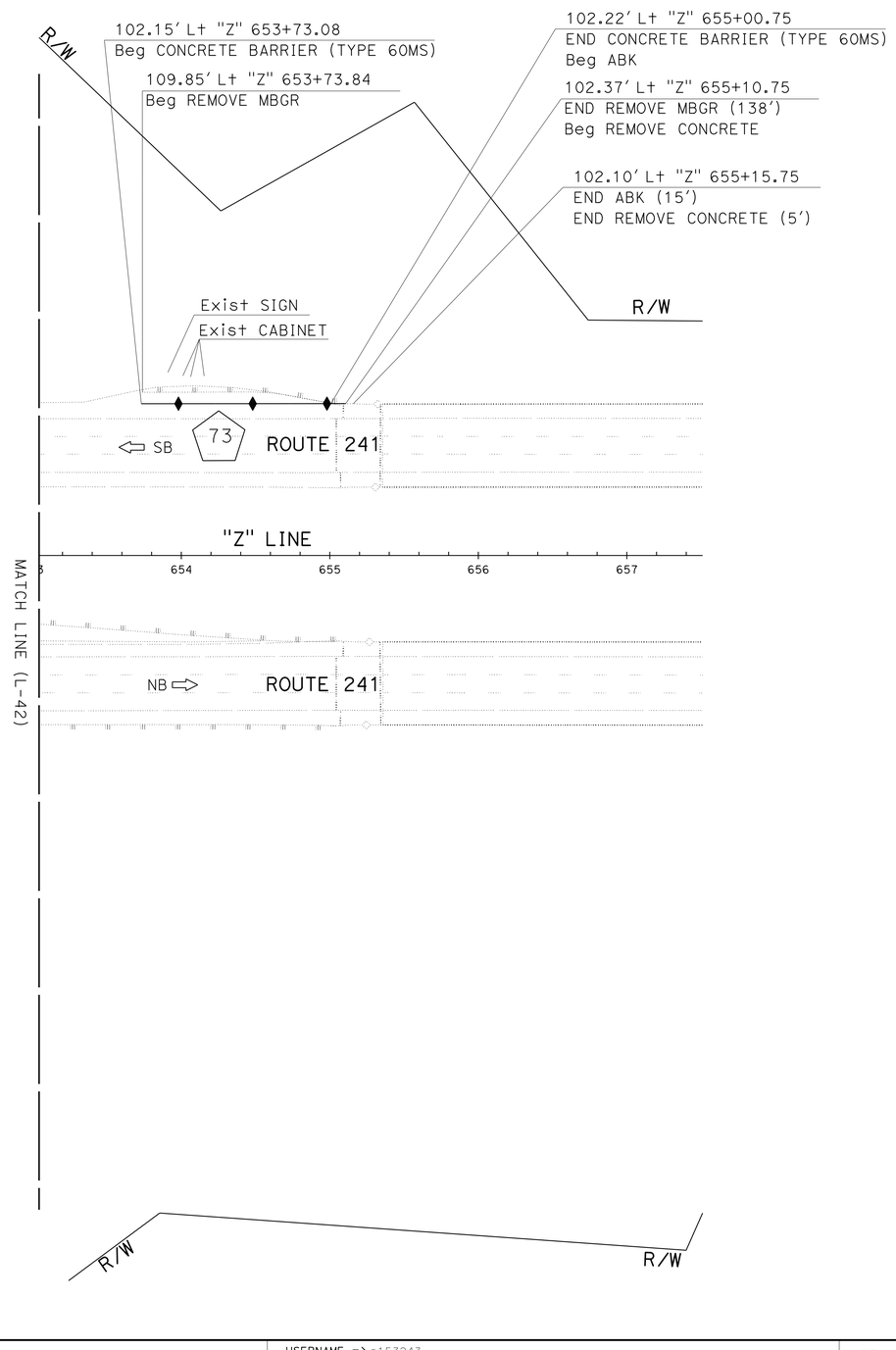

LAYOUT

SCALE: 1" = 50'

L-43

ENRIQUE BICHE
FARZANE SARPOOLAKI
MONTASHEEMA AFROZE
DESIGN D

REVISED BY
DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 00-00-00
DATE PLOTTED => 17-MAR-2025
TIME PLOTTED => 15:24

BORDER LAST REVISED 7/2/2010

USERNAME => s153243
DGN FILE => 1222000083ea043.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2995

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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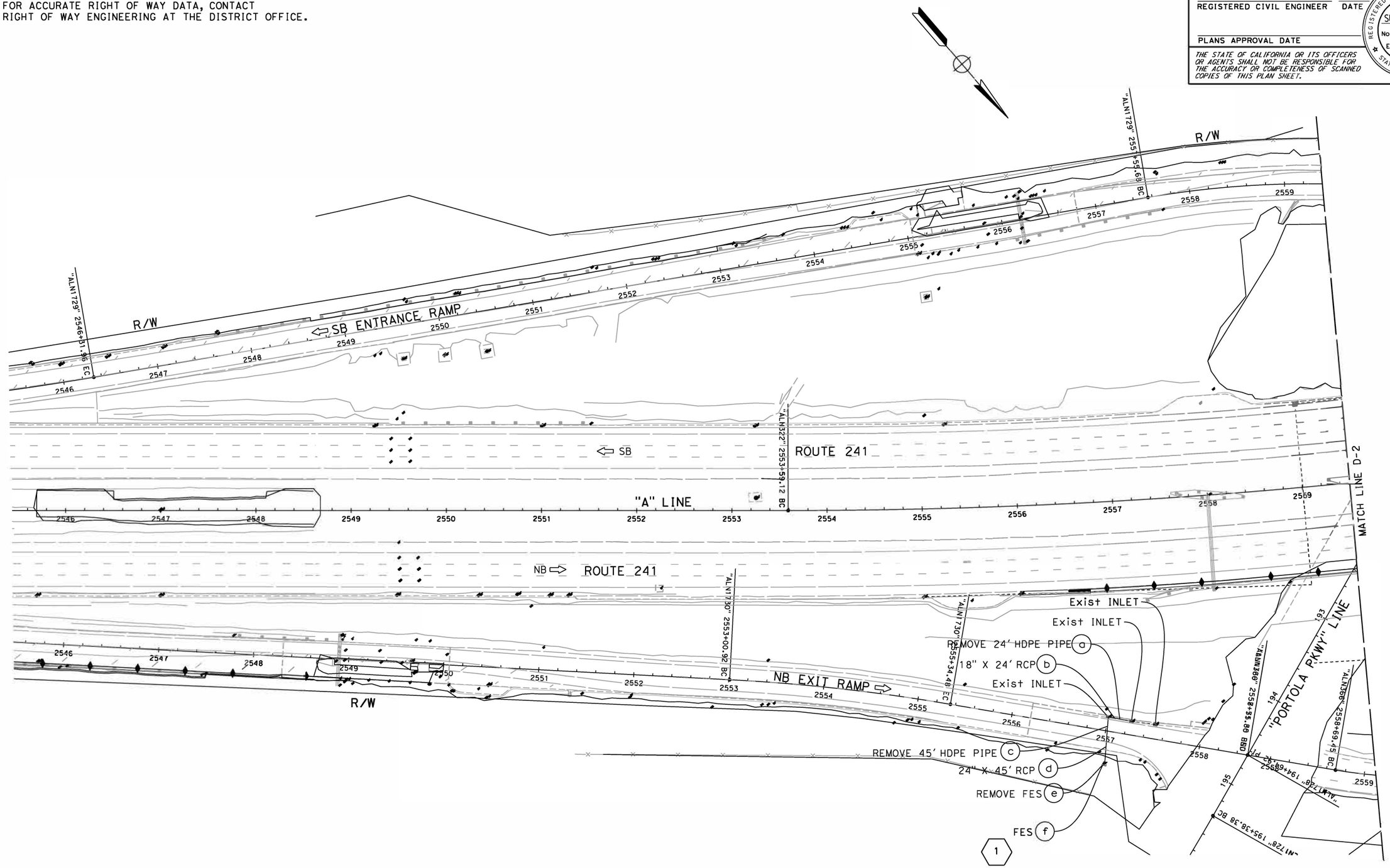

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-1

CALCULATED-DESIGNED BY	SUNIL GUPTA	REVISED BY	
CHECKED BY	PHUONG NGUYEN	DATE REVISED	
FUNCTIONAL SUPERVISOR	PHI DINH		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 2:47:24 PM

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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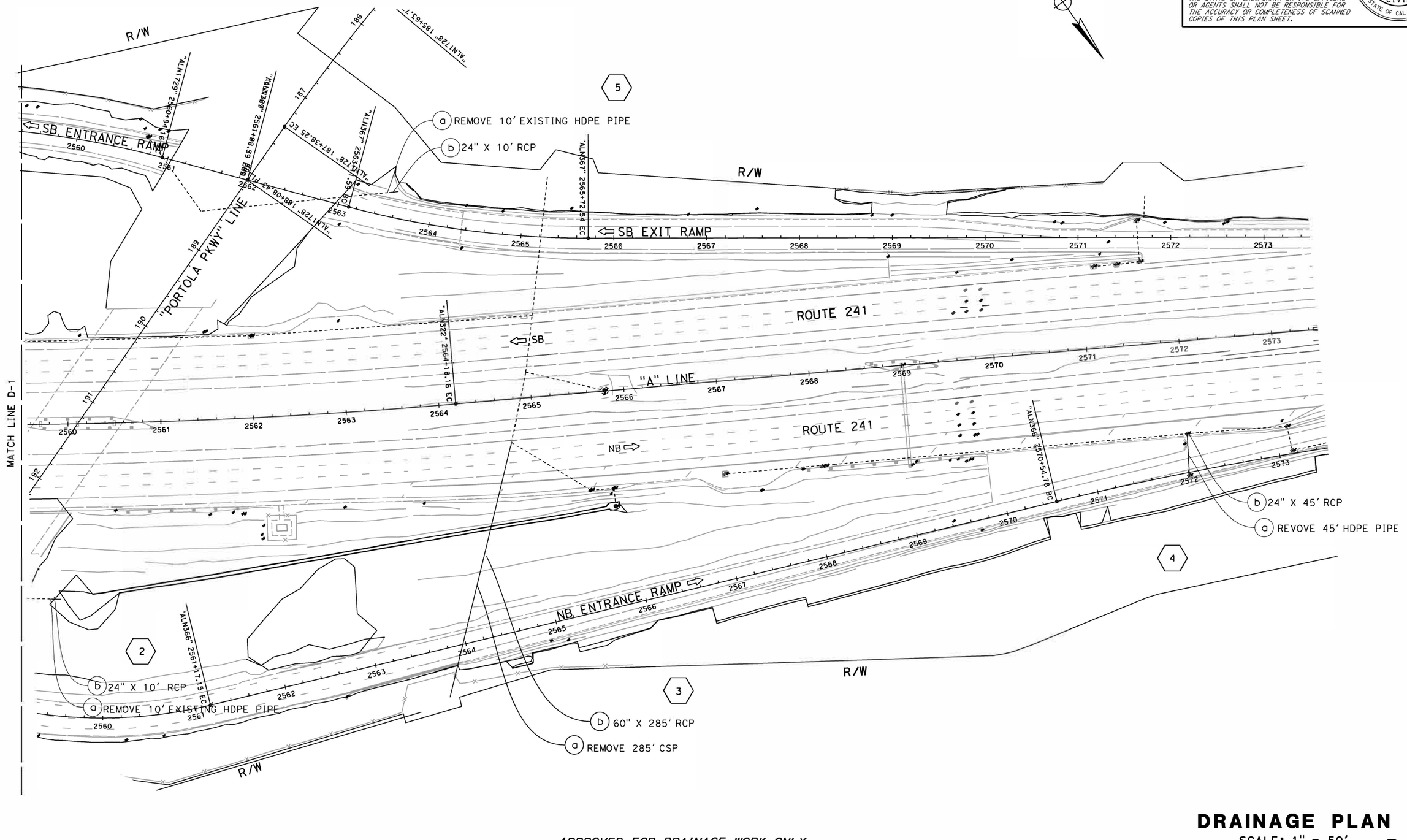

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	HYDRAULICS	Caltrans
FUNCTIONAL SUPERVISOR	PHI DINH	
CALCULATED-DESIGNED BY	PHUONG NGUYEN	
CHECKED BY	SUNIL GUPTA	
REVISED BY		
DATE REVISED		

LAST REVISION DATE PLOTTED => 3/13/2025
TIME PLOTTED => 8:43:11 AM
06-12-23

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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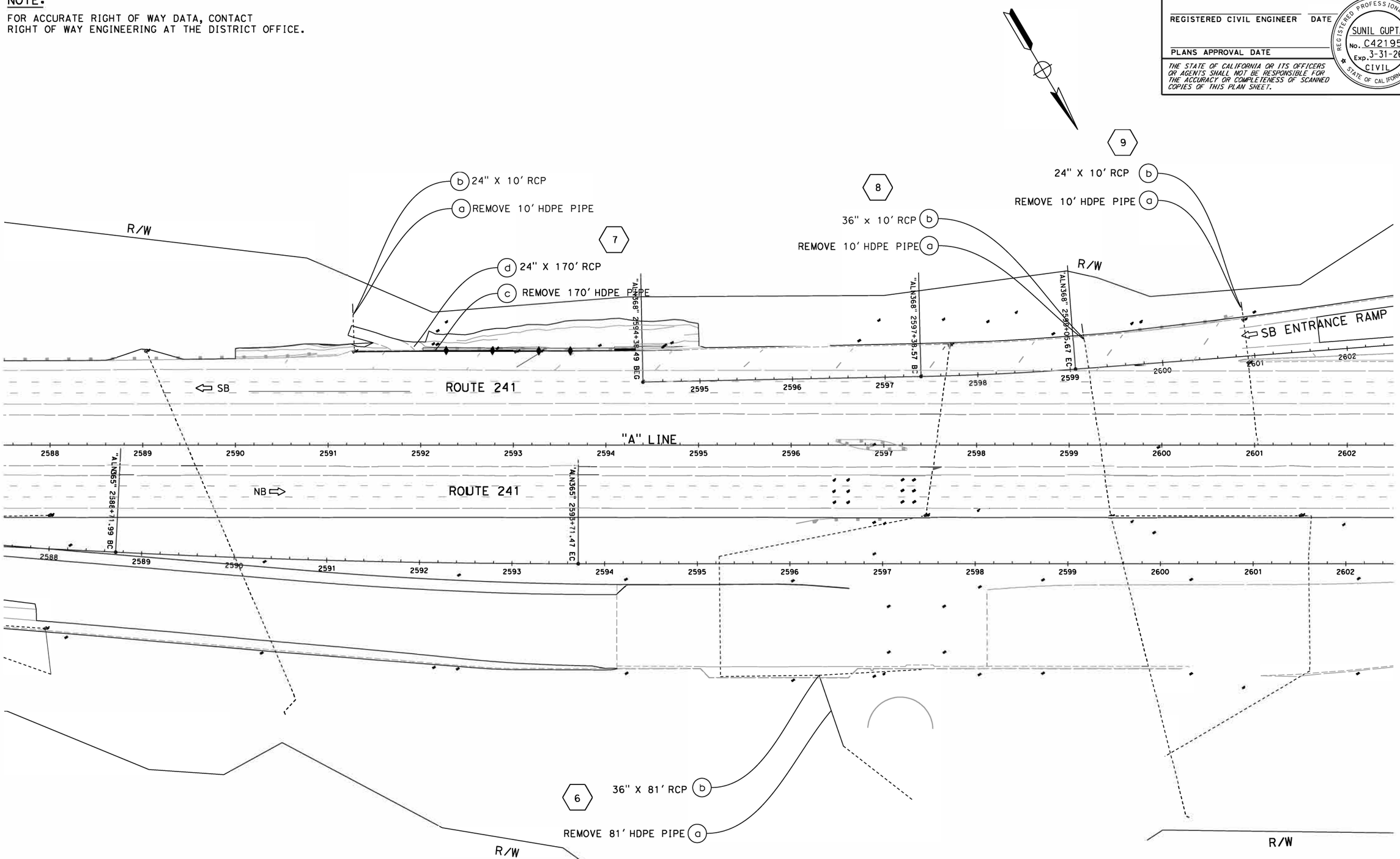

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D- 3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA

CHECKED BY: PHUONG NGUYEN

REVISED BY	DATE REVISED

LAST REVISION
DATE PLOTTED => 3/13/2025
TIME PLOTTED => 8:55:44 AM
06-12-23

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\12220000830a003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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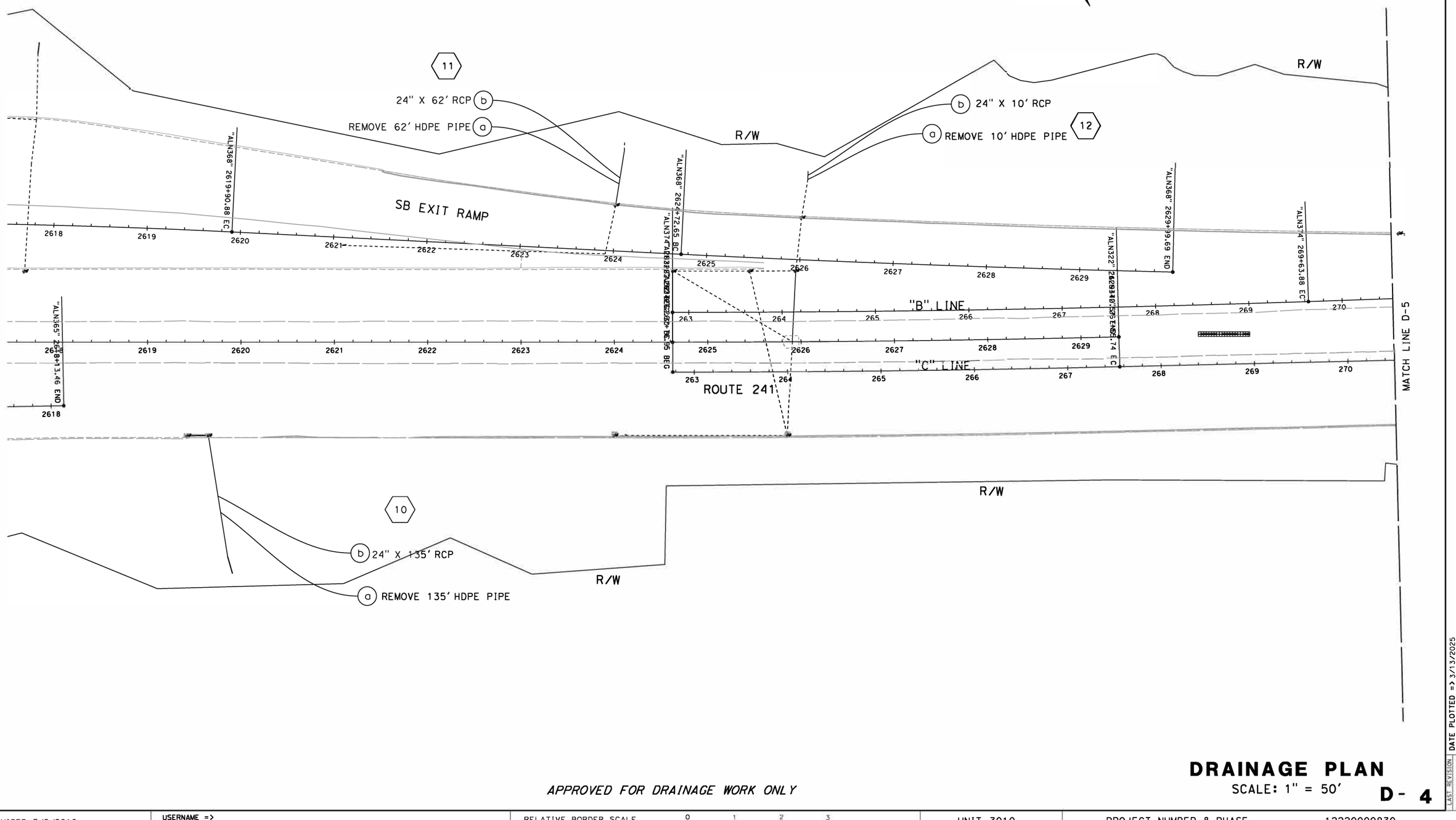

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D- 4

CALCULATED-DESIGNED BY	SUNIL GUPTA
CHECKED BY	PHUONG NGUYEN
FUNCTIONAL SUPERVISOR	PHI DINH
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	HYDRAULICS
Caltrans	
REVISED BY	
DATE REVISED	

LAST REVISION
DATE PLOTTED => 3/13/2025
TIME PLOTTED => 11:31:13 AM
06-12-23

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\12220000830a004.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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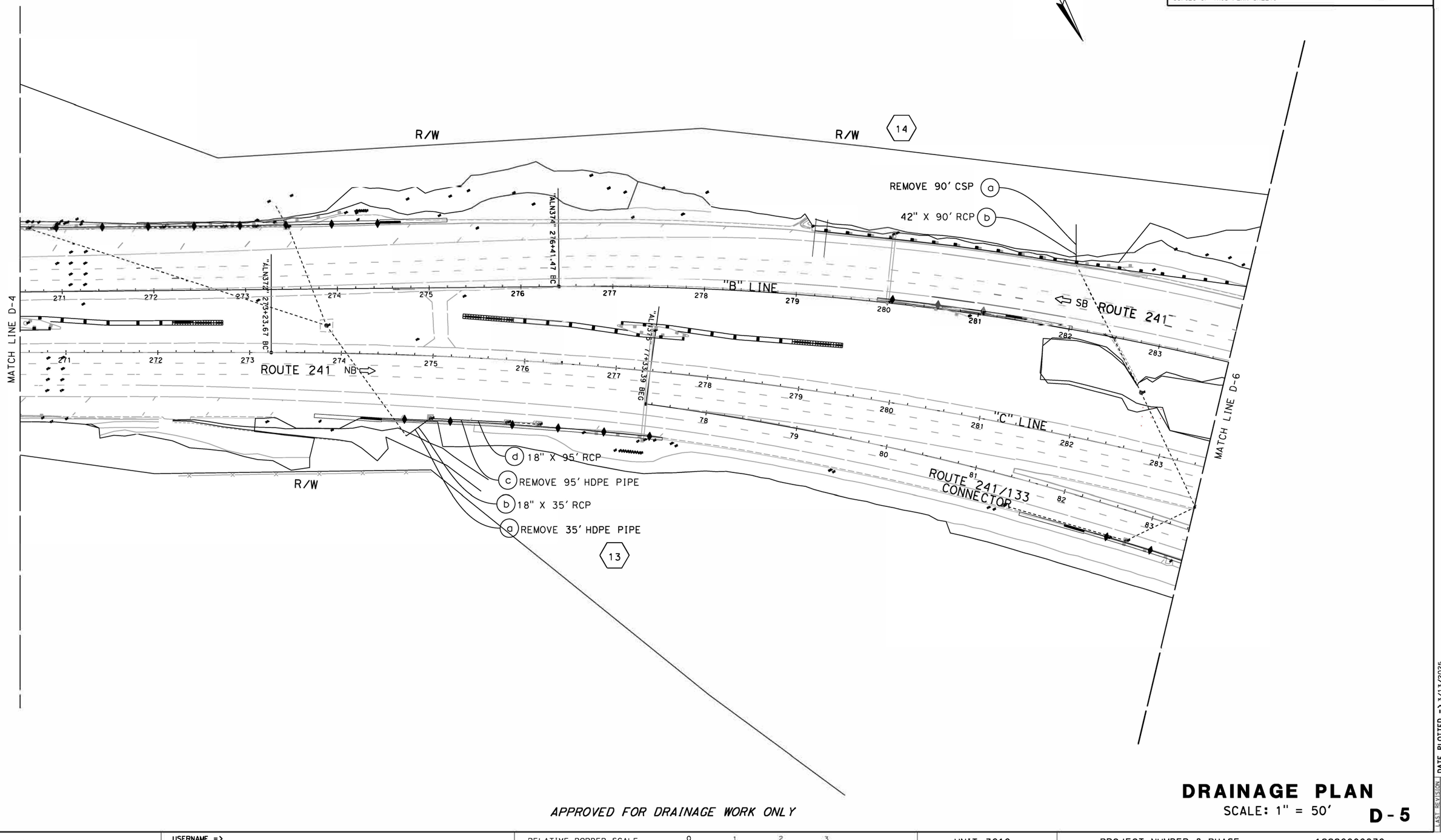

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-5

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
SUNIL GUPTA	PHUONG NGUYEN		

FUNCTIONAL SUPERVISOR: PHI DINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

LAST REVISION: DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 11:40:21 AM

BORDER LAST REVISED 7/2/2010

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
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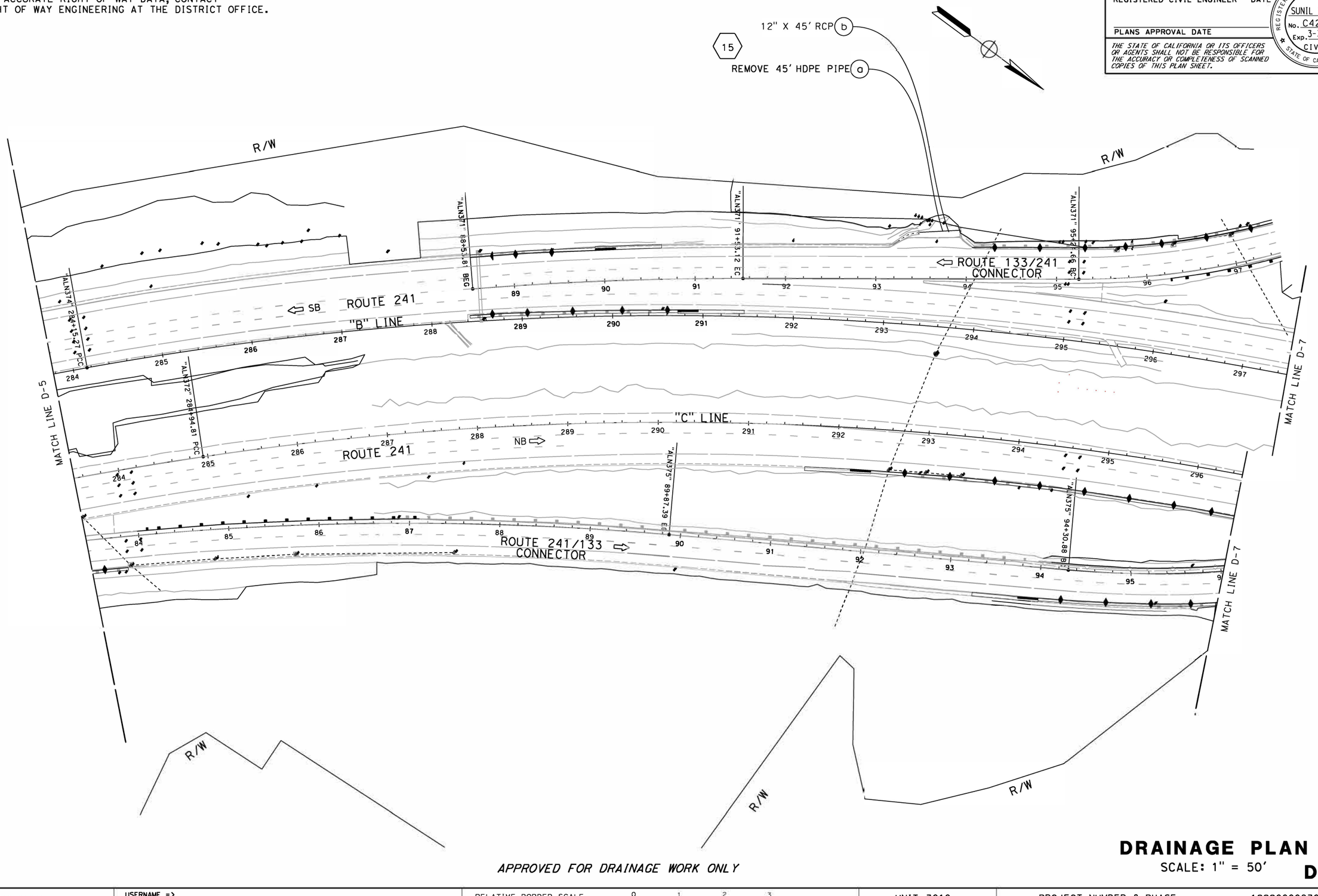

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DRAINAGE PLAN

SCALE: 1" = 50'

D - 6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 11:45:13 AM

BORDER LAST REVISED 7/2/2010

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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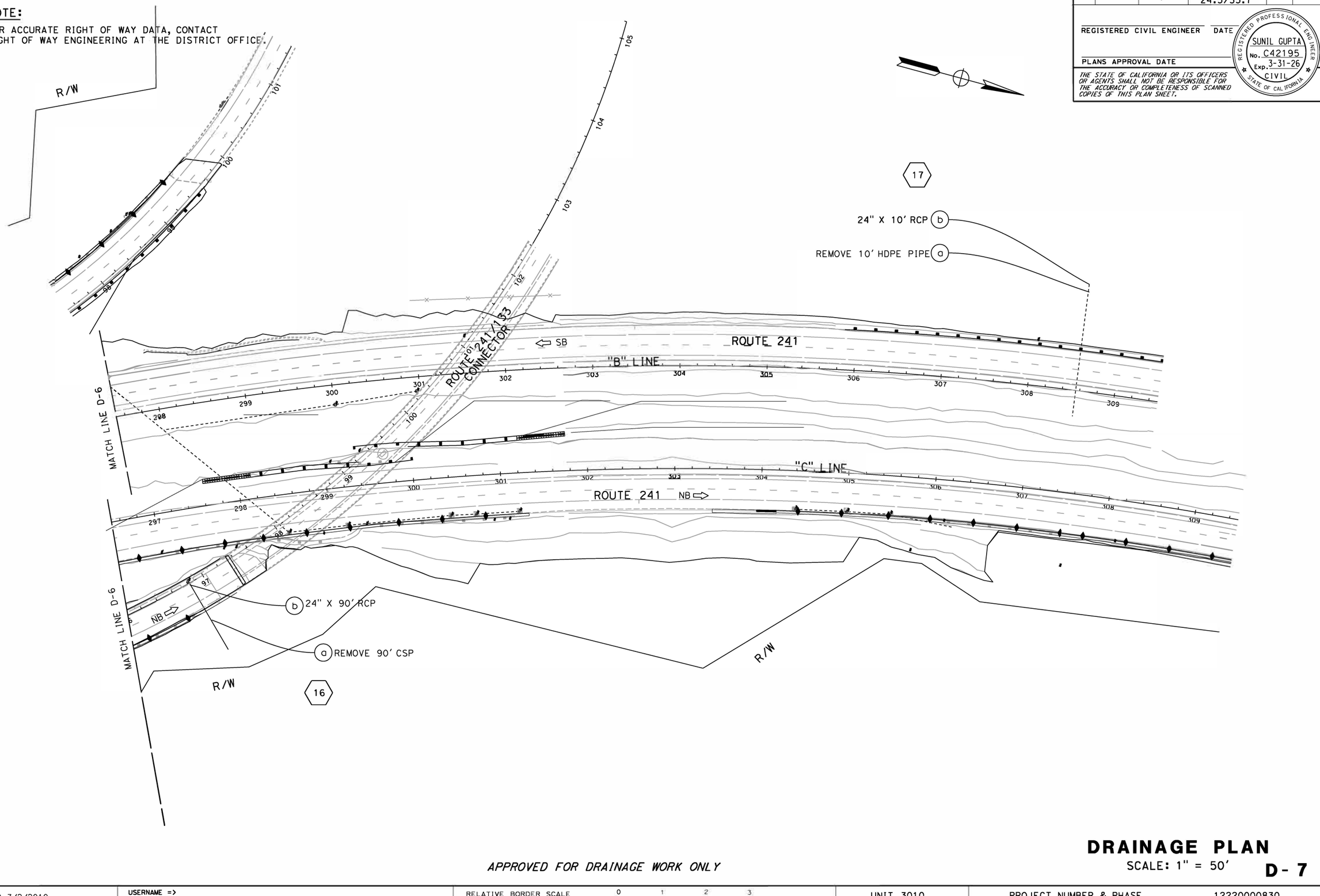

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DRAINAGE PLAN

SCALE: 1" = 50'

D-7

LAST REVISION: DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 11:53:53 AM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN

REVISED BY | DATE REVISED

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\1222000083ia007.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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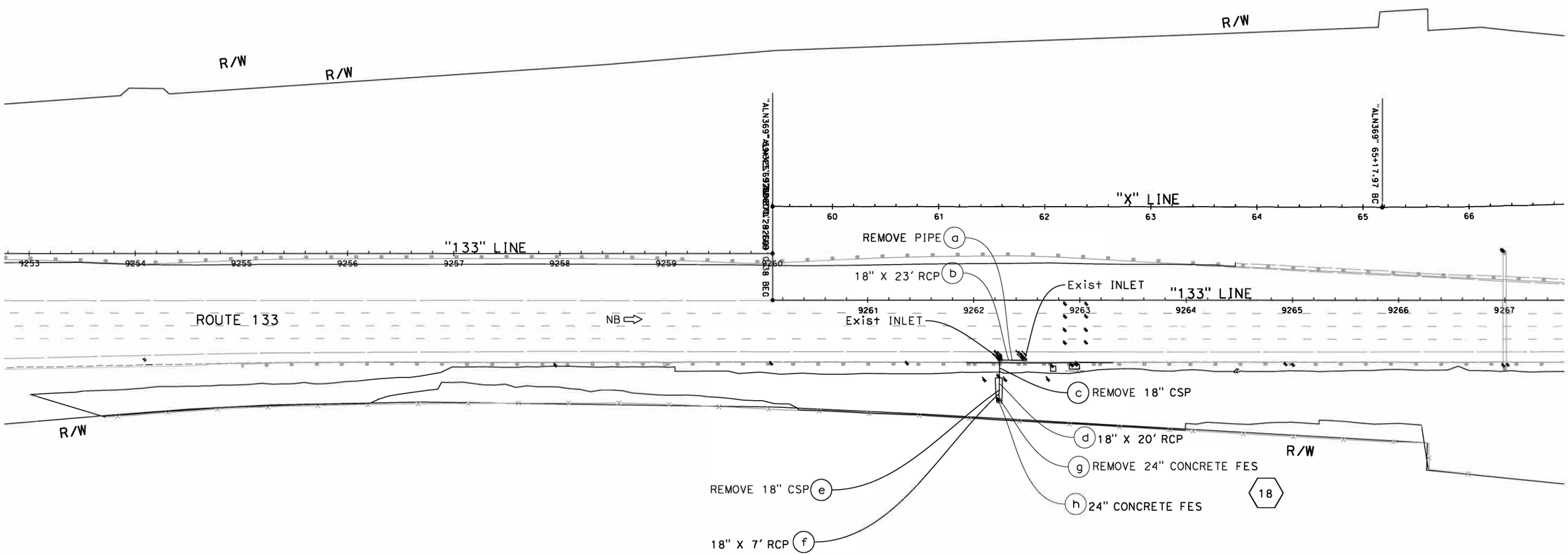

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DRAINAGE PLAN

SCALE: 1" = 50'

D - 8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN

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LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 1:05:37 PM

BORDER LAST REVISED 7/2/2010

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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SUNIL GUPTA
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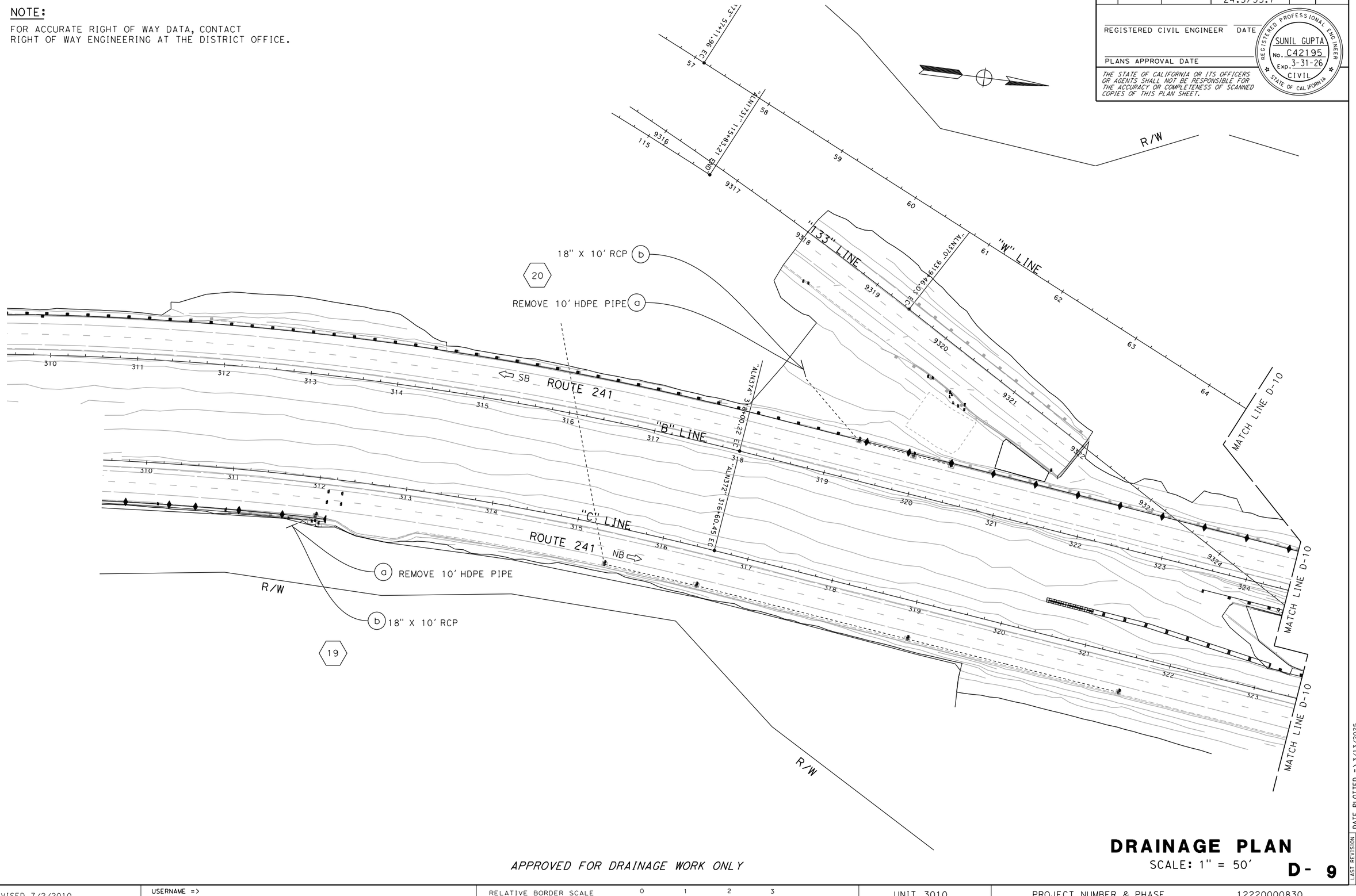

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DRAINAGE PLAN

SCALE: 1" = 50'

D- 9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA

CHECKED BY: PHUONG NGUYEN

REVISED BY	DATE REVISED

LAST REVISION
DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 3:17:26 PM

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\12220000083ia009.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
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STATE OF CALIFORNIA

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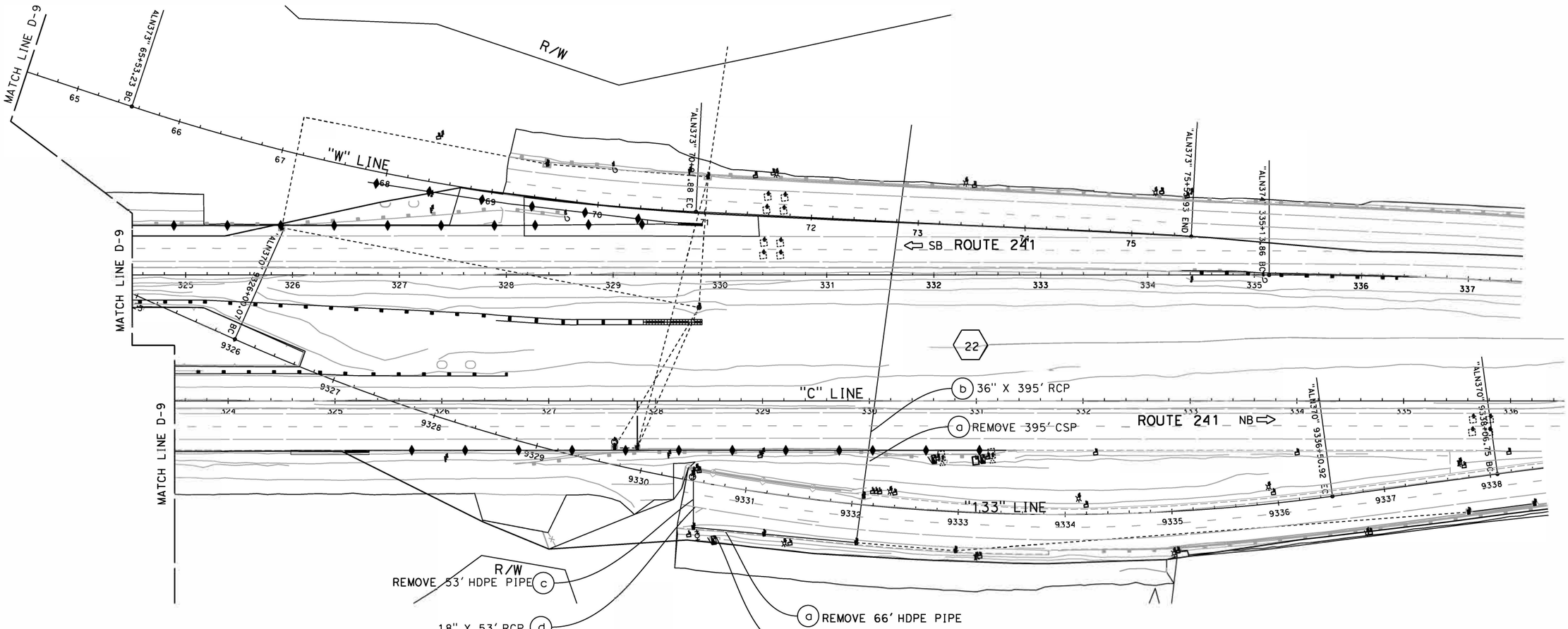

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DRAINAGE PLAN

SCALE: 1" = 50'

D-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN

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LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 1:21:32 PM

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\12220000083ia010.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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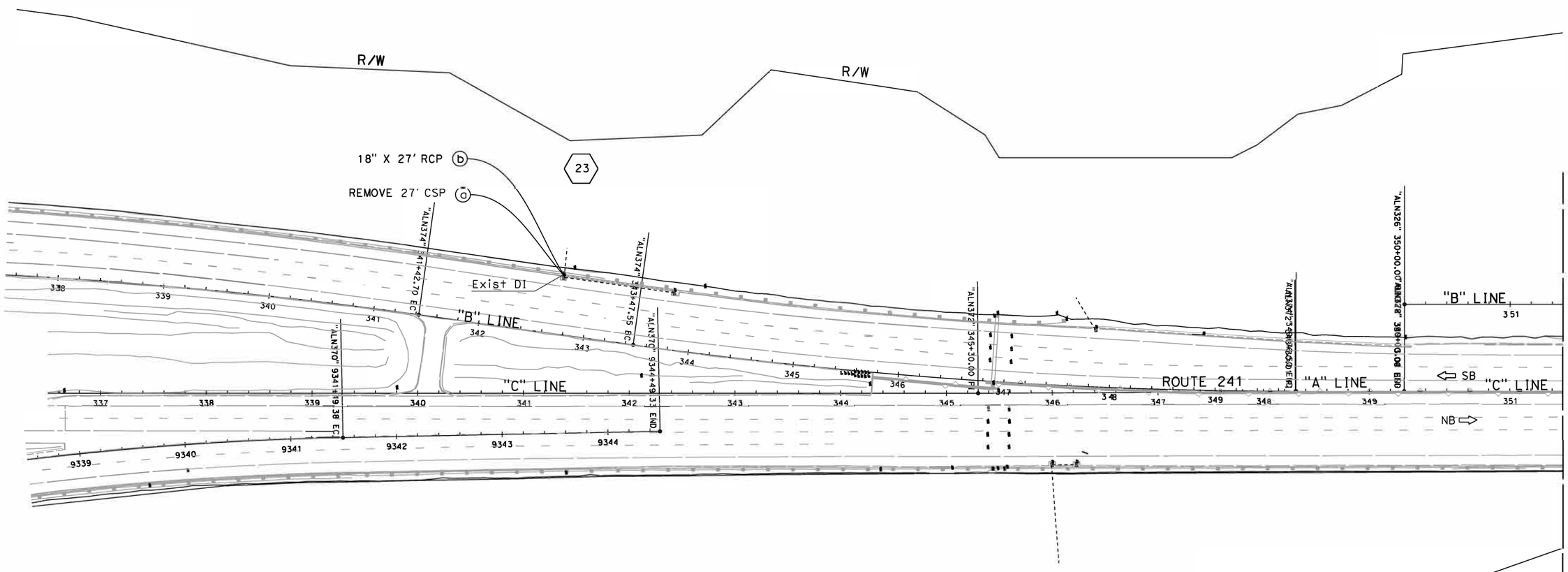

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DRAINAGE PLAN

SCALE: 1" = 50'

D - 11

CALCULATED-DESIGNED BY	SUNIL GUPTA
CHECKED BY	PHUONG NGUYEN
FUNCTIONAL SUPERVISOR	PHI DINH
REVISED BY	
DATE REVISED	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 1:27:07 PM

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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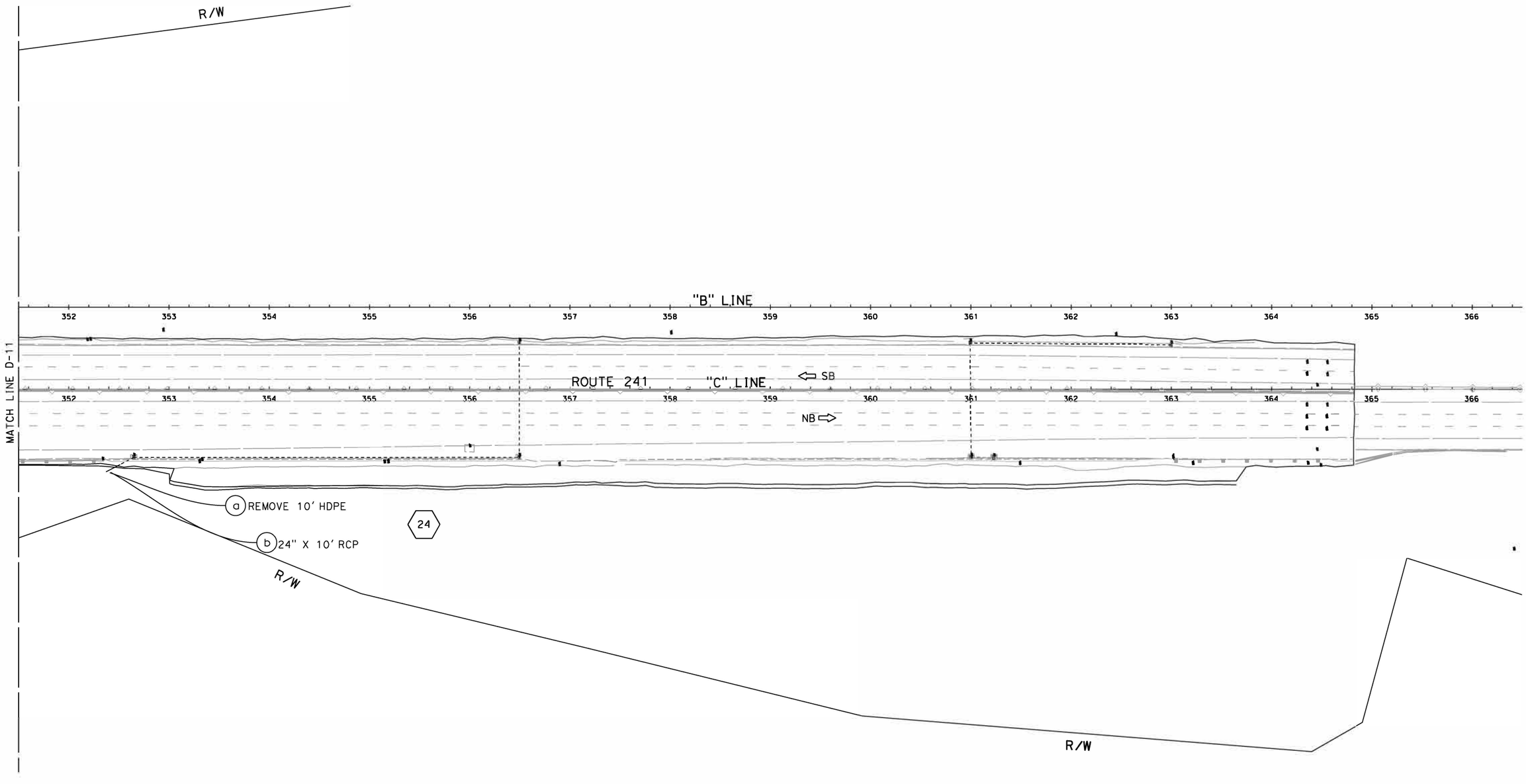

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-12

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: SUNIL GUPTA | CHECKED BY: PHUONG NGUYEN

FUNCTIONAL SUPERVISOR: PHI DINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

LAST REVISION | DATE PLOTTED => 3/13/2025 | TIME PLOTTED => 11:34:56 PM | 06-12-23

BORDER LAST REVISED 7/2/2010 | USERNAME => | DGN FILE => ...\Hydraulics\1222000083ia012.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 3010 | PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
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STATE OF CALIFORNIA

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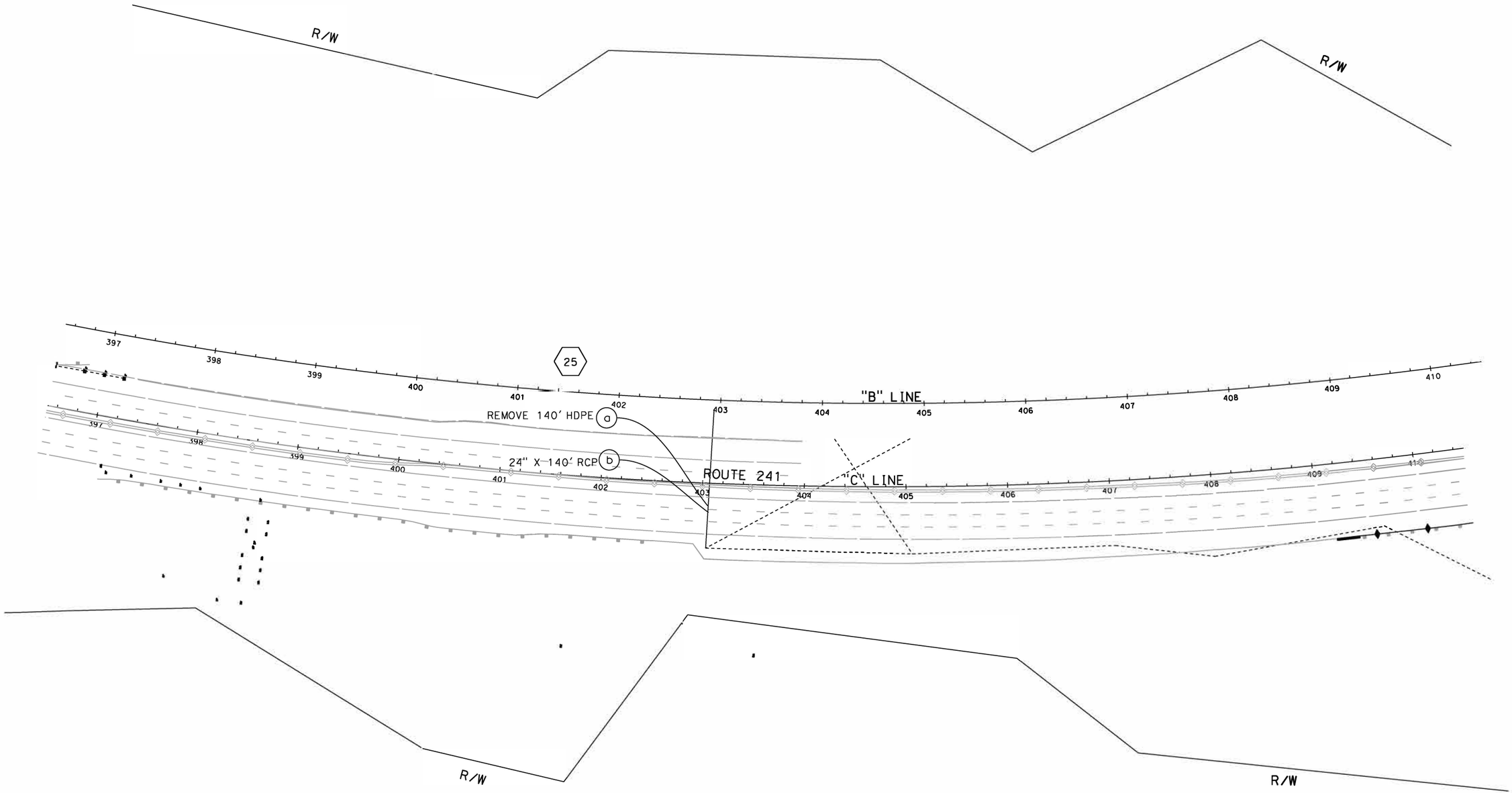

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

SUNIL GUPTA | PHUONG NGUYEN

CALCULATED-DESIGNED BY | CHECKED BY

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 1:40:46 PM

BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\1222000083ia013.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

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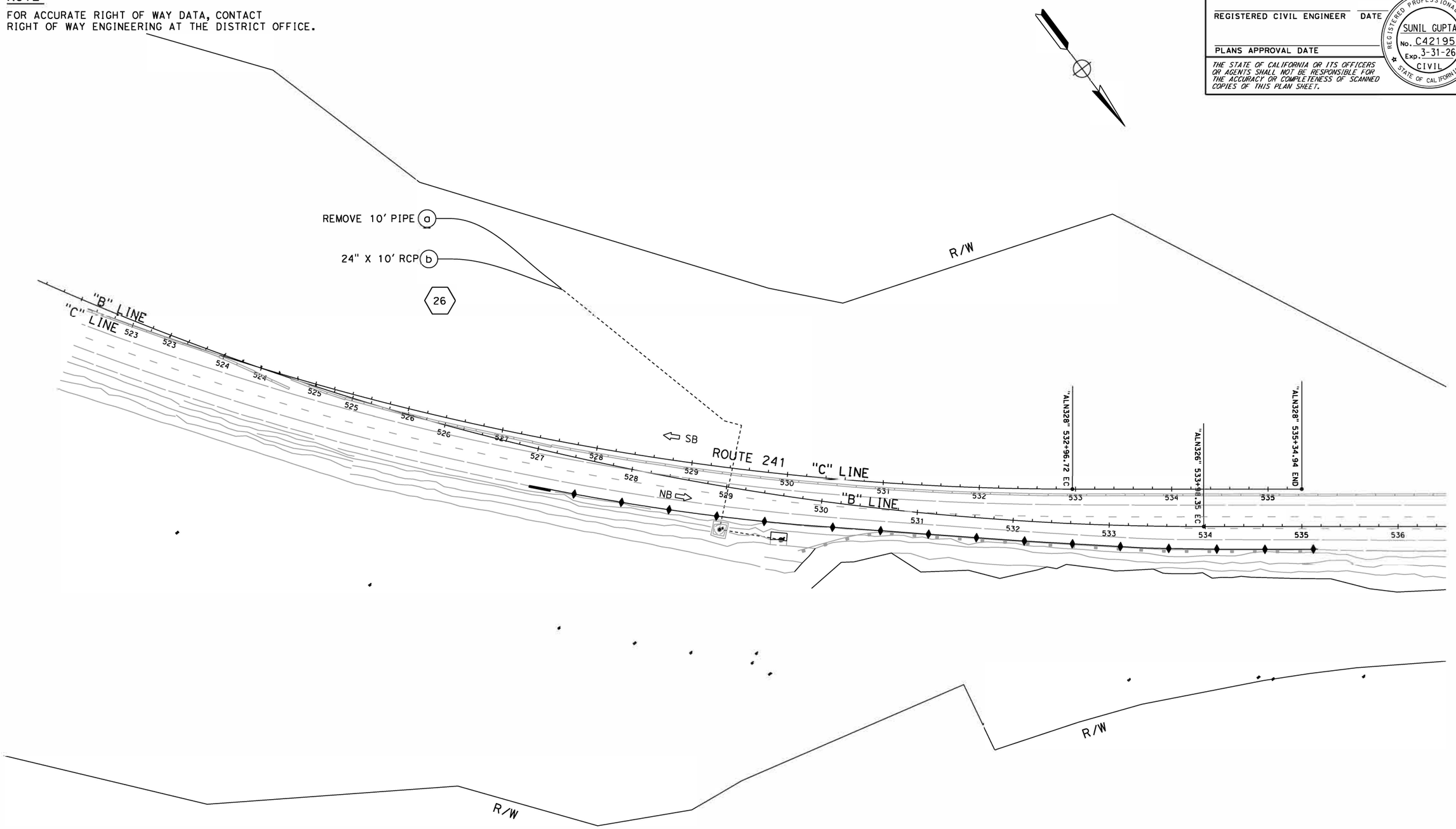

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-14

CALCULATED-DESIGNED BY	CHECKED BY	FUNCTIONAL SUPERVISOR	REVISED BY	DATE REVISED
SUNIL GUPTA	PHUONG NGUYEN	PHI DINH		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION: DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 1:46:42 PM

BORDER LAST REVISED 7/2/2010 | USERNAME => | DGN FILE => ...\Hydraulics\1222000083ia014.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 3010 | PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA

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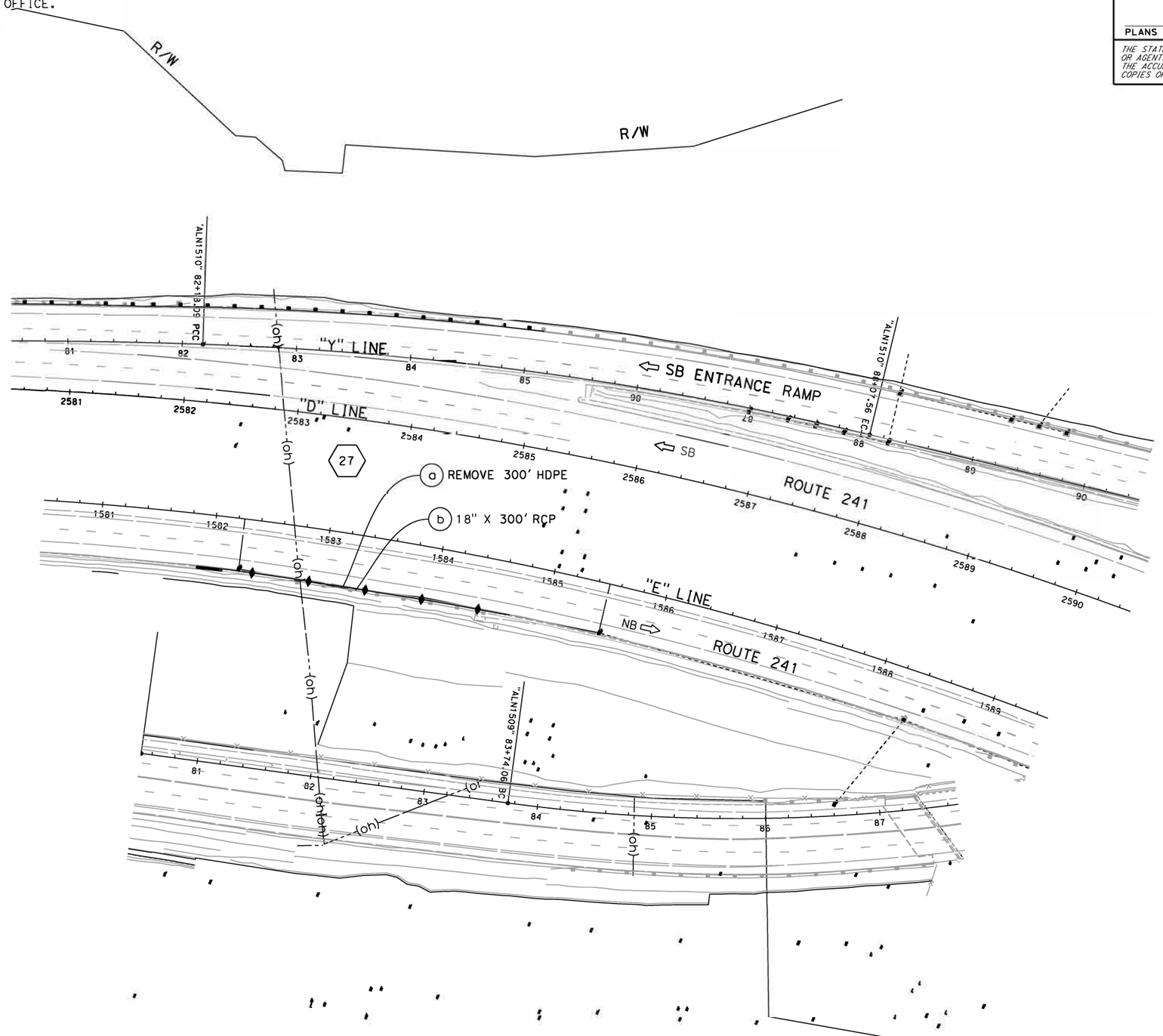

APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-15

LAST REVISION 06-12-23 DATE PLOTTED => 3/13/2025 TIME PLOTTED => 1:53:46 PM

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN
FUNCTIONAL SUPERVISOR: PHI DINH

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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USERNAME =>
DGN FILE => ...\Hydraulics\12220000830a015.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

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NOTE:

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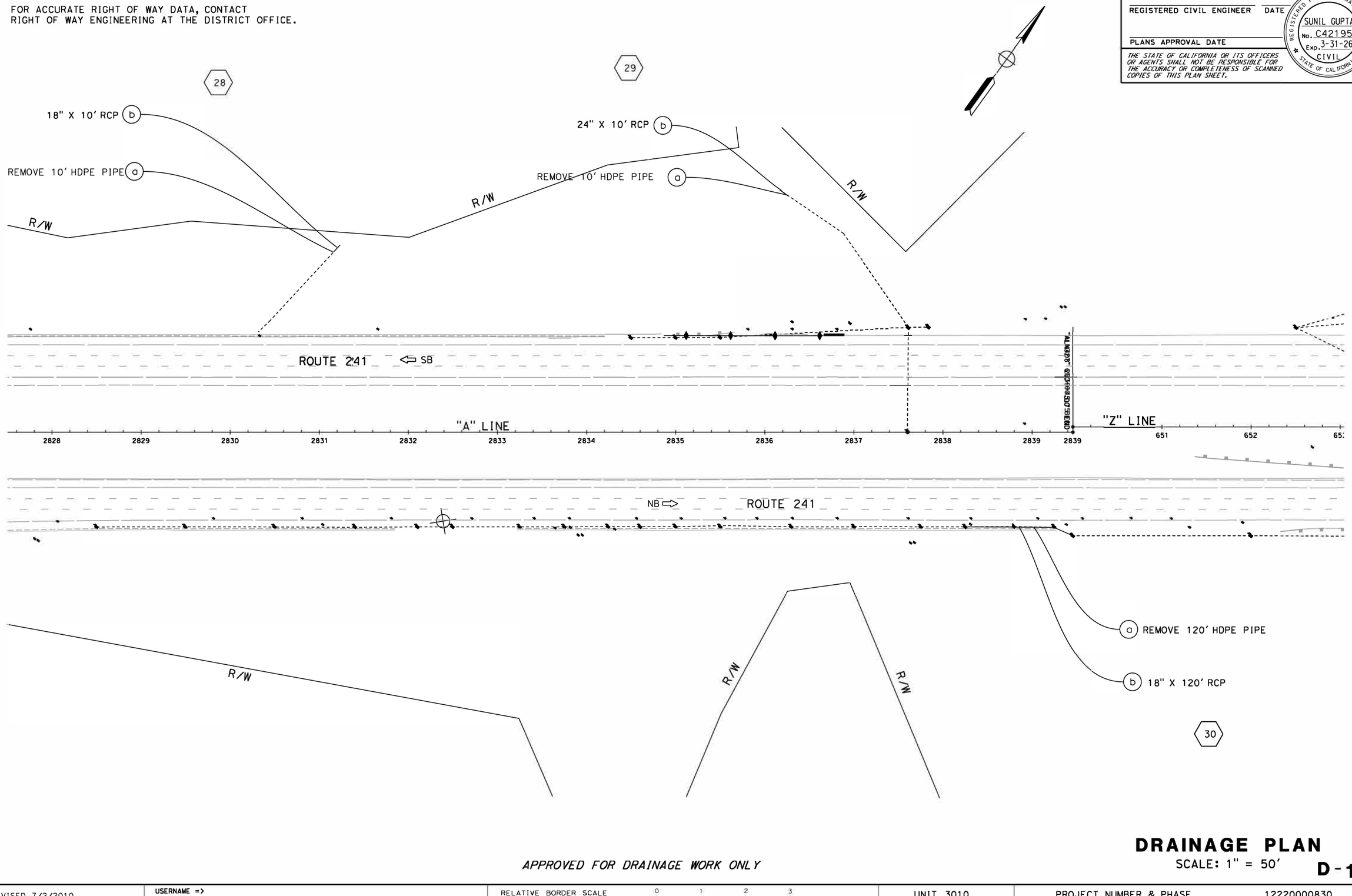
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



APPROVED FOR DRAINAGE WORK ONLY

DRAINAGE PLAN

SCALE: 1" = 50'

D-16

REVISED BY	
DATE REVISED	
SUNIL GUPTA	CALCULATED-DESIGNED BY
PHUONG NGUYEN	CHECKED BY
PHI DINH	FUNCTIONAL SUPERVISOR

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HYDRAULICS

LAST REVISION 06-12-23
DATE PLOTTED => 3/13/2025
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BORDER LAST REVISED 7/2/2010

USERNAME =>
DGN FILE => ...\Hydraulics\1222000083ia016.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	18" EINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES	STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	EA	EA	CY	CY	FT	FT					
1	a	24											REMOVE PIPE	232′ R+ 2557+09 "A" LINE	D-1	1	a
	b		24										18" RCP	232′ R+ 2557+09 TO 225′ R+ 2556+84 "A" LINE			b
	c	45											REMOVE PIPE	225′ R+ 2556+84 "A" LINE			c
	d			45									24" RCP	225′ R+ 2556+84 TO 273′ R+ 2556+78 "A" LINE			d
	e						1						REMOVE FES	273′ R+ 2556+78 "A" LINE			e
	f							1					FES	273′ R+ 2556+78 "A" LINE			f
2	a	10											REMOVE PIPE	188′ R+ 2559+83 "A" LINE	D-2	2	a
	b			10									24" RCP	188′ R+ 2559+83 to 178′ R+ 2559+83 "A" LINE			b
3	a	285											REMOVE PIPE	314′ R+ 2563+87 "A" LINE	D-2	3	a
	b					285							60" RCP	314′ R+ 2563+87 to 46′ R+ 2564+75 "A" LINE			b
4	a	45											REMOVE PIPE	144′ R+ 2571+98 "A" LINE	D-2	4	a
	b			45									24" RCP	144′ R+ 2571+98 to 145′ R+ 2572+00 "A" LINE			b
5	a	10											REMOVE PIPE	233′ R+ 2563+64 "A" LINE	D-2	5	a
	b			10									24" RCP	233′ R+ 2563+64 to 235′ R+ 2563+74 "A" LINE			b
6	a	81											REMOVE PIPE	248′ R+ 2596+30 "A" LINE	D-3	6	a
	b				81								36" RCP	248′ R+ 2596+30 to 324′ R+ 2596+56 "A" LINE			b
7	a	10											REMOVE PIPE	110′ L+ 2591+28 "A" LINE	D-3	7	a
	b			10									24" RCP	100′ L+ 2591+28 to 110′ L+ 2591+28 "A" LINE			b
	c	170											REMOVE PIPE	102′ L+ 2593+00 "A" LINE			c
	d			170									24" RCP	100′ L+ 2591+00 to 102′ L+ 2593+00 "A" LINE			d
8	a	10											REMOVE PIPE	130′ L+ 2599+13 "A" LINE	D-3	8	a
	b				10								36" RCP	130′ L+ 2599+13 to 120′ L+ 2599+15 "A" LINE			b
9	a	10											REMOVE PIPE	152′ L+ 2600+85 "A" LINE	D-3	9	a
	b			10									24" RCP	152′ L+ 2600+85 to 145′ L+ 2600+87"A" LINE			b
SUBTOTAL*																	

(*) FOR THE GRAND TOTAL, REFER TO DQ-5

DRAINAGE QUANTITIES
DQ-1

CALCULATED-DESIGNED BY: SUNIL GUPTA
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FUNCTIONAL SUPERVISOR: PHI DINH
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DATE REVISED

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HYDRAULICS

LAST REVISION 06-12-23
DATE PLOTTED => 3/13/2025
TIME PLOTTED => 2:04:25 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	42" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES	STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	LF	LF	EA	EA	CY	CY	FT	FT					
10	a	135													REMOVE PIPE	100' Rt 2619+65 "A" LINE	D-4	10	a
	b				135										24" RCP	100' Rt 2619+65 to 230' 2619+85 "A" LINE			b
11	a	62													REMOVE PIPE	146' Lt 2624+03 "A" LINE	D-4		a
	b				62										24" RCP	146' Lt 2624+03 to 214' Lt 2624+10 "A" LINE		11	b
12	a	10													REMOVE PIPE	173' Lt 2626+08 "A" LINE	D-4	12	a
	b				10										24" RCP	173' Lt 2626+08 to 183' 2626+09 "A" LINE			b
13	a	35													REMOVE PIPE	88' Rt 274+74 "C" LINE	D-4	13	a
	b			35											18" RCP	88' Rt 274+74 to 65' Rt 275+00 "C" LINE			b
	c	95													REMOVE PIPE	65' Rt 275+00 "C" LINE			a
	d			95											18" RCP	65' Rt 275+00 to 67' Rt 275+96 "C" LINE			a
14	a	90													REMOVE PIPE	113' Lt 281+88 "B" LINE	D-4	14	a
	b						90								42" RCP	113' Lt 281+88 to 70' Lt 281+95 "B" LINE			b
15	a	45													REMOVE PIPE	106' Lt 293+65 "B" LINE	D-5	15	a
	b		45												12" RCP	106' Lt 293+65 to 105' Lt 294+10 "B" LINE			b
16	a	90													REMOVE PIPE	82' Rt 297+25 "C" LINE		16	a
	b				90										24" RCP	82' Rt 297+25 to 126' Rt 297+43 "C" LINE			b
17	a	10													REMOVE PIPE	122' Lt 308+55 "B" LINE		17	a
	b				10										24" RCP	122' Lt 308+55 to 112' Lt 308+55 "B" LINE			b
SUBTOTAL*																			

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DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

DRAINAGE QUANTITIES
DQ-2

LAST REVISION 06-12-23
DATE PLOTTED => 3/13/2025
TIME PLOTTED => 2:07:52 PM

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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 3010
PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	42" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES			STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	LF	LF	EA	EA			CY	CY	FT	FT					
18	a	23															REMOVE PIPE	55' Rt 9262+24	D-8	18	a
	b			23													18" RCP	55' Rt 9262+24 to 55' Rt 9262+47 "RT 133" LINE			b
	c	20															REMOVE PIPE	55' Rt 9262+24			c
	d			20													18" RCP	55' Rt 9262+24 to 72' Rt 9262+24 "RT 133" LINE			d
	e	7															REMOVE PIPE	55' Rt 9262+24 to 96' Rt 9262+24 "RT 133" LINE			e
	f			7													18" RCP	96' Rt 9262+24 "RT 133" LINE			f
	g								1								REMOVE FES	96' Rt 9262+24 "RT 133" LINE			g
	h									1							FES	96' Rt 9262+24 "RT 133" LINE			h
19	a	10															REMOVE PIPE	177' Rt 312+90 "B" LINE	D-9	19	a
	b		10														18" RCP	177' Rt 312+90 to 172' Rt 313+00 "B" LINE			b
20	a	10															REMOVE PIPE	119' Lt 318+42 "B" LINE	D-9	20	a
	b		10														18" RCP	119' Lt 318+42 102' Lt 318+52 "B" LINE			b
21	a	66															REMOVE PIPE	70' Rt 328+35 "C" LINE	D-10	21	a
	b			66													18" RCP	70' Rt 328+35 to 119' Rt 328+35 "C" LINE			b
	c	53															REMOVE PIPE	124' Rt 329+00 "C" LINE			c
	d			53													18" RCP	119' Rt 328+35 to 124' 329+00 "C" LINE			d
SUBTOTAL*																					

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FUNCTIONAL SUPERVISOR: PHI DINH

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LAST REVISION | DATE PLOTTED => 3/13/2025
06-12-23 | TIME PLOTTED => 2:11:05 PM

DRAINAGE QUANTITIES
DQ-3

BORDER LAST REVISED 7/2/2010

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DGN FILE => ...\Hydraulics\12220000083id003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
Exp. 3-31-26
CIVIL
STATE OF CALIFORNIA

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	42" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES	REMOVE ELBOW	ELBOW	STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	CY	CY	FT	FT					
22	a	395															REMOVE PIPE	131′ Rt 329+88 "C" LINE	D-10	22	a
	b					395											36" RCP	131′ Rt 329+88 to 258′ Lt 330+40 "C" LINE			b
23	a	27															REMOVE PIPE	110′ Lt 341+40 "C" LINE	D-11	23	a
	b			27													18" RCP	110′ Lt 341+40 to 137′ Lt 341+42 "C" LINE			b
24	a	10															REMOVE PIPE	82′ Rt 352+37 "C" LINE	D-12	24	a
	b				10												24" RCP	82′ Rt 352+37 to 77′ Rt 352+47 "C" LINE			b
25	a	140															REMOVE PIPE	64′ Rt 403+06 "C" LINE	D-13	25	a
	b				140												24" RCP	64′ Rt 403+06 to 72′ Lt 403+08 "C" LINE			b
26	a	10															REMOVE PIPE	162′ Lt 527+17	D-14	26	a
	b				10												24" RCP	162′ Lt 527+17 to 157′ Lt 527+27 "C" LINE			b
27	a	300															REMOVE PIPE	43′ Rt 1582+25 "E" LINE	D-15	27	a
	b			300													18" RCP	43′ Rt 1582+25 to 41′ Rt 1585+50 "E" LINE			b
SUBTOTAL*																					

(*) FOR THE GRAND TOTAL, REFER TO DQ-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS

FUNCTIONAL SUPERVISOR: PHI DINH

CALCULATED-DESIGNED BY: SUNIL GUPTA
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DATE REVISED

DRAINAGE QUANTITIES
DQ-4

LAST REVISION DATE PLOTTED => 3/13/2025
06-12-23 TIME PLOTTED => 2:12:38 PM

BORDER LAST REVISED 7/2/2010

USERNAME =>
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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 3010

PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	133,241	11.4/13.6 24.5/35.7		x

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	42" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES	REMOVE ELBOW	ELBOW	STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	CY	CY	FT	FT					
28	a	10															REMOVE PIPE	204' Lt 2831+16 "A" LINE	D-16	28	a
	b			10													18" RCP	204' Lt 2831+16 to 215' Lt 2831+23 "A" LINE			b
29	a	10															REMOVE PIPE	270' Lt 2835+18 "A" LINE		29	a
	b				10												24" RCP	270' Lt 2835+18 to 265' 2836+26"A" LINE			b
30	a	120															REMOVE PIPE	106' Rt 2838+25 "A" LINE		30	a
	b			120													18" RCP	106' Rt 2838+25 to 116' Rt 2839+00 "A" LINE			b
SUBTOTAL																					

DRAINAGE QUANTITIES
DQ-5

CALCULATED-DESIGNED BY: SUNIL GUPTA
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FUNCTIONAL SUPERVISOR: PHI DINH
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LAST REVISION 06-12-23
DATE PLOTTED => 3/13/2025
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RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 3010
PROJECT NUMBER & PHASE 12220000830

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5	0.5/10.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○	REMOVE PIPE	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	36" REINFORCED CONCRETE PIPE	42" REINFORCED CONCRETE PIPE	60" REINFORCED CONCRETE PIPE	REMOVE FES	FES	STRUCTURAL CONCRETE, DRAINAGE INLET	MISCELLANEOUS IRON AND STEEL	"H" OR "V"	MAXIMUM COVER	DESCRIPTION	STATION	DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO. ⬡	DRAINAGE UNIT ○
		LF	LF	LF	LF	LF	LF	LF	EA	EA	CY	CY	FT	FT					
10	a	135													REMOVE PIPE	100′ Rt 2619+65 "A" LINE	D-4	10	a
	b				135										24" RCP	100′ Rt 2619+65 to 230′ 2619+85 "A" LINE			b
11	a	62													REMOVE PIPE	146′ Lt 2624+03 "A" LINE	D-4		a
	b				62										24" RCP	146′ Lt 2624+03 to 214′ Lt 2624+10 "A" LINE		11	b
12	a	10													REMOVE PIPE	173′ Lt 2626+08 "A" LINE	D-4	12	a
	b				10										24" RCP	173′ Lt 2626+08 to 183′ 2626+09 "A" LINE			b
13	a	35													REMOVE PIPE	88′ Rt 274+74 "C" LINE	D-4	13	a
	b			35											18" RCP	88′ Rt 274+74 to 65′ Rt 275+00 "C" LINE			b
	c	95													REMOVE PIPE	65′ Rt 275+00 "C" LINE			a
	d			95											18" RCP	65′ Rt 275+00 to 67′ Rt 275+96 "C" LINE			a
14	a	90													REMOVE PIPE	113′ Lt 281+88 "B" LINE	D-4	14	a
	b						90								42" RCP	113′ Lt 281+88 to 70′ Lt 281+95 "B" LINE			b
15	a	45													REMOVE PIPE	106′ Lt 293+65 "B" LINE	D-5	15	a
	b		45												12" RCP	106′ Lt 293+65 to 105′ Lt 294+10 "B" LINE			b
16	a	90													REMOVE PIPE	82′ Rt 297+25 "C" LINE		16	a
	b				90										24" RCP	82′ Rt 297+25 to 126′ Rt 297+43 "C" LINE			b
17	a	10													REMOVE PIPE	122′ Lt 308+55 "B" LINE		17	a
	b				10										24" RCP	122′ Lt 308+55 to 112′ Lt 308+55 "B" LINE			b
SUBTOTAL*																			

CALCULATED-DESIGNED BY: SUNIL GUPTA
CHECKED BY: PHUONG NGUYEN
FUNCTIONAL SUPERVISOR: PHI DINH
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DATE REVISED

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Caltrans® HYDRAULICS

DATE PLOTTED => 2/14/2025
TIME PLOTTED => 1:09:43 PM
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DRAINAGE QUANTITIES
DQ-2

BORDER LAST REVISED 8/5/2020
USERNAME =>
DGN FILE => ...\Hydraulics\12220000083id002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 3010
PROJECT NUMBER & PHASE 12190000701

Appendix F – USFWS Species List

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad Anaxyrus californicus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3762	Endangered

Western Spadefoot Spea hammondii — Proposed Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5425

Insects

NAME	STATUS

Monarch Butterfly Danaus plexippus — Proposed Threatened
Wherever found
There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/9743

Quino Checkerspot Butterfly Euphydryas editha quino (=E. e. wrighti) — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5900

Crustaceans

NAME	STATUS

Riverside Fairy Shrimp Streptocephalus woottoni — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8148

San Diego Fairy Shrimp Branchinecta sandiegonensis — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/6945

Flowering Plants

NAME	STATUS

Braunton's Milk-vetch Astragalus brauntonii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5674

Nevin's Barberry Berberis nevinii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8025

Santa Monica Mountains Dudleyea Dudleya cymosa ssp. ovatifolia — Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2538

Thread-leaved Brodiaea Brodiaea filifolia — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/6087

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate

regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the

maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

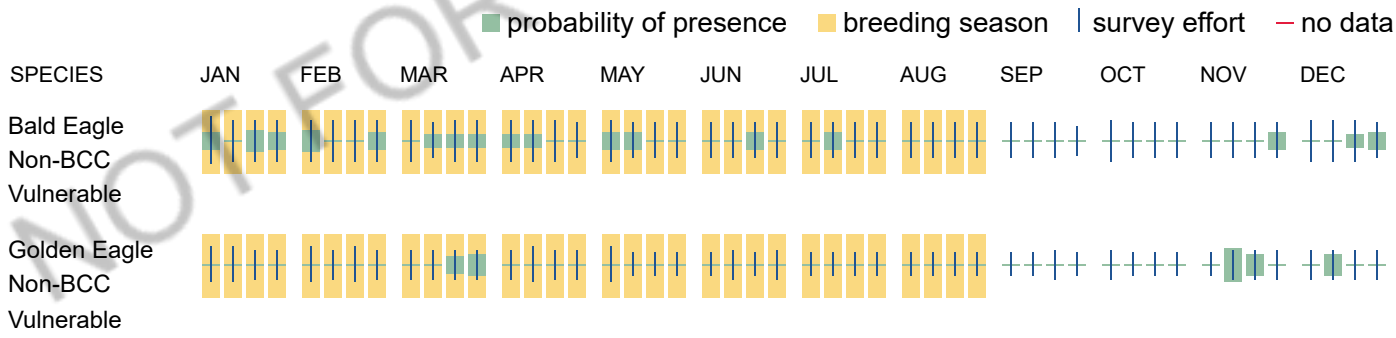
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black-chinned Sparrow Spizella atrogularis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

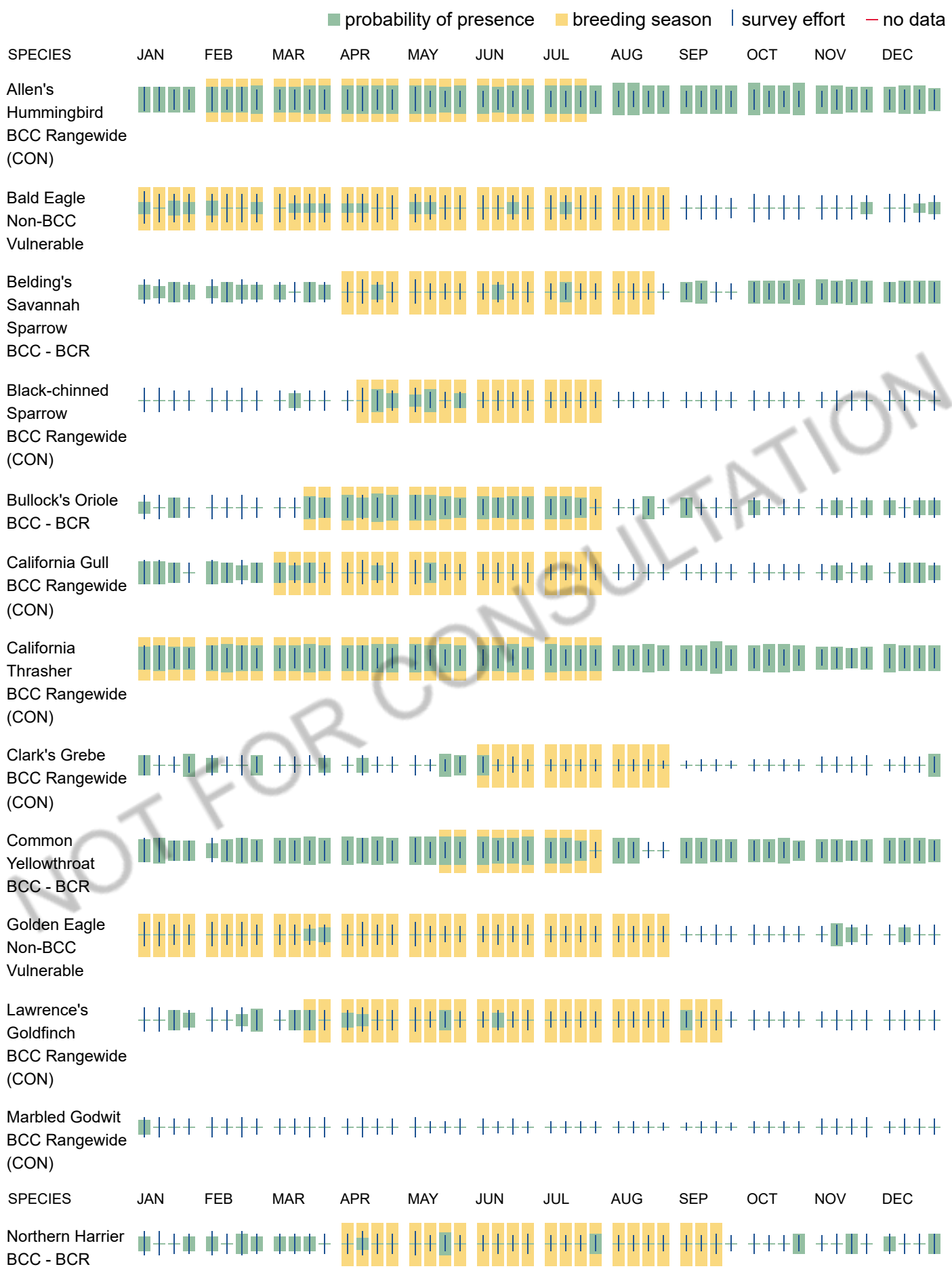
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

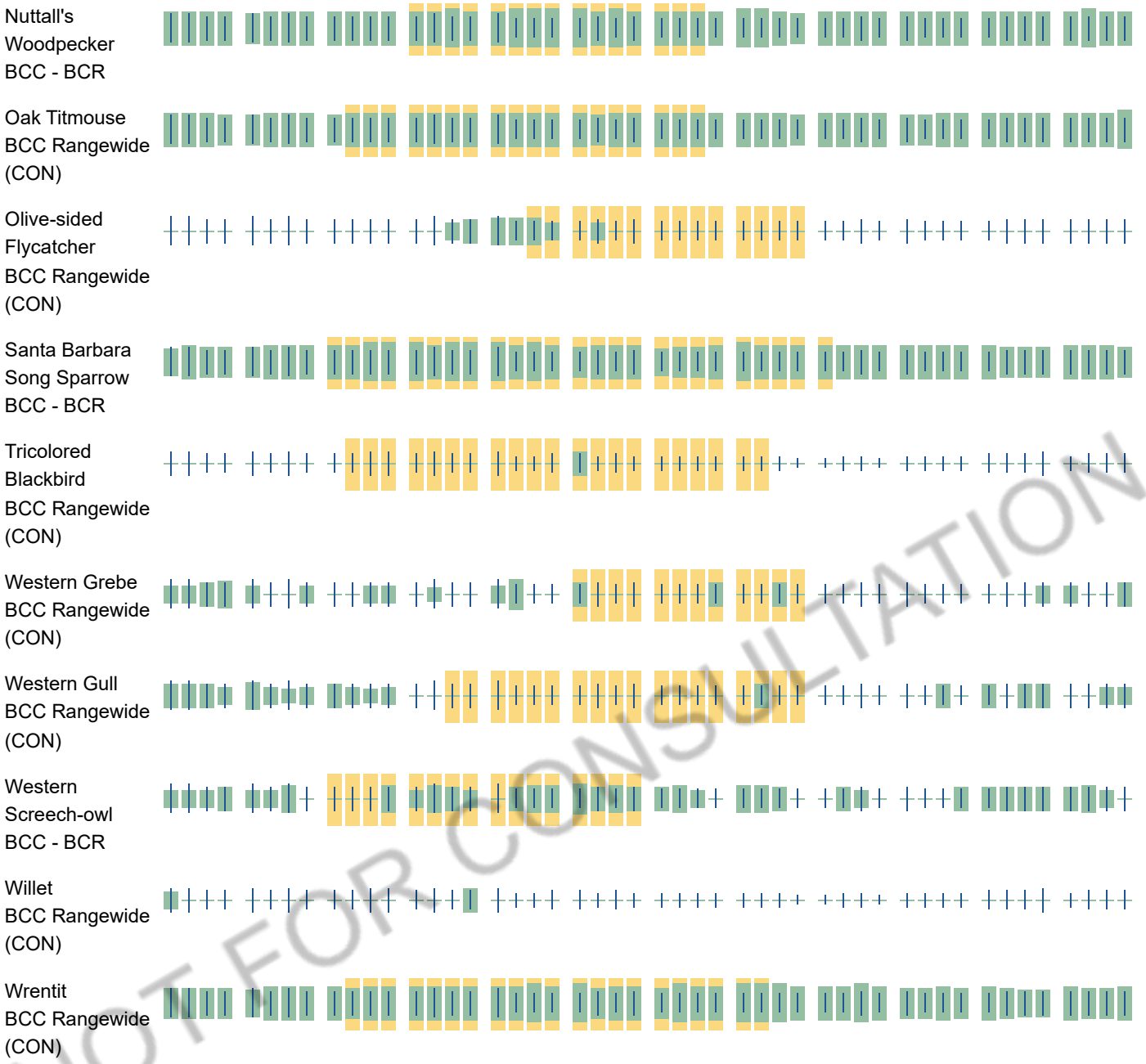
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND
- PEM1A
- PEM1Ah

FRESHWATER FORESTED/SHRUB WETLAND
- PSSC
- PSSA
- PSSAh
- PSSAx

RIVERINE
- R4SBC
- R4SBA
- R4SBAr
- R4SBCr
- R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Tustin (3311767) OR Orange (3311777) OR El Toro (3311766) OR Black Star Canyon (3311776))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Actinemys pallida southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Allium marvinii Yucaipa onion	PMLIL02330	None	None	G1	S1	1B.2
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anaxyrus californicus arroyo toad	AAABB01230	Endangered	None	G2G3	S2	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Asio otus long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Baccharis malibuensis Malibu baccharis	PDAST0W0W0	None	None	G1	S1	1B.1
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta sandiegonensis San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S1	
Brodiaea filifolia thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	SSC
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chaetodipus fallax fallax northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	PDPGN040J1	None	Endangered	G3T1	S1	1B.1
Chorizanthe polygonoides var. longispina long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G4G5T1T2	S1S2	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Hesperocyparis forbesii Tecate cypress	PGCUP040C0	None	None	G2	S2	1B.1
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepechinia cardiophylla heart-leaved pitcher sage	PDLAM0V020	None	None	G3	S2S3	1B.2
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Monardella hypoleuca ssp. intermedia intermediate monardella	PDLAM180A4	None	None	G4T2?	S2?	1B.3
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nolina cismontana chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Onychomys torridus ramona southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Penstemon californicus California beardtongue	PDSCR1L110	None	None	G3	S2	1B.2
Pentachaeta aurea ssp. allenii Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
Perognathus longimembris pacificus Pacific pocket mouse	AMAFD01042	Endangered	None	G5T2	S2	SSC
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Rallus obsoletus levipes light-footed Ridgway's rail	ABNME05014	Endangered	Endangered	G3T1T2	S1	FP
Rhinichthys gabrielino Santa Ana speckled dace	AFCJB3705K	Proposed Threatened	None	G5T1	S1	SSC
Riversidian Alluvial Fan Sage Scrub Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S3	SSC
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Interior Cypress Forest Southern Interior Cypress Forest	CTT83230CA	None	None	G2	S2.1	
Southern Riparian Scrub Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Willow Scrub Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S2	
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 97

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

48 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [3311776:3311766:3311767:3311777]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Abronia villosa var. *aurita*	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1		2001-01-01	 © 2011 Aaron E. Sims
Allium marvinii	Yucaipa onion	Alliaceae	perennial bulbiferous herb	Apr-May	None	None	G1	S1	1B.2	Yes	2001-01-01	 © 2013 Keir Morse
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE	None	G2	S2	1B.1	Yes	1974-01-01	 © 2009 Thomas Stoughton
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S2	1B.2		1994-01-01	No Photo Available
Atriplex pacifica	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2		1994-01-01	No Photo Available
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2		1994-01-01	No Photo Available
Baccharis malibuensis	Malibu baccharis	Asteraceae	perennial deciduous shrub	Aug	None	None	G1	S1	1B.1	Yes	2001-01-01	No Photo Available
Bahiopsis laciniata	San Diego County viguiera	Asteraceae	perennial shrub	Feb-Jun(Aug)	None	None	G4	S4	4.3		1974-01-01	No Photo Available

Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	FT	CE	G2	S2	1B.1	Yes	1974-01-01	 © 2016 Keir Morse
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3		1994-01-01	No Photo Available
Centromadia parryi ssp. *australis*	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1		1994-01-01	No Photo Available
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	None	CE	G3T1	S1	1B.1	Yes	1974-01-01	No Photo Available
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	None	None	G5T3	S3	1B.2		1994-01-01	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
Diplacus clevelandii	Cleveland's bush monkeyflower	Phrymaceae	perennial rhizomatous herb	Apr-Jul	None	None	G4	S4	4.2		1980-01-01	 © 2020 W. Juergen Schrenk
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	FE	CE	G4T1	S1	1B.1	Yes	1980-01-01	No Photo Available
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2		1980-01-01	 © 2015 Keir Morse

Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	None	None	G5TX	SX	1A	Yes	1974-01-01	No Photo Available
Hesperocyparis forbesii	Tecate cypress	Cupressaceae	perennial evergreen tree		None	None	G2	S2	1B.1		1974-01-01	 © 2011 Joey Malone
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes	2001-01-01	 © 2008 Tony Morosco
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01	 © 2019 Belinda Lo
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Lepechinia cardiophylla	heart-leaved pitcher sage	Lamiaceae	perennial shrub	Apr-Jul	None	None	G3	S2S3	1B.2		1974-01-01	 © 2003 Vince Scheidt
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4T4?	S4?	4.2	Yes	1980-01-01	 © 2008 Thomas Stoughton
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2		2001-01-01	No Photo Available

Monardella hypoleuca ssp. *intermedia*	intermediate monardella	Lamiaceae	perennial rhizomatous herb	Apr-Sep	None	None	G4T2?	S2?	1B.3	Yes	2012-10-16	 © 2016 Ron Vanderhoff
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2		1994-01-01	No Photo Available
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT	G1	S1	1B.1		1980-01-01	No Photo Available
Nolina cismontana	chaparral nolina	Ruscaceae	perennial evergreen shrub	(Mar)May-Jul	None	None	G3	S3	1B.2	Yes	2001-01-01	 © 2005 Santa Monica Mountains National Recreation Area
Penstemon californicus	California beardtongue	Plantaginaceae	perennial herb	May-Jun(Aug)	None	None	G3	S2	1B.2		1974-01-01	 Justin M. Wood 2009
Pentachaeta aurea ssp. *allenii*	Allen's pentachaeta	Asteraceae	annual herb	Mar-Jun	None	None	G4T1	S1	1B.1	Yes	2008-05-08	 ©2008 Bob Allen
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	None	None	G4	S4	4.2	Yes	2007-02-02	No Photo Available
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	No Photo Available
Rhinotropis cornuta var. *fishiae*	Fish's milkwort	Polygalaceae	perennial deciduous shrub	May-Aug	None	None	G5T4	S4	4.3		1974-01-01	No Photo Available
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2		1974-01-01	No Photo Available

Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	1B.2		1994-01-01	 Neal Kramer
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2		1994-01-01	No Photo Available
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2		1984-01-01	No Photo Available
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S3S4	4.2		1994-01-01	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available

Showing 1 to 48 of 48 entries

Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 19 March 2025].

}

Outlook

Caltrans 2020 Silverado Fire Damaged Restoration Project

From Carla Cervantes <Carla.Cervantes@lsa.net>
Date Thu 3/20/2025 8:16 AM
To NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

Hello,

This email contains the search results generated from the NOAA Fisheries California Species List Tool for the El Toro, Black Star Canyon, Orange, and Tustin, California 7.5-minute topographic quadrangles. This species list was generated for the Caltrans 2020 Silverado Fire Damaged Restoration Project located along a 9-mile segment of State Route-241 within Orange County, California.

Quad Name **El Toro**
Quad Number **33117-F6**

ESA Anadromous Fish

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

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

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

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Black Star Canyon**

Quad Number **33117-G6**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Orange**

Quad Number **33117-G7**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Tustin**

Quad Number **33117-F7**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

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

MMPA Cetaceans -

MMPA Pinnipeds -

Carla Cervantes| Biologist
LSA | 3111 East Tahquitz Canyon Way, Suite 123
Palm Springs, CA 92262
- - - - - - - - - - -
760-416-2075 Tel
909-678-1357 Mobile
Website

Outlook

Federal ESA - - NOAA Fisheries Species List Re: Caltrans 2020 Silverado Fire Damaged Restoration Project

From NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>
Date Thu 3/20/2025 8:16 AM
To Carla Cervantes <Carla.Cervantes@lsa.net>

Please retain a copy of each email request that you send to NOAA at nmfs.wcrca.specieslist@noaa.gov as proof of your official Endangered Species Act SPECIES LIST. The email you send to NOAA should include the following information: your first and last name; email address; phone number; federal agency name (or delegated state agency such as Caltrans); mailing address; project title; brief description of the project; and a copy of a list of threatened or endangered species identified within specified geographic areas derived from the NOAA Fisheries, West Coast Region, California Species List Tool. You may only receive this instruction once per week. If you have questions, contact your local NOAA Fisheries liaison.

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Appendix G – Notice of Availability

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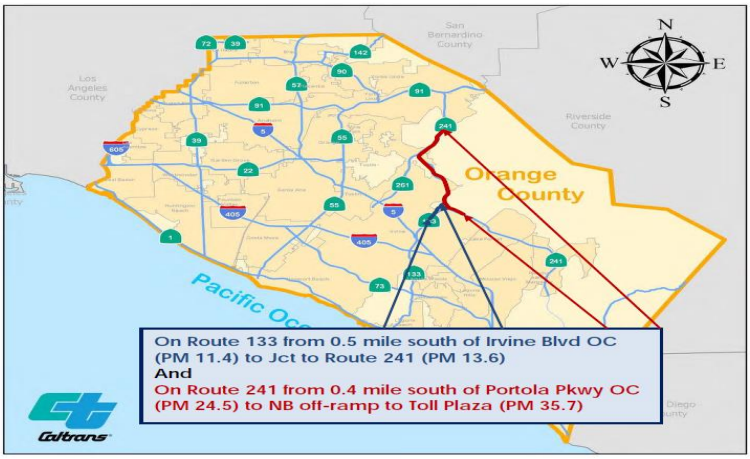
Public Notice

SR-133/SR-241 Permanent Restoration Project

Notice of Intent to Adopt a *Mitigated Negative Declaration*
Notice of Availability of an Initial Study
(Study results available)



WHAT'S BEING PLANNED?

The California Department of Transportation (Caltrans) initiated a major damage permanent restoration improvement and promoting resilient operations project to repair severely damaged transportation assets caused by the 2020 Silverado Fire and to improve the resilience of other existing roadway assets considered to be within a fire hazard severity zone. The improvements will be in Orange County, California on State Route 133 (SR-133) from Post Mile (PM) 11.4 to PM 13.6, and on State Route 241(SR-241) from PM 24.5 to PM 35.7 in the cities of Irvine, Orange, and Orange County, Unincorporated. The proposed project build improvements would include improvements along SR-133 south of Irvine Boulevard (Blvd) Over Crossing (OC) to Junction (Jct) SR-241 and on SR-241 south of Portola Parkway (Pkwy) OC to NB off- ramp Toll Plaza. Two alternatives are being considered: the Build and No Build Alternative.

WHY THIS PUBLIC NOTICE?

Caltrans has studied the effects this project may have on the environment. The studies show it will not significantly affect the quality of the environment. The report that explains why is called an Initial Study (IS). This notice is to tell you of the availability of the IS and Proposed Mitigated Negative Declaration (MND) for your review before the final design is selected.

WHAT'S AVAILABLE?

The IS/Proposed MND are available for review at the Caltrans District 12 Office, 1750 East 4th Street, Suite 100, Santa Ana, CA 92705, on weekdays from 8:00 a.m. to 5:00 p.m. The documents are also available for review at the following locations during normal business hours:

- OC Library – Heritage Park Regional Branch (14361 Yale, Irvine, CA 92604)
- OC Library – Foothill Ranch Branch (27002 Cabriole, Foothill Ranch, CA 92610)

In addition, the IS/Proposed MND and project information is also available online at: https://dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-133-sr-241-silverado-fire-restoration-project

WHERE YOU COME IN

Do you have any comments about processing the project with a Proposed MND? Do you disagree with the findings of our study as set forth in the Proposed MND? Would you care to make any other comments on the project? Would you like a public meeting/hearing?

Public Comment Period: May 1, 2025 to May 30, 2025

Please submit your comments or request for a public hearing no later than 5:00 pm, May 30, 2025 via email to: SR-133-241-SilveradoFireRestoration@dot.ca.gov, or in writing to: Carmen Lo, Associate Environmental Planner, Caltrans District 12, Division of Environmental Analysis, 1750 East 4th Street, Suite 100, Santa Ana, CA 92705. The date we will begin accepting comments is May 1, 2025. If there are no major comments, Caltrans will proceed with the project's design.

CONTACT

Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact the District 12 Office of Public Affairs at (657) 328-6309. TDD users may contact the California Relay Service TDD line at (800) 735-2929 or Voice Line at (800) 735-2922. For more information about this study or any other transportation matter, contact the Office of Public Affairs at (657) 328-6309 or by email at D12PIO@dot.ca.gov

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