ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
VEN-101 Padre Juan Rehab (EA 07-30240)

Resolution SHOPP-P-1819-09B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☒ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) for the *VEN-101 Padre Juan Rehab (EA 07-30240)*, effective on, DECEMBER 6, 2018 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

3.2 Whereas at its March 22, 2018 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *VEN-101 Padre Juan Rehab (EA 07-30240)*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.

3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-18-13, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated March 22, 2018
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 Caltrans agrees to secure funds for any additional costs of the project.

4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.

4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Ven 101 Padre Juan Rehab (EA 07-30240)

Resolution SHOPP-P-1819-09B

Joseph Kibe — Date: 10/15/18

Project Manager

Project Applicant

Derek Higa — Date: 10/15/18

Interim SB 1 Program Manager

Implementing Agency

For John Bulinski — Date: 10/15/18

District Director

California Department of Transportation

Laurie Berman — Date: 11-15-18

Director

California Department of Transportation

Susan Bransen — Date: 12/13/18

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT | **Date:** 10/15/18 09:17:49 AM

District	EA	Project ID	PPNO	Project Manager
07	30240	0713000488	4687	KIBE, JOSEPH G

County	Route	Begin Postmile	End Postmile	Implementing Agency	
VEN	101	R 36.3	R 40.6	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname

Ven 101 Padre Juan Rehab

Location/Description

Near Sea Cliff, from 0.4 mile south of Padre Juan Canyon Road Overcrossing to 0.3 mile north of Punta Gorda Pedestrian Undercrossing. Rehabilitate roadway.

Legislative Districts

Assembly:	37	Senate:	19	Congressional:	24

PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement	0.0	21.6	0.0		21.6	Lane-miles
Programmed Condition	Pavement	21.6				21.6	Lane-miles

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	09/28/18	
Right of Way Certification Milestone		01/10/20
Ready to List for Advertisement Milestone		02/14/20
Begin Construction Milestone (Approve Contract)		08/28/20

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP					Total
PA&ED	17/18	300					300
PS&E	18/19	3,300					3,300
RW Support	18/19	200					200
Const Support	19/20	6,000					6,000
RW Capital	19/20	150					150
Const Capital	19/20	42,500					42,500
Total		52,450					52,450

07-VEN-101 -PM R36.3/R40.6
302400 - 0713000488 - 4686
20.10.201.122

Supplemental
Project Scope Summary Report

On Route US-101

Between 0.4 Mile ~~North~~ SOUTH of Padre Juan Canyon Overcrossing

And 0.3 Mile ~~South~~ NORTH of Punda Gorda Pedestrian 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:

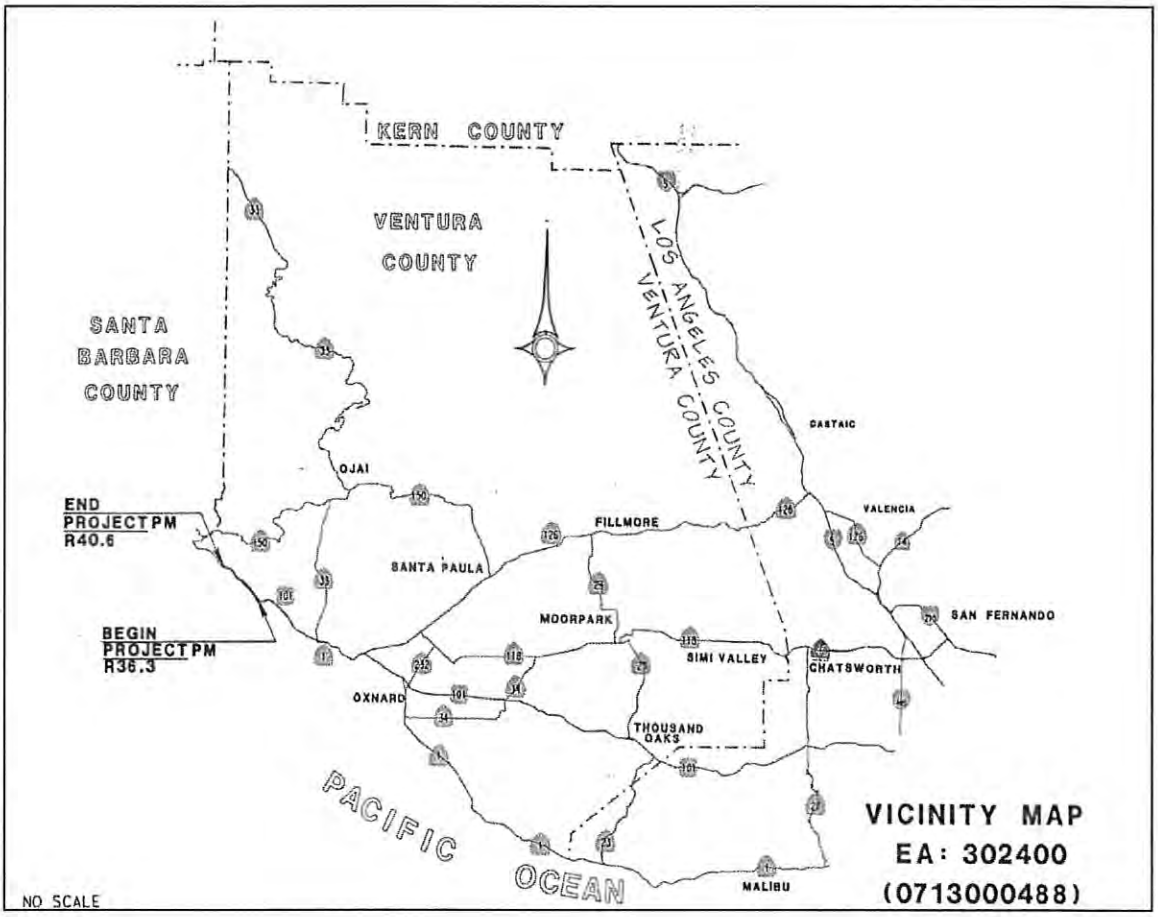
ANDY LIAO, Project Manager

PROJECT APPROVED:

FOR SHIRLEY CHOATE, Interim District Director

9/28/2018
Date

Vicinity Map



This Supplemental Project Scope Summary 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.

8-24-2018

REGISTERED CIVIL ENGINEER *DATE*

Table of Contents

1. INTRODUCTION AND BACKGROUND

This report is a supplemental of the Project Scope Summary Report (PSSR) that was approved on June 25, 2015 to revise the cost and schedule. The proposed scope of work is to rehabilitate the mainline pavement with the use of Crack, Seat and Overlay (CS&O); replace and upgrade, as needed, existing Metal Beam Guard Railing and dikes to current standards on Route 101 of Ventura County, between Padre Juan Overcrossing and Punta Gorda Pedestrian Undercrossing.

This pavement rehabilitation project is located on Route 101 in Ventura County in a fill section on the west side of the freeway towards the Pacific Ocean. The Project Initiation Document (PID) proposed CS&O pavement strategy which would raise the freeway profile by 8" for the entire roadway. When the PID was being prepared, the Engineer assumed the existing slope was 2:1 or flatter and the grading can be done along the slope to catch the proposed profile. Upon receiving the topography data in December 2017, Design team discovered the existing slope terrain on the west side of the freeway was actually steeper than anticipated, at about 1.5:1 with 3' or less flat area behind the Edge of Shoulder (ES) for most of the project limits. There is not enough space to construct an 8" wide dike shoulder backing and embankment to support the 8" increase in profile.

Design team also evaluated different methods to support the shoulder backing including a 7 foot deep guardrail with Lean Concrete Base (LCB) shoulder backing, retaining walls and concrete barrier. The team determined that a combination of 7'-post guardrail and concrete barrier is the only alternative to retain the raised freeway section without significant impacts to the existing utilities and the environmental sensitive area. Even though the cost for CS&O strategy is little bit less (approximate 5M), there is a lot more benefits for using Jointed Plain Concrete Pavement (JPCP) strategy. The project limits are under the California Coastal Commission (CCC) permit jurisdiction. Based on negotiations with the CCC on a similar project, the see-through, CA ST-10 (Mod) or Type 80 (Mod) barrier is most likely the railing type to be approved by the CCC. The construction of the see- through barrier will be costly, as the work involves special design and triggers removing and hauling aerially deposited lead (ADL) material for the barrier foundation excavation.

Design team, along with Headquarters' Pavement Advisor and District Maintenance Engineering, evaluated and concluded that changing the pavement strategy from CS&O to JPCP will be a better alternative. This option will eliminate raising the profile and necessary shoulder backing. The revised life-cycle analysis showed that the JPCP strategy yielded the lowest costs in both agency cost and user cost amongst CS&O, JPCP and JPCP-Rapid Set Concrete (RSC). JPCP will provide 40(+) years of pavement service life, increase workers' safety by reducing future maintenance and eliminate the need for barrier rail/retaining structures. The escalated estimated construction capital cost for the JPCP strategy will

be $43.5 million Which is $24.23 million more than the programmed amount of $19.27 million.

However, with all the available right of ways and configuration, JPCP method requires a cross-over detouring traffic handling plan combining with four stages construction to maintain three lanes traffic in each direction during peak hours. Because of the existing geometry and the significant difference of grade elevation between eastbound and westbound freeway, the project limits are expanded to PM R36.3/R40.6 to accommodate the cross-over detour with the same scope of work and performance output at 21.6 lane-miles. As a result of the inevitable and additional work, the project cost and schedule will be substantially escalated and extended, respectively.

As a result of the above changes, the cost of the project (capitals & supports) is revised from $23,640,000 to $53,680,000, and the Contract Acceptance date is extended from December 30, 2021 to November 10, 2022.

The estimated capital cost is shown in the table below:

Project Limits	***07-Ven-101 PM 36.3/40.6***	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	$9.8 million	$10.03 million
Capital Outlay Construction	$40.1 million	$43.50 million
Capital Outlay Right-of-Way	$138,900	$150,000
Funding Source	SHOPP (201.122)	
Funding Year	2019/2020	
Type of Facility	6-lane freeway	
Number of Structures	Six	
SHOPP Project Output	21.6 lane miles	
Environmental Determination or Document	Categorically Exempt/ Categorically Excluded (CE/CE)	
Legal Description	In Ventura County, from 0.6 mile south of Padre Juan Canyon Overcrossing to 0.4 mile north of Punta Gorda Pedestrian Undercrossing	
Project Development Category	Category 5	

It is anticipated that this project will be amended into the 2018 State Highway Operation and Protection Program (SHOPP) for funding in the fiscal year 2019/2020.

2. RECOMMENDATION

It is recommended that this project be approved and proceed to the Plans, Specifications, and Estimate (PS&E) Phase of this project.

3. PURPOSE AND NEED

Refer to the PSSR approved on June 26, 2015.

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

Refer to the PSSR approved on June 26, 2015.

5. CORRIDOR AND SYSTEM COORDINATION

The adjacent and related two projects were completed in 2017. No coordination is needed. Refer to the PSSR approved on June 26, 2015.

6. ALTERNATIVES

6A. Rehabilitation strategy:

- **Mainline:**

This project will rehabilitate the mainline using JPCP method. The new overlay pavement structural section on the mainline consists of the following:

No. 1 Lane		No. 2 & 3 Lanes	
0.85'	JPCP **	1.00'	JPCP **
-----	Base Bond Breaker	-----	Base Bond Breaker
		0.35'	Alternate Treated Base *
		0.35'	Alternate Treated Base *
		-----	Geogrid
0.85'	Total	1.70'	Total

* Alternate Treated Base (ATB) includes Lean Concrete Base (LCB), Lean Concrete Base Rapid Setting (LCB-RS), and Roller Compact Concrete (RCC) to be selected at the contractor's option.

** For lane replacement, remove at least the existing mainline concrete slabs in No. 2 and 3 lanes to be replaced, and two feet of existing shoulder and 0.5' adjacent lane/auxiliary lane that will be left in place, and replace with JPCP.

- **Ramp and Shoulder Rehabilitation:**

  Existing Asphalt Concrete (AC) ramps and shoulders will be cold-planed and replaced with new 0.20' of RHMA-SP-G. Any localized failed areas will be dig out and repaired with the same material RHMA-SP-G. All cracks greater than ¼" will be sealed with hot applied crack sealant.

6B. Design Exception
Refer to the PSSR approved on June 26, 2015.

6C. Environmental Compliance
The environmental document for this Supplemental PSSR is a Categorical Exemption and Categorical Exclusion under CEQA/NEPA guidelines (See Attachment F)

6D. Hazardous Waste
A hazardous waste assessment was prepared for this Supplemental PSSR (see Attachment D)

6I. Stormwater compliance:
A Storm Water Data Report (SWDR) for PA/ED phase was approved on June 26, 2018 (See Attachment B)

For other subsections not listed, refer to the PSSR approved on June 26, 2015.

7. TRANSPORTATION MANAGEMENT

7A. Transportation Management Plan
A Transportation Management Plan (TMP) will be prepared during the design phase. The updated TMP Data Sheet was approved on June 26, 2018 (see Attachment G)

7B. Vehicle Detection Systems
Refer to the PSSR approved on June 26, 2015.

8. ENVIRONMENTAL DETERMINATION/DOCUMENT

The environmental document for this project is a Categorical Exemption and Categorical Exclusion under CEQA/NEPA guidelines (See Attachment F)

9. PROJECT ESTIMATE

The revised cost estimate is attached (Attachment I)

10. FUNDING AND PROGRAMMING

Funding

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

Programming

Refer to the PSSR approved on June 26, 2015.

Capital Outlay Support and Project Estimates

Fund Source 20.XX.201.122	Fiscal Year Estimate for the Programmable Alternative							Support vs Capital %	Historical Support %
	Prior	18/19	19/20	20/21	21/22	Programmed	Current Estimate		
Component	In thousands of dollars ($1,000)								
PA&ED Support	300					300	530	1.2	1.2
PS&E Support		3,300				3,300	3,300	7.6	7.9
Right-of-Way Support		200				200	200	0.5	0.5
Construction Support			6,000 *			6000	6,000 *	13.8	12.3
Right-of-Way Capital		150 ***				150	150 ***		
Construction Capital			43,500 **			42,500	43,500 **		
Total	300	3,500	49,650			52,450	53,680	23	22

* Escalation Factor is 3.5% per year
** Escalation Factor is 4.2% per year
*** Escalation Factor is 8% per year

The support cost ratio is 23%.

11. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Status
PROGRAM PROJECT	M015	10/01/2015	Actual
BEGIN ENVIRONMENTAL	M020	06/30/2016	Actual
PA & ED	M200	09/28/2018	Target
START PS&E	M210	10/01/2018	Target
Pre 60% PS&E TO DOE	M313	06/15/2019	Target
Pre 95% PS&E TO DOE	M315	09/15/2019	Target
100% PS&E TO DOE	M377	01/13/2020	Target
PROJECT PS&E	M380	02/24/2020	Target
RIGHT OF WAY CERTIFICATION	M410	02/10/2020	Target
READY TO LIST	M460	03/16/2020	Target
FUND ALLOCATION	M470	05/11/2020	Target
HEADQUARTERS ADVERTISE	M480	06/08/2020	Target
AWARD	M495	09/08/2020	Target
APPROVE CONTRACT	M500	10/05/2020	Target
CONTRACT ACCEPTANCE	M600	11/10/2022	Target
END PROJECT	M800	11/08/2024	Target

12. RISKS

See Attachment C.

13. FHWA COORDINATION

Refer to the PSSR approved on June 26, 2015.

14. PROJECT REVIEWS

Refer to the PSSR approved on June 26, 2015.

15. PROJECT PERSONNEL

Name	Title	Phone Number
Matt Liao	Design Project Engineer	(213) 897-9673
Orlance C. Lee	Design Manager	(213) 897-0717
Andy Liao	Project Manager	(213) 897-0689

16. ATTACHMENTS (Number of Pages)

A. Revised Life-Cycle Analysis dated March 26, 2018 (10)
B. Storm Water Data Report-signed cover sheet (1)
C. Risk Register dated August 29, 2018 (2)
D. Hazardous Waste Assessment dated April 20, 2018 (3)
E. Right of Way Data Sheet dated August 8, 2018 (4)
F. Environmental Document dated May 2, 2018 (3)
G. Transportation Management Plan Data Sheet dated June 26, 2018 (3)
H. Project Change Request dated April 3, 2018(4)
I. Cost Estimate (1)
J. PSSR approved on June 26, 2015 (99)

Attachment A

RealCost Input Data

1. Economic Variables	
Value of Time for Passenger Cars ($/hour)	$12.80
Value of Time for Single Unit Trucks ($/hour)	$31.70
Value of Time for Combination Trucks ($/hour)	$31.70

2. Analysis Options	
Include User Costs in Analysis	Yes
Include User Cost Remaining Service Life Value	Yes
Use Differential User Costs	Yes
User Cost Computation Method	Calculated
Include Agency Cost Remaining Service Life Value	Yes
Traffic Direction	Both
Analysis Period (Years)	40
Beginning of Analysis Period	2019
Discount Rate (%)	4.0
Number of Alternatives	3

3. Project Details and Quantity Calculations	
State Route	07-Ven 101
Project Type	Rehabilitation
Project Name	PAVEMENT REHABILITATION - EA30240K
Maintenance Service Level	3
Local Region	SOUTH COAST
County	LA/PM.R36.7-R40.3
Climate Region	South Coast
Analyzed By	DANG KHOA VO
Mileposts	
Begin	
End	
Length of Project (miles)	3.60
Comments	PM: R36.7/R40.3 Jadre Juan Canyon OC/Punta Gorda PUC

4. Traffic Data	
AADT Construction Year (total for both directions)	67,000
Cars as Percentage of AADT (%)	92.0
Single Unit Trucks as Percentage of AADT (%)	3.0
Combination Trucks as Percentage of AADT (%)	5.0
Annual Growth Rate of Traffic (%)	1.0
Speed Limit Under Normal Operating Conditions (mph)	55
No of Lanes in Each Direction During Normal Conditions	3
Free Flow Capacity (vphpl)	2115
Queue Dissipation Capacity (vphpl)	1530
Maximum AADT (total for both directions)	289,830
Maximum Queue Length (miles)	5
5. Maintenance and Rehabilitation Sequence	
Alternative 1	

Final Pavement Surface	
Design Life	
Activity 1 Name	40YR REHAB (LANE REPLACE)-<JPCP-RSC >
Activity 1 Year of Action	2019
Activity 1 Annual Maintenance Cost ($1000)	17.28
Activity 1 Activity Service Life (Year)	45
Activity 2 Name	CAPM (CPR C)
Activity 2 Year of Action	2064
Activity 2 Annual Maintenance Cost ($1000)	64.8
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	CAPM (CPR B)
Activity 3 Year of Action	2069
Activity 3 Annual Maintenance Cost ($1000)	32.4
Activity 3 Activity Service Life (Year)	10
Activity 4 Name	
Activity 4 Year of Action	2079
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	0
Activity 5 Name	
Activity 5 Year of Action	2079
Activity 5 Annual Maintenance Cost ($1000)	0
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	
Activity 6 Year of Action	2079
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0
Alternative 2	
Final Pavement Surface	
Design Life	
Activity 1 Name	40YR REHAB (LANE REPLACE)-<JPCP>
Activity 1 Year of Action	2019
Activity 1 Annual Maintenance Cost ($1000)	17.28
Activity 1 Activity Service Life (Year)	45.0
Activity 2 Name	CAPM (CPR C)
Activity 2 Year of Action	2064
Activity 2 Annual Maintenance Cost ($1000)	64.8
Activity 2 Activity Service Life (Year)	5.0
Activity 3 Name	CAPM (CPR B)
Activity 3 Year of Action	2069
Activity 3 Annual Maintenance Cost ($1000)	32.4
Activity 3 Activity Service Life (Year)	10
Activity 4 Name	
Activity 4 Year of Action	2079
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	0
Activity 5 Name	
Activity 5 Year of Action	2079
Activity 5 Annual Maintenance Cost ($1000)	1
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	

Activity 6 Year of Action	2079
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0
Alternative 3	
Final Pavement Surface	
Design Life	
Activity 1 Name	1ST REHAB HMA W/ RHMA (20YR)
Activity 1 Year of Action	2019
Activity 1 Annual Maintenance Cost ($1000)	30
Activity 1 Activity Service Life (Year)	18
Activity 2 Name	CAPM HMA W/ RHMA
Activity 2 Year of Action	2037
Activity 2 Annual Maintenance Cost ($1000)	24
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	REHAB HMA W/ RHMA (20YR)
Activity 3 Year of Action	2042
Activity 3 Annual Maintenance Cost ($1000)	24
Activity 3 Activity Service Life (Year)	5
Activity 4 Name	2ND REHAB HMA W/RHMA (20 YRS) <Only Pavement Rehab>
Activity 4 Year of Action	2047
Activity 4 Annual Maintenance Cost ($1000)	31
Activity 4 Activity Service Life (Year)	18
Activity 5 Name	CAPM (FO)
Activity 5 Year of Action	2065
Activity 5 Annual Maintenance Cost ($1000)	24
Activity 5 Activity Service Life (Year)	5
Activity 6 Name	CAPM (FLEX OVERLAY+FO)
Activity 6 Year of Action	2070
Activity 6 Annual Maintenance Cost ($1000)	24
Activity 6 Activity Service Life (Year)	7
Alternative 4	
Final Pavement Surface	
Design Life	
Activity 1 Name	NEW/RECONST CRCP (20YR)
Activity 1 Year of Action	2019
Activity 1 Annual Maintenance Cost ($1000)	0
Activity 1 Activity Service Life (Year)	30
Activity 2 Name	CAPM (PR C)
Activity 2 Year of Action	2049
Activity 2 Annual Maintenance Cost ($1000)	0
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	CAPM (PR B)
Activity 3 Year of Action	2054
Activity 3 Annual Maintenance Cost ($1000)	0
Activity 3 Activity Service Life (Year)	10
Activity 4 Name	CAPM (PR A)
Activity 4 Year of Action	2064
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	10
Activity 5 Name	20
Activity 5 Year of Action	2074

Activity 5 Annual Maintenance Cost ($1000)	0
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	
Activity 6 Year of Action	2074
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0

Alternative 1	<JPCP-RSC> ALL 6 LANES - COLD PLANE AT RAMPS AND SHOULDER
Number of Activities	3

Activity 1	40YR REHAB (LANE REPLACE)-<JPCP-RSC >	
Agency Construction Cost ($1000)	$57,035.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	250	
No of Lanes Open in Each Direction During Work Zone	3	
Activity Service Life (years)	45.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	17.28	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (CPR C)	
Agency Construction Cost ($1000)	$893.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	3	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	64.8	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24

Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	CAPM (CPR B)	
Agency Construction Cost ($1000)		$1,433.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		10.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		32.4
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Alternative 2	<JPCP> 40YR REHAB - COLDPLANE RAMPS AND SHOULDER
Number of Activities	3

Activity 1	40YR REHAB (LANE REPLACE)-<JPCP>	
Agency Construction Cost ($1000)		$42,493.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		250
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		45.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		17.28
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End

First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (CPR C)	
Agency Construction Cost ($1000)		$893.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		5.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		64.8
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	CAPM (CPR B)	
Agency Construction Cost ($1000)		$1,433.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		10.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		32.4
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Alternative 3	CSO-40 YRS & COLDPLANE RAMPS AND SHOULDER
Number of Activities	6

Activity 1	1ST REHAB HMA W/ RHMA (20YR)	
Agency Construction Cost ($1000)	$36,000.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	250	
No of Lanes Open in Each Direction During Work Zone	3	
Activity Service Life (years)	18.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	30	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM HMA W/ RHMA	
Agency Construction Cost ($1000)	$6,464.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	3	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	24	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	REHAB HMA W/ RHMA (20YR)	
Agency Construction Cost ($1000)		$6,464.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		5.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		24
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		55
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 4	2ND REHAB HMA W/RHMA (20 YRS) <Only Pavement Rehab>	
Agency Construction Cost ($1000)		$34,000.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		120
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		18.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		31
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6

Third period of lane closure		

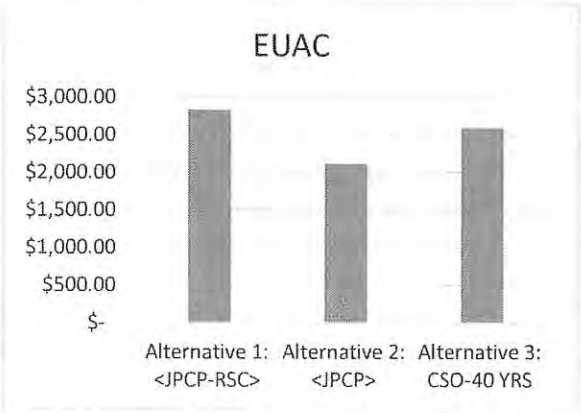
Activity 5	CAPM (FO)	
Agency Construction Cost ($1000)		$6,464.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		5.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		24
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

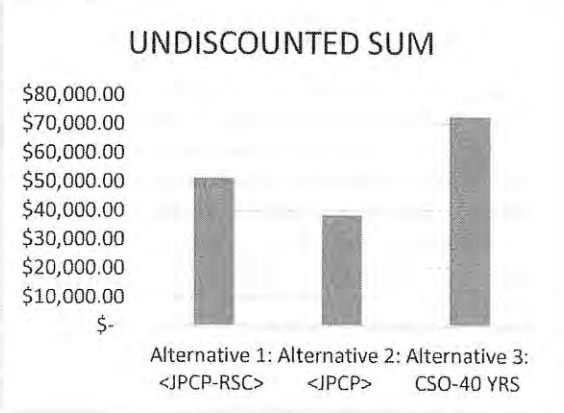
Activity 6	CAPM (FLEX OVERLAY+FO)	
Agency Construction Cost ($1000)		$6,464.00
User Work Zone Costs ($1000)		
Work Zone Duration (days)		40
No of Lanes Open in Each Direction During Work Zone		3
Activity Service Life (years)		7.0
Activity Structural Life (years)		
Maintenance Frequency (years)		1
Agency Maintenance Cost ($1000)		24
Work Zone Length (miles)		3.60
Work Zone Speed Limit (mph)		50
Work Zone Capacity (vphpl)		1000
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

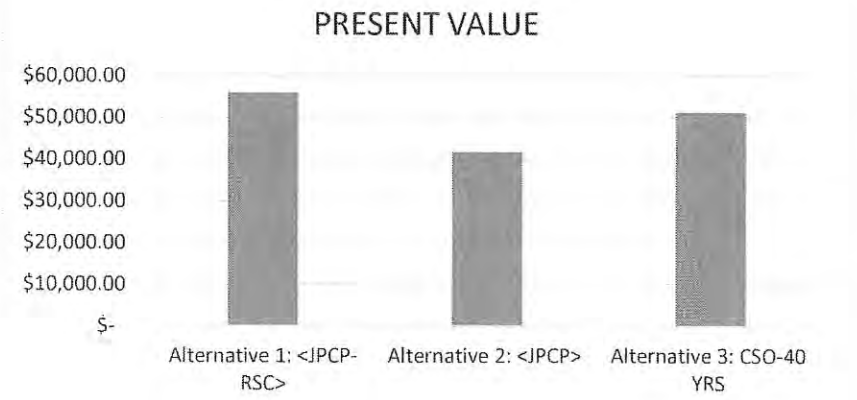
Deterministic Results

Total Cost	Alternative 1: <JPCP-RSC> 40 YRS REHAB - COLDPLANE AT RAMPS AND SHOULDER		Alternative 2: <JPCP> 40YR REHAB - COLDPLANE RAMPS AND SHOULDER		Alternative 3: CSO-40 YRS & COLDPLANE RAMPS AND SHOULDER	
	Agency Cost ($1000)	User Cost ($1000)	Agency Cost ($1000)	User Cost ($1000)	Agency Cost ($1000)	User Cost ($1000)
Undiscounted Sum	$51,372	$359	$38,446	$359	$72,638	$653
Present Value	$56,053	$395	$41,848	$395	$51,325	$510
EUAC	$2,832	$20	$2,114	$20	$2,593	$26

Lowest Present Value Agency Cost	**Alternative 2: <JPCP> 40YR REHAB - COLDPLANE RAMPS AND SHOULDER**
Lowest Present Value User Cost	**Alternative 1: <JPCP-RSC> 40 YRS REHAB - COLDPLANE AT RAMPS AND SHOULDER**







Attachment B

Dist-County-Route: 07-VEN-101
Post Mile Limits: R36.3/R40.6
Type of Work: Pavement Rehabilitation
Project ID (EA): 0713000488(302400)
Program Identification: 201.122(2R)
Phase: ☐ PID ☒ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): Los Angeles – Region 4
Total Disturbed Soil Area: 17.17 acre PCTA: 0.036 acre
Alternative Compliance (acres): 0 ATA 2 (50% Rule)? Yes ☐ No ☒
Estimated Const. Start Date: 9/4/2019 Estimated Const. Completion Date: 12/30/2020
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): NA
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.

Matt Liao, Registered Project Engineer — 6/20/2018 Date

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

Andy Liao, Project Manager — 6/26/18 *Date*

C. Isaac FOR D. LAWRENCE — 6/26/18
David Lawrence, Designated Maintenance Representative — *Date*

06/26/18
Ron Russak, Designated Landscape Architect Representative — *Date*

[Stamp Required at PS&E only] for *Shirley Pak, District/Regional Design SW Coordinator or Designee* — 06/26/2018. *Date*

Attachment C

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-D07-0001 (REV 09/2018)

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: 42,650,000

Project ID/District-EA	Project ID 0713000488 / EA 07-302400
Project Description	Pavement Resurfacing and Restoration (2R), 07-VEN-101; PM R36.3/R40.6
Project Manager	Andy Liao
Project Risk Manager	Mirna Dagher

☐ 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, Traffic Operations		Date:
Deputy District Director, Maintenance		Date:
Deputy District Director, Project Management		Date:

PA&ED (Required for Capital Projects Only)

Project Manager		Date: 9/21/18
Deputy District Director, Environmental	for	Date: 9-21-18
Deputy District Director, Design	PE	Date: 9/24/18
Deputy District Director, Traffic Operations		Date: 9/21/18
Deputy District Director, Maintenance		Date: 9/21/2018
Deputy District Director, Project Management		Date: 9-21-18

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: 9-21-18
Deputy District Director, Right of Way	DES for APN	Date: 9-21-18
Deputy District Director, Environmental		Date:
Deputy District Director, Traffic Operations		Date:
Deputy District Director, Maintenance		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, Traffic Operations		Date:
Deputy District Director, Maintenance		Date:
Deputy District Director, Project Management		Date:

LEVEL-3 - RISK REGISTER	Project Description:	Pavement Resurfacing and Restoration (2R), 07-VEN-101; PM R36.3/R40.6	DIST-EA 302400	Project Manager	Andy Liao	Right of Way Capital Cost:	$150,000	Total Project Capital Cost:	$42,637,000
				Risk Manager	Mirna Dagher	Capital Construction Cost:	$42,487,000	Estimated Construction Duration:	2 Years

Scope Summary: This is a Pavement Resurfacing and Restoration (2R) project that proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan Canyon Overcrossing (PM R36.3) and Punta Gorda Pedestrian Undercrossing (PM R40.6), with a pavement structure that should provide a minimum service life of 40 years. The Supplemental PR updates the project schedule, support costs, construction and right of way capital costs, pavement strategy, and project limits. The scope of work remains the same however, the proposed PID pavement strategy of "Crack, Seat and Overlay (CSOL)" is changed to "Jointed Plain Concrete Pavement (JPCP)" in the mainline travelled way of the project. The revised life-cycle analysis showed that the JPCP strategy yielded the lowest agency and user costs. Right of Way acquisition is not required for this pavement rehabilitation project. All work will occur within existing State Right of Way.

Risk Identification									Risk Assessment														Risk Response				
									Probability		Risk Impact on Capital Cost (70th Percentile)				$5,864,477		Risk Time Impact on Activities										
Risk No.	Status	Risk ID.	Task	Type	Category	Title	Risk Statement	Current status/Assumptions	Probability of Occurrence	Frequency Type	Low	Most Likely	High	Frequency	Simulated	Risk Impact	Low	Most Likely	High	Frequency	Simulated	Time Impact	Rationale	Strategy	Response Actions	Risk Owner	Updated
PA&ED-1	Active	160.Dgn	160	Threat	Dgn	Scope Change	*Changes made to the scope of the project during its development may require additional work that could add cost and time to the project.*	*The scope may be refined.*	50%	1	$1,900,285	$2,280,342	$3,800,570	1	$2,470,370	$2,470,370	22	35	66	1	44	44	By firmly establishing an acceptable scope, the cost of the project will be more reliable.	Mitigate	Work with all functionals and stakeholders to firm up the scope.	Project Engineer & Project Manager	Aug. 22, 2018
PA&ED-2	Active	160.Dgn	160	Threat	Dgn	Missing Items (Assets) Within the Project Limits	*During the development of the project, additional items (other assets that need to be worked on) within the project limits may have to be included which could add cost and time to develop the project.*	*As a result of scope refinement, there will be additional items.*	30%	1	$988,892	$1,186,671	$1,977,785	0	$1,285,560	$0	10	15	22	0	16	0	Identifying all items of work improves the reliability of the cost estimate.	Mitigate	Work with all functionals to comprehensively identify all work items.	Project Engineer	Aug. 22, 2018
PA&ED-3	Active	160.Row	160	Threat	Row	Right of Way Needs	*As a result of difficulties in obtaining a Temporary Construction Easement (TCE) during construction, limited access to the project site may occur, which would lead to increased project costs and schedule delays.*	*The plan is to complete all work (including construction staging) within the existing Caltrans ROW.*	10%	1	$15,000	$18,000	$37,500	0	$20,750	$0	120	160	240	0	180	0	The Right of Way needs, including construction access, are dependent on design and construction staging.	Mitigate	Project Engineer (PE) to establish all Right of Way needs for the project and acquire and clear all Right of Way before the start of construction. PE to identify properties that will be impacted either temporarily or permanently.	Project Engineer & ROW	Aug. 22, 2018
PA&ED-4	Active	160.Row	160	Threat	Row	Utility Identification and Relocation Needs	*As a result of a detailed site investigation, the need to relocate utilities outside the project area may arise, which would lead to project cost increases and schedule delays.*	*Impact on utilities is not yet fully assessed. Design is identifying the needed utility relocations.*	50%	1	$7,500	$9,000	$15,000	1	$9,750	$9,750	22	35	66	1	44	44	There are a lot of utility wires at on- and off-ramps. Other impacted utilities include gas, telephone, etc. Identifying all impacted utilities is critical to establishing the cost of utility relocations. Potholing will minimize this risk.	Mitigate	Review possible utility conflicts and conduct potholing to identify all utilities during the PS&E Phase. Once identified, contact utility companies and monitor progress.	Utility Engineer	Aug. 22, 2018
PA&ED-5	Active	160.Ppm	160	Threat	Ppm	Traffic Systems and Handling	*As a result of the need for better traffic management, modifications to the traffic systems and/or handling plans may occur, which would result in increased project costs and schedule delays.*	*Traffic through the construction site must be maintained and all transportation systems must be protected in operation.*	30%	1	$34,175	$41,010	$68,350	0	$44,428	$0	0	5	10	0	5	0	The staging of construction has been developed - it's awaiting approval.	Accept	Allocate funds to repair the traffic systems that may be impacted by MGS Installation. Approve staging plans as soon as possible. Working with Traffic to identify the location of flat areas to accommodate emergencies.	Traffic Engineer & Project Engineer	Aug. 22, 2018
PA&ED-6	Active	160.Trf	160	Threat	Trf	Survey and Mapping	*If surveying and mapping information are not completed in a timely manner or consistent with existing conditions, adjustments and modification may have to be made during construction, increasing the cost and duration of the project.*	*Existing conditions are reflected in the surveying and mapping information available. However, unidentified items may be discovered in later project stages.*	10%	1	$0	$750	$1,250	0	$708	$0	0	5	10	0	5	0	Serves as the basis for design.	Mitigate	Request survey and mapping information as early as possible.	Project Engineer	Aug. 22, 2018
PA&ED-7	Active	160.Env	160	Threat	Env	Environmental Impact and Clearance	*Environmental studies may uncover details that require mitigation measures that add cost and time to the project. Also, removing vegetation for construction may uncover nesting birds (protected under the Migratory Bird Treaty Act) or other habitats, which would lead to schedule delays during nesting season and increased project costs.*	*Environmental impact of the project is expected to be categorized as CE. Also, vegetation must be removed outside of bird-nesting season (Feb 1st - Sept 1st).*	10%	1	$0	$23,250	$38,750	0	$21,958	$0	66	90	120	0	93	0	Already received CE for PA&ED Phase. May need to identify further studies to be conducted. Adhere to avoidance and minimization measures throughout the project. Project schedule must plan around key dates.	Mitigate	Conduct all necessary studies for environmental compliance. Also, perform a survey of bird nests within the project area during PS&E. If they exist, include the breeding season in the project schedule.	Environmental Planner	Aug. 22, 2018
PA&ED-8	Active	160.Env	160	Threat	Env	Permits and Approvals	*Securing permits and approvals from external agencies may require negotiation and processing times that add cost and time to the project.*	*Permits and approvals have been obtained from external agencies.*	10%	1	$0	$0	$0	0	$0	$0	22	35	66	0	44	0	Identify all necessary permits and approvals.	Mitigate	Schedule adequate time and allow for uncertainty.	Project Engineer & Environmental Planner	Aug. 22, 2018
PA&ED-9	Active	160.Ppm	160	Threat	Dgn	Quality Review	*If adequate quality control and assurance is not maintained, errors and omissions may result in additional cost or duration to the project. As a result of a Value Analysis Study during PS&E, project changes may occur, which would lead to cost and schedule changes.*	*A comprehensive QC &QA will result in lower cost.*	30%	1	$988,892	$1,186,671	$1,977,785	0	$1,285,560	$0	10	15	22	0	16	0	By following the QMS process, the cost and schedule impact on the estimate can be minimized. No VA Study was conducted during the PA&ED Phase. Due to cost increases, a VA Study is now required and will be conducted during the PS&E Phase.	Mitigate	Monitor design progress to conform to the QMS process, by providing complete submittals for review. Conduct VA Study as early in the PS&E Phase as possible in order to consider and implement recommended changes in a timely manner.	Project Manager & Project Engineer	Aug. 22, 2018
PA&ED-10	Active	160.Dgn	160	Threat	Dgn	Constructability & Safety Review	*If deficiencies are identified in any one of the following areas: 1. Adequate Working Space, 2. Traffic Handling, 3. Utility Conflicts, 4. Approvals for Non-Standard features, the constructability may be questionable resulting in the need for changes and revisions that could add time and cost to the project.*	*A comprehensive safety and constructability review will result in lower construction costs.*	30%	1	$988,892	$1,186,671	$1,977,785	0	$1,285,560	$0	10	15	22	0	16	0	Conducting a comprehensive constructability review will minimize cost and schedule impact on the estimate.	Mitigate	Monitor design progress and provide complete submittals for constructability review.	Project Engineer	Aug. 22, 2018
PA&ED-11	Active	160.Con	160	Threat	Con	Differing Site Conditions	*Variations in site conditions may necessitate changes to the contract during Construction, which can increase costs or delay the project.*	*Variation in site conditions is expected.*	30%	1	$988,892	$1,186,671	$1,977,785	0	$1,285,560	$0	0	5	10	0	5	0	Adequately characterizing the site reduces cost uncertainties.	Mitigate	Minimize Contractor surprises by thoroughly characterizing the site.	Resident Engineer	Aug. 22, 2018

LEVEL-3 - RISK REGISTER	Project Description:	Pavement Resurfacing and Restoration (2R), 07-VEN-101; PM R36.3/R40.6	DIST-EA 302400	Project Manager	Andy Liao	Right of Way Capital Cost:	$150,000	Total Project Capital Cost:	$42,637,000
				Risk Manager	Mirna Dagher	Capital Construction Cost:	$42,487,000	Estimated Construction Duration:	2 Years

Scope Summary: This is a Pavement Resurfacing and Restoration (2R) project that proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan Canyon Overcrossing (PM R36.3) and Punta Gorda Pedestrian Undercrossing (PM R40.6), with a pavement structure that should provide a minimum service life of 40 years. The Supplemental PR updates the project schedule, support costs, construction and right of way capital costs, pavement strategy, and project limits. The scope of work remains the same however, the proposed PID pavement strategy of "Crack, Seat and Overlay (CSOL)" is changed to "Jointed Plain Concrete Pavement (JPCP)" in the mainline travelled way of the project. The revised life-cycle analysis showed that the JPCP strategy yielded the lowest agency and user costs. Right of Way acquisition is not required for this pavement rehabilitation project. All work will occur within existing State Right of Way.

Risk Identification									Risk Assessment												Risk Response				
									Probability		Risk Impact on Capital Cost (70th Percentile)				$5,864,477		Risk Time Impact on Activities								
Risk No.	Status	Risk ID.	Task	Type	Category	Title	Risk Statement	Current status/Assumptions	Probability of Occurrence	Frequency Type	Low	Most Likely	High	Frequency	Simulated	Risk Impact	Low	Most Likely	High	Frequency	Simulated	Time Impact	Rationale	Strategy	Response Actions	Risk Owner	Updated
PA&ED-12	Active	160.Con	160	Threat	Con	Prices and Economic Conditions	*As a result of changes in the demand and supply of materials during the Contracting Phase, material price increases may occur, which would lead to increased project costs.*	*Supply and demand for construction materials are dynamic. The recent implementation of federal tariffs raises concerns.*	70%	1	$1,977,785	$2,373,342	$3,955,570	1	$2,571,120	$2,571,120	0	5	10	1	5	5	Ultimately the marketplace determines the prices.	Accept	Competition and prevailing market conditions will determine the winning bid.	Project Manager & Project Engineer	Aug. 22, 2018
PA&ED-13	Active	160.Ppm	160	Threat	Ppm	Staffing & Resources	*Inadequate staff with the proper experience to complete all tasks necessary for the project may contribute to increased cost and duration of the project.*	*Staffing & resources may be different than anticipated.*	10%	1	$319,778	$383,733	$639,555	0	$415,711	$0	0	5	10	0	5	0	Staffing and productivity contribute mainly to the support cost.	Mitigate	Balance experienced and knowledgeable staff with new staff and consider succession planning.	Project Manager	Aug. 22, 2018
PA&ED-14	Active	160.Dgn	160	Threat	Dgn	Storm Water Requirements	*During the development of the project, additional items (other assets that need to be worked on) within the project limits may have to be included which could add cost and time to develop the project.*	*Currently, there is a high R-Value because the existing AB has been there a long time. In addition, all stormwater requirements must be met.*	10%	1	$21,319	$25,582	$42,637	0	$27,714	$0	10	15	22	0	16	0	Current funding plan assumes that the existing AB will be replaced but doesn't include any costs for BMPs. Also, stormwater requirements must be incorporated.	Mitigate	Considering Geogrid with half of AB thickness instead of full AB replacement so that the grade isn't exposed. Also, working to ensure that all legislative requirements for stormwater are met.	Project Engineer	Aug. 22, 2018
PA&ED-15	Active	160.Env	160	Threat	Env	Hazardous Materials	*As a result of replacing the MBGR, constructing 2 MVPs and removing yellow traffic stripes, special handling of Aerially Deposited Lead (ADL), asbestos shims, Treated Wood Waste (TWW) and yellow traffic stripes may be required, which would lead to increased project costs and schedule delays.*	*Hazardous levels of ADL are present in some portions of the project; a Lead Compliance Plan is required for worker safety. Also, asbestos shims may be present in the existing Metal Beam Guard Rail System (MBGR). Finally, the yellow traffic stripes and TWW will be removed during construction.*	50%	1	$5,000	$6,000	$10,000	1	$6,500	$6,500	22	35	66	1	44	44	Soil disturbance is anticipated during construction. The OEE will perform an asbestos survey during the PS&E or Construction Phase, if necessary. ADL, asbestos shims, TWW, yellow traffic stripes must be handled in accordance with regulatory requirements.	Mitigate	Conduct a complete investigation of soil and shims for asbestos and ADL during PS&E Phase. If needed, provide adequate funds in the project cost estimate for preparation of a Lead Compliance Plan and disposal of hazardous ADL soil, asbestos shims, TWW, and yellow traffic stripes.	Hazardous Waste Engineer	Aug. 22, 2018
PA&ED-16	Active	160.Con	160	Threat	Con	Sub-Surface Discoveries	*If sub-surface conditions are different from those described in the contract document, the project may incur additional costs.*	*No significant sub-surface discovery is anticipated.*	10%	1	$1,250	$1,500	$2,500	0	$1,625	$0	10	15	22	0	16	0	Sub-surface discoveries are always possible.	Accept	Make allowance for sub-surface discoveries in the project cost estimate.	Resident Engineer	Aug. 22, 2018

Attachment D

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Making Conservation
A California Way of Life.

To: ORLANCE C. LEE, P.E.
Senior Transportation Engineer
Office of Design C

Matt Liao, Project Engineer

Date: April 20, 2018
File: VEN-101 PM R 36.3/ R40.6
2R Project
EA: 07-334-302400
E-FIS: **1847-0713000088**

From: PENNY NAKASHIMA, P.G.
Senior Engineering Geologist
Office of Environmental Engineering
Hazardous Waste Coordinator, North Region

Subject: **REQUEST FOR HAZARDOUS WASTE ASSESSMENT FOR PA/ED**

The Office of Environmental Engineering (OEE) has reviewed your memorandum dated March 30, 2018 to provide a Hazardous Waste Assessment for the above-mentioned Pavement Resurfacing and Restoration (2R) project along State Route 101 in Ventura County, between Padre Juan overcrossing (PM R36.7) and Punta Gorda Pedestrian undercrossing (PM R40.3). The Office of Design C is preparing a PA/ED submittal. The scope of work in the approved Project Initial Document (PID)- Project Scope Summary Report (PSSR) remains the same except the project limits and the total project cost estimate are revised.

The scope of work includes paving of travelled way and four ramps, upgrading Metal Beam Guard Railing (MBGR) with Midwest Guardrail System (MGS) with vegetation control, dikes as needed and constructing two Maintenance Vehicle Pullouts (MVPs) as well as other miscellaneous items to meet the Caltrans current standards. This project will rehabilitate the mainline using Crack, Seat and Overlay (CSOL) method and all ramps will be overlaid with 0.2' of Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G). The scope of work remains unchanged. All proposed work is within Caltrans' Right-Of-Way (ROW). Based upon the above-mentioned proposed scope of work, available information provided to our office including preliminary plans and PSSR, we have the following hazardous waste assessment:

Aerially Deposited Lead

We understand that the proposed scope of works consist of upgrading MBGR with MGS with vegetation control and constructing two MVPs may involve soil disturbance. There

is a concern that Aerially Deposited Lead (ADL) contaminated soil may exist in unpaved areas. ADL contaminated soil typically exists in shallow unpaved areas due to particulate emissions from historical leaded gasoline usage. One previous ADL Site Investigation (SI) within and adjacent to the project limits on Route 101 (PM R39.8/ R43.6) dated March 2008 was performed by Geocon. The laboratory results show that the total lead concentrations ranged from less than 0.5 mg/kg to 180 mg/kg and the soluble lead concentrations ranged from non-detected to 9.8 mg/l for soil samples from surface to 2.0 feet below ground surface (bgs). Therefore, a detailed ADL SI for areas that will be excavated may be required during the PS&E stage. The SI will take up to four (4) months to complete and this time needs to be allocated into the project schedule. The soil disturbance for replacing MBGR to MGS with vegetation control can be considered minor soil disturbance and all excavated soils must remain in the immediate areas of disturbance. To protect workers and public safety from the hazards of lead contaminated soil, a Lead Compliance Plan (LCP) is required for work that disturbs soil. For cost estimate of preparation of LCP, please refer to the latest Contract Cost Database http://sv08web/contractcost/index.php.

Yellow & White Traffic Striping

There is a concern that yellow thermoplastic (or paint) traffic striping to be removed may contain lead and chromium at concentrations that are considered hazardous. However, in areas where the yellow traffic stripes are being removed along with AC or PCC, lead and chromium concentrations in the residue may not have concentrations at hazardous waste levels. Lead and chromium concentrations in residue can be estimated by considering length, width, and thickness of yellow traffic striping and volume of AC or PCC to be removed. The typical cross section shows that the yellow (thermoplastic or paint) traffic stripe will be removed along with AC pavement, there is no hazardous waste concern. The waste residue is non-hazardous and can be recycled or disposed to a Class III landfill facility. For the white traffic stripe removal, there is no hazardous waste concern because concentrations of lead and chromium are below hazardous waste levels.

A project specific LCP is required as per Cal-OSHA Titles 8 California Code of Regulations. The LCP will be used to prevent or minimize worker exposure to lead while removing and handling white traffic stripe residue. Please refer to the latest Contract Cost database (http://sv08web/design/contractcost/) for the lump sum cost of Contractor's LCP.

Asbestos Containing Materials

Based upon preliminary plans, we understand that bridge structure work will be involved. In the meantime, no detail information regarding the scope of the bridge structure work is available. There is a hazardous waste concern for Asbestos Containing Materials (ACMs) that might be contained in the bridge structure. Bridge is considered regulated structures

by EPA and Local Air District Rules states that any demolition and renovation activities need to have an asbestos survey. We recommend an asbestos survey be performed during design phase (PS&E) to properly evaluate potential of ACMs in existing concrete that will be replaced during construction.

Treated Wood Waste

Wood posts from MBGR requiring removal shall be considered and managed (handling, storing, transporting and disposing) as treated wood waste (TWW) under the Title 22 CA Code of Regulations since the existing wood posts are assumed to be treated with chemicals preservatives. All treated wood waste shall be disposed at an approved treated wood waste facility, either a Class I disposal facility or a composite-lined solid waste disposal facility approved by the State Water Resources Control Board. For the purpose of cost estimate, please refer to the latest Contract Cost Database (http://sv08web/design/contractcost/) for disposal of Treated Wood Waste in a Class I landfill facility or a composite-lined solid waste disposal facility.

Asbestos Shim

Asbestos shims may be present in the existing MBGR. The Office of Environmental Engineering will perform an asbestos survey during the PS&E phase if requested or the asbestos survey may be performed during the construction phase.

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 or need additional information, please call me at extension (213) 897-0670, Penny.Nakashima@dot.ca.gov or contact Jack Liu, Tuanchi.Liu@dot.ca.gov of my staff at (213) 897-1350.

Attachment E

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious Drought!
Help Save Water!

To: Orlance C. Lee , 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: 8/8/2018
EA: 302400
Data Sheet ID NO: ds3650
Project ID # 0713000488

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 Matt Liao 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 NA 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 NA 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)
9/21/2018	N/A	12/30/2019	2/14/2020	8/31/2023

TO **Orlance C. Lee**
ATTN **Matt Liao**
SENIOR R/W P&M **Matt Liao**
ROUTE 101
PM_KM PM R36.3/R40.6
EA 302400
Project ID # 0713000488
ALT

R/W DATA SHEET

ID NO ds3650

Date of Data Sheet 8/8/2018

Project Description This is a Paving Resurfacing and Restoration (2R) project with project limits falling within Ventura County, proposed to rehabilitate the mainline travelled way with a pavement structure that should provide a minimum service life of 40 years, and improve ride quality within the project limits.

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 Orlance C. Lee 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		
Clearance		
RAP (cont rate.)	No Right of Way	
Escrow costs (cont rate.)		
Utility relocation costs	**$66,000**	**$99,376**
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	**$66,000**	**$99,376**

Escalation Rate Rw .07
Escalation Rate Utilities .08
Cert.date 12/30/19

Parcel Count and Py Info

Data Sheet ID NO: ds3650
ROUTE 101
PM_KM PM R36.3/R40.6
EA 302400
ALT

PARCEL TYPES	DUAL APPR.
A	
B	
C	
D	
F	

RIGHTS NEEDED	
FEE	
EASE	
TCE	

TAKES	
FULL	
PART	
TOTAL	

DISPLACEMENT OF UNITS	
SFR	
BUS	
MULTI	

PARCELS WITH RAP

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS

POTENTIAL EXCESS PARCELS

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

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	
225 & 245	Acquisitions	
200	Utilities	
185.20.40	Utility Potholing	270
205	Railroads	
225 & 245	Condemnation	
225 & 245	Clearance	
225 & 245	Relocation	
220 & 300	RW Engineering	
	Total	270

UTILITY INFORMATION

1)	U-2 ---POTHOLES ---- 4" OIL IN 10" CSG MOBILE OIL CO . ---- 1926	2	3000	$6,000
2)	U-2 ---POTHOLES ---- 4" OIL IN 10" CSG MOBILE OIL CO. ------- 1926	2	3000	$6,000
3)	U-10 ---POTHOLES ---- 16" H SO CAL GAS ------ 2040+80 ----	2	3000	$6,000
4)	U-10 ---POTHOLES ---- 10" A.C.P IN 18" C.M.P CASTING MUN WATER ------ 2040	2	3000	$6,000
5)	U-10 ---POTHOLES ---- 10" A.C.P CASTING MUN WATER ------	2	3000	$6,000
6)	U-10 ---POTHOLES ---- 16" H SO CAL GAS ------ 2040+80 ----	2	3000	$6,000
7)	U-10 ---POTHOLES ---- 16" H SO CAL GAS ------ 2040+80 ----	2	3000	$6,000
8)	U-11 ---POTHOLES ---- 16" H SO CA GAS ------- 2055+20 --- 2069+20U-11 ---	2	3000	$6,000
9)	+20U-11 ---POTHOLES ---- 20" CSG ------- 2055+20 --- 2069+20	2	3000	$6,000
10)	U-11 ---POTHOLES ---- 8" MOBILE OIL ------- 2055+20 --- 2069	2	3000	$6,000
11)	U-12 ---POTHOLES ---- 20" CSG ------- 2055+20 --- 2069+20	2	3000	$6,000

Are utility easements required? No

Are Utility agreements required? No

Total Cu Ent Cost $66,000

Const. Completion Date 8/31/2023

Utility Escalation Rate 8%

Total Escalated Cost $99,376

Data Sheet ID NO: ds3650
ROUTE 101
PM_KM PM R36.3/R40.6
EA 302400
ALT

RR INFORMATION

Are RR affected Union Pacific

Describe the RR facilities affected, and ownership: Railroads on plans but unaffected
(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	Matt Ong	8/8/18
Estimate prepared by	Victor Lee	8/8/18
Utilities Estimate prepared by	Victor Lee	5/8/18

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 _____ 9/25/18

Attachment F

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM CE#201802018

07-VEN-101	36.3/40.6	30240	0713000488
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

This Pavement Resurfacing and Restoration project proposes to rehabilitate the pavement along State Route 101 in Ventura County between Post Miles (PM) 36.3 and 40.6 with a pavement structure that should provide a minimum service life of 40 years. The proposed work will include repaving the roadway with Jointed Plan Concrete Pavement (JPCP) in both directions on lanes 2 and 3, replacing individual concrete slabs in both directions on lane 1, applying asphalt concrete (AC) cold place and overlay on four ramps, upgrading the existing Metal Beam Guard Rail (MBGR) to Midwest Guard Rail (MGR), upgrading dikes to meet current Caltrans Standards, repairing and replacing loop detectors, signage, and lane striping, paving gore areas, and installing two Maintenance Vehicle Pullouts (MVPs) at PM 38.3 and 37.2. All work will be performed within Caltrans Right of Way.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Not Applicable – Caltrans is not the CEQA Lead Agency**

☐ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Class 1(d).** (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3].)

Susan Tse Koo
Print Name: Senior Environmental Planner or Environmental Branch Chief

Susan Tse Koo 05.01.2018
Signature Date

ANDY LIAO
Print Name: Project Manager

5/2/18
Signature Date

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☒ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☐ **23 CFR 771.117(c): activity (c)(22)**
- ☐ **23 CFR 771.117(d): activity (d)(___)**
- ☐ **Activity ___ listed in Appendix A of the MOU between FHWA and the State**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327. 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.

Susan Tse Koo
Print Name: Senior Environmental Planner or Environmental Branch Chief

Susan Tse Koo 05.01.2018
Signature Date

ANDY LIAO
Print Name: Project Manager/DLA Engineer

5/2/18
Signature Date

Date of Categorical Exclusion Checklist completion:

Date of ECR or equivalent :

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

Continued from page 1:

Hazardous Waste:

- Because Aerially Deposited Lead (ADL) may exist in unpaved areas, a detailed ADL Site Investigation (SI) for areas that will be excavated may be required during the PS&E stage. The SI will take up to (4) months to complete and this time needs to be allocated into the project schedule.
- Asbestos Shims may be present in the existing Metal Beam Guard Rail (MBGR). The Office of Engineering will perform an asbestos survey during the PS&E phase, or construction phase if necessary.
- The typical cross section shows that the yellow (thermoplastic paint) traffic stripe will be removed along with AC pavement, therefore the paint is not cause for hazardous waste concern. Because the waste is non-hazardous, it can be recycled or disposed to a Class III landfill facility.
- To protect worker and public safety from the hazards of lead contaminated soil, a project specific Lead Compliance Plan (LCP) is required for work that disturbs soil.
- The project specific LCP is required to prevent or minimize worker exposure to lead while removing and handling white traffic stripe residue.
- The soil disturbance for upgrading Metal Beam Guard Rail (MBGR) to Midwest Guard Rail (MGR) with vegetation control is considered minor soil disturbance and all excavated soils must remain in the immediate areas of disturbance.
- Wood posts from MBGR requiring removal shall be considered as treated wood waste (TWW) and managed as such in its handling, storage, transportation, and disposal. All treated wood waste shall be disposed at an approved TWW facility, either a Class I disposal facility or a composite-lined solid waste disposal facility approved by the State Water Resources Control Board.
- If the project scope should change for any reason, the Division of Environmental Planning must be notified and may require a Hazardous Waste Re-Assessment.

Biology:

- The Division of Environmental Planning will be provided the Project Specifications and Expenditures Review Package for review and comments.
- The Project Biologist, Sean Herron, must be notified two weeks prior to construction (at 213-897-8081 or Sean.Herron@dot.ca.gov) so that pre-construction surveys may be conducted and exclusionary devices and methods may be discussed, per the following standard specification: 14-6.03 Bird Protection.
- The Project Biologist must be invited to the pre-construction meeting, with one week prior to notice.
- If vegetation removal is needed, it is recommended that all vegetation removal occur outside of bird nesting season (February 1st through September 1st). The District Biologist shall be notified two weeks prior to the start of construction to determine if nesting birds are present. In the event that nesting birds are observed, the Resident Engineer (RE) shall pause work until a qualified biologist has determined that fledglings have left the nest. If this is not possible, the RE shall coordinate with the District Biologist to minimize the risk of violating the Migratory Bird Treaty Act (MBTA). The District Biologist recommends a buffer of 150 ft. for songbirds and a buffer of 500 ft. for raptors during all phases of construction. Nesting birds are protected under the MBTA and cannot be impacted by construction activities, including but not limited to noise, dust pollution, and habitat disturbance.
- No work should commence until any vegetation to be removed has been surveyed for nesting birds and cleared by District Biologist.
- If any nesting species of concern are observed during construction activities, all work shall immediately cease and the District Biologist shall be immediately notified. Work shall not resume until clearance is given by the District Biologist.
- Avoid impacts to large native trees, specifically sycamores and oaks, near areas slated to be landscaped.
- Minimize the use of invasive species, such as ice-plant, and maximize use of native species, such as deer grass (Muhlenbergia rigens), to minimize environmental impacts and increase environmental benefits of the project.
- This project must employ all appropriate Stormwater and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications. Prior to the start of construction all drain inlets and outlets must be protected with BMPs to prevent construction materials and debris from entering drainages. Thusly, this project has very little potential to create water quality impacts. Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.

Biology (cont.):

- All pollution and litter laws and regulations will be followed by all personnel on site.

07-VEN-101	36.3/40.6	30240	0713000488
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

- If hazardous materials are found onside, the contractor will be responsible for the collection, containment and disposal of all waste produced from work done on this project, including potential hazardous waste, in compliance with all applicable Federal, State, and local waste laws/regulations.
- No asphalt grindings shall be used within 100 feet of any water course. Water course, for this purpose is defined as any feature, either natural or man-made, which conveys water during any time of the year. The limitation on asphalt use near waterways is restricted to compacted shoulder backing.
- If the project scope should change for any reason, the Division of Environmental Planning will be notified to determine whether current environmental documentation is adequate.

Cultural Resources:

- If there are any changes to the proposed activities or if there are additional locations added, an additional review by the cultural resources unit will be required.
- If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assesses the significance of the find.

Attachment G

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

Co/Rte/PM Ven-101, PM 36.3/40.6 EA 302401 / 0713000488 Alternative No. ____

Project Limit In Ventura County on Route 101 from north of Padre Juan Canyon OC to south of Punta Gorda Pedestrian UC.

Project Description Rehabilitating the travelled way and the ramps, upgrading metal beam guard railing and dikes as needed, and constructing two MVPs to meet the Caltrans current standards.

1) Public Information

- ☐ a. Brochures and Mailers $ ____
- ☒ b. Press Release
- ☒ c. Paid Advertising $5,000.00
- ☐ 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) $ ____
- ☐ 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) $525,000.00
- ☐ b. Freeway Service Patrol $ ____
- ☐ c. Traffic Management Team
- ☐ d. Helicopter Surveillance $ ____
- ☐ e. Traffic Surveillance Stations (Loop Detector and CCTV) $ ____
- ☐ f. Others ____ $ ____

4) Construction Strategies

☒	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	$113,750.00
☐	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 _____	$

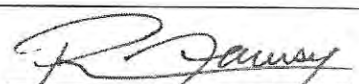
7) Other Strategies

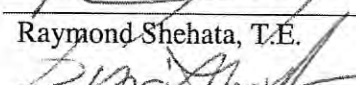
☐	a. Application of New Technology	$
☐	e. Others _____	$

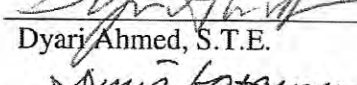
TOTAL ESTIMATED COST OF TMP ELEMENTS = $643,750.00

Project Notes:

1. This TMP Data Sheet supersedes the TMP Data Sheet dated 11/20/2014. Update is needed due to the new staging.
2. The scope of work involves paving rehab travelled way and ramps, upgrading guard rails, dikes and construct two MVPs. The project will be accomplished in four construction stages for a construction duration of approximately two years.
3. Public Affairs Compaign cost estimate of $5,000.00 was provided by David P. White, Public Information Officer, Caltrans Office of Public Affairs and Media Relations, on 6/08/2018.
4. 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.
5. COZEEP cost estimate of $525,000.00 was provided by Amjad Obeid, Construction Traffic Advisor, on 6/08/2018.
6. To enhance work zone safety, reduced speed zone is needed during construction whenever lanes are closed.
   Number of closure require = 500 (working days) x 75% = 375
   a- Labor cost for set up = 375 x $250/day = $93,750.00
   b- Equipment cost (PCMSs and Signs) =$20,000.00
   Total cost = 93,750.00 + 20,000.00 = $113,750.00
7. Cost for Reduced Speed Zone shall be added to the item Traffic ControlSystem (120100) in the amount of $113,750.00
8. It is anticipated work will be performed in accordance with the Lane Requirements Charts provided in the Maintaining Traffic Specifications.
9. 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  DATE 6/25/18
Raymond Shehata, T.E.

APPROVAL RECOMMENDED BY  DATE 6/26/18
Dyari Ahmed, S.T.E.

APPROVED BY  DATE 6/26/18
for Morteza Fahrtash,
District Traffic Manager

Attachment H

Project Change Request

Submitted on 03-APR-2018 07:04:39PM

Project ID 0713000488

District 07 EA5 30240 PPNO 4687 Pgm Doc SHOPP Pgm Del FY 2020 Prog Code 20.XX.201.122

County VEN Route 101 Postmile 37

Project Scope Description

PAVEMENT REHAB

Does this project involve Proposition 1B Funds? No Fund Types

Program Cost Yes Program Year No Scope No

Other No Description Split /Combine No

Components

($ in 1,000s)

	EXISTING (Programmed)		PROPOSED		COST EXPENDED to Date % Complete			CHANGE / TYPE			
	Value	FY	Value	FY	Expended	%Expended	%Complete	Value	Value%	Yrs	Type
PA&ED	$ 300	19/20	$ 300	19/20	$ 170	56.7%	50%	$ 0	0%	0	NA
PS&E	$ 1,700	19/20	$ 3,300	19/20	$ 0	0%	0%	$ 1,600	94.12%	0	P
R/W SUP	$ 200	19/20	$ 200	19/20	$ 0	0%	0%	$ 0	0%	0	NA
CON SUP	$ 2,100	19/20	$ 6,000	19/20	$ 0	0%	0%	$ 3,900	185.71%	0	P
R/W CAP	$ 70	19/20	$ 150	19/20	$ 0	0%	0%	$ 80	114.29%	0	NA
CON CAP	$ 19,270	19/20	$ 42,500	19/20	$ 0	0%	0%	$ 23,230	120.55%	0	P
Total	$23,640		$52,450		$170			$28,810	121.87%		

PRE-PGM DELIVERY YR Yes PGM DELIVERY YR & PRE VOTE POST VOTE

New Project Description (Only If Revised)

County VEN Route 101 Post Mile R36.3/R40.6

Description

Project Performance

Existing	Proposed
Value 21.6 Units Lane Miles(201.122)	Value 21.6 Units Lane Miles(201.122)

Performance Change

Value 0 Units Lane Miles(201.122) Percent 0

1.) WHAT IS THE PROPOSED CHANGE?

1. Construction Capital to increase by $23.23M;
2. Project Limit to increase by 0.7 mile from PM R36.7/R40.3 to PM R36.3/R40.6;
3. PS&E Support to increase by $1.6M;
4. Construction Support to increase by $3.9M;
5. R/W Capital to increase $80k.

2.) COMPLETE THE FOLLOWING REGARDING THE LATEST TWO COST ESTIMATES.
($'s in 1,000's.)

1. Con Cap Estimate Date 23-FEB-2018 Con Capital $43 RW Cap Estimate Date 23-FEB-2018 RW Capital $150
2. Con Cap Estimate Date 26-JUN-2015 Con Capital $19 RW Cap Estimate Date 26-JUN-2015 RW Capital $70

3.) WHAT WAS THE REASON FOR THE CHANGE?

1. This pavement rehabilitation project is located on Route 101 in Ventura County in a fill section on the west side of the freeway towards the Pacific Ocean. The Project Initiation Document (PID) proposed Crack, Seat and Overlay (CS&O) pavement strategy which would raise the freeway profile by 8" for the entire roadway. When the PID was being prepared, the Engineer assumed the existing slope was 2:1 or flatter and the grading can be done along the slope to catch the proposed profile. Upon receiving the topography data in December 2017, Design team discovered the existing slope terrain on the west side of the freeway was actually steeper than anticipated, at about 1.5:1 with 3' or less flat area behind the Edge of Shoulder (ES) for most of the project limits. There is not enough space to construct an 8" wide dike shoulder backing and embankment to support the 8" increase in profile.

Design team also evaluated different methods to support the shoulder backing including a 7' deep guardrail with Lean Concrete Base (LCB) shoulder backing, retaining walls and concrete barrier. The team determined that a combination of 7'-post guardrail and concrete barrier is the only alternative to retaining the raised freeway section without significant impacts to the existing utilities and the environmental sensitive area. The project limits are under the California Coastal Commission (CCC) permit jurisdiction. Based on negotiations with the CCC on a similar project, the see-through, CA ST-10 (Mod) or Type 80 (Mod) barrier is most likely the railing type to be approved by the CCC. The construction of the see-through barrier will be costly, as the work involves special design and triggers removing and hauling aerially deposited lead (ADL) material for the barrier foundation excavation. The revised construction capital cost to properly implement the CS&O strategy is estimated at $37M, including the unanticipated 20,000(+) feet of 7'-post guardrail, LCB shoulder backing, and see-through barrier installation and related hazardous material removal.

Design team, along with Headquarter's (HQ) Pavement Advisor and District Maintenance Engineering, evaluated and concluded that changing the pavement strategy from CS&O to Jointed Plan Concrete Pavement (JPCP) will be a better alternative. The revised life-cycle analysis showed that the JPCP strategy yielded the lowest costs in both agency cost and user cost amongst CS&O, JPCP and JPCP-Rapid Set Concrete (RSC). JPCP will provide 40(+) years of pavement service life, increase workers' safety by reducing future maintenance and eliminate the need for barrier rail/retaining structures. The current estimated construction capital for the JPCP strategy will increase by $23.23M from the programmed amount of $19.27M. There is only $5M difference between CS&O and JPCP alternative yet JPCP strategy will provide a lot more benefits.

2. The Northbound (NB) and Southbound (SB) directions of the freeway are at different elevations. Project limit is proposed to extend by 0.7 mile from Post-Mile (PM) R36.7/R40.3 to PM R36.3/R40.6, where NB and SB have the same elevations so that construction staging for shifting traffic to crossover is feasible.

3. PS&E Support cost will increase from $1.7M to $3.3M. This is due to extensive design effort to develop staging and traffic handling plans which was not required for CS&O strategy. With this increase, the total support cost for PS&E is only 7.7% of capital, which is less than the historical value of 10%.

4. Construction Support cost will increase from $2.1M to $6.0M due to construction duration increase from 175 working days to 520 working days to support the staging and construction activities. JPCP strategy will take longer to construct the lane replacements than CS&O as multiple stages are required to keep the lanes open to the traffic.

5. R/W Capital cost will increase from $70k to $150k due to additional potholing requirements near high risk utilities.

4.) WHEN WAS THE CHANGE DISCOVERED?

The PDT realized the potential cost increase on January 10, 2018 after analyzing the terrain data. From January thru March 2018, the Design Team worked closely with Maintenance Engineer and HQ Pavement Advisor to evaluate different construction and roadway designs alternatives, including changing the pavement strategies. In addition, the Team broke down the associated costs increase by using itemized estimation and ran life-cycle analysis for each design alternative. The Team needed time to study and analyze the situation, collaborate and work with different advisor and specialists to develop the costs, and evaluate and conclude the best alternative.

5.) WHAT HAS BEEN DONE TO MINIMIZE ANY CHANGE?

The Design team has studied various methods to retain the new structure shoulder backing, including a 7'-post guardrail with LCB, retaining walls and concrete barrier. The team also evaluated different pavement strategies including CS&O, JPCP and JPCP-Rapid Set. In addition, the team also verified the unit costs and quantities for each pavement strategy.

6.) WHAT CAN BE CONSTRUCTED WITH THE PROGRAMMED FUNDS?

With the programmed funds, the project needs to be down-scoped to construct either only the Northbound VEN-101 with CS&O or change to CAPM status.

7.) IF THE SCOPE IS REDUCED OR SPLIT, WOULD THE REMOVED WORK NEED TO BE REPROGRAMMED OR ADDED TO ANOTHER PROJECT? No

8.) IS A SUPPLEMENTAL SCOPING DOCUMENT NEEDED? IF YES STATUS? No

9.) WAS A VALUE ANALYSIS STUDY CONDUCTED? No

EXPLAIN THE RESULTS OF THE STUDY OR WHY A STUDY WAS NOT CONDUCTED.

A VA study will be conducted during the Design (PS&E) phase.

10.) COST - WHERE WILL THE REQUIRED FUNDS COME FROM?

The project cost increase is required to mitigate the unforeseen site condition and California Coastal Commission's regulations. The Performance Output for this project remained the same at 21.6 Lane-Miles. The additional funds will come from 10-year SHOPP Pavement Program by delaying EA 07-34800 ($19.2M Support & Capital) from SHOPP cycle 2020 to 2024 (27/28 FY) and will be delivered outside of the 2017 Ten-year cycle. EA 07-34800 was not addressing significant pavement performance output thus the overall 2017 Ten-year SHOPP Pavement Performance Report for the District is still on target.

11.) PRIOR PCRs – LIST OTHER PCRs PREVIOUSLY APPROVED.

None

12.) (A) (STIP-RIP) WHEN DID THE DISTRICT DISCUSS THIS WITH HEADQUARTERS STIP PROGRAM MANAGER AND THE RTPA OR COUNTY TRANSPORTATION COMMISSIONS STAFF?

(B) (STIP-IIP)WHEN DID THE DISTRICT DISCUSS THIS WITH HEADQUARTERS STIP PROGRAM MANAGER?

(C) (SHOPP) WHEN DID THE DISTRICT DISCUSS THIS WITH THE HEADQUARTERS PROGRAM MANAGER?

District discussed the changes with the HQ Pavement Program Advisor, Robert Hogan, on 1/9/2018, 1/22/2018, 2/22/2018 and 3/14/2018. He has reviewed the various strategies and concurred with the JPCP method.

13.) LESSONS LEARNED, NEW STRATEGIES
(What new information pertaining to this project could be beneficial to others?)

CS&O pavement strategy should be carefully thought through if the project limit has steep terrain or is near the ocean that will require California Coastal Commission Permit.

APPROVAL

Andy Liao
District Project Manager Date Phone Number (213) 897-0689

Robert So
Deputy District Director Date
Program/Project Management

HQ PD Coordinator

PD Concurrence Yes

PD Objections

CARL E. ANDERSON
HQ Project Delivery Coordinator Date

DISTRICT_DIRECTOR

CARRIE BOWEN
District Director Name Date

HQsAPPROVAL

JAMES E. DAVIS
HQ Division Chief Project Management Date

BRUCE W. De TERRA
HQ Division Chief Transportation Programming Date

Attachment I

	Option 1: Lane 1 (76 Slabs) - Lane 2, 3 with JPCP Ramp and Shoulder: Cold Plane <4 Stages Construction>				
I. ROADWAY ITEMS					
Section 1 Earthwork	Quantity	Unit	Unit Price	Item Cost	Section Cost
Develop Water Supply	1	LS	$50,000	$50,000	
Street Sweeping	1	LS	$36,000	$36,000	
Temporary Pavement Markings (Paint)	570	SQFT	$6.60	$3,762	
Temporary Traffic Stripe (Paint)	401,745	LF	$0.37	$148,646	
Channelizer (Surface Mounted)	40	EA	$30.00	$1,200	
Temporary Pavement Marker	50	EA	$3.40	$170	
Temporary Railing (Type K)	115,532	LF	$18.00	$2,079,567	
Temporary Crash Cushion Module	7	EA	$250	$1,750	
Remove Yellow Thermoplastic Traffic Stripe (Hazardous Waste)	38,016	LF	$0.80	$30,413	
Remove Painted Traffic Stripe	19,008	LF	$0.42	$7,983	
Remove Painted Pavement Marking	410	SQFT	$1.05	$431	
Remove Thermoplastic Traffic Stripe	38,016	LF	$0.42	$15,967	
Remove Thermoplastic Pavement Marking	55	SQFT	$2.95	$162	
Remove MBGR	21,315	LF	$15.00	$319,725	
Remove Concrete	116,885	SY	$35	$4,090,961	
Remove Concrete Barrier	1,100	LF	$25.00	$27,500	
Clearing and Grubbing	1	LS	$60,000	$60,000	
Install MidWest Guardrail	21,315	LF	$45.00	$959,175	
Roadway Excavation	46,126	CY	$20.00	$922,522	
Remove Asphalt Concrete Surfacing - Cold Plane	67,809	SY	$4.00	$271,236	
Isolation Joint Seal	17,887	LF	$7.50	$134,153	
Grinding	23,849	SY	$7.50	$178,870	
4" Thermoplastic Traffic Stripe	79,834	LF	$0.45	$35,925	
8" Thermoplastic Traffic Stripe (Broken 12-3)	79,834	LF	$0.90	$71,850	
Paint Pavement Marking	500	SQFT	$3.00	$1,500	
Construct Concrete Barrier (Type 60W Mod)	1,100	LF	$170.00	$187,000	
				Subtotal Earthwork	**$9,636,467**
Section 2 Pavement Structural Section	Quantity	Unit	Unit Price	Item Cost	Section Cost
JPCP <401050>	38,883	CY	$250.00	$9,720,766	
LEAN CONC. BASE <280000>	13,453	CY	$120.00	$1,614,413	
AGGRE. BASE (CLASS 3) <260303>	26,907	CY	$50.00	$1,345,344	
VEGETATION CONTROL (MINOR CONCRETE) <510502>	14,921	SY	$70.00	$1,044,435	
RHMA-SP-G <390301>	8,849	TONS	$130.00	$1,150,380	
				Subtotal Pavement Structural Section	**$14,875,337**
Section 3 Drainage	Quantity	Unit	Unit Price	Item Cost	Section Cost
Drainage System	1	LS	$200,000.00	$200,000	
				Subtotal Drainage	**$200,000**
Section 4 Environment	Quantity	Unit	Unit Price	Item Cost	Section Cost
Storm Water Compliance	1	LS	$750,000.00	$750,000	
Hazadous Waste Compliance	1	LS	$700,000.00	$700,000	
Highway Planting	1	LS	$100,000.00	$100,000	
				Subtotal Traffic	**$1,550,000**
Section 5 Traffic Items	Quantity	Unit	Unit Price	Item Cost	Section Cost
Maintain Traffic	1	LS	$1,104,250	$1,104,250	
TMP	1	LS	$643,750	$643,750	
				Subtotal Special Item	**$1,748,000**
Section 6 Minor Items				Item Cost	Section Cost
	28,009,804	x	10%	$2,800,980	
				Subtotal Minor Item	**$2,800,980**
Section 7 Roadway Mobilization					
	30,810,784	x	10%	$3,081,078	
				Subtotal Roadway Mobilization	**$3,081,078**
Section 8 Roadway Additions					
Supplemental Work	30,810,784	x	10%	$3,081,078	
Contingencies	30,810,784	x	10%	$3,081,078	
				Subtotal Roadway Addition	**$6,162,157**
				Total Roadway Item	**$40,054,020**
				Total Roadway Item <4.2% Escalation, 2020>	**$43,489,213**

Attachment J

07-VEN-101 – PM R36.7/R40.3
30240K - 0713000488 - 4686
20.10.201.122
June 2015

Project Scope Summary Report
(Roadway Rehabilitation)
To
Request Programming in the 2016 SHOPP

On Route US-101

Between Padre Juan Canyon Overcrossing

And Punta Gorda Pedestrian Undercrossing

I have reviewed the right of way information contained in this report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

DAN MURDOCH, *ACTING DEPUTY DISTRICT DIRECTOR, RIGHT OF WAY*

APPROVAL RECOMMENDED:

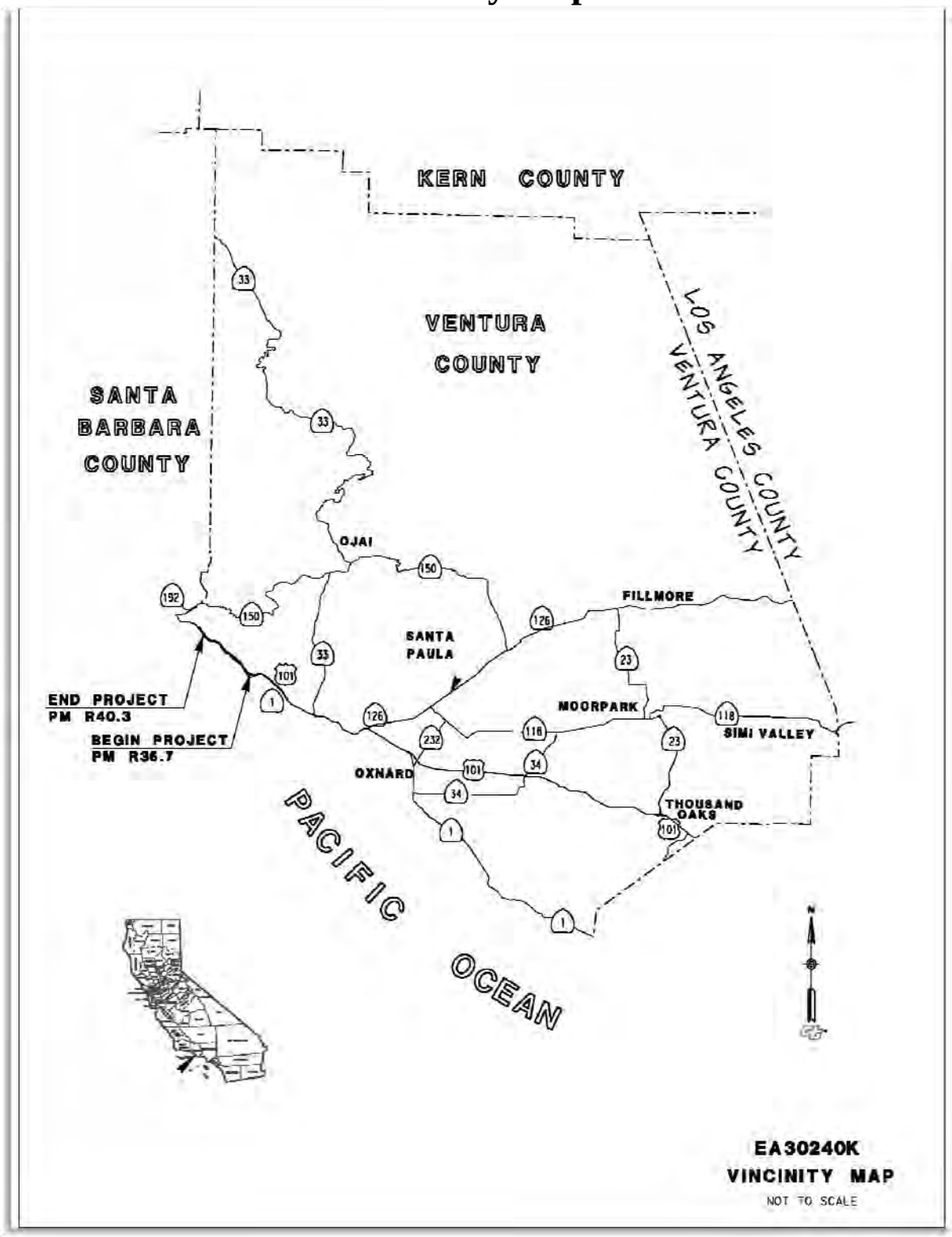
DAVID H. MIRAANEY, *PROJECT MANAGER*

APPROVED:

for CARRIE BOWEN, *DISTRICT DIRECTOR*

6/26/15
DATE

Vicinity Map



This project scope summary 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.

James Vu — 6/12/15

REGISTERED CIVIL ENGINEER — *DATE*

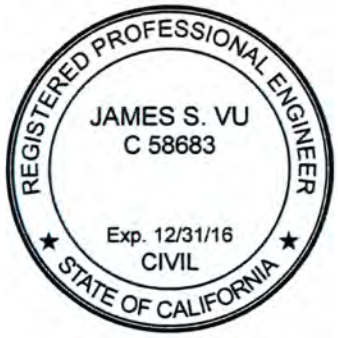


Table of Contents

1. INTRODUCTION AND BACKGROUND

Project Description:

This Pavement Resurfacing and Restoration (2R) project proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan overcrossing (PM R36.7) and Punta Gorda Pedestrian undercrossing (PM R40.3), with a pavement structure that should provide a minimum service life of 40 years. As needed, existing Metal Beam Guard Railing (MBGR) and dikes will be replaced / upgraded to current standards. All work will be completed within the prism of the roadway and no additional right of way will be required.

The estimated capital cost is shown in the table below:

Project Limits	07-VEN-101 PM R36.7/R40.3
Number of Alternatives	Two alternatives: "Build" and "No Build"
Alternative Recommended for Programming	"Build" alternative
Current Capital Outlay Support Estimate	$4.1M
Current Capital Outlay Construction Estimate	$15.85M (escalated in 2019: $19.27 M)
Current Capital Outlay Right-of-Way Estimate	$45,000 (escalated in 2019: $70,000)
Funding Source	SHOPP (201.122)
Funding Year	2019/20
Type of Facility	6-lane freeway
Number of Structures	Six
SHOPP Project Output	21.6 lane-miles
Anticipated Environmental Determination or Document	Categorically Exempt/ Categorically Excluded (CE/CE)
Legal Description	In Ventura County, from 0.6 miles south of Padre Juan Canyon Overcrossing to 0.4 miles north of Punta Gorda Pedestrian Undercrossing
Project Development Category	Category 5

2. RECOMMENDATION

It is recommended that this Project Scope Summary Report be approved and that the project be included in the 2016 SHOPP under the Roadway Rehabilitation Program (201.122) with a programming year of 2019/2020.

3. PURPOSE AND NEED

Purpose:
The purpose of this project is to restore the facility so that the roadway will be in such condition that only minimal maintenance will be required. The chosen strategy will provide a 40 year pavement life.

Need:
The 2011 Pavement Condition Survey (PCS) inventory indicates good pavement condition within the project limits. The prior years (2004 & 2008) PCS inventories show higher percentage of 3rd stage cracking and corner breaks. The correction in the 2011 PCS inventory may be due to interim maintenance works done in the area. It is anticipated that the pavement will deteriorate quickly since cracks in the wheel paths were observed at the May 28, 2014 field scoping meeting. The existing pavement appears to have been ground more than once, so the effective thickness of the structural section may be compromised. The scoping team concurred that 2R rehabilitation strategy is necessary to restore the integrity of the pavement.

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

4A. Roadway Geometric Information

		Existing	Proposed	Minimum RRR Standards
Facility Location(1,2)	(Post Mile Limits)	R36.7-R40.3	R36.7-R40.3	R36.7-R40.3
Minimum Curve Radius	Radius (ft)	3000	3000	3000
Through Traffic Lanes	Number of Lanes	6	6	6
	Lane Width (ft)	12	12	12

	Type (Flexible, Rigid, or Composite)	Rigid	Composite	NA
Paved Shoulder Width	Left (ft)	5	5	10
	Right (ft)	10	10	10
Median Width	(ft)	50 & Var	50 & Var	22
Shoulder is a Bicycle Lane	(Y/N)-Width (ft)	Y (10) Southbound only	Y (10) Southbound only	N
Other Bicycle Lane Width (3)	Width (ft)	NA	NA	NA
Bicycle Route	(Y/N)	*Y	*Y	*Y
Facilities Adjacent to the Roadbed (4)	Code-Width (ft)	NA	NA	NA

Notes:
1. Enter existing Post Mile limits (expand as needed for varied geometrics.)
2. Enter proposed Post Mile limits (expand as needed for varied geometrics.)
3. "Other Bicycle Lane Width" is the width of a bicycle lane that is not within the shoulder and is part of the traveled way.
4. Codes for row "Facilities Adjacent to the Roadbed":
B – Bicycle path
P – Pedestrian walkway
B/P – shared bicycle and pedestrian path
L – Landscaped area between the curb and sidewalk

Remarks:
*No bicycle travel is permitted between PM R36.7 (beginning of project), and PM R38.976 (Junction, Route 1). However, bicycles are permitted on highway shoulder from PM R38.95 (Junction with Route 1) through to PM R40.3 (end of project).

4B. Condition of Existing Facility:

1) Traveled Way Data

PMS Category (1-29) 9 Priority Classification (.1-.4) .3

International Roughness Index (IRI): 0-245

*Rigid Pavement: *Flexible Pavement:
* From latest PMS-Pavement Condition Inventory Survey Data.

3rd Stage Cracking %: 0.25 Alligator B Cracking % N/A

Faulting Spot Location Patching % N/A

Joint Spalls N/A Rutting N/A

Pumping N/A Bleeding N/A

Corner Breaks % 1.2 Raveling N/A

Locations(s) of subsurface or ponded surface-water problem:
N/A
Deflection Study Results (if available):
N/A

2) Shoulder Data

Condition:
The existing shoulders are generally in need of being repaired.

Deficiencies
The existing left shoulder width is 5 feet. This project proposes to maintain the shoulder width, while constructing maintenance vehicle pullout areas where feasible.

3) Pedestrian Facility Data

Facility Type and Location(s)	Meets ADA Standards?	If Facility does not meet ADA Standards, what feature(s) are not ADA compliant?	Status of Each Noncompliant Location
Sidewalks:	N/A	N/A	N/A
Curb Ramps:	N/A	N/A	N/A
Crosswalks:	N/A	N/A	N/A
Driveways:	N/A	N/A	N/A
Shared bicycle/ pedestrian path:	N/A	N/A	N/A
Others:	N/A	N/A	N/A

There are no pedestrian facilities on this freeway at the project location, and there are no pedestrian facilities at the ramp termini.

4) Bicycle Route Data

Deficiency	Location (Station, post mile limits or other reference points)
Pavement markings; signage needed	Mainline PM R38.95/R40.3;

Remarks:

Although VEN-101 is classified as a freeway at this location, it is also Classified as a "Class 3 Bicycle Route" between PM R38.95 and PM 40.3.

4C. Structures Information

Structures	Width Between Curbs			Replace Bridge Railings	Vertical Clearance			Work Identified in STRAIN	Replace Bridge Approach Rail	Replace Bridge Approach Slab	
Name	Exist	RRR Std	Prop	Y/N	Exist	RRR Std	Prop	Y/N	Y/N	Y/N	#
Number	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)				
52 0222: Padre San Juan Cyn Rd OC	61	n/a	61	N	18	16	18	N	N	N	
52 0376L: Hobson Access Rd UC	54	61	54	N	n/a	n/a	n/a	N	N	N	
52 0376R: Hobson Access Rd UC	51	56	51	N	n/a	n/a	n/a	N	N	Y	**1** a)
52 0207L: Seacliff OH and Separation	61	68	61	N	n/a	n/a	n/a	N	N	Y	**7** b)
52 0207R: Seacliff OH and Separation	51	56	51	N	n/a	n/a	n/a	N	N	Y	**6** c)
52 0328L: Mobil Pier UC	66	56	66	Y*	n/a	n/a	n/a	N	N	N	
52 0328R: Mobil Pier UC	51	56	51	Y*	n/a	n/a	n/a	N	N	N	

a) Replace departure slab in Lane 3
b) Replace all slabs incl ramp
c) Replace all slabs
*Bridge railing replacement is not included in this project

4D. Traffic Data

Present Year AADT 67,000 (year 2012)

Construction Year AADT 68,000 (year 2014) 20-Year AADT 80,000

DHV 5,800 40-Year AADT 94,000

D 60% % Trucks 8

*T.I. (20-Year) 13.5 ESAL (20-Year) 33,500,000

*T.I. (40-Year) 15.0 ESAL (40-Year) 67,000,000

* Must correlate with T.I. in Materials Report

Safety Field-Review: Traffic Safety Screening report was approved on 5/22/2014

3 years Collision Data: The Traffic Safety Screening shows Traffic Accident Surveillance and Analysis System (TASAS) data between 1/01/2009 and 12/31/2011 as below

	Actual Collision Rates ACC/MVM			Average Collision Rates ACC/MVM		
	F	F+I	Total	F	F+I	Total
PM R39.044	0.000	0.000	0.000	0.003	0..24	0.72
PM R39.165	0.000	0.000	0.000	0.004	0.33	1.00
PM R39.178	0.000	0.000	0.000	0.003	0.35	1.01
PM R39.340	0.000	0.000	**1.94**	0.001	0.13	0.46

Locations of Collision Concentration: The actual total collision rate of 1.94 is higher than statewide average collision rate of 0.46 for facilities with similar characteristics. There were 2 hit object type of collisions (property damage only).

Corrective Strategy:

This project will install, upgrade or replace MBGR along the roadway. This would reduce the severity of run-off-road/over embankment collisions, and collisions involving fixed objects.

4E. Materials

See Attachment E for Pavement Structural Recommendations

5. CORRIDOR AND SYSTEM COORDINATION

U.S 101 is California's major north-south coastal route between Los Angeles and San Francisco, connecting the central coastal cities. The Federal Highway Administration (FHWA) classifies US 101 as "Other Expressway or Freeway". It is part of the MAP-21 enhanced National Highway System (NHS) and the non-interstate Strategic Highway Network (STRAHNET). In Ventura County, the legislative name of US-101 is "the Screaming Eagles Highway".
Adjacent and related projects:

PROJECT	LOCATION (PM)	SCOPE	MILESTONES
EA 25190	VEN-101, R40.4/R43.6	Pavement Rehab - CAPM	RTL: 12/15/2015 CCA: 05/16/2017
EA 1W650	Route 101, various locations	Deck meth, joint seals, approach slab	RTL: 10/10/2013 CCA: 07/15/2015

6. ALTERNATIVES

6A. Rehabilitation strategy:

This project will rehabilitate the mainline using Crack, Seat and Overlay (CSOL) method. The new overlay pavement structural section on the mainline consists of the following:

- 0.10' Rubberrized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
- 0.20' RHMA –SP-G
- 0.20' Hot Mix Asphalt, superpave, Type A (HMA-SP-A)
- Stress Absorbing Membrane Interlayer – Rubberized
- 0.15' HMA-SP-A minimum (Leveling Course)

Also, all ramps will be overlaid with 0.2' of RHMA-SP-G.

6B. Design exceptions:

Pursuant to DIB 79-03, this project is "2R" certified; as such the preparation of a Fact Sheet for Exceptions to Mandatory Design Standards for existing geometric design features is not required.

6C. Environmental compliance:

A Mini-Preliminary Environmental Analysis Report (PEAR) for this project was approved on 1/21/2015 (see Attachment K). It is anticipated this project will be found

to be categorically exempt and categorically excluded under CEQA and NEPA guidelines respectively. Zoning clearance from Ventura County may be required.

6D. Hazardous Waste

A hazardous waste assessment was prepared for this PSSR (see Attachment L). This project may disturb soil at various locations to rebuild the side slope or construct maintenance vehicle pullouts. It was recommended that the top two feet soil in the unpaved area adjacent to the roadway be considered as containing high concentration of ADL contaminant. Should the soil be reused on site, it can be placed under 1 foot of non-hazardous soil and at least 5 feet above the maximum ground water level per the Lead Variance from the DTSC. If not reusable within the State right-of-way, this soil shall be disposed of at a Class I facility as California hazardous waste. It was recommended that the hazardous waste issues be re-evaluated during the PS&E phase as more detailed engineering design becomes available.

6E. Other agencies involved (permits/approvals from Fish and Game, Corps of Engineers, Coastal Commission, etc.):

Los Angeles Regional Water Quality Control Board (LARWCB)/Central Coast Regional Water Quality Control Board CCRWQCB); California Coastal Commission.

6F. Material and/or disposal site need and availability?

It was suggested that ADL contaminated soil be reused on site. Otherwise, the soil must be hauled off to and disposed of at a Class I facility as California hazardous waste.

6G. Highway planting and irrigation:

The costs to replace highway planting and to repair irrigation damaged by this project are included in the project cost estimate.

6H. Roadside design and management

Not applicable.

6I Stormwater compliance:

A Storm Water Data Report (SWDR), prepared in accordance with the July 2010 Edition of Storm Water Quality Handbook-PPDG, was approved on 02/27/2015 (see Attachment N).

6J. Right of way and utility issues:

Right of Way acquisition is not required for this pavement rehabilitation project. All work will occur within existing State Right of Way. It is expected that there will be Utility Relocation to adjust to grade a series of AT&T manholes.

6K. Railroad involvement:

There are two overhead structures at PM R38.95: 52-0207R and 52-0207L, spanning the single set of tracks that carries two Amtrak passenger routes, the “Coast Starlight” and the “Pacific Surfliner”, as well as freight cars. However, this project is not expected to involve railroad right of way.

6L. Salvaging and recycling of hardware and other non-renewable resources:
All materials should be reused or salvaged, if they match Caltrans standards.

6M. Prolonged temporary ramp closures:
Ramp Closures will be required. Traffic detours are anticipated and project-specific closure charts will be updated during the design phase.

6N. Recycled materials:
This project will generate approximately 5,000 tons of asphalt concrete, class 3 aggregate, and soil. Material not recycled onsite should be sent to mixing plants for recycling.

6O. Local and regional input:
Not applicable.

6P. What are the consequences of not doing this entire project?
The existing pavement will continue to deteriorate, resulting in decreased ride quality and increased maintenance costs, impacting mobility throughout the route. The scope of this project will eventually need to be undertaken, presumably at a greater capital cost.

6Q. List all alternatives studied, cost, reasons not recommended, etc.:
Four alternatives were studied, and Crack, Seat and Overlay was selected as the best rehabilitation strategy for this project (See Attachment H – Life-Cycle Cost Analysis). The other studied alternatives include:

1. Jointed Plain Concrete Pavement (JPCP): This alternative would replace #2 and #3 lanes with JPCP. All Portland Cement Concrete (PCC) slabs at #1 lane with 1st, and 3rd stage cracking would be removed and replaced with the same thickness of Jointed Plain Concrete Pavement-Rapid Set Concrete (JPCP-RSC) or Precast Jointed Concrete Pavement (PJCP). The estimated construction is about $50 million.
2. Precast Prestressed Concrete Pavement (PPCP): This alternative would replace #2 and #3 lanes with PPCP. All PCC slabs at #1 lane with 1st, and 3rd stage cracking would be removed and replaced with the same thickness of JPCP-RSC or PJCP. The estimated construction is about $60 million.
3. Conventional Concrete: This alternative would replace #2 and #3 lanes with PCC. All PCC slabs at #1 lane with 1st, and 3rd stage cracking would be removed and replaced with the same thickness of JPCP-RSC or PJCP. The estimated construction is about $38 million.

7. TRANSPORTATION MANAGEMENT

7A. Transportation Management Plan

A Transportation Management Plan (TMP) will be prepared during the design phase. The TMP Data Sheet was approved on November 20, 2014 (see Attachment I).

7B. Vehicle Detection Systems

The costs to repair/replace of loop detectors are included in the project cost estimate.

8. ENVIRONMENTAL DETERMINATION/DOCUMENT

A Mini-Preliminary Environmental Analysis Report (Mini-PEAR) was prepared for this project. The anticipated environmental document for this project is a Categorical Exemption and Categorical Exclusion under NEPA/CEQA guidelines.
(See Attachment K).

9. PROJECT ESTIMATE

Repeat STRAIN Work table for each structure. Do not include capital outlay support in the estimates. If the estimate for a specific item is duplicated in another item, show estimate in parenthesis and add a note. Add additional rows/lines as needed.

Pavement Work

	Lane Miles	Number	Estimate
Total Lane-Miles of Rehabilitation	21.6		
Flexible Overlay of Flexible Pavement (recycle not included) (1, 2)	0		
Rigid Overlay of Flexible Pavement	0		
Hot Recycled AC (1, 2)	0		
Cold Recycled AC (1, 2)	0		
Reconstruct Lane(s)	0		
Crack Seal & Flexible Overlay of Rigid Pavement (2)	21.6		7,360,000
Rigid Overlay of Rigid Pavement (2)	0		

Rigid Pavement Rehabilitation (list appropriate work type: grind, slab replacement, spall repair, grout & seal random cracks, lane replacement, joint seal, etc.)	0		
Ramps		4	375,000
OC/UC and Bridge Approaches (list appropriate work type: grind, replace, etc.)	0		
Edge Drain (side mi)	0		
Subtotal			**7,735,000**

Notes:
1. Include cost to remove and replace localized failed areas.
2. Include cost of shoulder backing material for increased thickness at shoulder edge, as needed.

STRAIN Work – *Enter structure number here*

	Estimate
52-0367R, Hobson Access Road UC	10,000
52-0207L, Seacliff OH & Separation	70,000
52-0207R, Seacliff OH & Separation	60,000
Subtotal	**140,000**

Does the Project Include:

	Yes/No	Estimate
Main Line Widening (lanes and/or shoulders)	No	
Bridge Widening and Rail Upgrade	No	
Included in Project Deferred (why)	RR project	
Bridge Rail Upgrade - Without Widening	No	
Included in Project Deferred (why)	RR project	
Vertical Clearance Adjustment	No	
Drainage Rehabilitation (roadbed surface) *(list appropriate work type: roadbed surface, roadside off-site, subsurface, etc.)*	Yes	200,000
Pedestrian Facilities	No	
Alternations Required (list):	No	
Traffic Control	Yes	500,000

Other		
TMP	Yes	548,000
Storm water compliance	Yes	750,000
Hazardous waste compliance	Yes	700,000
Signing and Striping	Yes	300,000
Inductive loop detector	Yes	100,000
Subtotal		**3,098,000**

Safety

	Yes/No	Estimate
Rumble Strip	No	
Superelevation/Cross Slope Correction	No	
Vertical Alignment	No	
Horizontal Alignment	No	
Left/Right-Turn Storage/Widening/Lengthening	No	
Signal Upgrade	Yes	100,000
Median Barrier (state type: e.g., PCC, Thrie Beam)	No	
Midwest Guardrail System (new/replace)	Yes	700,000
Concrete Guardrail (new)	No	
Roadside Cleanup	Yes	30,000
Gore Cleanup	Yes	20,000
Electroliers	No	
Subtotal		**850,000**

Roadside Management

	Yes/No	Estimate
Gore Area Pavement	Yes	120,000
Pavement beyond Gore Area	No	

Miscellaneous Paving	Yes	50,000
Maintenance Vehicle Pull-outs	Yes	60,000
Off-Freeway Access (gates, stairways, etc.)	No	
Roadside Facilities	Yes	120,000
Subtotal		**350,000**

Totals	Estimate
Pavement Work Subtotal	7,735,000
STRAIN Work Subtotal	140,000
Does the Project Include Subtotal	3,098,000
Safety Subtotal	850,000
Roadside Management Subtotal	350,000
Sum of Subtotals	12,173,000
20% Contingency	2,434,600
Mobilization	1,217,300
TOTAL PROJECT ESTIMATE	**15,824,900**

CALL $15,850,000

10. FUNDING/PROGRAMMING

It has been determined that this project is eligible for federal-aid funding. This project will be submitted for programming into the 2016 State Highway Operation Protection Program (SHOPP) cycle as part of the Pavement Rehabilitation "2R" Program (201.122); the proposed program year is 2019/2020. The escalated capital cost in the proposed program year will be $19.27 million dollars; the escalation factor is 5% per year. The escalated total cost is $23.44 million dollars.

Capital Outlay Support and Project Estimates

Fund Source	Fiscal Year Estimate						
20.10.201.122	Prior	2017/18	2018/19	2019/20	2020/21	Future	Total
Component	In thousands of dollars ($1,000)						
PA&ED Support		70	30				100
PS&E Support			600	1,100			1,700
Right-of-Way Support		70	70	60			200
Construction Support					800	1,300	2,100
Right-of-Way					70		70
Construction					19,270		19,270
Total		140	700	1,160	20,140	1,300	23,440

The support cost ratio is 17.49%.

11. SCHEDULE

Project Milestones		Scheduled Delivery Date (Month/Day/Year)
PA & ED	M200	09/21/18
PROJECT PS&E	M380	03/20/20
RIGHT OF WAY CERTIFICATION	M410	12/30/19
READY TO LIST	M460	02/14/20
APPROVE CONTRACT	M500	07/31/20
CONTRACT ACCEPTANCE	M600	12/30/21

12. RISKS

See Attachment O.

13. FHWA COORDINATION

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.

14. PROJECT REVIEWS

Scoping team field review		Date	10/08/2014
Scoping team field review attendance roster attached.			
Headquarters SHOPP Program Advisor	Leo Mahserelli	Date	03/27/2015
District Maintenance	Ayubur Rahman	Date	03/24/2015
	Larry Weaverling, Barbara Cisneros		
Headquarters Design Coordinator	Peter Vacura	Date	04/01/2015
Quality Review	Quality Review Team	Date	06/09/2015

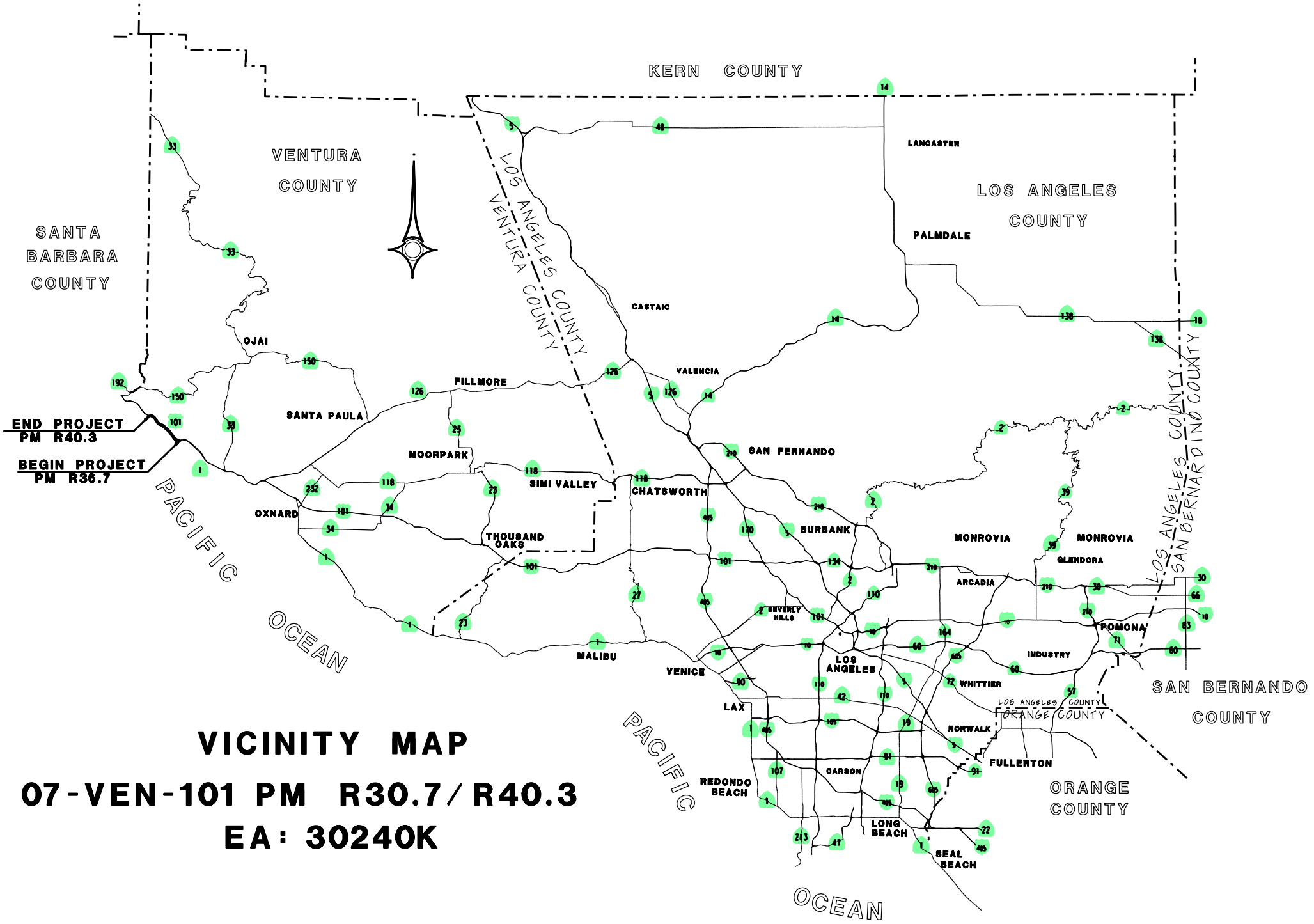
15. PROJECT PERSONNEL

Marco Ruano,	Chief, Office of Project and Special Studies	(213) 897-9635
James Vu,	Office of Project and Special Studies	(213) 897-0116
David H. Miraaney	Project Manager	(213) 897-2770
Godson Okereke	District Program Advisor	(213) 897-2667

16. ATTACHMENTS

A. Vicinity Map
B. Strip Map
C. Typical Sections
D. Pavement Condition Survey Inventory
E. Pavement Structural Recommendations
F. Traffic Safety Screening Analysis and Recommendations
G. 2R Certification
H. Life-Cycle Cost Analysis
I. Transportation Management Plan Data Sheet
J. Right of Way Data Sheet
K. Mini-Preliminary Environmental Analysis Report (Mini-PEAR)
L. Hazardous Waste Assessment
M. SHOPP Project Performance Output
N. Storm Water Data Report
O. Risk Assessment
P. Field Review Attendance Roster

Attachment A



VICINITY MAP

07-VEN-101 PM R30.7/R40.3

EA: 30240K

NO SCALE

Attachment A

Attachment B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	VEN	101	R36.7 / R40.3		

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 electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

DATE REVISED BY | DATE REVISED

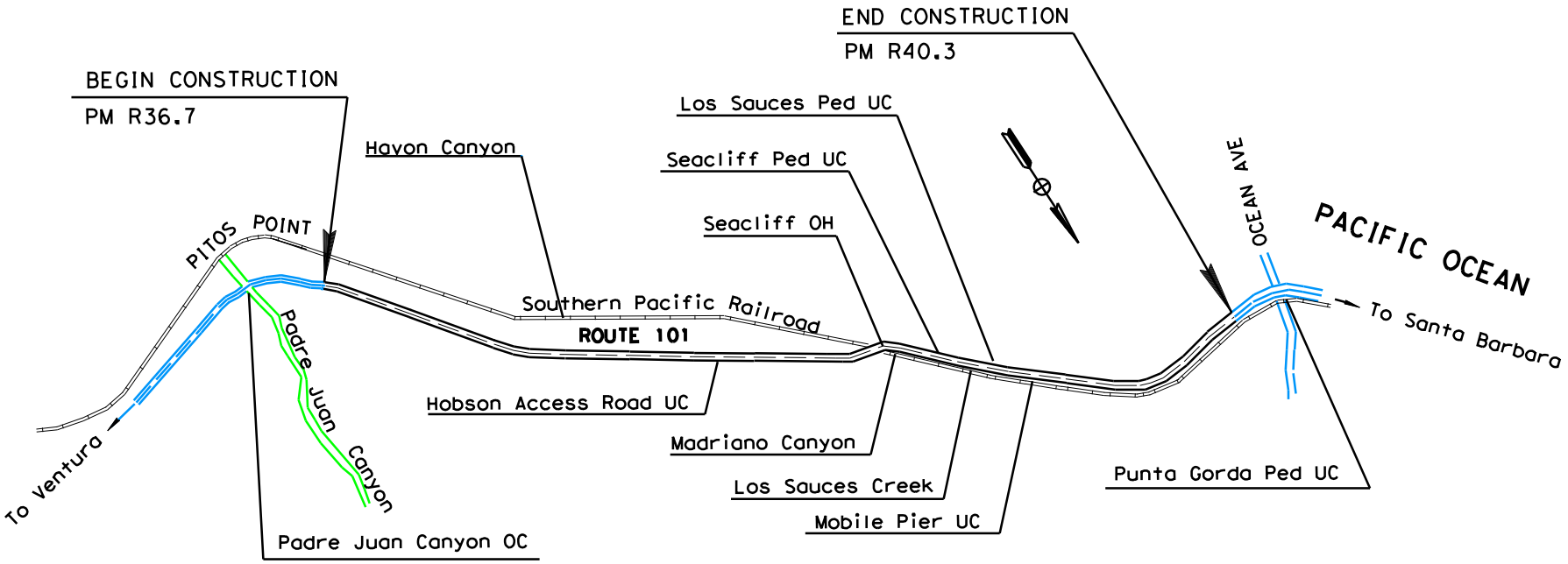
CALCULATED/DESIGNED BY | CHECKED BY

PROJECT ENGINEER

LAC TRAN

PLANNING

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



STRIP MAP
ATTACHMENT B

NO SCALE

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

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DGN FILE => $$$$$$$$$$DGNSPEC$$$$$$$$$$

CU 07186

EA 30240K

TIME PLOTTED => $$$$$$$$SYTIME$$$$$$$$

LAST REVISION 00-00-00

FORM DC-OE-92-PF (REV. 3/88)

Attachment C

DIST	COUNTY	ROUTE	POSTMILE	SHEET NO	TOTAL SHEETS
07	VEN	101	R36.7/R40.3		

DATE	REVISED BY	DATE REVISED

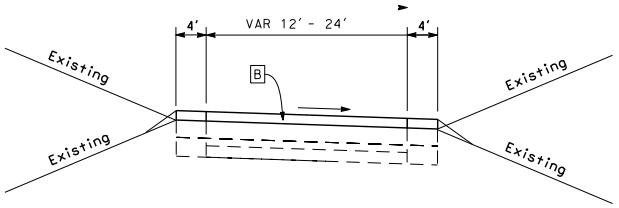
CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans PROJECT STUDIES



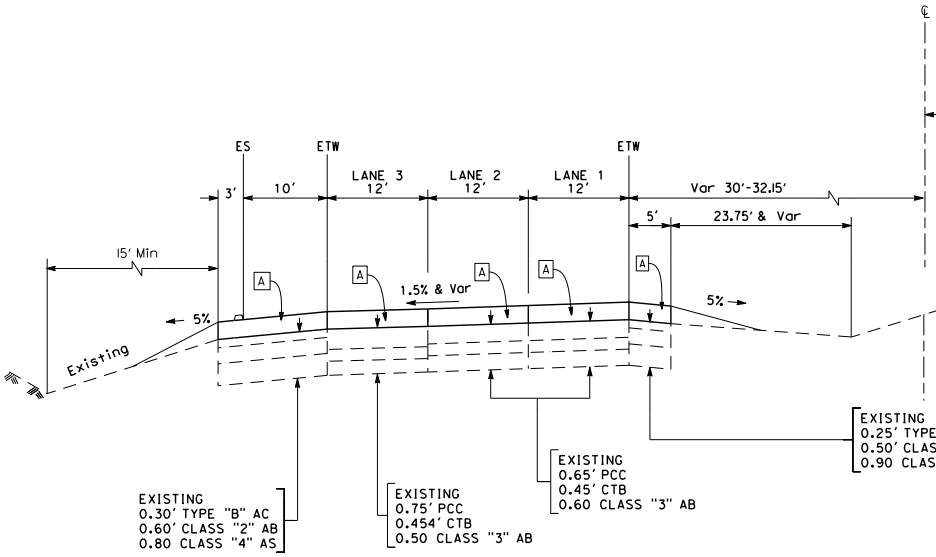
VEN-101 CONNECTORS

SB ON from RTE 1 (PM R39.044)
NB OFF to RTE 1 (PM 39.165)
SB OFF to RTE 1 (PM R39.178)
NB ON from RTE 1 (PM R39.340)

PROPOSED STRUCTURAL SECTIONS

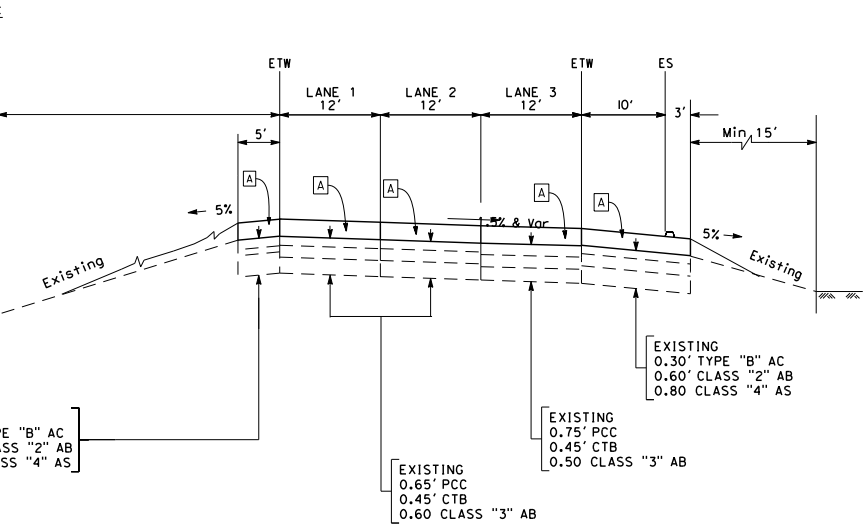
[A] 0.10' RHMA-SP-G
0.20' RHMA-SP-G
0.20' HMA-SP-A
---- SAMI-R
0.15' HMA-SP-A

[B] 0.20' RHMA-SP-G



SOUTHBOUND VEN-101

PM R36.7/R40.3



NORTHBOUND VEN-101

PM R36.7/R40.3

TYPICAL CROSS SECTIONS
ATTACHMENT C

NO SCALE

NOTE: Superelevation sections not shown for clarity

LAST REVISION
DATE PLOTTED => $DATE
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CU 07 186 EA

Attachment D

2013 Pavement Condition Report - Ven 101 PM R37.0-R40.3

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R	37	R	38	1	0	0	0	0	0	0	FALSE	72	72
R	37	R	38	1	0	0	0	0	0	0	FALSE	66	66
R	37	R	38	1	7	7	1	1	14	14	FALSE	68	68
R	37	R	38	1	0	0	0	0	0	0	FALSE	63	63
R	37	R	38	1	0	0	0	0	0	0	FALSE	76	76
R	37	R	38	1	2	2	0	0	0	0	FALSE	83	83
R	38	R	38.889	0.889	0	0	0	0	0	0	FALSE	80	71
R	38	R	38.889	0.889	0	0	0	0	0	0	FALSE	83	74
R	38	R	38.889	0.889	16	14.224	4	3.556	7	6.223	FALSE	111	99
R	38	R	38.889	0.889	0	0	0	0	0	0	FALSE	82	73
R	38	R	38.889	0.889	0	0	0	0	0	0	FALSE	86	76
R	38	R	38.889	0.889	4	3.556	0	0	1	0.889	FALSE	92	82
R	38.889	R	38.893	0.004	16	0.064	4	0.016	7	0.028	FALSE	0	0
R	38.889	R	38.893	0.004	4	0.016	0	0	1	0.004	FALSE	0	0
R	38.893	R	38.908	0.015	16	0.24	4	0.06	7	0.105	FALSE	0	0
R	38.893	R	38.908	0.015	4	0.06	0	0	1	0.015	FALSE	0	0
R	38.908	R	38.911	0.003	16	0.048	4	0.012	7	0.021	FALSE	0	0
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R	39.798	R	40	0.202	3	0.606	0	0	1	0.202	FALSE	155	31
R	40	R	40.372	0.372	0	0	0	0	0	0	FALSE	119	44
R	40	R	40.372	0.372	0	0	0	0	0	0	FALSE	91	34
R	40	R	40.372	0.372	0	0	0	0	0	0	FALSE	0	0
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				19.756		33.116		5		23.372			1682
			Project	Lanemiles		1.68%		0.25%		1.18%			85

Collection Date: : : AM
Printed: 05/05/2014

Caltrans Maintenance Program
2011 Pavement Condition Survey Inventory
Caltrans Drive Order

District 7, VEN, Rte 101, PM 36.5 - 40.5

District		**7**
County		**VEN**
Route		**101**
Begin PM	**R**	**36.000**

District 7 County VEN Route 101

Begin PM - End PM	Length	LaneMi. (Est.)	Type	AADT (,000)	MSL

Lane	Surface Type	Alligator Cracking A %	Alligator Cracking B %	Alligator Cracking C (Y/N)?	Rutting, Bleeding	Slab Cracking 1st %	Slab Cracking 3rd %	Slab Cracking Corner %	Faulting	Patching Area %	Patching Poor Cond.?	Ride, IRI		Priority	Skid	Defect
R 36.000 - R 37.000			**1.000**		**6.000**	**MLD**		**65**					**1**			
L1	R											5	70	98		GOOD CONDITION
L2	R											5	69	98		GOOD CONDITION
L3	R					0	0	0				5	88	33		UNSEALED CRACKS OR
R1	R											5	79	98		GOOD CONDITION
R2	R											5	81	98		GOOD CONDITION
R3	R					0	0	0				5	93	33		UNSEALED CRACKS OR
R 37.000 - R 38.000			**1.000**		**6.000**	**MLD**		**65**					**1**			
L1	R											5	73	98		GOOD CONDITION
L2	R											5	74	98		GOOD CONDITION
L3	R					2	0	12				5	80	33		UNSEALED CRACKS OR
R1	R											5	73	98		GOOD CONDITION
R2	R											5	83	98		GOOD CONDITION
R3	R					4	0	0				5	83	33		UNSEALED CRACKS OR
R 38.000 - R 38.889			**0.889**		**5.334**	**MLD**		**65**					**1**			
L1	R											5	85	98		GOOD CONDITION
L2	R											5	88	98		GOOD CONDITION
L3	R					10	0	6				5	112	32		SLAB CRACKING
R1	R											5	83	98		GOOD CONDITION
R2	R											5	92	98		GOOD CONDITION
R3	R					4	1	1				5	97	31		SLAB CRACKING
R 38.889 - R 38.893			**0.004**		**0.024**	**MLD**		**65**					**1**			
L3	B												N/A	0		N/A - Bridge
R3	R					4	1	1					N/A	31		SLAB CRACKING
R 38.893 - R 38.908			**0.015**		**0.090**	**MLD**		**65**					**1**			
L3	B												N/A	0		N/A - Bridge
R3	B												N/A	0		N/A - Bridge
R 38.908 - R 38.911			**0.003**		**0.018**	**MLD**		**65**					**1**			
L3	R					10	0	6					N/A	32		SLAB CRACKING
R3	B												N/A	0		N/A - Bridge

*Surface type of 'EB' is Enhanced Binder.

Caltrans Maintenance Program
2011 Pavement Condition Survey Inventory
Caltrans Drive Order

District 7, VEN, Rte 101, PM 36.5 - 40.5

District 7 County VEN Route 101

Begin PM - End PM		Length	LaneMi. (Est.)	Type	AADT (,000)	MSL										
Lane	Surface Type	Alligator Cracking A %	Alligator Cracking B %	Alligator Cracking C (Y/N)?	Rutting, Bleeding	Slab Cracking 1st %	Slab Cracking 3rd %	Slab Cracking Corner %	Faulting	Patching Area %	Patching Poor Cond.?	Ride, IRI	Priority	Skid	Defect
R 38.911	**- R 38.952**		**0.041**		**0.246**	**MLD**	**65**		**1**						
L3	R					10	0	6				N/A	32		SLAB CRACKING
R3	R					4	1	1				N/A	31		SLAB CRACKING
R 38.952	**- R 38.976**		**0.024**		**0.144**	**MLD**	**65**		**1**						
L3	B											N/A	0		N/A - Bridge
R1	R											31 191	5		RIDE
R2	R											25 174	5		RIDE
R3	R					4	1	1				44 224	5		RIDE
R 38.976	**- R 39.000**		**0.024**		**0.144**	**MLD**	**67**		**1**						
L1	B											24 171	0		N/A - Bridge
L2	B											28 182	0		N/A - Bridge
L3	B											18 156	0		N/A - Bridge
R3	B											N/A	0		N/A - Bridge
R 39.000	**- R 39.044**		**0.044**		**0.264**	**MLD**	**67**		**1**						
L3	B											N/A	0		N/A - Bridge
R3	B											N/A	0		N/A - Bridge
R 39.044	**- R 39.068**		**0.024**		**0.144**	**MLD**	**66**		**1**						
L3	R					6	0	0				N/A	33		UNSEALED CRACKS OR
R1	B											5 115	0		N/A - Bridge
R2	B											5 102	0		N/A - Bridge
R3	B											5 117	0		N/A - Bridge
R 39.068	**- R 39.782**		**0.714**		**4.998**	**MLD**	**66**		**1**						
L1	R											5 81	98		GOOD CONDITION
L2	R											5 74	98		GOOD CONDITION
L3	R					6	0	0				5 94	33		UNSEALED CRACKS OR
R1	R											5 85	98		GOOD CONDITION
R2	R											5 94	98		GOOD CONDITION
R3	R					4	0	0				5 113	33		UNSEALED CRACKS OR
R 39.782	**- R 39.798**		**0.016**		**0.112**	**MLD**	**66**		**1**						
L1	B											31 191	0		N/A - Bridge
L2	B											5 93	0		N/A - Bridge

*Surface type of 'EB' is Enhanced Binder.

Caltrans Maintenance Program
2011 Pavement Condition Survey Inventory
Caltrans Drive Order

District 7, VEN, Rte 101, PM 36.5 - 40.5

District 7 County VEN Route 101

Begin PM - End PM		Length	LaneMi. (Est.)	Type	AADT (,000)	MSL
R 39.798 - R 40.000		**0.202**	**1.414**	**MLD**	**66**	**1**
R 40.000 - R 40.372		**0.372**	**2.604**	**MLD**	**66**	**1**
R 40.372 - R 40.396		**0.024**	**0.168**	**MLD**	**66**	**1**
T 40.396 - T 40.614		**0.218**	**1.308**	**MLD**	**66**	**1**

Lane	Surface Type	Alligator Cracking A %	Alligator Cracking B %	Alligator Cracking C (Y/N)?	Rutting, Bleeding	Slab Cracking 1st %	Slab Cracking 3rd %	Slab Cracking Corner %	Faulting	Patching Area %	Patching Poor Cond.?	Ride, IRI	Priority	Skid	Defect
L3	B											N/A	0		N/A - Bridge
R1	B											124	0		N/A - Bridge
R2	B											126	0	6	N/A - Bridge
R3	B											157	0	7 18	N/A - Bridge
L1	R											71	98	5	GOOD CONDITION
L2	R											132	98		GOOD CONDITION
L3	R					6	0	0				N/A	33	9	UNSEALED CRACKS OR
R1	R											78	98	5	GOOD CONDITION
R2	R											126	98		GOOD CONDITION
R3	R					4	0	0				147	33	7 15	UNSEALED CRACKS OR
L1	R											69	98	5	GOOD CONDITION
L2	R											70	98	5	GOOD CONDITION
L3	R					11	0	0				125	33		UNSEALED CRACKS OR
R1	R											118	98	6 5	GOOD CONDITION
R2	R											145	98		GOOD CONDITION
R3	R					3	0	3				143	32	14 13	SLAB CRACKING
L1	R											127	98		GOOD CONDITION
L2	R											125	98	7	GOOD CONDITION
L3	R					11	0	0				130	33	6	UNSEALED CRACKS OR
R1	F -DG											134	98	8	GOOD CONDITION
R2	F -DG	0	5									148	32	17	NO ALL. A, LOW ALL. B
R3	F -DG	23	11									N/A	9	21	MOD ABC
L1	F -DG											133	98		GOOD CONDITION
L2	F -DG	5	0									129	32	17	ALL. A, NO B, OPEN CRKS
L3	F -DG	1	0									137	32	16	ALL. A, NO B, OPEN CRKS
R1	F -DG											107	98	18	GOOD CONDITION
R2	F -DG	0	5									131	32	10	NO ALL. A, LOW ALL. B
R3	F -DG	23	11									N/A	9	16	MOD ABC

*Surface type of 'EB' is Enhanced Binder.

Attachment E

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

To: **Kelvin Yuen**
Senior Transportation Engineer
Office of Project and Special Studies
Attn: **James Vu**

Date: October 30, 2013

File No.: 07-VEN-101, PM R31.15/R40.3
Pavement Resurfacing and Restoration
EA: 30240K
E-FIS: 0713000488

Kirsten Stahl, P. E.
Office of Engineering Services, Materials Investigations
From : **DEPARTMENT OF TRANSPORTATION**

Subject: **PSSR PAVEMENT STRUCTURAL RECOMMENDATIONS**

Per your request dated September 18th, 2013, Materials Investigations has reviewed the 2R project along VEN-101 between Padre Juan Canyon OC and Punta Gorda PUC and offers the following pavement structure alternatives based on the current 2012 Highway Design Manual (HDM) standards. Please be advised that these recommendations are provided for cost estimation purposes only on this planning project. For the final design, Materials estimates that it will need additional resource hours allocated per the table at the end of this memo, in order to prepare the final recommendation based on the various strategies provided.

(I) Lanes Rehabilitation or Widening:

Outer Lanes (Nos. 2 & 3): $T.I._{40} = 15$, R-value = 15
Inner Lane (No. 1): $T.I._{HDM} = 12.0$, R-value = 15

A. JPCP or JPCP-RSC

	Outer Lanes		Inner Lane
1.00'	JPCP or JPCP-RSC **	0.85'	JPCP or JPCP-RSC **
------	Base Bond Breaker	------	Base Bond Breaker
0.35'	Alternate Treated Base*	0.35'	Alternate Treated Base*
0.70'	Aggregate Base (AB), Class 3	0.70'	Aggregate Base (AB), Class 3
-------	SEG (Subgrade Enhancement Geotextile)	-------	SEG
2.05'	Total	1.90'	Total

B. Precast Prestressed Concrete Pavement (PPCP) or Precast Jointed Concrete Pavement (PJCP)

	Outer Lanes		Inner Lane
0.85'/0.95'	PPCP / PJCP **	0.75'/0.80'	PPCP / PJCP **
------	Base Bond Breaker	------	Base Bond Breaker
0.35'	Alternate Treated Base*	0.35'	Alternate Treated Base*
0.70'	Aggregate Base (AB), Class 3	0.70'	Aggregate Base (AB), Class 3
------	SEG	------	SEG
1.90'/2.00'	Total	1.80'/1.85'	Total

* Alternate Treated Base (ATB) includes Lean Concrete Base (LCB), Lean Concrete Base Rapid Setting (LCB-RS), and Roller Compact Concrete (RCC) to be selected at the contractor's option.

** For lane replacement, remove at least the existing mainline PCC in the outer two lanes to be replaced, and two feet of existing shoulder and 0.5' adjacent lane/auxiliary lane that will be left in place, and replace with one of the new concrete pavement structures stated above.

C. Hot Mix Asphalt – Superpave alternative (HMA – SP)

HMA – SP (20 years Design) alternative

$T.I._{20} = 13.5$ R-value = 15

0.20' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.40' Hot Mix Asphalt, superpave, Type A (HMA-SP-A)
0.65' Alternate Treated Base
1.00' AB, Class 3
2.25' Total

HMA – SP (40 years Design) alternative

$T.I._{40} = 15$ R-value = 15

0.10' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.20' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.50' Hot Mix Asphalt, superpave, Type A (HMA-SP-A)
0.75' Alternate Treated Base
1.00' AB, Class 3
2.55' Total

D. Crack, Seat and Overlay (CSO) of Rigid Pavement (20-Year Design - all lanes)

0.20' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.15' Hot Mix Asphalt, superpave, Type A (HMA-SP-A)
------ Stress Absorbing Membrane Interlayer – Rubberized (SAMI-R)
0.15' HMA-SP-A min. (Leveling Course)
0.50' Total

Crack, Seat and Overlay (CSO) of Rigid Pavement (40-Year Design - all lanes)

0.10' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.20' Rubberized Hot Mix Asphalt, superpave, gap graded (RHMA-SP-G)
0.20' Hot Mix Asphalt, superpave, Type A (HMA-SP-A)
------ Stress Absorbing Membrane Interlayer – Rubberized (SAMI-R)
0.15' HMA-SP-A min. (Leveling Course)
0.65' Total

Where vertical clearance prevents the CSO recommended above, assume lane replacement using one of the lane replacement alternatives. When CSO is used, it applies to all lanes, including median and shoulder. For tapers into and under bridges and other features which may prevent overlaying the existing pavement, a lane replacement option will be needed in order to meet the minimum performance life requirement.

Notes: 1. If mainline PCC slabs with 3rd stage cracking are between 10% to 20%, a Life Cycle Cost Analysis (LCCA) is required to determine if slab replacement (CAPM), or lane replacement (rehabilitation) is the most cost effective.

2. Inner lanes are lanes where trucks are not legally permitted to travel (typically lanes 1 and 2 of 8 or more lane freeways, and HOV lanes).

3. Estimate for CSO must consider grade adjustment to barriers, inlets, bridges, ramp approaches & departures, guardrails, and other items that must need height adjustment as a result of the rehabilitation strategy that may be selected.

4. Where existing treated base is in good condition and there is sufficient room to place JPCP, PPCP or PJCP, the existing treated base may be left in place.

(II) <u>Mainline PCC To Remain:</u>

For existing PCC lanes to remain in place, including locations to be overlaid with HMA:

1. Grind existing pavement not previously ground or which has an International Roughness Index (IRI) greater than 170 inches/mile. For overlays, only grind if IRI is greater than 170 inches/mile. For CSO, no grinding is needed.

2. Repair spalls.

3. Replace damaged slabs with JPCP-RSC or Precast Concrete to match thickness of existing slabs.

   0.75' Outer Lane (No. 3) – JPCP-RSC (match existing thickness)
   0.65' Inner Lanes (Nos. 1 &2) – JPCP-RSC (match existing thickness)
   ------ Base Bond Breaker
   0.45' Replace CTB in kind with LCB-RS on an as-needed basis. For cost estimate purposes, assume 20% of the replacement slabs will need replacement of the underlying cement treated base.

Consult with District Maintenance Engineer regarding locations and extent of slab replacement, grinding, and spall repair. If the percent of slabs warrant replacement in a given lane and location exceeds 10%, perform a Life Cycle Cost Analysis per HDM Topic 619 to determine if slab replacement or lane replacement of the given segment is more cost effective. If 20% or more of slabs warrant replacement, do lane replacement.

(III) Mainline Asphalt Median, Shoulder:

A. Replace Shoulder:

1. Concrete Alternative:

T.I. = 9 (Maximum per HDM 613.5(2)), R-value = 15

0.70'	Shoulder Concrete Pavement (SCP) ***
Varies (1.00' min)	AB, Class 3 (encapsulated) ****
1.70' min.	Match overall depth of the adjacent lane (see HDM 613.5(2) for additional instructions)

*** Shoulder Concrete Pavement (SCP) is a new pilot specification proposed to be adopted in the future, which gives the Contractor a choice of several different material options. Assume JPCP for estimate.

**** Encapsulate (wrap) any untreated base materials adjacent to the JPCP pavement structure in Geotextile to prevent migration of fine soil into the JPCP pavement structure.

If resulting existing base thickness upon replacing the existing surface with concrete is 0.50' or more, existing base can remain in place.

Reminder that HDM Index 613.5(2), requires the first two feet adjacent to the outside lane be an extension of the mainline travelled way (mandatory standard). This two-foot section must be doweled in accordance with Sheet P2 of the Standard Plans.

2. Asphalt Alternative:

For the existing 0.30' AC section along the shoulder and 0.25' in the median, remove the existing AC and replace it in kind with new Hot Mix Asphalt-Superpave-Type A (HMA-SP-A).

B. Alternative shoulder for temporary traffic handling and ramp crossings:

1. Concrete

T.I. = 10.5 (2 year ESALs), R-value = 15

0.80'	JPCP or JPCP-RSC
------	Base Bond Breaker
0.35'	Alternate Treated Base*
0.35'	AB, Class 3
-------	Subgrade Enhancement Geotextile (SEG)
1.50'	Total

2. RHMA-SP-G

T.I. = 10.5 (2 year ESALs), R-value = 20 (with SEG)

0.20' RHMA-SP-G
0.35' HMA-SP-A
0.55' Alternate Treated Base*
0.80' AB, Class 3
------- Subgrade Enhancement Geotextile (SEG)
1.90' Total

3. HMA-SP-A

T.I. = 10.5 (2 year ESALs), R-value = 20 (with SEG)

0.55' HMA-SP-A
0.55' Alternate Treated Base*
0.80' AB, Class 3
------- Subgrade Enhancement Geotextile (SEG)
1.90' Total

IV. Ramp Rehabilitation or New Ramp:

Where it has been identified that ramp conditions warrant rehabilitation, use one of the following recommendations:

A. Mill and Overlay Existing Ramp:

Mill out 0.20'of the existing AC ramp and replace it with new 0.20' of RHMA-SP-G. Please note that any existing AC layer to remain in place after milling must be at least 0.15' thick for stability. After milling, dig out and repair the localized failed areas with new HMA, Type A, and seal all cracks greater than ¼" with hot applied crack sealant. You must verify the existing surface thickness either by As-Built Plans or coring of the AC on the ramp.

B. Pavement Replacement or New Ramp:

1. $T.I._{20}$ = 12 (Heavy Traffic), R-value = 20 (with SEG)

0.85' JPCP or JPCP-RSC	OR	0.20' RHMA-SP-G
0.35' ATB*		0.40' HMA-SP-A*****
0.70' AB, Class 3		0.60' ATB*
------- SEG		0.90' AB, Class 3
1.90' Total		------- SEG
		2.10' Total

2. $T.I._{40}$ = 14 (Heavy Traffic), R-value = 20 (with SEG)

0.95' JPCP or JPCP-RSC	OR	0.10' RHMA-SP-G
0.35' ATB*		0.20' RHMA-SP-G
0.70' AB, Class 3		0.50' HMA-SP-A*****
------- SEG		0.70' ATB*
2.00' Total		1.10' AB, Class 3
		------- SEG
		2.60' Total

Notes: Please note that the JPCP or JPCP-RSC option must be used at the Ramp Terminus where truck traffic is deemed heavy (150' min. length).

***** If the electrical loop detectors are required, the loop should be cut, epoxy filled, and sandwiched in this HMA layer and place Geosynthetic Pavement Interlayer (GPI) within the limits of the loop detector, prior to placing the final HMA-SP-A and RHMA-SP-G layers.

Materials request for allocation of resources:

Depending on the strategy selected in the planning report for programming, the Materials Investigations Unit (1840) estimates that it will need the following hours to develop final recommendations, assist with specifications, attend meetings, and support Construction. An additional 240 hours is recommended, 500 hours for the Southern Regional Lab (SRL) for testing and 40 hours for Materials Investigation for field work and implementation of test results to investigate areas of settlement within the project limits. Additional hours may also be required for the Headquarters Geotechnical Unit during this process.

Project Phase	Lane Replacement Alternative (hours)	CSO Alternative (hours)	Field Investigation In addition to Strategy Alternative (hours)
160	40	40	40 (Materials) + 500 (SRL)
230	60	60	
270	60	60	
285	8	8	
Total	168	168	540

The purpose of the Field Investigation is to accomplish the portion of the work based on settlement along Ven-101, just south of the SB/VEN County line that may be impacting existing roadway conditions.

If you have any questions, please call Raimundo Jo-Fung at 7-2844 or me at 7-0470.

KIRSTEN STAHL, P. E
District Materials Engineer

Approved by: William K. Farnbach
Acting Chief, Office of Eng. Services

Attachment F

Memorandum

Flex your power!
Be energy efficient!

To: HAMID SAADATNEJADI, Chief
Office of Maintenance Engineering I

Date: April 28, 2014
File: 07-30240K
Ven-101- PM R37/R40
Pavement Resurfacing
Restoration

From: KIRK PATEL, P.E.
Senior Transportation Engineer
Office of Traffic Engineering North

Subject: TRAFFIC SAFETY SCREENING ANALYSIS AND RECOMMENDATIONS

This is a safety Analysis, as required during project development, for the proposed 2R (Roadway Resurfacing and Restoration) project on State Route 101 in Ventura County, from PM R37.0, Padre Juan Canyon OC to PM R40.0, Punta Gorda PUC.

Project scope of work:

Mainline

1. Lane replacement strategy for the outside two lanes on both directions includes a typical 40-year life pavement structure of 1.05 inches JPCP, 0.35 ATB, 0.7 Class 3 AB or equivalent.

2. Replace individual slabs on the inside lanes for both directions. Cold plane and overlay (CP/OL) the AC shoulder. Typically 0.2 inches CP/OL.

3. Upgrade metal beam railing and bridge connections at approach and departure ends of bridge abutments at:

    a. Hobson Creek OC bridge (PM R 38.9)
    b. Seacliff/Ven 1 UC bridge (PM R38.97)
    c. Mobil Pier UC (PM R39.78)

Ramps

1. Cold plane and OL 0.2 inches RHMA

2. Northbound off-ramp to Seacliff/Ven 1
    a. Refresh stripings & pavement markings
    b. Replace the metal beam guardrailing and end treatment with double metal beam guardrail and end treatment at the end of the ramp.

3. Northbound on-ramp from Seacliff/Ven 1
   a. Rehabilitate on-ramp pavement
   b. Refresh stripings & pavement markings

4. Southbound off-ramp to Seacliff/Ven 1
   a. Refresh stripings & pavement markings
   b. Rehabilitate on-ramp pavement

5. Southbound on-ramp from Seacliff/Ven 1
   a. Refresh stripings & pavement markings
   b. Rehabilitate on-ramp pavement

The field investigations for this report were conducted on September 26 and October 1, 2013.

DESCRIPTION OF ROADWAY SEGMENT

The project location is located in the coastal/mountain area of Ventura County with only one interchange at Ven 1/Seacliff. The roadway is a 6-lane PCC paved freeway with wide, unpaved center median, AC paved right and left shoulders. From PM R37 to R37.25 and from PM R38.8 to R40.0, the center median has a thrie beam barrier. From PM R37.0 to PM R38.9, Seacliff interchange, northbound and southbound roadbeds are at different elevations. The roadway is fairly level and has few horizontal curves.

TRAFFIC DATA

Mainline

The Average Daily Traffic in 2012 for this segment of Freeway is about 67,000 vehicles per day, and truck traffic is approximately 8% of the total traffic volume (Attachment A – Traffic Volume).

The most recent three-year accident history within the project limits, from 1/01/2009 to 12/31/2011, identified an actual total collision rate to be lower than statewide average collision rate for facilities with similar characteristics for southbound direction and higher than average for northbound direction. (Attachment B – Table B).

Traffic Accident Surveillance and Analysis System (TASAS) data Date range: 1/01/2009 – 12/31/2011						
	Actual Collision Rates ACC/MVM			Average Collision Rates ACC/MVM		
PM R37.0 to PM R40.0	F	F+I	Total	F	F+I	Total
Northbound	**0.009**	**0.20**	**0.58**	0.003	0.15	0.44
Southbound	**0.009**	0.05	0.20	0.003	0.15	0.45

ACC = Accident, MVM = Million Vehicle Miles

Safety Screening Procedures for 2R projects bases the calculations on either the most recent 3 or 5 years of available data. For the remaining discussions, 3-year collision data was analyzed. Accident history was reviewed and a total of 83 collisions were reported, 62 in northbound and 21 in southbound. Of these collisions, there were 2 fatal (1 northbound and 1 southbound) and 24 injury (20 northbound and 4 southbound). The fatal collisions were 1 head-on type, where the lost control northbound vehicle crossed over the center median, and 1 auto-pedestrian which the pedestrian was under the influence and walked into the southbound traveled way. The primary cause of these collisions were either improper turning(30.1%) or speeding (51.5%) and the types of collisions were 1 (1.2%) head on, 10 (12%) sideswipe, 38 (45.8%) rear end, 2 (2.4%) broadside, 23 hit object (27.7%), 5 (6.0%) overturn, 1 auto-pedestrian (1.2%), and 3 (3.6%) other. 41% of collisions involving vehicles that were stopped or slowing/stopping (Attachment B – TSAR).

The same most recent three-year period did not show any Table C accident concentrations for this segment. The actual collision rates for northbound direction are higher than statewide average, and most of the collisions (32 out of 62) occurred in the segment from PM 39, Seacliff interchange, to PM 40, with 25 rear end collisions, 3 sideswipes, and 4 hit objects (Attachment B – Collision Diagrams). The primary cause of the collisions was speeding and inattention during congestion periods.

Southbound On Ramp from State Route 1/Seacliff, PM R39.044

The most recent three-year accident history identified no collision (Attachment B – Table B).

Northbound Off Ramp to State Route 1/Seacliff, PM R39.165

The most recent three-year accident history identified no collision (Attachment B – Table B).

Southbound Off Ramp to State Route 1/Seacliff, PM R39.178

The most recent three-year accident history identified no collision (Attachment B – Table B).

Northbound On Ramp from State Route 1/Seacliff, PM R39.340

For the same most recent three-year accident history, the actual total collision rate of 1.94 is higher than statewide average collision rate 0.46 for facilities with similar characteristics (Attachment B – Table B). There were 2 hit object type of collisions (property damage only). When the drivers, who were under the influence of alcohol, lost control and hit the dike while trying to negotiate the curve on ramp (Attachment B – Collision Diagram).

Traffic Accident Surveillance and Analysis System (TASAS) data Date range: 1/01/2009 – 12/31/2011						
	Actual Collision Rates ACC/MVM			Average Collision Rates ACC/MVM		
	F	F+I	Total	F	F+I	Total
PM R39.044	0.000	0.00	0.00	0.003	0.24	0.72
PM R39.165	0.000	0.00	0.00	0.004	0.33	1.00
PM R39.178	0.000	0.00	0.00	0.003	0.35	1.01
PM R39.340	0.000	0.00	**1.94**	0.001	0.13	0.46

TRAFFIC INVESTIGATION REPORTS

For the same three year period, no Caltrans Highway Safety Improvement Program for investigation of high collision concentration locations (Table C All), or high collision concentration locations under wet conditions (Wet Table C) triggered any Traffic Investigation Report (TIR) for either mainline or ramps.

SAFETY SCREENING

2R SAFETY SCREENING 1

For project on expressways with four lanes or more and freeways, the Fatal + Injury (F+I) accident rates must be below either the statewide average or 0.35 accidents per million vehicle miles (acc/mvm).

The actual F+I collision rate for northbound direction was calculated to be 0. 20 acc/mvm, which is higher than the statewide average of 0.15 but lower than the 0.35 acc/mvm limit. Southbound rate is 0.05, which is lower than statewide and the 0.35 acc/mvm limit.

As for the ramps, three ramps did not have any collision. The only ramp that had collisions was the northbound on ramp with two collisions. However, the F+I collision rate was 0.0, which is lower than the average.

The project passes Safety Screen 1, based on 3-years of Collision Data gathered from 1/1/2009 to 12/31/2011.

2R SAFETY SCREEN 2

Safety Screen 2 addresses collisions related to roadway widths on 2 and 3 lane conventional highways. Since this project has four or more lanes and is rated as freeway, this safety screen does not apply.

2R SAFETY SCREEN 3

This Safety Screen is looking for identifiable collision patterns that are correctable. The majority of the collisions for this segment were rear end (46%), sideswipe (12%) and hit object (28%).

This report recommended countermeasures listed under Project Scope of Work section, which included upgrading metal beam guardrails and roadway delineations. These proposed upgrades are considered cost effective and would help reduce or eliminate the types of collisions that are identified in this segment.

It is anticipated that the recommended countermeasures can be adequately addressed within the funding constraints of a 2R Project. Based on this assumption, this project passes Safety Screen 3.

2R Safety Screen 4

Safety Screen 4 addresses Pedestrian and Bicycle needs on the project. This safety screen does not apply to this project because this section is freeway and bikes are prohibited.

GENERAL SAFETY ENHANCEMENTS RECOMMENDATION

Mainline

Recommendations on the mainline within the project limits were determined by field reviews and are listed below:

Upgrade metal beam railing and bridge connections at approach and departure ends at bridge abutments at:

d. Hobson Creek OC bridge (PM R 38.9)
e. Seacliff/Ven 1 UC bridge (PM R38.97)
f. Mobil Pier UC (PM R39.78)

Ramps

Safety enhancement recommendations for ramps were determined by field reviews and are listed below:

Northbound off-ramp to Seacliff/Ven 1

c. Refresh stripings & pavement markings
d. Rehabilitate ramp pavement
e. Reconstruct the metal beam guardrail end treatment at the end of the ramp.

6. Northbound on-ramp from Seacliff/Ven 1
   a. Rehabilitate ramp pavement
   b. Refresh stripings & pavement markings

7. Southbound off-ramp to Seacliff/Ven 1
    a. Refresh stripings & pavement markings
    b. Rehabilitate ramp pavement

8. Southbound on-ramp from Seacliff/Ven 1
    a. Refresh stripings & pavement markings
    b. Rehabilitate ramp pavement

TRAFFIC SAFETY PERSONNEL

Office of Traffic Engineering North

Kirk Patel, Area Senior	(213) 897-1825
Trung Duong, Project Engineer	(213) 897-0837

Attachments:

A. Traffic Volumes 2012 (AADT) - Vehicles & Trucks
B. TASAS – Collision Diagrams for northbound mainline and northbound onramp from Seacliff
   Table Bs 3-Year Summary
   Selective Accident Retrieval (TSAR)
   Table Cs
C. Aerial photos

Attachment G

Dist 07 – Ven – 101
PM R37.0-R40.0
Project EA 30240K

2R PROJECT CERTIFICATION

A Safety Screening, as required by Design Information Bulletin Number 79, was conducted for the segment of highway identified above in the project description.

REGISTERED PROFESSIONAL ENGINEER
KAUSHIK S. PATEL
No. C 044128
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

Chief, Traffic Engineering North-Ventura

Date: 4/26/2014

This project will be scoped and designed as a 2R Project per the guidance in Design Information Bulletin Number 79. The Safety Screening that was performed will be an integral part of the development of this project.

Karl Dreher, Deputy District Director for Design
Acting

Date: 5/21/14

I concur with the 2R Purpose and Need of this project.

Peter Vacura, Design Coordinator

Date: 5/22/14

I concur that this project should be scoped and designed as a 2R Project per the guidance in Design Information Bulletin Number 79 and that the Safety Screening associated with this project will be an integral part of the development of this project. Therefore, since the appropriate Purpose and Need for this project is pavement resurfacing and restoration (2R), I have determined that this project is to be delivered as a 2R Project.

Deborah Wong, District Deputy for Maintenance and Operations

Date: 5-22-14

Attachment H

RealCost Inputs

1. Economic Variables	
Value of Time for Passenger Cars ($/hour)	$12.80
Value of Time for Single Unit Trucks ($/hour)	$31.70
Value of Time for Combination Trucks ($/hour)	$31.70

2. Analysis Options	
Include User Costs in Analysis	Yes
Include User Cost Remaining Service Life Value	Yes
Use Differential User Costs	Yes
User Cost Computation Method	Calculated
Include Agency Cost Remaining Service Life Value	Yes
Traffic Direction	Both
Analysis Period (Years)	40.00
Beginning of Analysis Period	2015.00
Discount Rate (%)	4.00
Number of Alternatives	4.00

3. Project Details and Quantity Calculations	
State Route	US-101
Project Type	Rehabilitation
Project Name	EA30240K, Ven-101 RR
Maintenance Service Level	2
Local Region	South Coast
County	VEN/R36.7-R40.3
Climate Region	South Coast
Analyzed By	James Vu
Mileposts	
Begin	0.00
End	0.00
Length of Project (miles)	3.60
Comments	PM: R36.7/R40.3 Jadre Juan Canyon OC/Punta Gorda PUC

4. Traffic Data	
AADT Construction Year (total for both directions)	67,000
Cars as Percentage of AADT (%)	92
Single Unit Trucks as Percentage of AADT (%)	3
Combination Trucks as Percentage of AADT (%)	5
Annual Growth Rate of Traffic (%)	1
Speed Limit Under Normal Operating Conditions (mph)	55
No of Lanes in Each Direction During Normal Conditions	3
Free Flow Capacity (vphpl)	2,115
Queue Dissipation Capacity (vphpl)	1,530
Maximum AADT (total for both directions)	289,830
Maximum Queue Length (miles)	5

5. Maintenance and Rehabilitation Sequence	
Alternative 1	
Final Pavement Surface	
Design Life	
Activity 1 Name	40YR REHAB (LANE REPLACE)
Activity 1 Year of Action	2015
Activity 1 Annual Maintenance Cost ($1000)	17
Activity 1 Activity Service Life (Year)	45
Activity 2 Name	CAPM (CPR C)
Activity 2 Year of Action	2060
Activity 2 Annual Maintenance Cost ($1000)	65
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	CAPM (CPR B)
Activity 3 Year of Action	2065
Activity 3 Annual Maintenance Cost ($1000)	32
Activity 3 Activity Service Life (Year)	10
Activity 4 Name	
Activity 4 Year of Action	2075
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	0
Activity 5 Name	
Activity 5 Year of Action	2075
Activity 5 Annual Maintenance Cost ($1000)	0
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	
Activity 6 Year of Action	2075
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0
Alternative 2	
Final Pavement Surface	
Design Life	
Activity 1 Name	40YR REHAB (LANE REPLACE)
Activity 1 Year of Action	2015
Activity 1 Annual Maintenance Cost ($1000)	17
Activity 1 Activity Service Life (Year)	45
Activity 2 Name	CAPM (CPR C)
Activity 2 Year of Action	2060
Activity 2 Annual Maintenance Cost ($1000)	65
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	CAPM (CPR B)
Activity 3 Year of Action	2065
Activity 3 Annual Maintenance Cost ($1000)	32
Activity 3 Activity Service Life (Year)	10
Activity 4 Name	
Activity 4 Year of Action	2075
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	0
Activity 5 Name	
Activity 5 Year of Action	2075
Activity 5 Annual Maintenance Cost ($1000)	1
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	
Activity 6 Year of Action	2075
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0
Alternative 3	
Final Pavement Surface	
Design Life	
Activity 1 Name	20YR REHAB (CSFOL)
Activity 1 Year of Action	2015
Activity 1 Annual Maintenance Cost ($1000)	30
Activity 1 Activity Service Life (Year)	18

Activity 2 Name	CAPM (FLEX OVERLAY)
Activity 2 Year of Action	2033
Activity 2 Annual Maintenance Cost ($1000)	24
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	CAPM (FO + JPCP SR)
Activity 3 Year of Action	2038
Activity 3 Annual Maintenance Cost ($1000)	24
Activity 3 Activity Service Life (Year)	5
Activity 4 Name	20YR REHAB (MSRO)
Activity 4 Year of Action	2043
Activity 4 Annual Maintenance Cost ($1000)	30
Activity 4 Activity Service Life (Year)	18
Activity 5 Name	CAPM (FO + JPCP SR)
Activity 5 Year of Action	2061
Activity 5 Annual Maintenance Cost ($1000)	24
Activity 5 Activity Service Life (Year)	5
Activity 6 Name	2,066
Activity 6 Year of Action	17.28
Activity 6 Annual Maintenance Cost ($1000)	7
Activity 6 Activity Service Life (Year)	0
Alternative 4	
Final Pavement Surface	
Design Life	
Activity 1 Name	40YR REHAB (LANE REPLACE)
Activity 1 Year of Action	2015
Activity 1 Annual Maintenance Cost ($1000)	4.32
Activity 1 Activity Service Life (Year)	55
Activity 2 Name	CAPM (PR C)
Activity 2 Year of Action	2070
Activity 2 Annual Maintenance Cost ($1000)	30
Activity 2 Activity Service Life (Year)	5
Activity 3 Name	
Activity 3 Year of Action	2075
Activity 3 Annual Maintenance Cost ($1000)	0
Activity 3 Activity Service Life (Year)	0
Activity 4 Name	
Activity 4 Year of Action	2075
Activity 4 Annual Maintenance Cost ($1000)	0
Activity 4 Activity Service Life (Year)	0
Activity 5 Name	
Activity 5 Year of Action	2075
Activity 5 Annual Maintenance Cost ($1000)	0
Activity 5 Activity Service Life (Year)	0
Activity 6 Name	
Activity 6 Year of Action	2075
Activity 6 Annual Maintenance Cost ($1000)	0
Activity 6 Activity Service Life (Year)	0

Alternative 1	JPCP - Rapid Set	
Number of Activities	3	

Activity 1	40YR REHAB (LANE REPLACE)	
Agency Construction Cost ($1000)	$47,000.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	90	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	45.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	17.28	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (CPR C)	
Agency Construction Cost ($1000)	$893.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	64.8	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	CAPM (CPR B)	
Agency Construction Cost ($1000)	$1,433.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	10.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	32.4	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Alternative 2	JPCP - Precast
Number of Activities	3

Activity 1	40YR REHAB (LANE REPLACE)	
Agency Construction Cost ($1000)	$59,000.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	60	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	45.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	17.28	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (CPR C)	
Agency Construction Cost ($1000)	$893.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	64.8	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	CAPM (CPR B)	
Agency Construction Cost ($1000)	$1,433.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	10.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	32.4	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Alternative 3	CSOL
Number of Activities	6

Activity 1	20YR REHAB (CSFOL)	
Agency Construction Cost ($1000)	$16,000.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	120	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	18.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	30.24	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (FLEX OVERLAY)	
Agency Construction Cost ($1000)	$6,464.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	23.76	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 3	CAPM (FO + JPCP SR)	
Agency Construction Cost ($1000)	$6,464.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	23.76	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 4	20YR REHAB (MSRO)	
Agency Construction Cost ($1000)	$17,686.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	18.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	30.24	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 5	CAPM (FO + JPCP SR)	
Agency Construction Cost ($1000)	$6,464.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	23.76	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 6	CAPM (FO + JPCP SR)	
Agency Construction Cost ($1000)	$6,464.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	7.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	17.28	
Work Zone Length (miles)	4.00	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

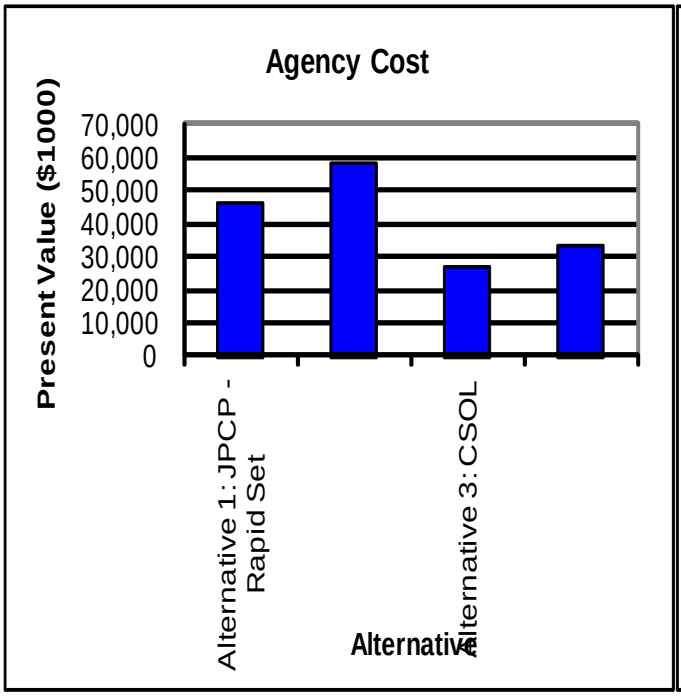
Alternative 4	PCC - Conventional
Number of Activities	2

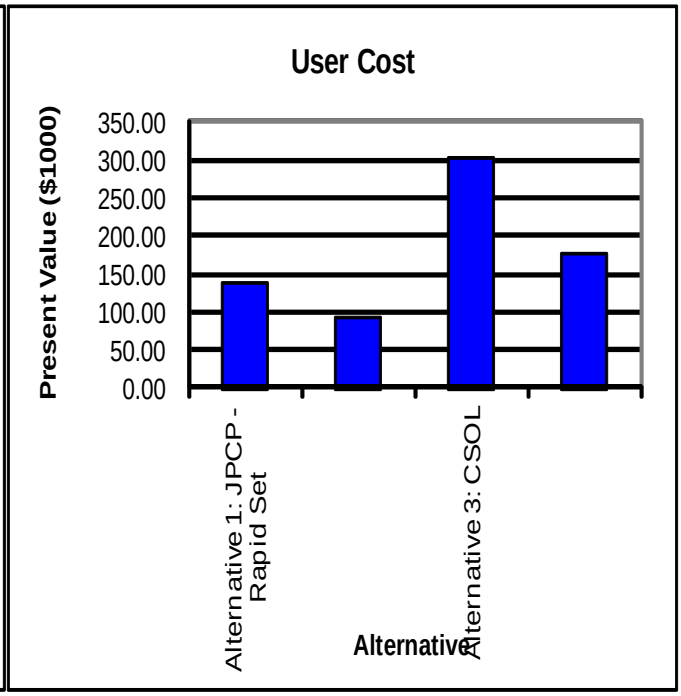
Activity 1	40YR REHAB (LANE REPLACE)	
Agency Construction Cost ($1000)	$35,000.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	120	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	55.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	4.32	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Activity 2	CAPM (PR C)	
Agency Construction Cost ($1000)	$893.00	
User Work Zone Costs ($1000)		
Work Zone Duration (days)	40	
No of Lanes Open in Each Direction During Work Zone	2	
Activity Service Life (years)	5.0	
Activity Structural Life (years)		
Maintenance Frequency (years)	1	
Agency Maintenance Cost ($1000)	30.24	
Work Zone Length (miles)	3.60	
Work Zone Speed Limit (mph)	50	
Work Zone Capacity (vphpl)	1000	
Traffic Hourly Distribution	Weekday Double-Peak	
Time of Day of Lane Closures (use whole numbers based on a 24-hour clock)		
Inbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		
Outbound	Start	End
First period of lane closure	21	24
Second period of lane closure	0	6
Third period of lane closure		

Deterministic Results

Total Cost	Alternative 1: JPCP - Rapid Set		Alternative 2: JPCP - Precast		Alternative 3: CSOL		Alternative 4: PCC - Conventional	
	Agency Cost ($1000)	User Cost ($1000)	Agency Cost ($1000)	User Cost ($1000)	Agency Cost ($1000)	User Cost ($1000)	Agency Cost ($1000)	User Cost ($1000)
Undiscounted Sum	$42,451.75	$125.55	$53,118.41	$83.70	$41,755.45	$429.69	$25,623.04	$136.97
Present Value	$46,250.70	$137.98	$57,972.98	$91.99	$27,017.18	$301.83	$33,096.38	$177.63
EUAC	$2,336.75	$6.97	$2,929.00	$4.65	$1,365.00	$15.25	$1,672.14	$8.97





Attachment I

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: James Vu, Project Engineer

Date: November 20, 2014
File: Ven–101, PM 36.7/40.3
07–30240K/0713000488

From: Alber K. Yu
Office of District Traffic Manager
DEPARTMENT OF TRANSPORTATION

Subject: Transportation Management Plan (TMP) Data Sheet

Attached are the approved TMP Data Sheet and the preliminary "Lane Requirement Charts" for the above referenced project. If you have any questions, please contact Raymond Shehata of my staff at 7-7940 or myself at 7-0285.

Albert K. Yu, P.E.
Office of District Traffic Manager

Attachments

Cc: File
Kelvin Yuen — Design Manager
David Miraaney — Project Manager

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

Co/Rte/PM Ven-101, PM 36.7/40.3 EA 30240K / 0713000488 Alternative No. ____

Project Limit In Ventura County on Route 101 from north of Padre Juan Canyon OC to south of Punta Gorda Ped UC.

Project Description Crack, seat and AC overlay existing pavement.

1) Public Information

☐	a. Brochures and Mailers	$
☒	b. Press Release	
☒	c. Paid Advertising	$35,000.00
☐	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)	$
☐	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)	$450,000.00
☐	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 $ _____
- [x] g. Reduced Speed Zone $63,000.00
- [ ] 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 = $548,000.00

Project Notes:

1. The scope of work involves crack, seat and AC overlay the existing lanes and shoulders.
2. Public Affairs Compaign cost estimate of $35,000.00 was provided by Judy Gish, Public Information Officer, Caltrans Office of Public Affairs and Media Relations, on 11/19/2014.
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 $450,000.00 was provided by Amjad Obeid, Construction Traffic Advisor, on 11/14/2014.
5. To enhance work zone safety, reduced speed zone is needed during construction whenever lanes are closed.
   Number of closure require = 250 (working days) x 75% = 187.5 use 190
   a- Labor cost for set up = 190 x $200/day = $38,000.00
   b- Equipment cost (PCMSs and Signs) =$15,000.00
   Total cost = 38,000.00 + 15,000.00 = $63,000.00
6. Cost for Reduced Speed Zone shall be added to the item Traffic ControlSystem (120100) in the amount of $63,000.00
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 11/20/14

APPROVAL RECOMMENDED BY — Albert Yu, S.T.E. — DATE 11-20-14

APPROVED BY — Sam Esquenazi, District Traffic Manager — DATE 11-20-14

Preliminary Chart
EA 30240K - EFIS 0713000488

Chart no. 1
Freeway Lane Requirements and Hours of Work

County: Ven	Route/Direction: 101/NB	

Closure limits: North of Padre Juan Canyon Rd to South of Ocean Ave

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1	1	S	S	S	2	2	2	2	2	2	S	S	S	S	1	1	1	1	1	
Fri	1	1	1	1	1	1	S	S	S	2	2	2	2	2	2	S	S	S	S	2	2	2	1	1	
Sat	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	
Sun	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	

Legend:

1	Provide at least 1 through freeway lane open in direction of travel
2	Provide at least 2 adjacent through freeway lanes open in direction of travel
S	Shoulder closure allowed

REMARKS: The number of through traffic lanes is 3.
The full width of the traveled way must be open for use by traffic when construction activities are not actively in progress.

Preliminary Chart
EA 30240K - EFIS 0713000488

Chart no. 2
Freeway Lane Requirements and Hours of Work

County: Ven | Route/Direction: 101/SB

Closure limits: South of Ocean Ave to North of Padre Juan Canyon Rd

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1	1	S	S	S	2	2	2	2	2	2	S	S	S	S	2	1	1	1	1	
Fri	1	1	1	1	1	1	S	S	S	2	2	2	2	2	2	S	S	S	S	2	1	1	1	1	
Sat	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	
Sun	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	

Legend:

1	Provide at least 1 through freeway lane open in direction of travel
2	Provide at least 2 adjacent through freeway lanes open in direction of travel
S	Shoulder closure allowed

REMARKS: The number of through traffic lanes is 3.
The full width of the traveled way must be open for use by traffic when construction activities are not actively in progress.

Attachment J

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

Serious Drought!
Help Save Water!

To: Kelvin Yuen , 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: 6/16/2015
EA: 30240K
Data Sheet ID NO: ds1375
Project ID # 0713000488

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 James Vu 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 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.
- ds1375 supersedes ds1140 to reflect revised milestone dates, based on revised PM schedule.

Right of Way Certificate (RWC) lead time will require a minimum of NA 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 NA 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 **Revised Project Manager's Milestone Schedule.**

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
9/21/2018	N/A	12/30/2019	2/14/2020	12/30/2021

TO **Kelvin Yuen**
ATTN **James Vu**
SENIOR R/W P&M **David Miraaney**
ROUTE 101
PM_KM PM R36.7-R40.3
EA 30240K
Project ID # 0713000488
ALT 1

R/W DATA SHEET

ID NO ds1375

Date of Data Sheet 6/16/2015

Project Description This Pavement Resurfacing and Restoration (2R) project proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan overcrossing (PM R36.7), and Punta Gorda Pedestrian undercrossing (PM R40.3), with a pavement structure that should provide a minimum service life of 40 years. As needed, existing Metal Beam Guard Railing (MBGR), curb ramps, curbs and dike will be replaced / upgraded to current standard

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 bv

This cost estimate is pursuant to the following responses supplied by Kelvin Yuen 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		
Clearance		
RAP (cont rate.)	No Right of Way	
Escrow costs (cont rate.)		
Utility relocation costs	**$45,000**	**$74,673**
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	**$45,000**	**$74,673**

Escalation Rate Rw .07
Escalation Rate Utilities .08
Cert.date 12/30/19

Comment

ds1375 supersedes ds1140 to reflect revised milestone dates, based on revised PM schedule.

Parcel Count and Py Info

ROUTE 101
PM_KM PM R36.7-R40.3
EA 30240K
ALT 1

PARCEL TYPES	DUAL APPR.
A	
B	
C	
D	
F	

RIGHTS NEEDED	
FEE	
EASE	
TCE	

TAKES	
FULL	
PART	
TOTAL	

DISPLACEMENT OF UNITS	
SFR	
BUS	
MULTI	

PARCELS WITH RAP

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS

POTENTIAL EXCESS PARCELS

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

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	
225 & 245	Acquisitions	
200	Utilities	1,272
185.20.40	Utility Potholing	
205	Railroads	
225 & 245	Condemnation	
225 & 245	Clearance	
225 & 245	Relocation	
220 & 300	RW Engineering	
	Total	**1,272**

UTILITY INFORMATION

Are utility easements required? No

Are Utility agreements required? No

Total Current Cost $45,000

Const. Completion Date 12/30/2021

Utility Escalation Rate 8%

Total Escalated Cost $74,673

ROUTE 101
PM_KM PM R36.7-R40.3
EA 30240K
ALT 1

RR INFORMATION

Are RR affected? UPRR

Describe affected RR: UPRR

When Branch Lines Or Spurs Are Affected ,would Acquisition And Or Payment Of Damages To Businesses And Or Industries Served By The Railroad Facility Be More Cost Effective Than Service Contracts ,or Grade Separations Requiring Construction And Maintenance Agreements Involved?

50000

Explain Branch lines: A UPRR line runs adjacent and underneath the project area.

Discuss Types Of Agreements And Rights Required From The Railroads. Are Grade Xing Requiring Service Contracts ,or Grade Separations Requiring Construction And Maintenance Agreements Involved.

A service contract for flagging during construction will likely be required. if it is necessary to enter railroad right of way a right of entry will also be required. if work is to be done on the Seacliff OH a C&M Agreement will need to be completed.

RAILROAD COST PERTAINING TO CONSTRUCTION ACTIVITY: $50,000

The cost of flagging related to project construction activity is a Phase 4 cost (construction contract cost). Though noted on the RW data sheet, the estimated flagging cost is not a RW cost, and is not a part of RW Capital.. The estimate is provided so it can be added to the engineer's estimate for construction -- the RR flagging estimate is based on days needed for construction activity.

		DATE
Right of Way Estimate prepared by	Roy Gallegos	6/16/15
Railroad Estimate prepared by	Steve Johnson	11/18/14
Utilities Estimate prepared by	Michele Graves	6/3/15

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 _____ FOR DAN MORROCH 6-17-15

Attachment K

Mini-Preliminary Environmental Analysis Report
Mini-PEAR

1. Project Information

District	County	Route	PM	EA	E-FIS
7	VEN	101	R36.7 / R40.3	30240K	0713000488
Project Title: **Pavement Resurfacing and Restoration Project**					
Project Manager **David H. Miraaney**				Phone # **07-2770**	
Project Engineer **James Vu**				Phone # **07-0116**	
Environmental Branch Chief/Manager **Tami Podesta**				Phone # **07-0309**	

2. Project Description

Purpose and Need

This Pavement Resurfacing and Restoration (2R) project proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan overcrossing (PM R36.7), and Punta Gorda Pedestrian undercrossing (PM R40.3), with a pavement structure that should provide a minimum service life of 40 years. As needed, the existing Metal Beam Guard Railing (MBGR), curb ramps, curbs and dike will be replaced / upgraded to current standard. All work will be performed in Ventura County and within the prism of the roadway; no additional right-of-way would be required.

The purpose of the project is to assist with the following:

- Restore the highway facility to a state of good repair
- Renovate the highway to a condition that requires minimal maintenance
- Upgrade and replace to current design standards MBGR, curb ramps, curbs and dikes.

Description of work

The project proposes to restore and rehabilitate the pavement structure on US 101 in Ventura County, between Padre Juan overcrossing (PM R36.7) and Punta Gorda Pedestrian undercrossing (PM R40.3) with a pavement surface that should last 40 years. As needed the highway facility will be upgraded to current design standards with metal beam guard railing (MBGR), curb ramps, curbs and dike will be replaced / upgraded to current standards.

CEQA
- ☒ Categorical Exemption
- ☐ Statutory Exemption
- ☐ Initial Study/Negative Declaration
- ☐ Environmental Impact Report (EIR)

NEPA
- ☒ Categorical Exclusion
- ☐ "Routine" EA/FONSI
- ☐ "Complex" EA/FONSI
- ☐ Environmental Impact Statement (EIS)

4. Summary Statement (this statement will go directly into the PSR)

In order to identify environmental issues, constraints, costs, and resource needs, a Mini-PEAR was prepared for the project. Potential disposal, staging, and borrow sites will need to be identified in the PA&ED phase for complete environmental review. Field studies were not conducted and technical studies have been deferred to the PA&ED phase. Based on existing workload and available resources, it is anticipated that it will take 1 month to complete the environmental documentation process.

5. Special Considerations

- **Air Quality:** Based on the scope of work, the project is exempt from conformity requirements according to 40 CFR 93.126 through 93.128.

- **Biological Environment:** The proposed project will not require work in riparian habitat or jurisdictional areas and would require approximately 659 hours. However, construction related clearing and grubbing, noise and vibration, there is the potential to impact nesting birds. Coordination with US Fish and Wildlife, US Army Corps of Engineers, Los Angeles Regional Water Quality Control Board and California Department of Fish and Game may be required for this project, if the scope of work changes. Several species of birds have been observed in the area therefore this Division highly recommends conducting vegetation removal to be scheduled outside the time frame of February 15th through September 1st in order to minimize impacts to nesting birds. Waters of the U.S. are located in and adjacent to the project area and have the potential to be impacted by the proposed project. Work within these water features may potentially impact fish populations and water quality therefore a water diversion for this project will be necessary, and any work within perennial drainages should be conducted outside the winter rain season which is November 1st to April 1st. This Division highly recommends that a qualified biologist be onsite to monitor any construction related activities, due to the sensitive nature of the species residing within the proposed project area. It is anticipated that from the date of the NESR request, it will take approximately 6-8 months to deliver the Final NES (MI) due to the required seasonal bird surveys. This Division request that Best Management Practices to the Maximum Extent Practicable be in place before and during the project construction to avoid any water quality impacts. If at any time work, debris, or staging of equipment shall occur inside the channel, drainage, stream, rivers or creek beds this division must be notified immediately. Due to the nature and location of work an Army Corp Nationwide permit 404, Regional Water Quality Control Board 401 and California Department of Fish and Game 1602 permits must be obtained prior to the construction of the project. Please be advised that this process takes six to twelve months (6-12 months) to complete.

- **Cultural Resources:** The project could possess highly archaeological sensitivity. This evaluation is based on records and file search conducted at the Caltrans District 7 office building. As indicated by these records, archaeological sites are adjacent and or in the project area. The investigated areas within the area of potential effects (APE) should be surveyed by a qualified archaeologist prior to project approval. Once the APE is surveyed, results should be documented in a screened 106 PA memo. If cultural materials are found during construction, further investigation and/or mitigation may be necessary. Since the project does occur in a sensitive archaeological zone, potential effects on cultural resources could be significant. The APE has been previously disturbed by highway construction. The project work will be completed within the prism of the existing highway which is built on several feet of fill form the surrounding area and will most likely not have an adverse effect on the known archaeological sites in / adjacent to the area of potential effects (APE).The estimate for the delivery of studies is 1-2 months.

- **Hazardous Waste/Materials:** A Hazardous Waste Assessment is required for this project. The finished new, higher pavement grades at certain segments, the projectr may need to modify the side slope or build retaining wall at the edge of pavement, creating a possibility of disturbing adjacent soil. Based on our past experience and to be conservative for programming purposes, we recommend that any depth within the top two feet soil in the unpaved area adjacent to the roadway be considered as containing high concentrations of ADL contaminant. Should the soil be reused on site, it can be placed under (1) one foot of non-hazardous soil and at least (5) five feet above the maximum ground water level per the Lead Variance from DTSC (Department of Toxic Substances Control). If not reusable within the State right-of-way, this soil must be hauled off to and disposed of at a Class I facility as California Hazardous Waste. There are concern that the yellow stripe removed in this project may contain high level of lead and chromium. A special provision to address this concern shall be included in the PS&E package. To address lead in both soil and the residue of the yellow stripe removal, a Lead Compliance Plan will be required. Furthermore, the project will remove MBGR (Metal Beam Guard Rail) wood posts, which typically were treated with preserving chemicals to protect against insect attack and fungal decay. DTSC requires that TWW (treated wood waste) be disposed of as hazardous waste. Please refer to the latest contract cost database at: http://sv08web/design/contractcost/ . We recommend a re-evaluation during PS&E phase as more detailed engineering design becomes available.

- **Stewardship:** The Pavement Resurfacing and Restoration project on Route 101 between Padre Juan OC (PM 36.7) and Punta Gorda Pedestrian UC (PM 36.7) will consist of replacing Metal Beam Guard Rail (MBGR), replacing curb ramps and upgrading curbs and dikes. An Environmental Commitment Record (ECR) is required for this project; and Stewardship will be responsible for preparing, reviewing, updating the ECR, confirming that environmental commitment compliance and processing the Certificate of Environmental Compliance (CEC).

6. Disclaimer

This report is not an environmental document or determination. The above information and recommendations are based on the project description provided in this report. The discussion and conclusions provided by this Mini-PEAR are approximate and based on a *cursory* review of existing records, databases, and mapping tools to estimate the potential for probable environmental effects. The purpose of this report is to provide a preliminary level of environmental analysis to support the Project Initiation Document. Changes in project scope, alternatives, existing environmental conditions, and/or environmental laws or regulations will require a re-evaluation of this report.

7. Approval

Environmental Office Chief — Date: 1/21/15

Project Manager — Date: 1/21/15

☐ Headquarters Coordinator's Class of Action Concurrence has been obtained (e-mail concurrence is attached)—required for environmental documents only and not CEs.

ATTACHMENTS:

Attachment B: Estimated Resources by WBS Code

ATTACHMENT A - Resources by WBS Code

VEN 101 Pavement Rehabilitation Project **(Mini-PEAR)**

Project EA: 30240K

EFIS ID: 713000488

Description: 07-VEN-101-PM R 36.7-R 40.3

WBS Code / Unit Code	Generalist 1774	Visual 1851	Biology 1781	Cultural 1779	Haz Waste 1846/47	Noise 1845	Stewardship 1782	Supp Services 1775	Other Services varies	Total
100.10-Proj Mgt PAED	8.0							20.0		28.0
100.15-Proj Mgt PSE										0.0
100.20-Proj Mgt Const										0.0
150.20.25-Initial Biological Study			20.0							20.0
165.05.05-Review Project Information	8.0		5.0							13.0
165.05.10-Public Agency Scoping			5.0							5.0
165.10.05-Surveys & Maps for Study			25.0							25.0
165.10.50-Hzrds.Wste.Init.Ste Assmnt					80.0					80.0
165.10.75 Environmental Comitment Record	8.0						10.0			18.0
165.15.05-Biological Assessment			25.0							25.0
165.15.10-Wetlands Study			4.0							4.0
165.15.15-Resource Agncy Crd			4.0							4.0
165.15.20-NES (MI) Report			9.0							9.0
165.20.05-Perform Archae Study				30.0						30.0
165.20.25-Perform Compliance Docs				30.0						30.0
165.25.15-CE/CE Determination	16.0									16.0
165.25.20-Peer Review			1.0							1.0
165.50.40-USFWS Approval			200.0							200.0
165.50.95-Permits (NOAA)			2.0							2.0
165.50.95-Permits (Coastal Permit)			40.0							40.0
180.10.05-Prep & Approve FED			1.0							1.0
180.15-Notice of Exemption										0.0
235.05.05-Envir Mitigation (Bio)			8.0							8.0

ATTACHMENT A - Resources by WBS Code

WBS Code Unit Code	Generalist 1774	Visual 1851	Biology 1781	Cultural 1779	Haz Waste 1846/47	Noise 1845	Stewardship 1782	Supp Services 1775	Other Services varies	Total
235.05.10-Envir Mitigation (Cultural)				12.0						12.0
235.10-Detail.Site.Invest (Hazrd.Wste)					100.0					
235.40-Update ECR	6.0						60.0			66.0
255.05-Review PS&E packet	6.0		8.0	8.0	20.0					42.0
255.15-Envir. Reevaluation	6.0			20.0						26.0
260.75-Envir. Certificate										0.0
270.20.50-Technical Support			2.0		20.0					22.0
270.70-Update ECR										0.0
270.80-Construction Monitoring			150.0	20.0						170.0
280 - Administration Permits/Stewartship	4.0						74.0			78.0
295.35-Cert of Env Compliance	6.0			4.0			20.0			30.0
295.40-Long Term Environ. Mit.			150.0							150.0
Total:	68.0	0.0	659.0	124.0	220.0	0.0	164.0	20.0	0.0	1255.0

Attachment L

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious drought.
Help Save Water!

To: Kelvin Yuen, STE
Office of Project and Special Studies

Attn: James Vu, 7-0116

Date: December 1, 2014

File: 07-VEN-101,
PM R36.7/R40.3
Roadway Rehab
PSSR

From: Andrew Yoon
Acting Branch Chief
Hazardous Waste Unit, North Region

EA: 07-30240K
E-FIS: 0713000488

Subject: **Hazardous Waste Assessment for PSSR**

This memo is to respond to your memo dated November 4, 2014 for the Project Scope Summary Report for the above referenced project. The project proposes pavement rehabilitation using crack, seat and overlay method on Route 101 from Padre Juan Canyon Road OC to Punta Gorda UC in Ventura County. All work will be within the State right-of-way.

We have discussed the project with your staff. The work scope includes repairing existing cracked PCC slabs, cold planing and AC overlay on ramps, replacing affected traffic loop detectors, replacing pavement delineation, adjusting or replacing AC dike and metal beam guard rail (MBGR), replacing bridge barriers, and replacing damaged or missing roadside signs.

Database Research

We have researched the Geotracker database of the California State Water Resource Control Board. The database shows three sites that were previously investigated in a map covering our project area (see attached), but these sites are far from our project corridor (exceeding 1000 feet in distance), were of types of localized pollution (e.g., leaking underground tanks), and all of these cases have since been closed. There is no record of active hazardous waste sites or known source of hazardous waste contamination within the project area.

Our research on the EnviroStor database, which was created by the California Department of Toxic Substances Control (DTSC), indicates that the State has responded to one cleanup site that was caused by Seacliff train derailment (also see attached). No record of active hazardous waste site or source of hazardous waste contamination is known within the project area.

We have researched our branch library and have not found any past studies that fell within the limits of this project. There is no information on soil contamination available for this project.

Hazardous Waste Concerns

To adjust for the finished new, higher pavement grades at certain segments, the project may need to modify the side slope or build retaining wall at the edge of pavement, creating a possibility of disturbing adjacent soil. Based on our past experience and to be conservative for programming

purposes, we commend that any depth within the top two feet soil in the unpaved area adjacent to the roadway be considered as containing high concentration of ADL contaminant. Should the soil be reused on site, it can be placed under 1 foot of non-hazardous soil and at least 5 feet above the maximum ground water level per the Lead Variance from the DTSC. If not reusable within the State right-of-way, this soil must be hauled off to and disposed of at a Class I facility as California hazardous waste.

There is a concern that the yellow stripes to be removed in this project may contain high level of lead and chromium. A special provision to address this concern shall be included in the PS&E package.

To address lead in both soil and the residue of the yellow stripe removal, a Lead Compliance plan will be required.

Furthermore, the project will remove MBGR wood posts, which typically were treated with preserving chemicals to protect against insect attack and fungal decay. DTSC requires that treated wood waste (TWW) be disposed of as a hazardous waste.

Please refer to the latest contract cost database at http://sv08web/design/contractcost/.

We recommend a re-evaluation during the PS&E phase as more detailed engineering design becomes available.

Resource Allocation Request

Related to the potential soil contamination, a site investigation will be required during the design phase to identify the ADL levels in soil and the necessary measures of health and safety protection.

For resource allocation purpose, we have estimated the support cost to complete hazardous waste work in this project based on the work scope and using our most recent site investigation cost data. We estimate that 80 hours will be needed for activity 165, 180 hours for activity 235, 40 hours for activity 255, and 40 hours for activity 270.

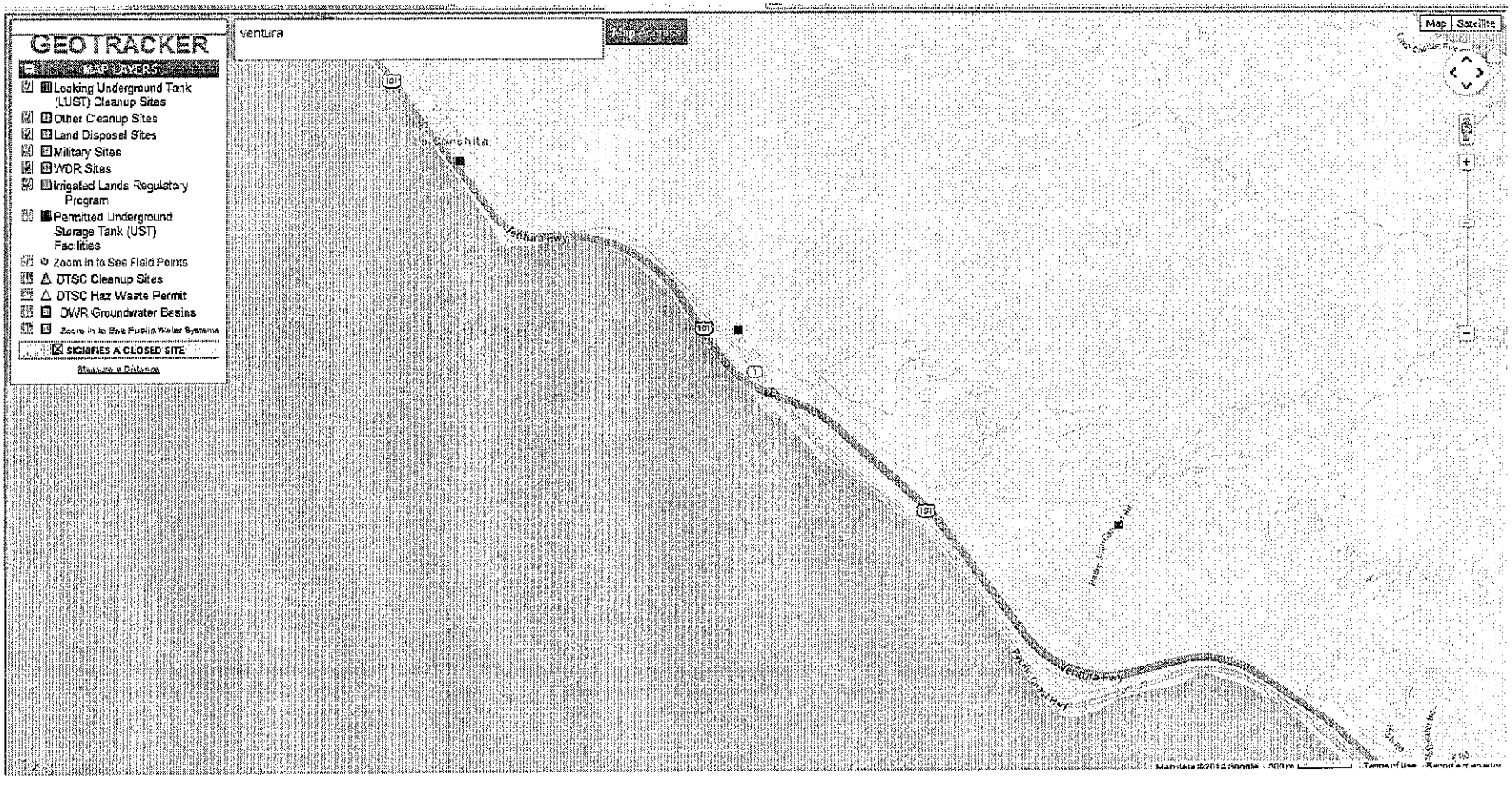
Please inform us of any changes made to the scope of work. If you have any questions or need additional information, please call me at extension 7-6117 or Nathan Chou of my staff at 7-4718.

Attachments: GeoTracker Records
EnviroStor Records

EA 07-30240K
07-VEN-101
PM R36.7/R40.3

GEOTRACKER

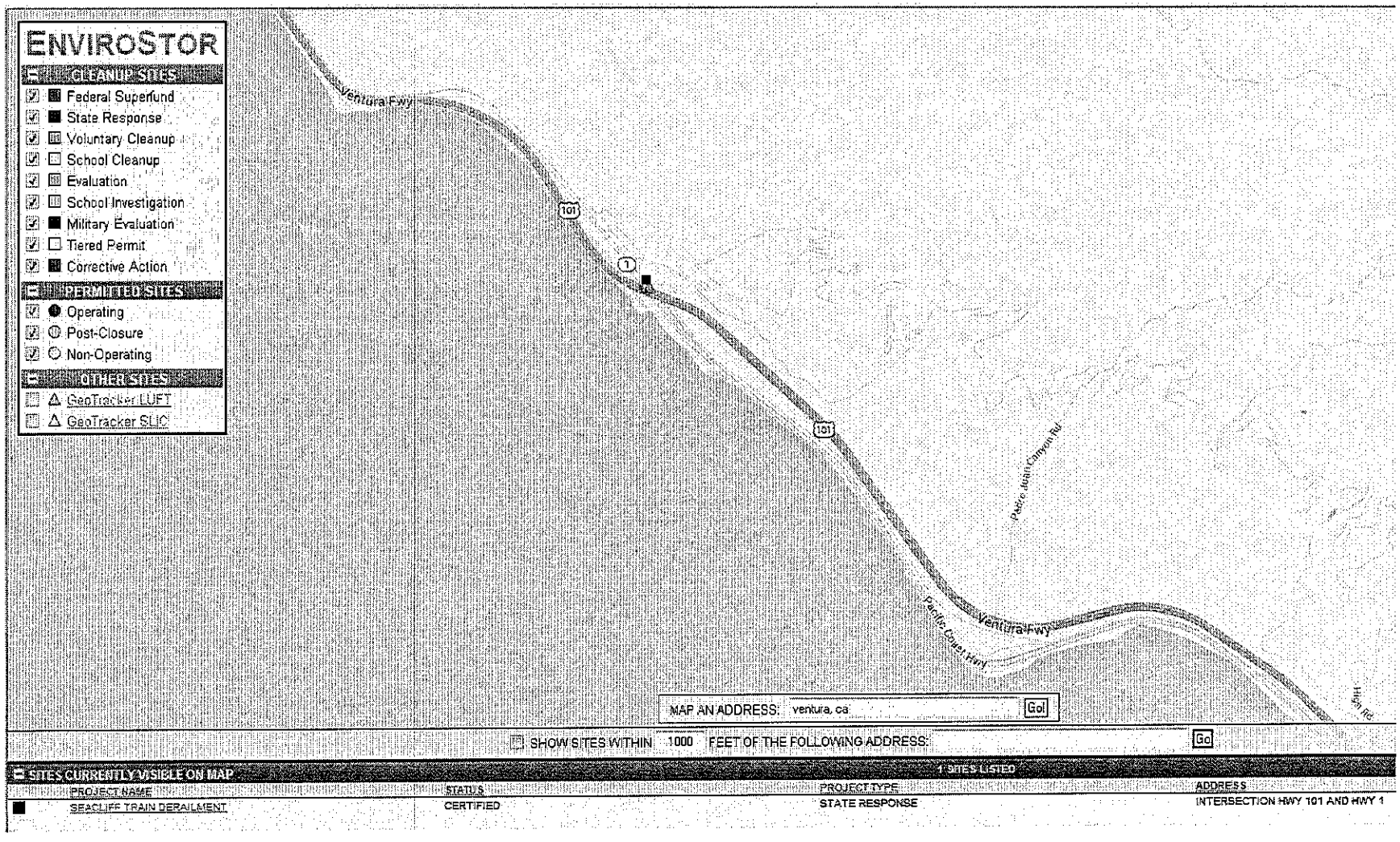
(by California State Water Resource Control Board)



EA 07-30240K
07-VEN-101
PM R36.7/R40.3

ENVIROSTOR

(by California Department of Toxic Substance Control)



Attachment M

SHOPP Project Performance Output

Update Date: 06/15/2015	Source		Program	Fiscal	RTL	Programming Information ($1,000)
District - County - Rte -PM	**EA**	**PPNO**	**Code**	**Year**	**Date**	**R/W $45 Construction $15,850 Support $4,100**
07-VEN-101- R36.7/R40.3	30240	4687	201.122	18/19	**TBD**	**Project Manager:** David Miraaney
Location: VEN-101 between Padre Juan Canyon OC to Punta Gorda PUC						**HQ Program Manager:**
Project Discription: Roadway Rehabilitation						

PROGRAM	ACCT. CODE 20.XX.	Quantity of Performance Output						After Constr uction	PERFORMANCE units
		Ten Year Plan	PID		PA&ED	RTL		CCA	
Approval Date				Output Cost ($1,000)			Output Cost ($1,000)		
Construction Cost ($1,000)									
Right of Way Cost ($1,000)									
Support Cost Cost ($1,000)									
EMERGENCY RESPONSE									
Major Damage Restoration	201.130								Locations
Permanent Restoration	201.131								Locations
COLLISION REDUCTION									
Safety Improvements	201.010								Collision Reduce
Collision Severity Reduction	201.015	2016		700					MBGR
Median Barrier Upgrade	201.020								Centerline Miles
MANDATES									
Relinquishments	201.160								Lane Miles
Noise Attenuation for Schools	201.270								Locations
Railroad	201.325								Locations
Hazardous Waste Mitigation	201.330	2016		700					Locations
Storm Water	201.335	2016		750					Acres Treated / Pollutant
ADA Compliance	201.361								Curb Ramps
SHOPP TEA	201.736								Locations
BRIDGE PRESERVATION									
Bridge Rehabilitation	201.110	2016		140					Bridges approach slabs
Bridge Scour Mitigation	201.111								Bridges
Bridge Rail Replacement/Upgrade	201.112								Linear Feet
Bridge Seismic Restoration	201.113								Bridges
Bridge Widening	201.114								Bridges
Trans Permit Requirements for Bridges	201.322								Bridges
ROADWAY PRESERVATION									
Roadway Rehabilitation (3R)	201.120								Lane Miles
Pavement Preservation (CAPM)	201.121								Lane Miles
Pavement Rehabilitation (2R)	201.122	2016	22	7,735					Lane Miles
Long-Life Pavement Corridors (4R)	201.125								Lane Miles
Roadway Protective Betterment	201.150								Locations
Drainage System Restoration	201.151								Concrete Channel
Signs and Lighting Rehabilitation	201.170								Signs
									Light Fixtures
MOBILITY									
Operational Improvements	201.310								Daily Vehicle Hours of delay
Transportation Management Systems	201.315								Field Elements
									Miles of fiber
Truck Inspection & WIM Facilities	201.321								Locations
ROADSIDE PRESERVATION									
Highway Planting Restoration	201.210	2016		50					Acres
Freeway Maintenance Access	201.230	2016	3	60					Locations
Roadside Enhancement	201.240								Locations
Beautification and Modernization	201.245								Centerline Miles
Safety Roadside Rest Area Restoration	201.250								Locations
New Safety Roadside Rest Areas	201.260								Locations
FACILITIES									
Equipment Facilities	201.351								Locations
Maintenance Facilities	201.352								Locations
Office Buildings	201.353								Locations
Materials Lab	201.354								Locations
Additional Performance Units									
Paved Shoulders		2016	7	2,000					Miles

Attachment N

Dist-County-Route: 07-VEN-101
Post Mile R36.7/R40.3
Project Type: Pavement Resurfacing and Restoration
Project ID (or EA): 0713000488 (30240K)
Program Identification: SHOPP(201.122)
Phase: ☒ PID
☐ PA/ED
☐ PS&E

Regional Water Quality Control Board(s): Los Angeles- Region 4

1.	Is the project required to consider incorporating Treatment BMPs?	Yes ☐	No ☒
2.	Does the project disturb 5 or more acres of soil?	Yes ☐	No ☒
3.	Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver?	Yes ☐	No ☒
4.	Does the project potentially create permanent water quality impacts?	Yes ☐	No ☒
5.	Does the project require a notification of ADL reuse	Yes ☐	No ☒

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: 9/4/2019 Construction Completion Date: 12/30/2020
Separate Dewatering Permit (if yes, permit number) Yes ☐ Permit #_____ No ☒
Erosivity Waiver Yes ☐ Date: _____ No ☒

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

Fardin Amini 2/23/15
Fardin Amini, Registered Project Engineer/Landscape Architect *Date*

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

2/27/2015
Shirley Pak, District/Regional SW Coordinator or Designee *Date*

[Stamp Required for PS&E only)

1. Project Description

- This is a Paving Resurfacing and Restoration (2R).
- This project proposes to rehabilitate the pavement along State Route 101 in Ventura County, between Padre Juan overcrossing (PM R36.7), and Punta Gorda Pedestrian undercrossing (PM R40.3).
- All work will be completed within the prism of the roadway and no additional right of way will be required.
- Replace existing traffic stripe, pavement marking, damaged loop detectors.
- Total cost of project is $28 million.
- There are no drinking water reservoirs or recharge facilities within project limits.
- This project limits fall within Ventura County, This is urban MS4 area.
- The total disturbed soil area (DSA) for this project is 0.0 acre.
- The total project impervious area is 47.1 acres. The net impervious surface area will not change.
- This proposed project will not require 401 certification.
- There is no 303d water bodies within project limits
- The project limits are in the Pitas Point watershed. There is no Total Maximum Daily Loads (TMDLs).

Miscellaneous Ventura Coastal Watersheds - Oxnard Subwatershed

Note: There are 4 coastal subwatersheds grouped under the Miscellaneous Ventura Coastal Watersheds, Pitas Point, Buenaventura, Oxnard and Ventura Coastal Streams Subwatersheds. These subwatersheds are physically independent from one and other (see pdf maps). Oxnard is the only subwatershed that currently has an established TMDL - the Total Maximum Daily Loads for Santa Clara River Estuary/Surfers' Knoll, McGrath State Beach, and Mandalay Beach Coliform and Beach Closures.

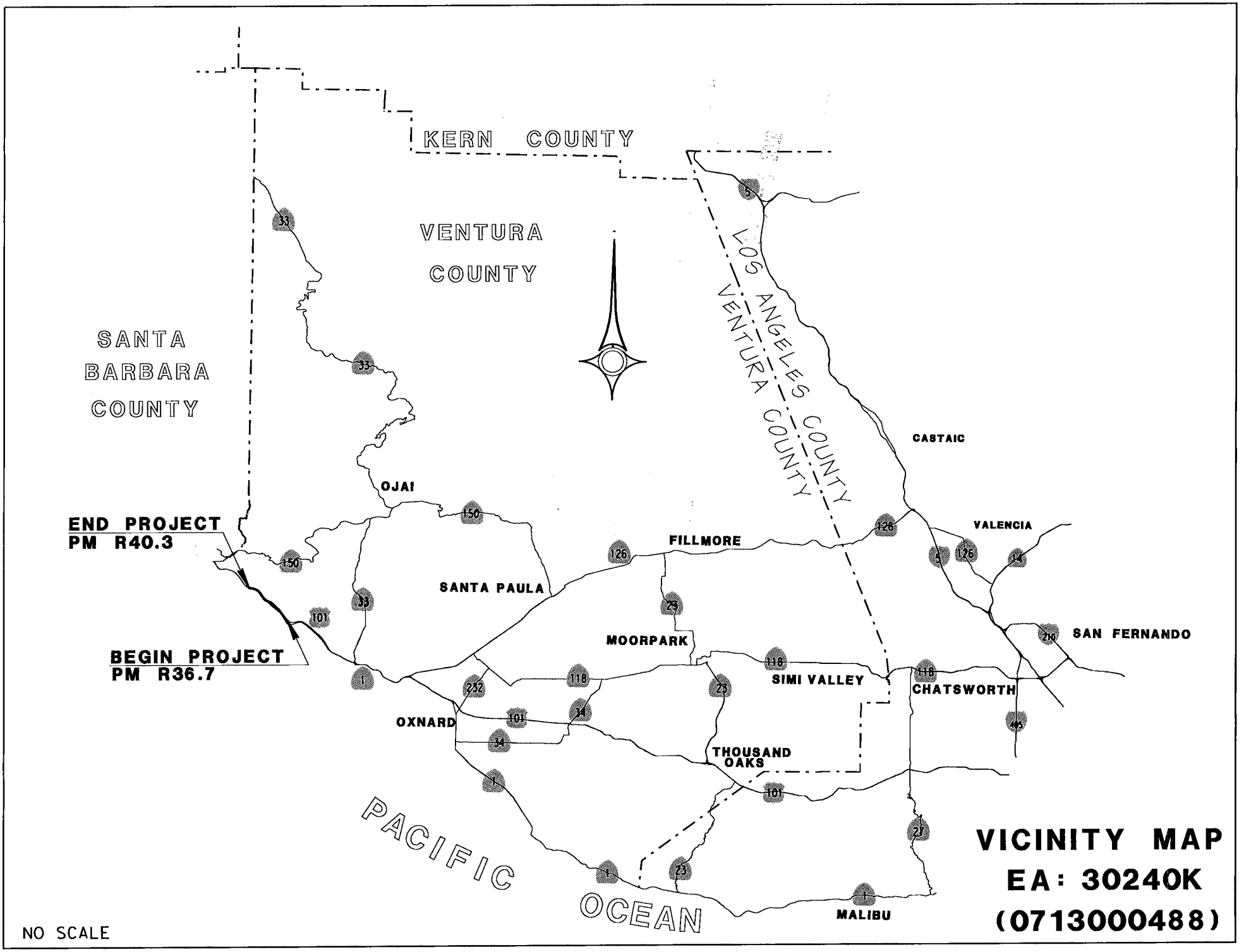
2. Construction Site BMPs

- This Project requires a Water Pollution Control Program (WPCP) since the Disturbed Soil Area (DSA) created by the project is less than 1 acre.
- Based on Appendix C of Project Planning and Design Guide (PPDG), Job Site Management (lump sum) for this project are as follow: Wind Erosion Control, Sediment Tracking Control, Street Sweeping and Vacuuming, Stabilized Construction Roadway, Spill Prevention Control, Solid Waste Management, Hazardous Waste Management, Sanitary/Septic Waste Management, Material Delivery and Storage, Material use, Vehicle and Equipment Cleaning, Vehicle and Equipment Fuelling, Vehicle and Maintenance.
- Separate bid items are temporary concrete washout, temporary drainage inlet protection, and temporary fiber roll.
- On 2/24/2014, Mr. Jimmy Chan, Acting Construction Storm Water Coordinator, agreed to temporary construction site BMP strategy used for scope at this project.
- The estimated cost for Storm Water BMPs to be used on this project is $500,000.
- This project has no disturbed soil area, and therefore will require a Water Pollution Control

3. Required Attachments[1]

- Vicinity Map
- Evaluation Documentation Form

[1] Additional attachments may be required as applicable or directed by the District/Regional Design Storm Water Coordinator (e.g. BMP line item estimate, DPP, CS checklists, etc).



VICINITY MAP
EA: 30240K
(0713000488)

DATE: 1/30/2015

Project ID (or EA): 0713000488(30240K)

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If **Yes**, go to 10. If **No**, continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.	✓		If **Yes**, contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. SP. CPM 2/27/2015 *(Dist./Reg. SW Coordinator initials)* If **No**, continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?	✓		If **Yes**. *(Ventura county)*, go to 5. If **No**, document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If **Yes**, continue to 6. If **No**, go to 10.
6.	Is it a new facility or major reconstruction?		✓	If **Yes**, continue to 8. If **No**, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?		✓	If **Yes**, continue to 8. If **No**, go to 10.
8.	Does the project result in a net increase of one acre or more of new impervious surface?			If **Yes**, continue to 9. If **No**, go to 10. *0.0 AC (Net Increase New Impervious Surface)*
9.	Project is required to consider approved Treatment BMPs.			See Sections 2.4 and either Section 5.5or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.
10.	Project is not required to consider Treatment BMPs. SP. *(Dist./Reg. Design SW Coord. Initials)* F.A *(Project Engineer Initials)* 2/23/15 *(Date)*	✓		Document for Project Files by completing this form, and attaching it to the SWDR.

1 *See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs*

Attachment O

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS)

Form PM-0001 (Rev. 4/2013)

The risk register is to approved and signed-off by the 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)
Project ID/District-EA	EFIS ID:0713000488/EA:07-30240
Project Description	VEN-101-37/40-IN VEN FR PADRE JUAN CYN OC TO PUNT A GURDA PUC - PVMT REHAB
Project Manager (PM)	MIRAANEY, DAVID H
Project Risk Manager (for Risk Level 3 Projects)	

☐ 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: 6/15/15
Deputy District Director, Planning	Date: 6-18-15
Deputy District Director*, Design**	Date: 6-19-15
Deputy District Director, Project Management	Date: 6/22/15

PA&ED (Required for Capital Projects Only)

Project Manager	Date:
Deputy District Director*, Environmental	Date:
Deputy District Director*, Design**	Date:
Deputy District Director, Project Management	Date:

Prior to PS&E (Required for Capital Projects and 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

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Project Risk Register for 30240 as of 06/15/15

Save to Excel

No.	Status*	ID	Risk Type	RBS Category	WBS Impacted	Critical Path Impacted?	Title	Risk Statement	Impact Description	Linear/ Non-Linear	Risk Probability	Risk Impact	Impact Consequence Cost/Time	Cost/ Time Score	Cost $K (Low)	Cost $K (Most Likely)	Cost $K (High)	Probable Cost Impact ($K)	Time in Mos (Low)	Time in Mos (Most Likely)	Time in Mos (High)	Probable Time Impact (Mos.) *	Rationale (for Rating)*	Response Strategy	Response Action	Mitigation Option (Minimize Prob or Impact)	Risk Triggers	Residual Risks	Secondary Risks	Risk Interaction	Risk Owner	Comments	Last Updated
1	Active	24362	Thr	CON	5.270		Unidentified utilities	Unidentified utilities	It will increase the construction cost.	Linear	1-9%	Very Low	Cost	1 (LOW)	3	7	10	00.33						Accept	The contingency fund will pay for the mitigation and we shall pothole early in construction phase.	Impact	Potholing				Hussam Buran		06/15/2015 13:38:00
2	Active	24369		DGN	3.230		Pavement Rehabilitation Strategy	Pavement rehabilitation strategy may be changed	It will increase the construction cost.	Linear	1-9%	Very Low	Cost	1 (LOW)	5000	10000	15000	500.00						Accept	Crack seat and overlay (CSOL) strategy was selected based on Life Cycle Cost Analysis. CSOL may not be the preferred pavement rehab strategy for District 7.The way it looks, it is a remote alternativey.most likely it will not happen unless we replace only the outside lanes which are usually the ones damaged by the trucks but then there is no money for the crack and seat for the rest of the lanes.	Impact	Further study and consideration will be needed during PAED and PS&E phases.				Orlance Lee		06/15/2015 14:12:00
3	Active	24370	Thr	DGN	3.235		Late Discovery of ADL.	Late discovery of aerially deposited lead	It will increase the cost of construction.	Linear	1-9%	Very Low	Cost	1 (LOW)	10	20	30	01.00						Mitigate	Should be included in the environmental mitigation funds.	Impact	Testing during design				Orlance Lee		06/15/2015 14:02:00
TOTAL EXPECTED IMPACT																		$501.33(K)				0 (Mos.)										

Attachment P

MEETING SIGN-IN SHEET

Project: EA 30240K, VEN-101 PM R36.7/R40.3 **Date:** 05/28/2014

RR-PSSR **Location:** Field

	Name	Office / Agency	Phone Number
1			
2			
3	James Vu	D7- OPSS	213-897-0116
4	Pride Osayamwen	D7 - Planning (OPS)	213-897-0994
5	Kirsten Stahl	D7-MATLS	213 897-0970
6	LARRY WEAVERLING	D7 VENTURA MAINT	805 654-4658
7	Barbara Cisneros	D7 Maintenance	805 529-1126
8	Kelvin Yuen	07- OPSS	213-897-4637
9	GODSON OKEREKE	Mtce Engr	213 897-2667
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

10/8/2014

EA 3024ok Ven 101, PM 36.7 - 40.3

Field Meeting

James Vu	D7- OPSS	(213) 897-0116
Godson Oforeke	D7- Mtce	(213) 897-2667
Leo Mahserelli	HQ - Pavement	(916) 274-6063
Kelvin Yuen	D7- OPSS	213-897-4637