07 - LA - 101 - 32.8/33.8
EA 307100– PPNO-4766
20.XX.80.030 – Structure
April, 2018

Project Report
Liberty Canyon Wildlife Crossing

For Project Approval

IN LOS ANGELES COUNTY IN AGOURA HILLS
WEST OF LIBERTY CANYON ROAD UNDERCROSSING

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:

for Andrew P. Nierenberg, *DEPUTY DISTRICT DIRECTOR, RIGHT OF WAY*

APPROVAL RECOMMENDED:

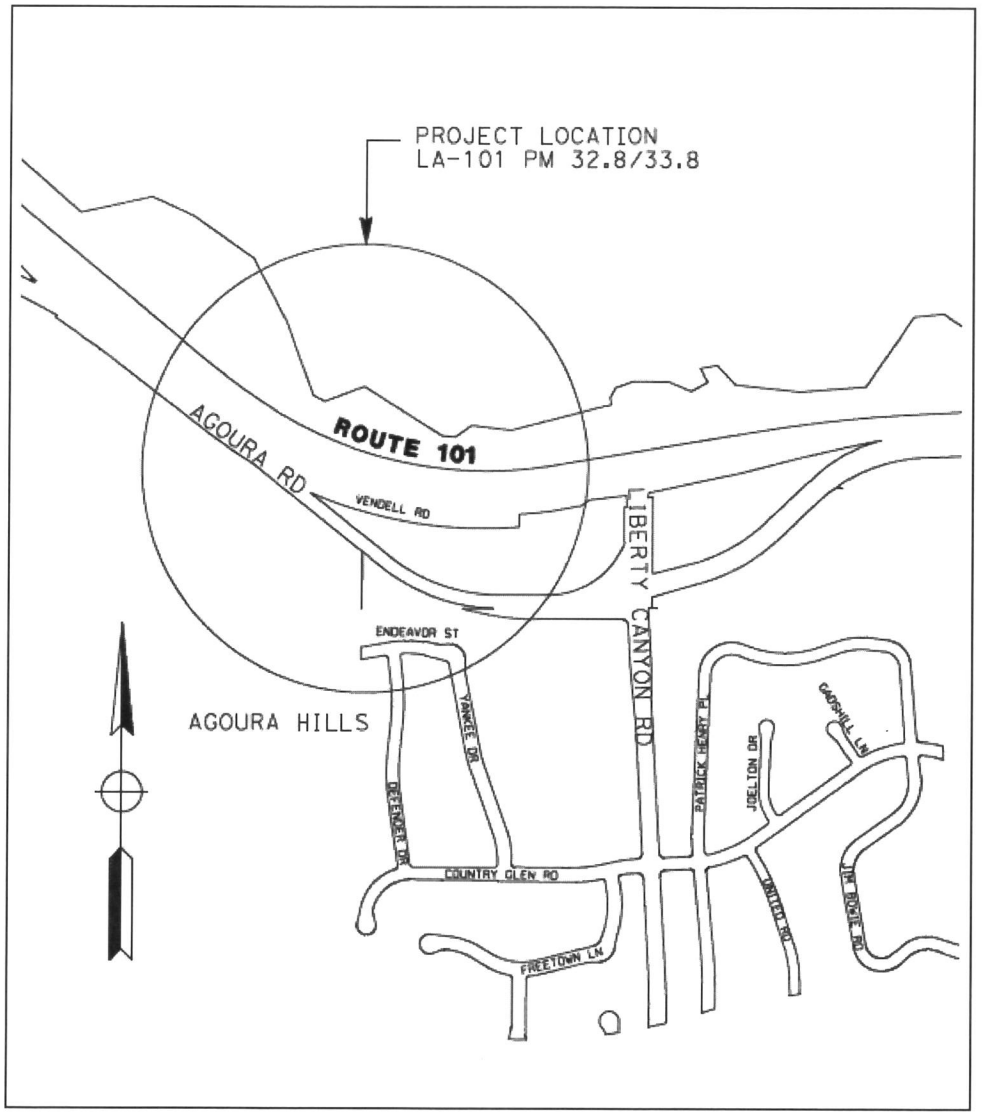
Sheik M. Moinuddin, *PROJECT MANAGER*

PROJECT APPROVED:

Carrie Bowen, *DISTRICT DIRECTOR*

4-30-18
DATE

Vicinity Map



This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER *DATE*

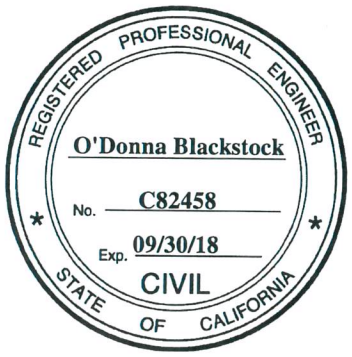


Table of Contents

1. INTRODUCTION

The California Department of Transportation (Caltrans) in cooperation with the Mountain Recreation and Conservation Authority (MRCA) proposes to construct a vegetated bridge across US-101 west of Liberty Canyon Road in the City of Agoura Hills in Los Angeles County to function as a wildlife crossing. The project is sponsored by the MRCA, which is a local partnership among the Santa Monica Mountains Conservancy, the Conejo Recreation and Park District, and the Rancho Simi Recreation and Park District.

Project Limits	*07-LA-101* *32.8/33.8*	
Number of Alternatives	*3 (Including No Build Alternative)*	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	$20,376,000	$20,376,000
Capital Outlay Construction	$41,698,000	$45,872,000
Capital Outlay Right-of-Way	$16,320,000	$21,848,000
Funding Source	*Private*	
Funding Year	TBD	
Type of Facility	*Wildlife Crossing (Structure - Bridge)*	
Number of Structures	Two (2)	
Environmental Determination or Environmental Document	Initial Study/Mitigated Negative Declaration (IS/MND), Environmental Assessment/Finding of No Significant Impact (EA/FONSI)	
Legal Description	*In Los Angeles County in Agoura Hills west of Liberty Canyon Road Undercrossing*	
Project Development Category	*4*	

2. RECOMMENDATION

It is recommended that the Project Report (PR) be approved with the preferred alternative and proceed to the PS&E phase.

3. BACKGROUND

US-101 is a major north-south arterial highway in the State of California. US-101 is designated as a freeway and is commonly known as the Hollywood Freeway to the south of the Route 101/170/134 interchange, and as the Ventura Freeway to north of the interchange. It is designated as a Surface Transportation Assistance Act (STAA) truck route, allowing large trucks to operate on this route. It is part of the Federal Aid Primary (FAP) system, which is a subset of the National Highway System. It also acts as the primary access route to and from downtown Los Angeles, various residential

communities, tourist destinations in Los Angeles and the central California coast. This segment of US-101 within the project limits is an 8-lane freeway and has an Annual Average Daily Traffic (AADT) of 304,000 with 5.45% truck traffic.

Within the project limits, US-101 passes through the City of Agoura Hills separating the Santa Monica Mountains to the south from the Simi Hills and Santa Susana Mountains to the north. US-101 is a formidable and virtually impenetrable barrier for many wildlife species including mountain lions, bobcats, gray foxes, coyotes and mule deer that inhabit and travel between these two mountain ranges. In particular, mammals with large home ranges such as mountain lions and bobcats need large connected habitats in order to hunt, breed and thrive. The construction of US-101 divided this previously continuous habitat range into isolated habitat fragments and resulted in severely restricted movement between the two mountain ranges. For mountain lions in particular, the consequences of this restriction results in increased inbreeding, territorial fighting and very low genetic diversity within the Santa Monica Mountains.

The wildlife crossing is critical in the linkage between the Santa Monica Mountains and the Sierra Madre Range, which is one of the few coastal to inland connections remaining in Southern California. Both the South Coast Missing Linkages Project and the California Essential Habitat Connectivity Project identified the need to preserve and enhance this critical linkage in order to sustain ecological and developmental processes in California's South Coast Eco region. Additionally, the National Park Service has been collecting and publishing data on carnivore movement for over a decade, thereby validating the importance of a linkage for sustaining wildlife populations in the Santa Monica Mountains.

Analysis of genetics and tracking of range size conducted by the National Park Service has indicated that providing wildlife connectivity through intervening natural areas in the Simi Hills, Santa Susana Mountains and to the larger ecosystem of the Sierra Madre Range is imperative for preserving a viable mountain lion population in the Santa Monica Mountains. The genetic diversity of mountain lions in the Santa Monica Mountains was determined to be lower than anywhere else in the state of California, or anywhere else throughout the species range in the Western United States.

Connectivity is not just important for mountain lions, the National Park Service data has shown that bobcats and coyotes are also exhibiting significant genetic effects in the relatively short period since the freeway was built; and research continues to show that smaller species including lizards and birds are affected by the habitat fragmentation caused by roads and urban development. Without a safe and sustainable wildlife crossing, movement between these remaining areas of natural habitat is severely restricted and wildlife within the Santa Monica Mountains is essentially trapped.

The Liberty Canyon area was identified by scientists and experts working in the field of wildlife movement as the optimal location for a safe and sustainable wildlife crossing across US-101; as of the date of this report, 18 mountain lions have been killed while attempting to migrate into the Santa Monica Mountains. This location's prime habitat

has already been protected on both sides of the freeway and is contiguous with large swaths of protected habitat to the north and south of this connection making it a viable solution for connectivity within the Santa Monica Mountains.

4. PURPOSE AND NEED

Purpose:
The purpose of this project is to construct a vegetated bridge across US-101 west of Liberty Canyon Road in the City of Agoura Hills in Los Angeles County to function as a wildlife crossing. The wildlife crossing shall provide a safe and sustainable passage for wildlife across US-101 that reduces accidents and wildlife mortality, allows for the safe movement of animals and the exchange of genetic material.

Need:
The need of the proposed project is based on genetic and tracking data that shows US-101 is a barrier to wildlife that historically traveled between the Santa Monica Mountains and Simi Hills to connect with the Santa Monica Mountains and to the Sierra Madre mountain range north of Highway 126. In particular, large mammals such as mountain lions and bobcats need large connected habitats in order to hunt, breed and thrive.

US-101 divides this previously contiguous range into isolated habitat fragments; for mountain lions, this has resulted in inbreeding, territorial fighting, and a decrease in genetic diversity. Connectivity is critical for all kinds of wildlife, especially in an area such as Los Angeles with an extensive freeway system.

A. Problem, Deficiencies, Justification
Environmental impacts and mitigation measures were not considered nor required when US-101 and most of Southern California's freeways were built in the 1950s. As a result the construction of US-101 divided the previously connected natural habitat ranges of many wildlife species. Currently, a safe and sustainable wildlife crossing across US-101 is not available. Without the addition of a wildlife crossing, the ecological and environmental impact on wildlife that resulted from the construction of US-101 will persist and the fate of many wildlife species within the Santa Monica Mountains will remain at risk.

B. Corridor and System Coordination
In District 7, US-101 extends 83.1 miles; 39.5 miles are in Los Angeles County and 43.6 miles are in Ventura County. US-101 is part of the Federal Aid Primary (FAP) system, which is a subset of the National Highway System (NHS). The proposed project is located along the freeway segment between State Route 27 and the Los Angeles/Ventura County Line. This segment is classified as Rural Principal Arterial under FAP and State Freeway under the State Highway System (SHS).

C. Traffic
The latest Transportation Concept Report (TCR) for US-101 was completed in July

2013. The TCR identifies the existing and future route conditions as well as future needs for each route on the SHS. Currently, US-101 within the project limits has four mixed flow lanes (MFL) and an auxiliary lane in each direction. The existing Level of Service (LOS) for this segment of the freeway is F. Due to economic, environmental, right of way, and other constraints, it is not feasible for Caltrans to continue to add more lanes to the highway system. With these limitations, Caltrans District 7 has established LOS F0 as the minimum acceptable LOS on the freeway system. In accordance with the "CONCEPT - 2035 Facility" table in the TCR, eight (8) total MFLs [four (4) MFLs in each direction] are needed in the year of 2035 to maintain LOS of F0 within the project segment of the freeway. Thus, no widening of this segment of the freeway is planned at this time.

5. ALTERNATIVES

5A. Viable Alternatives

As a result of Public Hearing, Alternative 2, Design Option 2 was selected to be the Preferred Alternative for this project.

No Build Alternative

The No Build alternative will maintain the existing configuration of US-101 and no additional infrastructure will be constructed to enhance wildlife connectivity across the freeway. This alternative does not satisfy the purpose and need for this project and will result in the continued restriction of wildlife movement into and out of the Sana Monica Mountains and threaten the long-term viability of wildlife species within it. Currently, a separate project is constructing permanent directional fencing to funnel wildlife to the existing Liberty Canyon Road undercrossing.

Alternative 1

Alternative 1 proposes to build a vegetated bridge across US-101 west of Liberty Canyon Road. The scope of work includes:

- Construct a two span 165-foot wide by 200-foot long bridge with columns on spread footings in the freeway median.
- Construct retaining walls at both the north and south end of the bridge.
- Construct sound walls along the outer edges of the bridge to mitigate traffic noise and block light in order to make the crossing more conducive to wildlife crossing.
- Plant vegetation on the bridge to provide a passage that resembles the natural habitat for wildlife.

Alternative 2

Alternative 2 includes the structure described in Alternative 1 with the addition of an extension crossing over Agoura Road, which runs parallel to US-101 at this location. The scope of work includes:

- Construct a tunnel with retaining wall systems along Agoura Road to keep the road operational and to support the fill materials required by the wildlife crossing.
- Fill and grade the slope area between the freeway and Agoura Road to provide a continuous grade allowing the wildlife crossing to extend over Agoura Road before descending to join the existing ground.

Alternative 2 has two design options:

- Design Option 1 - Construct a 48-foot wide bridge and associated retaining wall system along Agoura Road to keep the road operational and to accommodate the fill material needed to construct the wildlife crossing.
- Design Option 2 - Construct a 54-foot wide bridge and associated retaining wall system along Agoura Road to keep the road operational and to accommodate the fill material needed to construct the wildlife crossing.

Both design options for the proposed overcrossing over Agoura Road will consist of a maximum vertical clearance of 16.5 feet. Under both alternatives 1 & 2, the permanent directional fencing may be modified to funnel wildlife to the new vegetated bridge.

The Structure Advance Planning Study (APS) for the proposed bridge, tunnel, and associated improvements are included in the attachments. See attachments for the APS.

This alternative can be constructed in two phases if funding is limited. The first phase would consist of the construction of the bridge over US-101. This would meet the immediate need to provide a wildlife crossing across the freeway. The escalated capital and support cost for this phase is approximately $72 million dollars.

The second phase would consist of the construction of the Agoura Road tunnel and grading of the area between US-101 and Agoura Road to allow the wildlife crossing to extend over Agoura Road, which is currently a two-lane road that does not have high traffic volumes. If traffic volumes increase due to nearby residential and commercial development, Agoura Road would be widened per City of Agoura Hills's requirements. The escalated capital and support cost for this phase is approximately $16 million dollars.

Nonstandard Mandatory & Advisory Design Features
The following nonstandard features have been identified:

Nonstandard Shoulder Width, NB Mainline Shoulder, Highway Design Manual, (HDM) Index 302.1
The existing left shoulder width for NB US-101 within the project limits is 10 feet. The widths of the proposed bridge columns (4 feet in diameter) and associated concrete barrier (Type 60F) will reduce the left shoulder that varies from 10 feet to 3 feet, for a distance of approximately 472 feet along the freeway centerline.

Nonstandard Stopping Sight Distance on Horizontal Curve, SB Mainline, HDM Index 201.6
The bridge columns will be placed along the portion of the freeway with an 1800-foot radius horizontal curve along the centerline. The proposed columns and reduced shoulder width will result in a stopping sight distance of approximately 470 feet for a design speed of 70 mph along the inside lane of SB mainline.

Nonstandard Side Slope, HDM Index 304.1
The area between the proposed vegetated bridge (US-101) and Agoura Rd Tunnel will be filled and achieve a side slope range of 2:1 to 3:1. The new construction is a wildlife crossing and will not have vehicular traffic. The placement of retaining walls, sound walls, concrete barriers and guardrail will serve as mitigation for the traveling public.

5B. Rejected Alternatives

Two other alternatives were identified for this project, but were not fully developed due to recommendations from Caltrans' Project Delivery Team. Both alternatives proposed constructing a tunnel under State Route 101 to serve as wildlife crossing. Neither tunnel would convey wildlife across and to the south of Agoura Road since they would have entrances to the north of Agoura Road, adjacent to State Route 101.

Rejected Alternative 1
The first tunnel is a 13 feet wide by 13 feet high jacked box culvert located west of Liberty Canyon Road. This tunnel would not accommodate the same wide range of wildlife species as an overcrossing. A tunnel study, originally done by the Federal Highway Administration Central Federal Lands Highway Division (FHWA-CFLHD) in 2010 and updated in 2015, estimated the cost at approximately $19.7 million (see the Project Study Report by visiting the Caltrans website at www.dot.ca.gov/dist070/travel/projects/libertycanyon). It was agreed that the cost-benefit would not achieve the goals of the project.

Rejected Alternative 2
The second tunnel is a 32 feet wide by 15 feet high cast-in-place rectangular culvert located west of Liberty Canyon Road. This tunnel was not considered feasible due to constructability considerations and high traffic impacts. Specifically, such a large tunnel would require using the cut-and-cover technique and the closure of State Route 101, one of the busiest freeways in the region. In addition, it was estimated that such a large tunnel would be more costly than an overcrossing.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A.Hazardous Waste
The preliminary Hazardous Waste Assessment prepared on June 14, 2017 (Attachment D) for this project, finds that construction activities involving imported soil backfill will not have hazardous waste issues unless the existing freeway shoulder surfaces are disturbed before they are covered with imported fill material. If the exposed sites are

disturbed, the exposed soils are likely to be lead-impacted and will require an Aerially Deposited Lead (ADL) site investigation. The Advance Planning Study (APS) dated September 29, 2017 proposes Cast-In-Drilled-Holes (CIDH) piles for bridge support which will require a new Hazardous Waste Assessment. The new assessment will investigate the elevation of groundwater in the project area. If groundwater elevation is below the endpoints of piles, the site should not have any issues; otherwise it will need to be screened for potential contaminants for disposal purposes.

6B. Landscaping
The bridge across US-101 and fill area between the freeway and Agoura Road will be landscaped to provide a continuous passage that resembles a natural habitat for the wildlife. The landscape design will be provided by MRCA.

6C. Storm water
The Los Angeles Regional Water Quality Control Board (LARWQCB) has jurisdiction over the project area. The total disturbed area (TDA) for the project is approximately 8.0 acres.

A Storm Water Data Report (SWDR) was prepared in accordance with the Storm Water Quality Handbook-Project Planning Design Guide (PPDG) and approved on April 26, 2018.

6D.Right-of-Way Issues
The preferred alternative would require 1) relocation of utilities identified in the right of way data sheet and 2) right of way from MRCA, City of Agoura Hills, and private property owners. A small parcel is required to complete this project and will be acquired by MRCA before construction and maintained by MRCA once construction is complete. The parcel is located outside of Caltrans right of way. The Right of Way Data Sheet was approved on April 19, 2018.

6E. Environmental Compliance
A Draft Initial Study with Mitigated Negative Declaration (MND)/Environmental Assessment with Finding of No Significant Impact (FONSI) was prepared and circulated on September 1, 2017. A Public hearing was held in October 2017 and public comments were collected. The final MND/FONSI was approved on April 12, 2018.

6F. Air Quality Conformity
Air Quality Assessment was prepared September 2017 and included in the MND/FONSI.

6G. Railroad
Railroad impacts are not anticipated for this project since no rail systems exist within the project limits.

6H. Noise Abatement Decision Report
Traffic Noise Study Report was prepared in August 2017 and included in the ED.

6I. Value Analysis

Value Analysis (VA) studies are required on all federally-aided projects greater than $50 million or more on the National Highway System (NHS) and on bridge projects $40 million or more. At this time, all funding for the Wildlife Crossing project is from private sources. However, a VA may be processed for possible future federal-aid funding during PS&E.

6J. Maintenance

The proposed wildlife crossing bridge structure to be constructed over US-101 is located within State Right of Way and will be maintained by Caltrans. The structure/tunnel over Agoura Rd is in the City of Agoura Hills Right of Way and will not be maintained by Caltrans. Also a letter from the City of Agoura Hills to Caltrans Environmental (dated January 28, 2016) states the city's position not to maintain or inherit maintenance of structure/tunnel over Agoura Road. A Maintenance Agreement needs to be prepared and executed by others for maintenance of the structure/tunnel over Agoura Road.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

A public hearing was held on October 12, 2017 to review the conceptual improvements to the community and obtain feedback from the public and other stake holders. Based on the comments received from the City of Agoura hills during the comment period, Caltrans and the project stake holders worked to refine Build Alternative 2 which defined the parameters of the structure over Agoura Road, width of 54 feet and a maximum vertical clearance of 16 feet 6 inches.

Permits

Proposed permits and approvals required for construction of the project are (but not limited to):
California Department of Fish and Wildlife - 1602 Permit
California Department of Transportation (Caltrans) - Encroachment Permit
California State Water Resources Control Board - 402 Permit
California Public Utilities Commission (CPUC)
City of Agoura Hills - Encroachment Permit
Federal Highway Administration (FHWA) - Air Quality Conformity Determination
Utility Agencies - Utility Agreements

Transportation Management Plan

A Transportation Management Plan (TMP) Data Sheet was approved on March 19, 2015. The TMP was prepared to minimize delay and inconvenience to the traveling public during the construction of the proposed improvements by using press releases, paid advertising and the internet as the primary channels for public information. The preliminary cost estimate for the TMP is included in the attachments.

Stage Construction
The project will construct a bridge for wildlife crossing and will use stage construction to install and remove false work over US-101. Access points to properties will be accessible throughout the duration of construction and the minimum eleven-foot-wide lanes will be maintained.

A detailed stage construction plan will be developed during the Plans, Specifications and Estimates (PS&E) stage.

Graffiti Control
The following measures will be implemented during design, where feasible, as a deterrent to graffiti:

- Avoidance of smooth surfaces, where feasible
- Use of drought tolerant planting, where appropriate, to cover surfaces

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding
It has been determined that this project is eligible for Federal-aid funding.

Programming

Fund Source	Fiscal Year Estimate									
20.80.030	Prior	15/16	16/17	17/18	18/19	19/20	20/21	Future	Total	Historical Support / Cap Ratio
Component	In thousands of dollars ($1,000)									
PA&ED Support		700	400	76					1,176	*
PS&E Support					2,500	4,300	700		7,500	*
Right-of-Way Support					500	500	200		1,200	*
Construction Support					500	1,500	4,500	4,000	10,500	*
Right-of-Way					1,847	20,000			21,847	
Construction							33,400	12,470	45,870	
Total		700	500	300	5,347	26,300	38,800	16,470	88,093	

The support cost ratio is 30.08%.

* There is no Historical comparison for this type of project, however historical support to cost ratio for bridge replacement is about 28% (EA0E960)

Estimate
See attachments for the Cost Estimate.

9. DELIVERYSCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	5/1/2015A
BEGIN ENVIRONMENTAL	M020	10/1/2015A
CIRCULATE DPR & DED EXTERNALLY	M120	10/30/2017A
PA & ED	M200	04/30/18A
BEGIN STRUCTURE	M215	6/1/2018
PS&E TO DOE	M377	5/2/2020
DRAFT STRUCTURES PS&E	M378	7/15/2020
PROJECT PS&E	M380	7/13/2020
RIGHT OF WAY CERTIFICATION	M410	7/01/2020
READY TO LIST	M460	7/29/2020
HEADQUARTERS ADVERTISE	M480	1/25/2021
AWARD	M495	2/26/2021
APPROVE CONTRACT	M500	4/15/2021
CONTRACT ACCEPTANCE	M600	3/30/2023
END PROJECT EXPENDITURES	M800	12/30/2025
FINAL PROJECT CLOSEOUT	M900	12/30/2025

*Dates are tentative

10. RISKS

A quantitative analysis of identified risks were prepared and registered in the risk register. See attachments for the Risk Register.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)
This project is considered to be an Assigned Project in accordance with the current Federal Highway Administration (FHWA) and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

Project Partners and Stakeholders:
California State Coastal Conservancy Mountains Recreation and Conservation Authority (MRCA)
National Park Service
National Wildlife Federation
Resources Conservation District of the Santa Monica Mountains (RCDSMM)
Santa Monica Mountains Conservancy
California Department of Fish and Wildlife
California State Parks
California Wildlife Conservation Board
City of Agoura Hills

City of Calabasas
City of Thousand Oaks
US Fish and Wildlife Service
Assembly Member Richard Bloom
Congressmen Ted Lieu
Senator Fran Pavley
Senator Henry Stern
Los Angeles County Supervisor Sheila Kuehl
Ventura County Supervisor Linda Parks
US Army Corps of Engineers
Regional Water Quality Control Board

12. PROJECT REVIEWS

District Maintenance	N/A	Date _____
District Design Liason	Zebunnesa Tareque	Date 04/09/18
Project Manager	Sheik Moinuddin	Date 04/12/18
FHWA	N/A	Date _____
Constructability Review	Ulysses Smpardos	Date 10/10/17

13. PROJECT PERSONNEL

Susan Tse Koo, Caltrans Senior Environmental Planner
Francis Appiah, Caltrans Associate Environmental Planner
Andrew Yoon, Caltrans Senior Transportation Engineer, Air Quality Branch
Penny Nakashima, Caltrans Senior Engineer Geologist, Hazardous Waste Branch
Sheik Moinuddin, Caltrans Project Manager
Ulysses Smpardos, Caltrans Structure Engineer, Bridge Design South
Khan Hossain, Caltrans Office Manager, Design C
Lohit Kotha, Caltrans Design Manager
O'Donna Blackstock, Caltrans Project Engineer
Clark Steven, Architect, New West Land Company
Seth Riley, National Parks Service
Beth Pratt, National Wildlife Foundation
Paul Edelman, Chief of Natural Resources & Planning, MRCA

14. ATTACHMENTS

A. Layout & Advanced Planning Study (APS)
B. Environmental Document (ED)
C. Hazardous Waste Assessment
D. Storm Water Data Report (SWDR)
E. Right of Way Data Sheet
F. Transportation Management Plan (TMP) Data Sheet
G. Risk Register
H. Cost Estimate

ATTACHMENT A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101	32.8/33.8		

REGISTERED CIVIL ENGINEER DATE

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

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.

LAYOUT

SCALE 1"=50' **L-1**

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: O. BLACKSTOCK

CHECKED BY:

FUNCTIONAL SUPERVISOR: LOHIT KOTHA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® **DESIGN**

LAST REVISION: 00-00-00

DATE PLOTTED => 04-APR-2018

TIME PLOTTED => 11:52

BORDER LAST REVISED 7/2/2010

USERNAME => s113883

DGN FILE => 307101ea001-with Agoura Tunnel.dgn

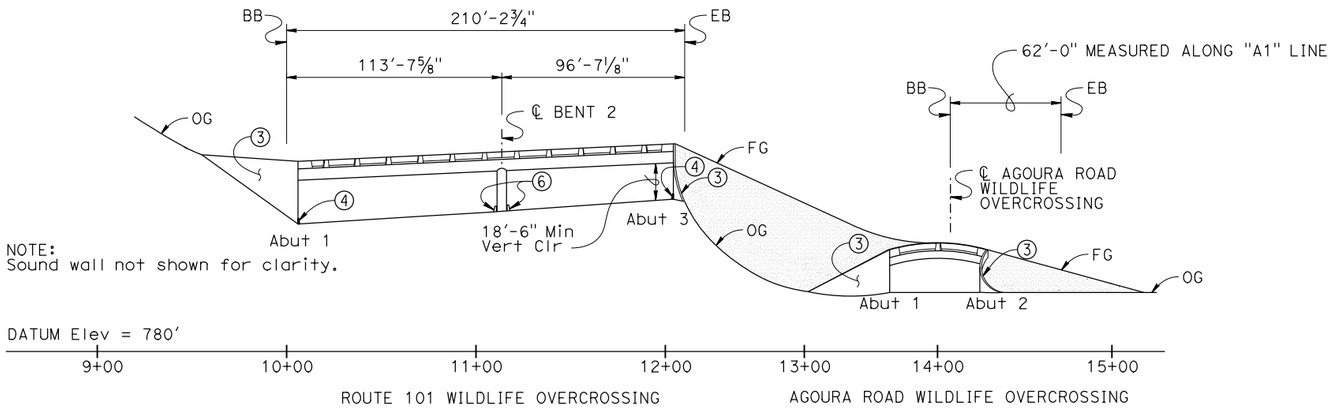
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 1823

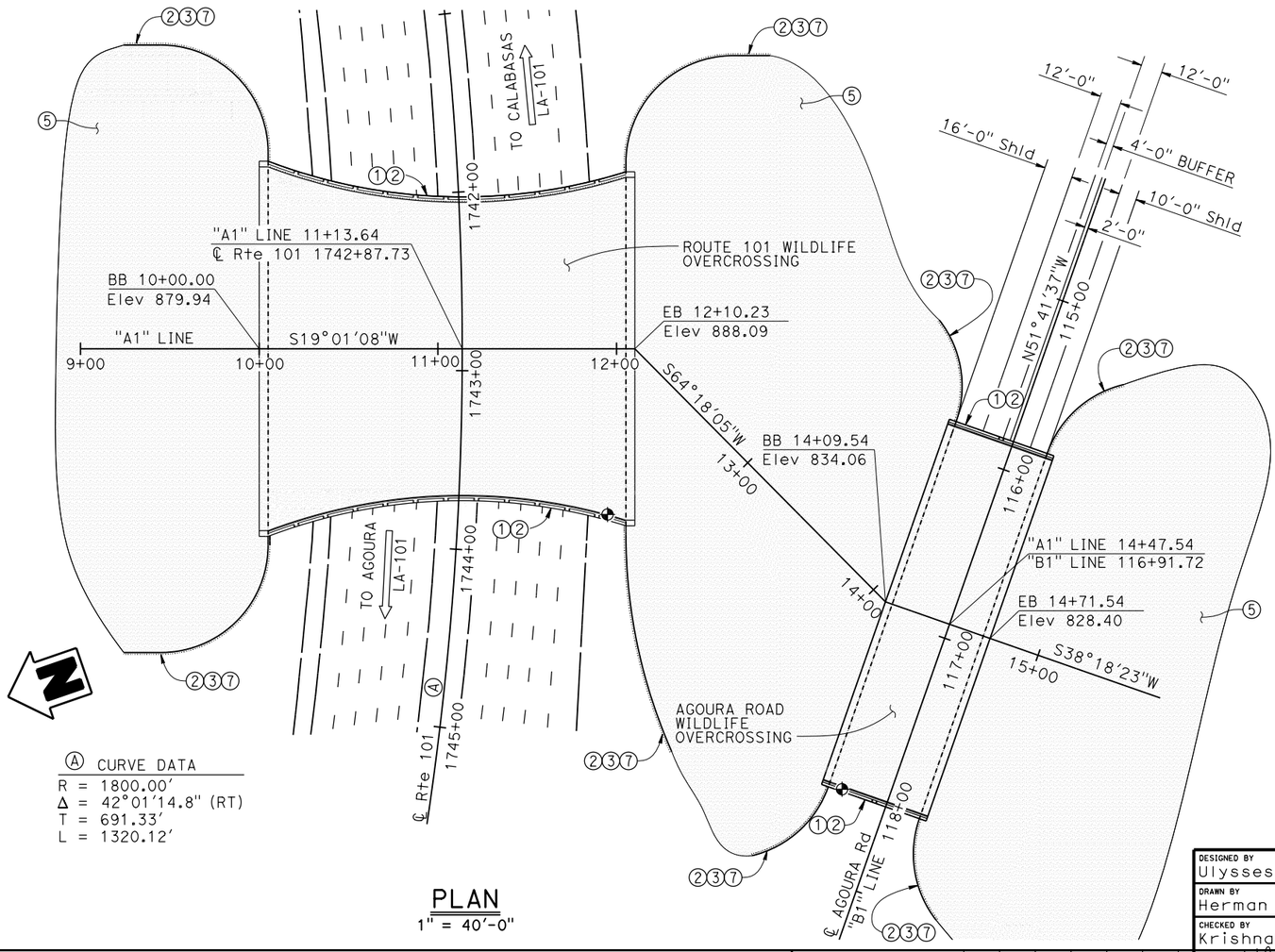
PROJECT NUMBER & PHASE 07140002131

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING SERVICES

Dist	COUNTY	ROUTE	POST MILE
07	LA	101	32.8/33.8



ELEVATION
1" = 40′-0"



Ⓐ CURVE DATA
R = 1800.00′
Δ = 42°01′14.8″ (RT)
T = 691.33′
L = 1320.12′

PLAN
1" = 40′-0"

LEGEND:

- ◆ Indicates point of Minimum Vertical Clearance
- Indicates limits of imported fill and vegetation
- ① Concrete Parapet
- ② Plexiglass or masonry block sound wall, 8′ (Min) high
- ③ Retaining Wall, Type 1
- ④ Concrete Barrier Type 60D
- ⑤ Imported fill and vegetation
- ⑥ Concrete Barrier Type 60F
- ⑦ Architectural Treatment

NOTES:

1. Traffic will pass through construction site; therefore, falsework openings are required. Based on information available at the time of this study, there is sufficient vertical clearance to provide a minimum of 15′-0" under falsework.
2. Temporary railing to be placed by others.
3. Existing utilities and signs in conflict to be removed or relocated by others.
4. Traffic control and staging to be handled by District.
5. Existing Rte 101 alignment to remain unchanged.
6. Existing alignment of Agoura Road to remain unchanged.
7. Extent of imported fill and vegetation beyond structure limits to be handled by District.

DESIGNED BY: Ulysses Smpardos	DATE: 9-29-17	STRUCTURE DESIGN	PLANNING STUDY
DRAWN BY: Herman Mauroschadt	DATE: 9-29-17	DESIGN BRANCH 15	LIBERTY CANYON WILDLIFE CROSSING, 1 OF 3
CHECKED BY: Krishnakant Andurlekar	DATE: 9-29-17		UNIT: 3604 / BRIDGE No.: TBD
APPROVED: Ulysses N. Smpardos	DATE: 9-29-17		CONTRACT No.: 07-30710K / PROJECT No. & PHASE: 0714000213

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REVISION 3/17/2017)
DATE PLOTTED => 29-SEP-2017 TIME PLOTTED => 10:56
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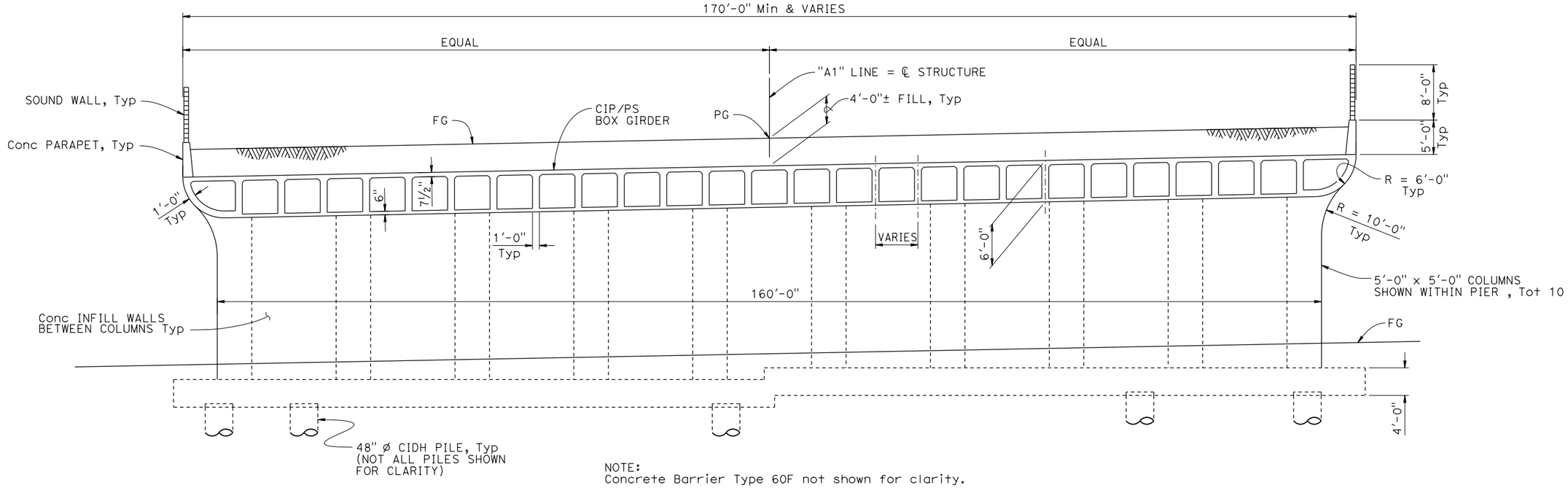
ORIGINAL SCALE IN INCHES 0 1 2 3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING SERVICES

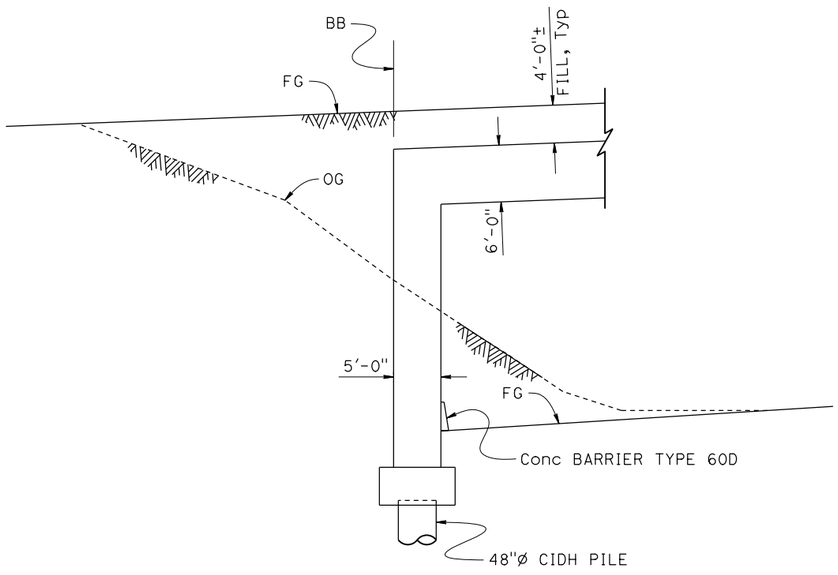
Dist	COUNTY	ROUTE	POST MILE
07	LA	101	32.8/33.8



NOTE:
Concrete Barrier Type 60F not shown for clarity.

ROUTE 101 WILDLIFE OVERCROSSING SECTION

1/8" = 1'-0"



ABUTMENT 1 SECTION

1/8" = 1'-0"

DATE OF ESTIMATE	10/05/17
BRIDGE REMOVAL	$0.00
STRUCTURE DEPTH	6.00
LENGTH	210
WIDTH	170
AREA	35,700
COST/SQFT INCLUDING TRO, MOBILIZATION & 25% CONTINGENCY	$515.51
TOTAL COST	$18,404,000.00

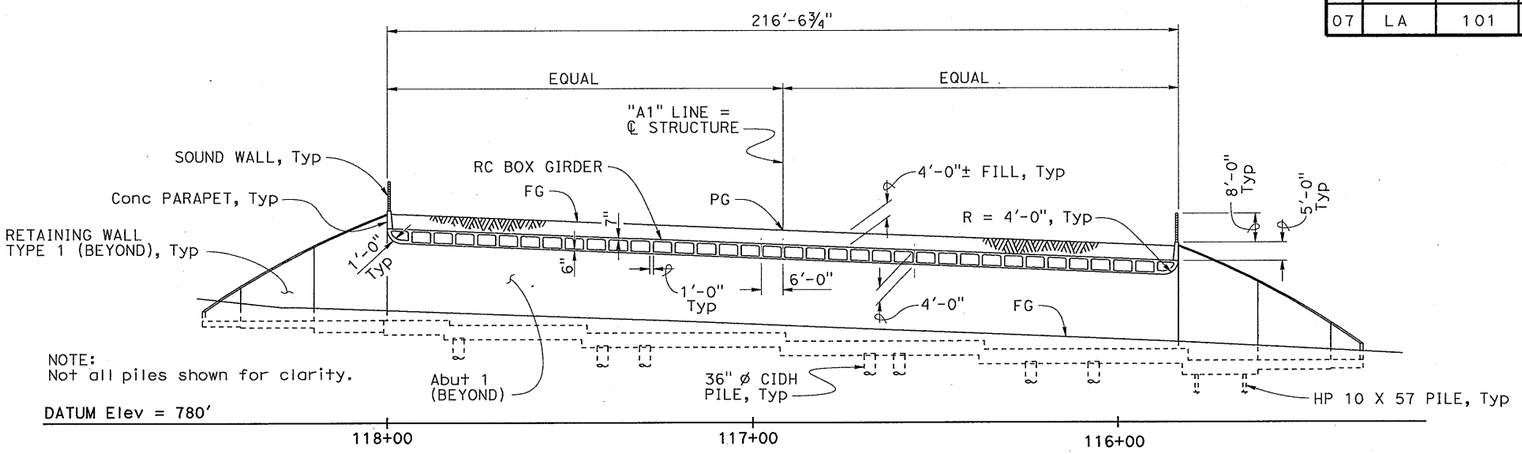
ROUTE 101 WILDLIFE OVERCROSSING

DESIGNED BY Ulysses Smpardos	DATE 9-29-17	STRUCTURE DESIGN	PLANNING STUDY
DRAWN BY Herman Mauroschadt	DATE 9-29-17	DESIGN BRANCH 15	LIBERTY CANYON WILDLIFE CROSSING, 2 OF 3
CHECKED BY Krishnakant Andurlekar	DATE 9-29-17		UNIT: 3604 / BRIDGE No.: TBD
APPROVED Ulysses N. Smpardos	DATE 9-29-17		CONTRACT No.: 07-30710K / PROJECT No. & PHASE: 0714000213

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REVISION 3/17/2017)
DATE PLOTTED => 29-SEP-2017 TIME PLOTTED => 10:57
FILE => 07-30710k-b-gp2.dgn USERNAME => s132486
ORIGINAL SCALE IN INCHES 0 1 2 3

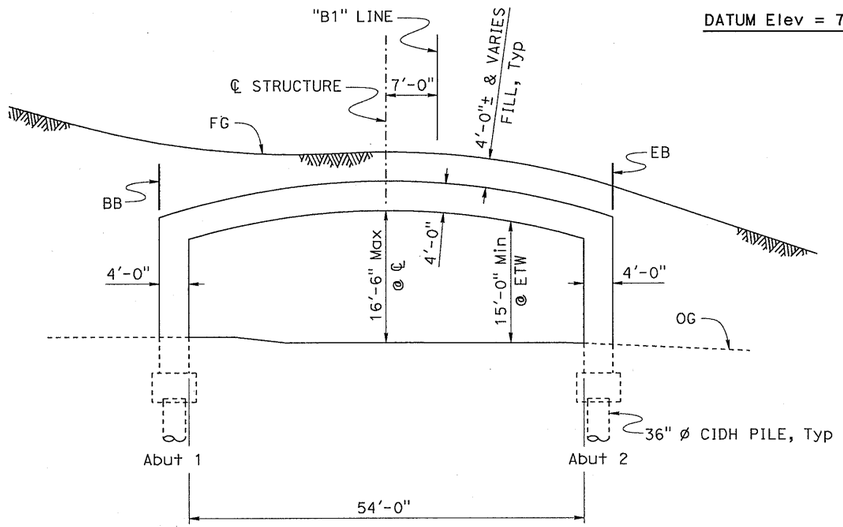
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF ENGINEERING SERVICES

Dist	COUNTY	ROUTE	POST MILE
07	LA	101	32.8/33.8



AGOURA ROAD WILDLIFE OVERCROSSING SECTION

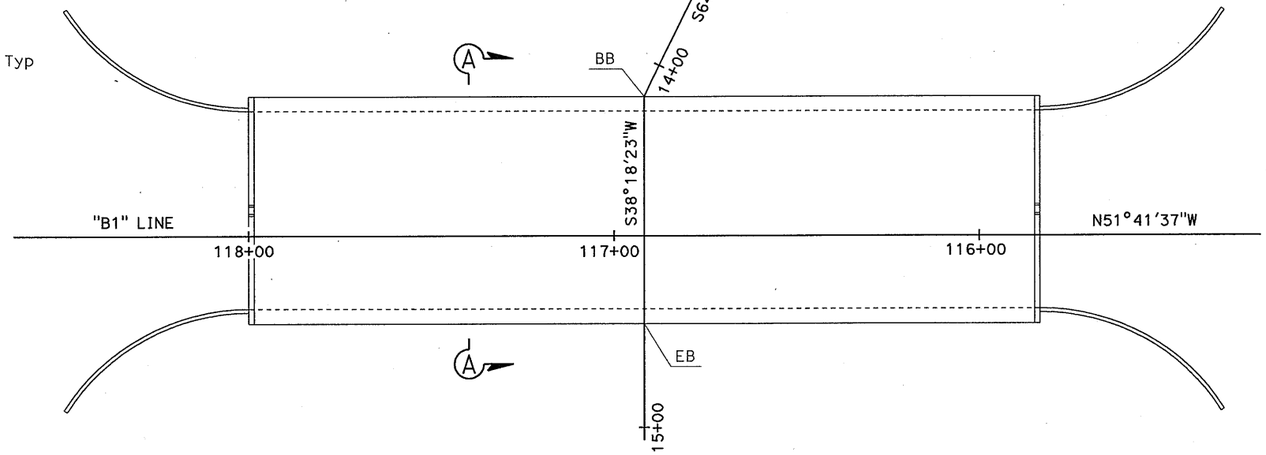
1" = 20'-0"



SECTION A-A

1" = 10'-0"

DATE OF ESTIMATE	10/05/17
BRIDGE REMOVAL	$0.00
STRUCTURE DEPTH	4.00
LENGTH	62
WIDTH	217
AREA	13,423
COST/SQFT INCLUDING TRO, MOBILIZATION & 25% CONTINGENCY	$588.72
TOTAL COST	$7,902,000.00



PLAN

1" = 20'-0"

AGOURA ROAD WILDLIFE OVERCROSSING

DESIGNED BY Ulysses Smpardos	DATE 9-29-17	STRUCTURE DESIGN	PLANNING STUDY
DRAWN BY Herman Mauroschadt	DATE 9-29-17	DESIGN BRANCH 15	LIBERTY CANYON WILDLIFE CROSSING, 3 OF 3
CHECKED BY Krishnakant Andurlekar	DATE 9-29-17		UNIT: 3604 / BRIDGE No.: TBD
APPROVED Ulysses N. Smpardos	DATE 9-29-17		CONTRACT No.: 07-30710K / PROJECT No. & PHASE: 0714000213

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REVISION 3/17/2017)
DATE PLOTTED => 10-APR-2018 TIME PLOTTED => 13:46
FILE => 07-30710K-b-gp3.dgn USERNAME => 6132486
ORIGINAL SCALE IN INCHES 0 1 2 3

ATTACHMENT B

MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department) proposes to construct a wildlife crossing over U.S. Route 101 west of Liberty Canyon Road (postmile 32.8 to postmile 33.8) in the City of Agoura Hills in Los Angeles County.

Determination

The Department has prepared an Initial Study for this project, and following public review, has determined from this study that the proposed project would not have significant effect on the environment for the following reasons:

The project would have no effect on wild and scenic rivers, farmland, timberland, coastal zone, paleontology, cultural resources, mineral resources and floodplain.

In addition, the project would have less than significant effects to visuals/aesthetics, geology, hazardous waste, air quality and noise, and transportation.

With the following mitigation measures incorporated, the project would have less than significant effects to construction related impacts on biological resources, and hydrology and water quality.

Avoidance, minimization and mitigation measures include pre-construction surveys, vegetation and replanting, post-construction monitoring and evaluation, and water quality permits.

Ronald Kosinski

RONALD KOSINSKI
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation

Apr. 12, 2018

Date

CALIFORNIA DEPARTMENT OF TRANSPORTATION

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Liberty Canyon Wildlife Habitat Connectivity Project

FOR

The California Department of Transportation has determined that Alternative 2 Design Option 2 will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) and Initial Study with Mitigated Negative Declaration which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA and Initial Study with a Mitigated Negative Declaration.

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

April 12, 2018
Date

Ronald Kosinski
RONALD KOSINSKI
Caltrans Deputy District Director

ATTACHMENT C

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Making Conservation a California Way of Life.

To: SUSAN TSE
SENIOR ENVIRONMENTAL PLANNER
DIVISION OF ENVIRONMENTAL PLANNING

Date: June 14, 2017

File: 07-LA-101-PM 31.9/33.7
EA: 07-334-307100
EFIS:1847-0714000213
Wildlife Overcrossing

From: PENNY NAKASHIMA, P.G.
Senior Engineering Geologist
Office of Environmental Engineering (OEE)
District Hazardous Waste Branch - North Region

Subject: **HAZARDOUS WASTE ASSESSMENT**

This is in response to your request for a review of the Liberty Canyon Project Summary Report and a hazardous waste assessment and ISA, which we received on May 10, 2017. This project will construct a vegetated bridge to facilitate passage of wildlife between the Santa Monica Mountains and the Simi Hills, ultimately connecting to the Sierra Madre Mountain Range. There is one No-Build Alternative and two Build Alternatives under consideration:

Build Alternative 1
This alternative proposes to build a vegetated bridge across US-101 west of Liberty Canyon Road. The scope of work includes:

- Constructing a two span 165-foot wide by 200-foot long bridge with columns on spread footings in the freeway median.
- Constructing retaining walls at both the north and south end of the bridge.
- Constructing soundwalls along the outer edges of the bridge to mitigate traffic noise and block light in order to make the crossing more conductive to wildlife crossing.
- Planting vegetation on and adjacent to the bridge to create an extension of the surrounding wildlife habitat and connect the crossing to the existing riparian corridor.
- Installing irrigation and drainage systems on the bridge.
- Filling and grading the slope and open area between the freeway and Agoura Road from the southern bridge abutment down to the shoulder of Agoura Road.
- Modifying or replacing existing wildlife fencing from Lost Hills Road (post mile PM 31.9) to Palo Comado Canyon Road (Cheseboro Road exit, PM 33.7) to prohibit wildlife from accessing US-101 and funnel wildlife to the overcrossing.
- Constructing a multi-use, single-track recreational trail on the overcrossing.

Build Alternative 2
This alternative proposes the same design as Build Alternative 1 with the addition of an extension of the overcrossing over Agoura Road, which runs parallel to US-101 at this location. The scope of work includes:

- Constructing a two span 165-foot wide by 200-foot long bridge with columns on spread footings in the freeway median.

- Constructing retaining walls at both the north and south end of the bridge.
- Constructing a 48-foot wide tunnel and associated retaining wall system along Agoura Road to keep the road operational and to accommodate the fill material needed to construct the wildlife crossing.
- Grading and fill the slope between the bridge abutment and Agoura Road south of the freeway to grade to allow the crossing to extend over Agoura Road before descending to join existing ground.
- Constructing soundwalls along the outer edges of the bridge to mitigate traffic noise and block light in order to make the crossing more conductive to wildlife crossing.
- Planting vegetation on and adjacent to the bridge to create an extension of the surrounding wildlife habitat and connect the crossing to the existing riparian corridor.
- Installing irrigation and drainage systems on the bridge.
- Filling and grading the slope and open area between the freeway and Agoura Road from the southern bridge abutment down to the shoulder of Agoura Road.
- Modifying or replacing existing wildlife fencing from Lost Hills Road (post mile PM 31.9) to Palo Comado Canyon Road (Cheseboro Road exit, PM 33.7) to prohibit wildlife from accessing US-101 and funnel wildlife to the overcrossing.
- Constructing a multi-use, single-track recreational trail on the overcrossing.

Based on the available information we have on file and the information submitted, the following are general conclusions regarding hazardous waste issues on this project:

1. The Los Angeles Regional Water Quality Control Board's GeoTracker and the California Department of Toxic Substances Control's EnviroStor regulatory agency environmental databases were researched to identify potential recognized environmental concerns. Based on our review, no evidence of hazardous waste sites were found to exist at or in the vicinity of the property acquisition. There are no gas stations or facilities with underground storage tanks in the vicinity of the proposed aquisition that may be a potential hazardous waste concern.
2. Fencing work as proposed on the Liberty Canyon Wildlife Fencing Summary plan does not have any hazardous waste issues. The proposed wildlife jump ramps to be constructed involve minimal disturbance and no excavation of unpaved soil. Therefore, aerially deposited lead (ADL) site investigation (SI) for this work is not required.
3. Wildlife jump ramps and landscape fill materials need to be tested for contaminants prior to acceptance. Imported borrow fill materials need to be free of contaminants. This will require testing of soil source prior to acceptance and placement at detection limits that are below concentrations that have adverse impacts on ecological (animal) receptors. OEE will prepare the non-standard special provisions (NSSP) for the sampling and analysis of soil by the contractor for RE approval prior to acceptance. The NSSPs requires approval from HQ Construction Engineering and HQ Office of Construction Contract Standards.
4. An ADL Site Investigation Report, by Stantec, on Route 101 PM 29.1/38.2 (Task Order No. 27 on Contract 07A3322, dated October 15, 2015) indicates that the exposed soil adjacent to the freeway is hazardous material with soluble lead exceeding Soluble Threshold Limit Concentration (STLC) of 5 mg/L. Disturbance of unpaved soil involving excavation for bridge abutments and retaining/wing walls will require an ADL

site investigation. We will initiate the SI upon receiving a hazardous waste assessment request at the early stage of PS&E. The SI will take approximately 3 months to complete.

5. Based on the current Structure advance planning study, pile foundation is not anticipated. Therefore, groundwater disposal is not a hazardous waste concern.

The project involves removal of existing metal beam guard railing with wood posts. The existing wood posts have been treated with chemical preservatives that contain arsenic, chromium, copper, creosol, and pentachlorophenol to protect it from insect attack and fungal decay. All treated wood waste must be managed and disposed of at an approved treated wood waste facility in accordance with Title 22 California Code of Regulations. Funding needs be allocated for the management (handling, storing, transportation, and disposal) of treated wood waste and the Board of Equalization (BOE) fee.

Asbestos containing materials (ACM) may be encountered during metal beam guard railing removal work. The shims used in metal beam guard railings have been found to contain asbestos. An asbestos survey is required to identify ACM in the project. OEE will prepare and seek approval for the asbestos survey non-standard special provision (NSSP) during the PS&E phase.

In general, the top two feet of soil in unpaved areas adjacent to the roadway is expected to contain high concentrations of ADL contaminant. The Contractor will be required to prepare a project specific Lead Compliance Plan (LCP) to prevent or minimize worker exposure to lead contaminant in the soil. For the latest LCP cost estimate, please check the Contract Cost Database at *http://sv08web/contractcost/*.

We request 680 hours of support cost for this project. The following hours are only estimates and may be revised if the scope of work changes:
WBS 235.10 = 500 hrs (PS&E phase, SI support, SSPs/NSSPs support)
WBS 255.05 = 40 hrs (PS&E phase, final PS&E Quality Review)
WBS 270.66 = 100 hrs (Lead Compliance Plan review, Construction support)
WBS 280.10 = 40 hrs (Construction support for ECR/CEC project closeout)

This Hazardous Waste Assessment is for the scope of work described above. Any changes made to the scope of work will require a Hazardous Waste Re-Assessment. If you have any questions, I can be reached at penny.nakashima@dot.ca.gov, (213) 897-0670 or contact Quyen Tran of my staff at quyen.tran@dot.ca.gov, (213) 897-4718.

ATTACHMENT D

Dist-County-Route: 07-LA-101
Post Mile Limits: 32.8/33.8
Type of Work: Wildlife Crossing
Project ID (EA): 0714000213 (EA 307100)
Program Identification:
Phase: ☐ PID ☒ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): Los Angeles Region 4
Total Disturbed Soil Area: 8 acres PCTA: 0.03 acre
Alternative Compliance (acres): -0.03 ATA 2 (50% Rule)? Yes ☐ No ☒
Estimated Const. Start Date: 11/01/2019 Estimated Const. Completion Date: 06/01/2022
Risk Level: RL 1 ☐ RL 2 ☒ RL 3 ☐ WPCP ☐ Other:
Is MWELO applicable? Yes ☐ No ☒
Is the Project within a TMDL watershed? Yes ☒ No ☐
TMDL Compliance Units (acres): 5.62
Notification of ADL reuse (if yes, provide date): Yes ☐ Date: No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E only.

O'Donna Blackstock, Registered Project Engineer/Landscape Architect — 4/20/2018 Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

Sheik Moinuddin, Project Manager — 4/23/2018 *Date*

Jose M Villaseñor for David Lawrence — 4/24/18
David Lawrence, Designated Maintenance Representative *Date*

Ron Russak, Designated Landscape Architect Representative — 04/26/18 *Date*

[Stamp Required at PS&E only]

for *Shirley Pak, District/Regional Design SW Coordinator or Designee* — 04/26/2018 *Date*

ATTACHMENT E

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious Drought!
Help Save Water!

To: Lohit Kotha , Design Manager
Office of Design
District 7, Los Angeles Office

From: Dan Murdoch, Office Chief
Right of Way Appraisals, and Planning & Management
District 7, Los Angeles Office

Date: 12/6/2017
EA: 307100
Data Sheet ID NO: ds2818
Project ID # 0714000213

Subject: Current Estimated Right of Way Costs for **Project Report**

We have completed an estimate of the Right of Way costs for the above referenced project based on information received from Odonna Blackstock PE and the following assumptions and limiting conditions apply:

- The mapping did not provide sufficient detail to determine the limits of the right of way required.
- The transportation facilities have not been sufficiently designed, so our estimator could not determine the damages to any of the remainder parcels affected by the project.
- Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the estimate.

Right of Way Certificate (RWC) lead time will require a minimum of 24 months after maps to appraisal **(MA).** Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement if required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of 18 months will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

Current Schedule: PRSM

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
N/A	N/A	09/28/2021	N/A	07/31/2021

TO **Lohit Kotha**
ATTN **ODonna Blackstock**
SENIOR R/W P&M **Sheik Moinuddin**
ROUTE 101
PM_KM 33
EA 307100
Project ID # 0714000213
ALT

R/W DATA SHEET

ID NO ds2818

Date of Data Sheet 12/6/2017

Project Description Liberty Canyon Wildlife Crossing Project, In Los Angeles County, in Agoura Hills, 0.2 mile west Liberty Canyon Rd UC

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios.
The estimate is subject to change and revision.
The mapping did not provide sufficient nor adequate detail to determine the limits of thr Right of Way required and effects on the improvements.
The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

This cost estimate is pursuant to the following responses supplied by Lohit Kotha to the Data Sheet Request Form.

	YES	NO	Not known at this time
Utilities are depicted on plans		x	
Railroads are depicted on plans		x	
There are Material and/or Disposal Sites Required	x		
Caltrans will do the Right of Way work	x		
There will be a Cooperative Agreement	x		
This is a reimbursable project	x		
There is Hazardous Waste potential	x		

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits	$999,600	$1,310,514
Clearance		
RAP (cont rate.)		
Escrow costs (cont rate.)	$6,779	$8,887
Utility relocation costs	$15,313,000	$20,527,935
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	$16,319,379	$21,847,336

Escalation Rate Rw .07
Escalation Rate Utilities .08
Cert.date 9/28/21

Parcel Count and Py Info

Data Sheet ID NO: ds2818
ROUTE 101
PM_KM 33
EA 307100
ALT

PARCEL TYPES	DUAL APPR.
A	
B 0	
C	
D	
F	

RIGHTS NEEDED	
FEE	1
EASE	
TCE	

TAKES	
FULL	1
PART	0
TOTAL	1

DISPLACEMENT OF UNITS	
SFR	
BUS	
MULTI	

PARCELS WITH RAP

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS
0

POTENTIAL EXCESS PARCELS

UTILITY IMPACTS	
u4-1	
u4-2	
u4-3	
u4-4	10
u5-7	
u5-8	
u5-9	10

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	
225 & 245	Acquisitions	
200	Utilities	4,300
185.20.40	Utility Potholing	90
205	Railroads	
225 & 245	Condemnation	126
225 & 245	Clearance	
225 & 245	Relocation	
220 & 300	RW Engineering	300
	Total	4,816

UTILITY INFORMATION

2)	Pothole 6"M gas (SCG), Agoura Road	6	3000	$18,000
3)	30" Water (Las Virgenes Mucipal Water) MWD, Vendell Pl (1900 Feet)	1900	2250	$4,275,000
4)	Sewer manhole (Las Virgenes Mucipal Water)	2	30000	$60,000
5)	24"Sewer (Las Virgenes Mucipal Water) (200 Feet)	200	1800	$360,000
6)	Power from OH to UG "Estimate from SCE $5,400,000 + $1,600,000	1	7000000	$7,000,000
7)	ATT from OH to UG "Estimated $1,200,000	1	1200000	$1,200,000
8)	MCI from OH to UG "Estimated $1,200,000	1	1200000	$1,200,000
9)	Airtouch from OH to UG "Estimated $1,200,000	1	1200000	$1,200,000

Are utility easements required? No

Are Utility agreements required? Yes

Total Current Cost $15,313,000

Const. Completion Date 07/31/2021

Utility Escalation Rate 8%

Total Escalated Cost $20,527,935

Data Sheet ID NO: ds2818
ROUTE 101
PM_KM 33
EA 307100
ALT

RR INFORMATION

Are RR affected 0

Describe the RR facilities affected, and ownership:
(i.e. RR name, RR spurs, branch lines, at grade crossings?)

Will construction work be performed in RR right of way? Y/N If yes, describe:

What types of agreements are anticipated to be required from the RR?

Will Temporary Construction Easement (TCE) rights be required for the project construction? If yes, explain.

Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.	
Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR re-arrangement costs. This figure is included in the RW Capital estimate total.	**$ 0**

		DATE
Right of Way Estimate prepared by	Victor Lee	12/6/17
Railroad Estimate prepared by	Presley Burroughs	10/2/17
Utilities Estimate prepared by	Michele Graves	10/10/17

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF _____ 04/19/18

ATTACHMENT F

TRANSPORTATION MANAGEMENT PLAN DATA SHEET
(Preliminary TMP Elements and Costs)

Co/Rte/PM LA-101, PM 33.00 EA 30710K / 0714000213 Alternative No. ____

Project Limit In Los Angeles County in the City of Agoura Hills on Route 101 at Liberty Canyon Rd.

Project Description Constructing a vegetated overpass across Route 101 to provide wildlife crossing just west of Liberty Canyon Road.

1) Public Information

- ☐ a. Brochures and Mailers $
- ☒ b. Press Release
- ☒ c. Paid Advertising $50,000.00
- ☐ d. Public Information Center/Kiosk $
- ☐ e. Public Meeting/Speakers Bureau
- ☐ f. Telephone Hotline
- ☒ g. Internet
- ☐ h. Others _____ $

2) Motorists Information Strategies

- ☒ a. Changeable Message Signs (Fixed) $00.00
- ☐ b. Changeable Message Signs (Portable) $
- ☐ c. Ground Mounted Signs $
- ☐ d. Highway Advisory Radio $
- ☐ e. Caltrans Highway Information Network (CHIN)
- ☐ f. Others _____ $

3) Incident Management

- ☒ a. Construction Zone Enhanced Enforcement Program (COZEEP) $90,000.00
- ☐ b. Freeway Service Patrol $
- ☒ c. Traffic Management Team
- ☐ d. Helicopter Surveillance $
- ☐ e. Traffic Surveillance Stations (Loop Detector and CCTV) $
- ☐ f. Others _____ $

4) Construction Strategies

- [x] a. Lane Closure Chart
- [ ] b. Reversible Lanes
- [ ] c. Total Freeway Mainline Closure
- [ ] d. Extended Weekend Closure
- [ ] e. Contra Flow
- [ ] f. Truck Traffic Restrictions $
- [ ] g. Reduced Speed Zone $
- [ ] h. Connector and Ramp Closures
- [ ] i. Incentive and Disincentive $
- [ ] j. Moveable Barrier $
- [ ] k. Others _____ $

5) Demand Management

- [ ] a. HOV Lanes/Ramps (New or Convert) $
- [ ] b. Park and Ride Lots $
- [ ] c. Rideshare Incentives $
- [ ] d. Variable Work Hours
- [ ] e. Telecommute
- [ ] f. Ramp Metering (Temporary Installation) $
- [ ] g. Ramp Metering (Modify Existing) $
- [ ] h. Others _____ $

6) Alternative Route Strategies

- [ ] a. Add Capacity to Freeway Connector/Ramps $
- [ ] b. Street Improvement (widening, traffic signal... etc) $
- [ ] c. Traffic Control Officers $
- [ ] d. Parking Restrictions
- [ ] e. Others _____ $

7) Other Strategies

- [ ] a. Application of New Technology $
- [ ] e. Others _____ $

TOTAL ESTIMATED COST OF TMP ELEMENTS = $140,000.00

Project Notes:

1. The scope of work involves constructing a vegetated overpass across Route 101 at Liberty Canyon Road.
2. Public Affairs Compaign cost estimate of $50,000.00 was provided by Judy Gish, Public Information Officer, Caltrans Office of Public Affairs and Media Relations, on 3/12/2015.
3. In the instruction to the RE File, inform RE to notify Public Affairs prior to construction to ensure that a PIO is assigned for the project.
4. COZEEP cost estimate of $90,000.00 was provided by Amjad Obeid, Construction Traffic Advisor-South, on 3/16/2015.
5. Existing Fixed Changeable Message Signs may be used to manage traffic as needed during construction as follows:
   A. CMS # 108 (NB Rte 101 at De Soto Ave).
   B. CMS # 98 (SB Rte 101 at Ventu Park Rd).
6. Traffic Management Team is required during full freeway closure for falsework erection and removal.
7. It is anticipated work will be performed in accordance with the Lane Requirements Charts provided in the Maintaining Traffic Specifications.
8. Any changes in construction strategy that would result in a different type of closures other than indicated here shall require a revision for the TMP Data Sheet.

PREPARED BY — Raymond Shehata, T.E. — DATE 3/17/15

APPROVAL RECOMMENDED BY — Sarah Horn, P.E., Acting S.T.E. — DATE 3/17/15

APPROVED BY — Sam Esquenazi, District Traffic Manager — DATE 3/19/15

ATTACHMENT G

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-0001 (REV 07/2013)

The risk register is to be approved and signed-off by the District Deputies* listed below for all scalability levels. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

Project Information ☒ Capital Project ☐ Major Maintenance Project (Check One) Total Estimated Cost: $68,000,000.00

Project ID/District-EA: 0714000213/07-30710

Project Description: Liberty Canyon Wildlife Crossing

Project Manager (PM): Sheik M. Moinuddin

Project Risk Manager (For Risk Level 3 Projects): Sharas Bangalore SB

☐ No Risk Register Certification Required - - Check box if project is less than $1 million in total cost and risk register not prepared. Sign below and submit this form with PID, PA&ED, PS&E submittal, and RE Handoff File (as applicable).

Project Manager Signature _____ Date: _____

PID (Recommended for Capital Projects Only excluding Minor Projects)

Project Manager _____ Date: _____

Deputy District Director, Planning _____ Date: _____

Deputy District Director*, Design** _____ Date: _____

Deputy District Director, Project Management _____ Date: _____

PA&ED (Required for Capital Projects Only)

Project Manager E.J. S. Moinuddin Date: 04/24/2018

Deputy District Director*, Environmental _____ Date: 4/24/18

Deputy District Director*, Design** _____ Date: 4/24/18

Deputy District Director, Project Management _____ Date: 4/24/18

Prior to PS&E (Required for Capital Projects and Major Maintenance Projects)

Project Manager _____ Date: _____

Deputy District Director*, Design** _____ Date: _____

Deputy District Director*, Construction _____ Date: _____

Deputy District Director*, Right of Way _____ Date: _____

Deputy District Director*, Environmental _____ Date: _____

Deputy District Director, Project Management** _____ Date: _____

RE File Hand-off (Recommended for Capital Projects and Major Maintenance Projects)

Project Manager _____ Date: _____

Deputy District Director*, Design** _____ Date: _____

Deputy District Director*, Construction _____ Date: _____

Deputy District Director, Project Management** _____ Date: _____

*or the respective Project Delivery Division Chief signatures in the North Region or Central Region

**or Deputy District Director, Maintenance signature for HM Projects designed by the District Maintenance Division

LEVEL 3 - RISK REGISTER						Project Name:	Liberty Canyon Wildlife Crossing			Project Manager	Sheik M. Moinuddin					Risk Manager	Sharas Bangalore	District-EA	07-30710
										Risk Assessment						Total Capital Cost		$68,000,000	
Risk Identification									Probability	Cost Impact Before Mitigation (70th)				$3,687,201		Risk Response			
Risk No.	Status	Risk ID.	Task	Type	Category	Title	Risk Statement	Current status/Assumptions	Probability of Occurrence	Low	Most likely	High	Frequency	Impact	Risk Before	Rationale	Strategy	Response Actions	Risk Owner	Updated
1	Active	180.PPM	180	Threat	PPM	Funding	Funding source for support cost for future phases and construction capital are not identified or committed.	Funding	50%				1	$0	$0	Project sponsor to get the consensus of all stake holders during the PA&ED phase to commit for future funding of the project.	Avoid	Develop a comprehensive funding plan and cooperative agreement.	Project sponsors	4/23/2018
2	Active	180.Env	180	Threat	Env	Foot Print of the project	There is a creek about 50 feet south of Agoura Road fill section of the project. Any change in the foot print which touches the creek may threat the proposed project.	Foot print of the wildlife crossing stays the same during the PS&E phase.	20%				0	$0	$0	PA&ED has been developed with consensus from all stake holders not to touch the creek and PS&E phase has to make sure to stay within the existing foot print.	Avoid	Make sure not to change the foot print of the project to avoid touching the creek in PS&E phase.	Design	4/23/2018
3	Active	180.Mtn	180	Threat	Mtn	Maintenance Agreement	City of Agoura Hills has declined to maintain the tunnel portion or any other element of this project with in their R/W. Also, the conceptual plans show that there is 4 feet of soil on top of the 101 bridge which is in Caltrans R/W. There is no clear indication as to which agency will maintain various elements of the project.	Maintenance agreement is required	60%				1	$0	$0	Get the stake holders to come to an agreement as to which agency will maintain which elements of the project within their R/W during the PS&E phase.	Mitigate	Develop a comprehensive Maintenance agreement plan.	Project Manager	4/23/2018
4	Active	180.Dgn	180	Threat	Dgn	Permits	Permits from several agencies, namely, California Department of Fish and Wildlife; Caltrans; California State Water Resources Control Board; California Public Utilities Commission; City of Agoura Hills; FHWA will be required.	Permits and approvals are required.	50%				1	$0	$0	Involve the permit agencies early in the PS&E phase.	Mitigate	Involve the Permitting agencies early enough to avoid delays to permit issuing process and hence avoid delay to the project	Project Manager	4/23/2018
5	Active	180.Env	180	Threat	Env	Contaminated water	As a result of probable shallow ground water at 10-20 feet below ground surface adjacent to the project area, during construction phase, National Pollutant Discharge Elimination System (NPDES) compliance may require construction dewatering. This would impact the work, resulting additional time and cost.	Groundwater was not analyzed for water quality	30%	$100,000	$150,000	$200,000	0	$150,000	$0	Depth of foundation for bridges, sound walls and retaining walls, may encounter groundwater.	Mitigate	Site investigation to determine water quality and if treating is required to be done during PS&E phase.	Environmental	4/23/2018
6	Active	180.Row	180	Threat	Row	Utility Agreement and relocation	Agreement to relocate utilities is required from several utility companies, namely, but not limited to, SCE, SC Gas co., Cell phone towers by AT&T and Verizon., DWP to name a few.	Utility agreements is required	50%	$500,000	$4,000,000	$5,000,000	1	$3,583,333	$3,583,333	Involve the utility companies early in the PS&E phase to get the agreements and start the relocation process.	Mitigate	It would require 24-36 months to execute all the utility agreements and relocate the utilities.	R/W	4/23/2018
7	Active	180.Row	180	Threat	Row	R/W issues	Caltrans will not acquire the R/W but Mountains Recreation and Conservation Authority (MRCA) will acquire the additional R/W needed from private developer.	MRCA will acquire the necessary R/W from private developer.	30%	$100,000	$300,000	$500,000	0	$300,000	$0	Minimize the impact of R/W acquisition on construction.	Mitigate	Work with MRCA early enough during the Design phase to start R/W acquisition process from private developer.	MRCA	4/23/2018
8	Active	180.Env	180	Threat	Env	Hazardous waste issues	CIDH piles are proposed for bridge support and hence there is need for new Hazardous Waste Assessment and Geotechnical investigation to see if there is any impact of water table during CIDH pile drilling.	There are no hazardous waste issues during the PA&ED phase.	30%	$250,000	$500,000	$750,000	0	$500,000	$0	Minimize the impact of Hazardous waste and water table issues during construction by testing during PS&E phase.	Mitigate	Hazardous waste testing to be done early during Design phase. Geotechnical investigation to be done early during Design phase	Hazardous waste unit	4/23/2018

ATTACHMENT H

PROJECT

PRELIMINARY COST ESTIMATE

EA: 07-307100 PID: 0714000213

EA: 07-307100

PID: 0714000213

District-County-Route: 07-LA-101

PM: 32.8 - 33.8

Type of Estimate : Preliminary Cost Estimate

Program Code :

Project Limits : LA-101-PM 32.8/33.8

Project Description: Wildlife Crossing

Scope : Construction of a bridge across US-101, a 54' tunnel(bridge) over Agoura Road, fill and grade inbetween US-101 and Agoura Road

Alternative : 2 - Design Option 2

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	$ 11,341,200	$ 12,476,467
TOTAL STRUCTURES COST	$ 30,356,450	$ 33,395,166
SUBTOTAL CONSTRUCTION COST	$ 41,697,650	$ 45,871,633
TOTAL RIGHT OF WAY COST	$ 16,319,379	$ 21,847,336
TOTAL CAPITAL OUTLAY COSTS	$ 58,018,000	$ 67,719,000
PR/ED SUPPORT	$ 1,176,000	$ 1,176,000
PS&E SUPPORT	$ 7,500,000	$ 7,500,000
RIGHT OF WAY SUPPORT	$ 1,200,000	$ 1,200,000
CONSTRUCTION SUPPORT	$ 10,500,000	$ 10,500,000
TOTAL SUPPORT COST	$ 20,376,000	$ 20,376,000
TOTAL PROJECT COST	$ 78,400,000	$ 88,100,000

If Project has been programmed enter Programmed Amount

	Month	/	Year
Date of Estimate (Month/Year)	11	/	2017
Estimated Construction Start (Month/Year)	4	/	2021
Number of Working Days =	701		
Estimated Mid-Point of Construction (Month/Year)	5	/	2020
Estimated Construction End (Month/Year)	12	/	2025
Number of Plant Establishment Days	261		

Estimated Project Schedule

PID Approval	May-15
PA/ED Approval	April-18
PS&E	April-20
RTL	August-20
Begin Construction	April-21

Reviewed by District O.E. or Cost Estimate Certifier	n/a	**xx/xx/xxxx**	(xxx) xxx-xxxx
	Office Engineer / Cost Estimate Certifier	**Date**	**Phone**
Approved by Project Manager	Sheik M. Moinuddin	**4/24/2018**	(213) 897-8092
	Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	**Earthwork**	$	738,800
2	**Pavement Structural Section**	$	58,600
3	**Drainage**	$	740,000
4	**Specialty Items**	$	62,000
5	**Environmental**	$	1,763,700
6	**Traffic Items**	$	690,600
7	**Detours**	$	-
8	**Minor Items**	$	405,400
9	**Roadway Mobilization**	$	446,000
10	**Supplemental Work**	$	326,400
11	**State Furnished**	$	1,401,800.00
12	**Time-Related Overhead**	$	3,228,600.00
13	**Roadway Contingency**	$	1,479,300.00
	TOTAL ROADWAY ITEMS	**$**	**11,341,200**

Estimate Prepared By :	Blackstock O'Donna, P.E	Apr-18	(213) 897-7515
	Name and Title	Date	Phone
Estimate Reviewed By :	Lohit Kotha, Design Manager	Apr-18	(213) 897-2752
	Name and Title	Date	Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
190101	Roadway Excavation	CY		x		=	$	-
19010X	Roadway Excavation (Type X) ADL	CY		x		=	$	-
194001	Ditch Excavation	CY		x		=	$	-
19801X	Imported Borrow	CY/TON		x		=	$	-
192037	Structure Excavation (Retaining Wall)	CY		x		=	$	-
193013	Structure Backfill (Retaining Wall)	CY		x		=	$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		=	$	-
16010X	Clearing & Grubbing	LS/ACRE	1	x	13,200.00	=	$	13,200
170101	Develop Water Supply	LS	1	x	10,000.00	=	$	10,000
19801X	Imported Borrow	CY	89,443	x	8.00	=	$	715,544
210130	Duff	ACRE		x		=	$	-
XXXXXX	Some Item	Unit						

TOTAL EARTHWORK SECTION ITEMS	**$**	**738,800**

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
401050	Jointed Plain Concrete Pavement	CY		x		=	$	-
400050	Continuously Reinforced Concrete Pavement	CY		x		=	$	-
404092	Seal Pavement Joint	LF		x		=	$	-
404093	Seal Isolation Joint	LF		x		=	$	-
413117	Seal Concrete Pavement Joint (Silicone)	LF		x		=	$	-
413118	Seal Pavement Joint (Asphalt Rubber)	LF		x		=	$	-
280010	Rapid Strength Concrete Base	CY		x		=	$	-
410095	Dowel Bar (Drill and Bond)	EA		x		=	$	-
390132	Hot Mix Asphalt (Type A)	TON	365	x	155.00	=	$	56,575
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		=	$	-
39300X	Geosynthetic Pavement Interlayer (Type X)	SQYD		x		=	$	-
26020X	Class 2 Aggregate Base	TON/CY		x		=	$	-
290201	Asphalt Treated Permeable Base	CY		x		=	$	-
250401	Class 4 Aggregate Subbase	CY		x		=	$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		=	$	-
397005	Tack Coat	TON		x		=	$	-
377501	Slurry Seal	TON		x		=	$	-
3750XX	Screenings (Type XX)	TON		x		=	$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		=	$	-
370001	Sand Cover (Seal)	TON		x		=	$	-
731530	Minor Concrete (Textured Paving)	CY		x		=	$	-
731502	Minor Concrete (Miscellaneous Construction)	CY		x		=	$	-
39407X	Place Hot Mix Asphalt Dike (Type D)	LF	200	x	7.00	=	$	1,400
150771	Remove Asphalt Concrete Dike	LF	200	x	3.00	=	$	600
420201	Grind Existing Concrete Pavement	SQYD		x		=	$	-
150860	Remove Base and Surfacing	CY		x		=	$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		=	$	-
15312X	Remove Concrete	LF/CY/LS		x		=	$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		=	$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		=	$	-
39405X	Shoulder Rumble Strip (HMA, X-In Indentations)	STA		x		=	$	-
413113	Repair Spalled Joints, Polyester Grout	SQYD		x		=	$	-
420102	Groove Existing Concrete Pavement	SQYD		x		=	$	-
390136	Minor Hot Mix Asphalt	TON		x		=	$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		=	$	-
XXXXXX	Some Item	Unit		x		=	$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	**$**	**58,600**

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
15080X	Remove Culvert	EA/LF		x		=	$	-
150820	Modify Inlet	EA		x		=	$	-
155232	Sand Backfill	CY		x		=	$	-
15020X	Abandon Culvert	EA/LF		x		=	$	-
152430	Adjust Inlet	LF		x		=	$	-
155003	Cap Inlet	EA		x		=	$	-
510501	Minor Concrete	CY		x		=	$	-
510502	Minor Concrete (Minor Structure)	CY		x		=	$	-
5105XX	Minor Concrete (Type XX)	CY		x		=	$	-
620XXX	XX" Alternative Pipe Culvert (Type X)	LF		x		=	$	-
6411XX	XX" Plastic Pipe	LF		x		=	$	-
65XXXX	XX" Reinforced Concrete Pipe (Type X)	LF		x		=	$	-
6650XX	XX" Corrugated Steel Pipe (0.XXX" Thick)	LF		x		=	$	-
68XXXX	XX" Plastic Pipe (Edge Drain)	LF		x		=	$	-
69011X	XX" Corrugated Steel Pipe Downdrain (0.XXX" Th	LF		x		=	$	-
70321X	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x		=	$	-
70XXXX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x		=	$	-
7050XX	XX" Steel Flared End Section	EA		x		=	$	-
703233	Grated Line Drain	LF		x		=	$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON		x		=	$	-
72901X	Rock Slope Protection Fabric (Class X)	SQYD		x		=	$	-
721420	Concrete (Ditch Lining)	CY		x		=	$	-
721430	Concrete (Channel Lining)	CY		x		=	$	-
750001	Miscellaneous Iron and Steel	LB		x		=	$	-
XXXXXX	Additional Drainage	LS	1	x	740,000.00	=	$	740,000

TOTAL DRAINAGE ITEMS	**$**	**740,000**

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
080050	Progress Schedule (Critical Path Method)	LS	1	x	5,000.00	=	$	5,000
582001	Sound Wall (Masonry Block)	SQFT		x		=	$	-
510530	Minor Concrete (Wall)	CY		x		=	$	-
15325X	Remove Sound Wall	LF/LS		x		=	$	-
070030	Lead Compliance Plan	LS	1	x	5,000.00	=	$	5,000
141120	Treated Wood Waste	LB	2,280	x	1.40	=	$	3,192
153221	Remove Concrete Barrier	LF	450	x	75.00	=	$	33,750
150662	Remove Metal Beam Guard Railing	LF	200	x	20.00	=	$	4,000
150668	Remove Flared End Section	EA		x		=	$	-
8000XX	Chain Link Fence (Type XX)	LF		x		=	$	-
80XXXX	XX" Chain Link Gate (Type CL-6)	EA		x		=	$	-
832001	Midwest Guardrail System	LF	200	x	55.00	=	$	11,000
839301	Single Thrie Beam Barrier	LF		x		=	$	-
839310	Double Thrie Beam Barrier	LF		x		=	$	-
839521	Cable Railing	LF		x		=	$	-
8395XX	Terminal System (Type CAT)	EA		x		=	$	-
839585	Alternative Flared Terminal System	EA		x		=	$	-
839584	Alternative In-line Terminal System	EA		x		=	$	-
4906XX	CIDH Concrete Piling (Insert Diameter)	LF		x		=	$	-
839XXX	Crash Cushion (Sand Filled)	EA		x		=	$	-
83XXXX	Concrete Barrier (Insert Type)	LF		x		=	$	-
520103	Bar Reinforced Steel (Retaining Wall)	LB		x		=	$	-
510060	Structural Concrete, Retaining Wall	CY		x		=	$	-
513553	Retaining Wall (Masonry Wall)	SQFT		x		=	$	-
511035	Architectural Treatment	SQFT		x		=	$	-
598001	Anti-Graffiti Coating	SQFT		x		=	$	-
203070	Rock Stain	SQFT		x		=	$	-
5136XX	Reinforced Concrete Crib Wall (Type X)	SQFT		x		=	$	-
83954X	Transition Railing (Type X)	EA		x		=	$	-
597601	Prepare and Stain Concrete	SQFT		x		=	$	-
839561	Rail Tensioning Assembly	EA		x		=	$	-
83958X	End Anchor Assembly (Type X)	EA		x		=	$	-
XXXXXX	Some Item	Unit		x		=	$	-

TOTAL SPECIALTY ITEMS	**$**	**62,000**

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
	Biological Mitigation	LS	1	x	250,000.00	=	$	250,000		
130670	Temporary Reinforced Silt Fence	LF		x		=	$	-		
141000	Temporary Fence (Type ESA)	LF		x		=	$	-		
								Subtotal Environmental Mitigation	*$*	*250,000*

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)			Cost		
20XXXX	Highway Planting	LS	1	x	283,500.00	=	$	283,500		
20XXXX	Irrigation System	LS	1	x	404,250.00	=	$	404,250		
204099	Plant Establishment Work	LS	1	x	320,250.00	=	$	320,250		
204101	Extend Plant Establishment Work	LS		x		=	$	-		
20XXXX	Follow-up Landscape Project	LS		x		=	$	-		
150685	Remove Irrigation Facility	LS		x		=	$	-		
20XXXX	Maintain Existing (Irrigation or Planted Areas)	LS		x		=	$	-		
206400	Check and Test Existing Irrigation Facilities	LS		x		=	$	-		
21011X	Imported Topsoil (X)	CY/TON		x		=	$	-		
20XXXX	Rock Blanket, Rock Mulch, DG, Gravel Mulch	SQFT/SQYD		x		=	$	-		
200122	Weed Germination	SQYD		x		=	$	-		
208304	Water Meter	EA		x		=	$	-		
2087XX	XX" Conduit (Use for Irrigation x-overs)	LF		x		=	$	-		
20890X	Extend X" Conduit (Use for Extension of Irrigation x-overs)	LF		x		=	$	-		
								Subtotal Landscape and Irrigation	*$*	*1,008,000*

5C - EROSION CONTROL

Item code		Unit	Quantity		Unit Price ($)			Cost		
210010	Move In/Move Out (Erosion Control)	EA		x		=	$	-		
210350	Fiber Rolls	LF		x		=	$	-		
210360	Compost Sock	LF		x		=	$	-		
2102XX	Rolled Erosion Control Product (X)	SQFT		x		=	$	-		
21025X	Bonded Fiber Matrix	SQFT/ACRE		x		=	$	-		
210300	Hydromulch	SQFT		x		=	$	-		
210420	Straw	SQFT		x		=	$	-		
210430	Hydroseed	SQFT	*$ 246,230*	x	0.2	=	$	49,246		
210600	Compost	SQFT		x		=	$	-		
210630	Incorporate Materials	SQFT		x		=	$	-		
								Subtotal Erosion Control	*$*	*49,246*

5D - NPDES

Item code		Unit	Quantity		Unit Price ($)			Cost		
130300	Prepare SWPPP	LS	1	x	13,000.00	=	$	13,000		
130200	Prepare WPCP	LS		x		=	$	-		
130100	Job Site Management	LS	1	x	26,000.00	=	$	26,000		
130330	Storm Water Annual Report	EA	3	x	2,000.00	=	$	6,000		
130310	Rain Event Action Plan (REAP)	EA	3	x	11,000.00	=	$	33,000		
130320	Storm Water Sampling and Analysis Day	EA	33	x	1,080.00	=	$	35,640		
130520	Temporary Hydraulic Mulch	SQYD		x		=	$	-		
130550	Temporary Hydroseed	SQYD		x		=	$	-		
130505	Move-In/Move-Out (Temporary Erosion Control)	EA		x		=	$	-		
130640	Temporary Fiber Roll	LF	27,600	x	5.00	=	$	138,000		
130900	Temporary Concrete Washout	LS	1	x	10,000.00	=	$	10,000		
130710	Temporary Construction Entrance	EA	4	x	3,000.00	=	$	12,000		
130570	Temporary Cover	SQYD	21,900	x	7.00	=	$	153,300		
130620	Temporary Drainage Inlet Protection	EA	10	x	250.00	=	$	2,500		
130730	Street Sweeping	LS	1	x	27,000.00	=	$	27,000		
								Subtotal NPDES	*$*	*456,440*

								TOTAL ENVIRONMENTAL	**$**	**1,763,700**

Supplemental Work for NPDES

066595	Water Pollution Control Maintenance Sharing*	LS	1	x	6,000.00	=	$	6,000		
066596	Additional Water Pollution Control**	LS	1	x	6,000.00	=	$	6,000		
066597	Storm Water Sampling and Analysis***	LS	1	x	6,000.00	=	$	6,000		
XXXXXX	Some Item	LS		x		=	$	-		
								Subtotal Supplemental Work for NDPS	*$*	*18,000*

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
860460	Lighting and Sign Illumination	LS		x		=	$	-
860201	Signal and Lighting	LS		x		=	$	-
860990	Closed Circuit Television System	LS		x		=	$	-
86110X	Ramp Metering System (Location X)	LS		x		=	$	-
86070X	Interconnection Conduit and Cable	LF/LS		x		=	$	-
5602XX	Furnish Sign Structure (Type X)	LB		x		=	$	-
5602XX	Install Sign Structure (Type X)	LB		x		=	$	-
498040	XX" CIDHC Pile (Sign Foundation)	LF		x		=	$	-
86080X	Inductive Loop Detectors	EA/LS		x		=	$	-
8609XX	Traffic Monitoring Station (Type X)	LS		x		=	$	-
15075X	Remove Sign Structure	EA/LS		x		=	$	-
151581	Reconstruct Sign Structure	EA		x		=	$	-
152641	Modify Sign Structure	EA		x		=	$	-
860090	Maintain Existing Traffic Management System Ele	LS	1	x	5,000.00	=	$	5,000
86XXXX	Fiber Optic Conduit System	LS		x		=	$	-
XXXXX	Some Item	LS		x		=	$	-

Subtotal Traffic Electrical $ *5,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
566011	Roadside Sign - One Post	EA	4	x	300.00	=	$	1,200
566012	Roadside Sign - Two Post	EA		x		=	$	-
5602XX	Furnish Sign	SQFT		x		=	$	-
568016	Install Sign Panel on Existing Frame	SQFT		x		=	$	-
150711	Remove Painted Traffic Stripe	LF	2,850	x	0.90	=	$	2,565
141101	Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	2,100	x	2.25	=	$	4,725
810120	Remove Pavement Marker	EA	620	x	1.32	=	$	818
150742	Remove Roadside Sign	EA		x		=	$	-
152320	Reset Roadside Sign	EA		x		=	$	-
152390	Relocate Roadside Sign	EA		x		=	$	-
82010X	Delineator (Class X)	EA		x		=	$	-
840502	Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	6,300	x	2.10	=	$	13,230
846012	Thermoplastic Crosswalk & Pavement Marking (Enhanced Wet Night Vi	SQFT		x		=	$	-
120090	Construction Area Signs	LS	1	x	8,000.00	=	$	8,000
810230	Pavement Marker (Retroreflective)	EA	140	x	5.50	=	$	770

Subtotal Traffic Signing and Striping $ *31,308*

6C - Traffic Management Plan

Item code		Unit	Quantity		Unit Price ($)			Cost
128651	Portable Changeable Message Signs	EA	4	x	$ 3,750	=	$	15,000

Subtotal Traffic Management Plan $ *15,000*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
846030	Remove Thermoplastic Traffic Stripe	LF	2,850	x	1.00	=	$	2,850
120165	Channelizer (surface mounted)	EA	56	x	46.00	=	$	2,576
120120	Type III Barricade	EA		x		=	$	-
129100	Temporary Crash Cushion Module	EA	56	x	319.00	=	$	17,864
120100	Traffic Control System	LS	1	x	548,100.00	=	$	548,100
120159	Temporary Traffic Stripe (Paint)	LF	6,300	x	0.70	=	$	4,410
129000	Temporary Railing (Type K)	LF	1,780	x	33.00	=	$	58,740
120300	Temporary Pavement Marker	EA	140	x	7.75	=	$	1,085
82010X	Delineator (Class X)	EA		x		=	$	-
141103	Remove Yellow Thermoplastic Traffic Stripe (Haz. Waste)	LF	2,100	x	1.70	=	$	3,570

Subtotal Stage Construction and Traffic Handling $ *639,195*

TOTAL TRAFFIC ITEMS **$ 690,600**

SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity		Unit Price ($)		Cost
190101	Roadway Excavation	CY		x		= $	-
19801X	Imported Borrow	CY/TON		x		= $	-
390132	Hot Mix Asphalt (Type A)	TON		x		= $	-
26020X	Class 2 Aggregate Base	TON/CY		x		= $	-
250401	Class 4 Aggregate Subbase	CY		x		= $	-
130620	Temporary Drainage Inlet Protection	EA		x		= $	-
129000	Temporary Railing (Type K)	LF		x		= $	-
128601	Temporary Signal System	LS		x		= $	-
120149	Temporary Pavement Marking (Paint)	SQFT		x		= $	-
80010X	Temporary Fence (Type X)	LF		x		= $	-
XXXXXX	Some Item	Unit		x		= $	-

TOTAL DETOURS **$ -**

SUBTOTAL SECTIONS 1 through 7 $ 4,053,700

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items					
ADA Items			1.0%	$	40,537
8B - Bike Path Items					
Bike Path Items			1.0%	$	40,537
8C - Other Minor Items					
Other Minor Items			8.0%	$	324,296
Total of Section 1-7	$	4,053,700	10.0%	$	405,370

TOTAL MINOR ITEMS **$ 405,400**

SECTIONS 9: MOBILIZATION

Item code							
999990	Total Section 1-8	$	4,459,100	10%	= $	445,910	

TOTAL MOBILIZATION **$ 446,000**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS		x		= $	-
066094	Value Analysis	LS	1	x	10,000.00	= $	10,000
066070	Maintain Traffic	LS		x		= $	-
066919	Dispute Resolution Board	LS	1	x	30,000.00	= $	30,000
066921	Dispute Resolution Advisor	LS		x		= $	-
066015	Federal Trainee Program	LS		x		= $	-
066610	Partnering	LS	1	x	90,000.00	= $	90,000
066204	Remove Rock and Debris	LS		x		= $	-
066222	Locate Existing Crossover	LS		x		= $	-
XXXXXX	Some Item	Unit		x		= $	-
	*Cost of **NPDES** Supplemental Work specified in Section 5D*					= $	18,000
	Total Section 1-8	$	4,459,100		4%	= $	178,364

TOTAL SUPPLEMENTAL WORK **$ 326,400**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	Resident Engineers Office	LS	1	x	328,400.00	=	$328,400
066063	Traffic Management Plan - Public Information	LS	1	x	15,000.00	=	$15,000
066901	Water Expenses	LS		x		=	$0
8609XX	Traffic Monitoring Station (X)	LS		x		=	$0
066841	Traffic Controller Assembly	LS		x		=	$0
066840	Traffic Signal Controller Assembly	LS		x		=	$0
066062	COZEEP Contract	LS	1	x	880,000.00	=	$880,000
066838	Reflective Numbers and Edge Sealer	LS		x		=	$0
066065	Tow Truck Service Patrol	LS		x		=	$0
066916	Annual Construction General Permit Fee	LS		x		=	$0
XXXXXX	Some Item	Unit		x		=	$0
	Total Section 1-8		$ 4,459,100		4%	=	$ 178,364

TOTAL STATE FURNISHED	**$1,401,800**

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization	$32,285,846	(used to calculate TRO)
Total Construction Cost (excluding TRO and Contingency)	$36,989,750	(used to check if project is greater than $5 million excluding contingency)

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = **10%**

Item code		Unit	Quantity		Unit Price ($)		Cost
070018	Time-Related Overhead	WD	701	X	$4,606	=	$3,228,600

TOTAL TIME-RELATED OVERHEAD	**$3,228,600**

Note: If the building portion of the project is greater than 50% of the total project cost, then TRO is not included.

SECTION 13: ROADWAY CONTINGENCY

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-12	$	9,861,900	x	**15%**	=	$1,479,285

TOTAL CONTINGENCY	**$1,479,300**

EA: 07-307100 PID: 0714000213

II. STRUCTURE ITEMS

	Bridge 1		Bridge 2		
DATE OF ESTIMATE	10/02/17		10/02/17		00/00/00
Bridge Name	Route 101 Wildlife OC		Agoura Rd Wildlife OC		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	CIP/PS Box Girder		RC Box Girder		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	170 LF		217 LF		0 LF
Total Bridge Length (Feet)	210 LF		62 LF		0 LF
Total Area (Square Feet)	35700 SQFT		13454 SQFT		0 SQFT
Structure Depth (Feet)	6 LF		4 LF		0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$494		$570		$0
COST OF EACH	**$17,627,589**		**$7,669,453**		**$0**

DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Name	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx		xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$100		$0		$0
COST OF EACH	**$0**		**$0**		**$0**

TOTAL COST OF BRIDGES		**$25,297,042**
TOTAL COST OF BUILDINGS		**$0**
Structures Mobilization Percentage	10%	**$2,529,704**

Recommended Contingency: (Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Structures Contingency Percentage	10%	**$2,529,704**
TOTAL COST OF STRUCTURES		**$30,356,450**

Estimate Prepared By: U.Smpardos / Paul Mak — 10/5/2017

HQ ------ Division of Structures — Date

EA: 07-307100 PID: 0714000213

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees		$	999,600
	A2)	SB-1210		$	0
B)	Acquisition of Offsite Mitigation			$	0
C)	C1)	Utility Relocation (State Share)		$	0
	C2)	Potholing (Design Phase)		$	0
D)	Railroad Acquisition			$	0
E)	Clearance / Demolition			$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)			$	0
G)	Title and Escrow			$	6,779
H)	Environmental Review			$	0
I)	Condemnation Settlements		0%	$	0
J)	Design Appreciation Factor		0%	$	0
K)	Utility Relocation (Construction Cost)			$	15,313,000

L)	**TOTAL RIGHT OF WAY ESTIMATE**	**$16,319,379**
M)	**TOTAL R/W ESTIMATE: Escalated**	**$21,847,336**
N)	**RIGHT OF WAY SUPPORT**	**$1,200,000**

Support Cost Estimate Prepared By	Zoltan Elo Project Coordinator[1]	(213) 897- 0790 Phone
Utility Estimate Prepared By	Michele Graves Utiliy Coordinator[2]	(213) 897-2858 Phone
R/W Acquistion Estimate Prepared By	Victor Lee Right of Way Estimator[3]	(213) 897-3711 Phone

Note: Items G & H applied to items A + B

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required