

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
American River Bridge Rehabilitation - CMGC (03-3F070)

Resolution _____

(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 *American River Bridge Rehabilitation - CMGC (03-3F070)*, effective on, _____ (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 May 13, 2020 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *American River Bridge Rehabilitation - CMGC (03-3F070)*, 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-20-40, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated May 13, 2020
 - 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

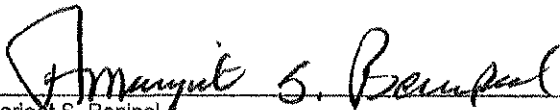
American River Bridge Rehabilitation - CMGC (03-3F070)

Resolution SHOPP-P-2021-06B

 3-18-2021
Amarjeet S. Benipal Date

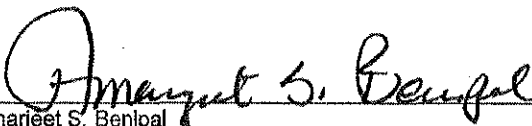
District Director

Project Applicant

 3-18-2021
Amarjeet S. Benipal Date


District Director

Implementing Agency

 3-18-2021
Amarjeet S. Benipal Date


District Director

California Department of Transportation

 4-26-2021
Toks Omishakin Date

Director

California Department of Transportation

 05-19-21
Mitchell Weiss Date

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:	04/12/21 02:08:24 PM
District	EA	Project ID		PPNO	Project Manager		
03	3F070	0312000054		6402	PERI, CLARK A		
County	Route	Begin Postmile	End Postmile	Implementing Agency			
SAC	51	2.0	3.5	PA&ED	Caltrans		
				PS&E	Caltrans		
				Right of Way	Caltrans		
				Construction	Caltrans		
Project Nickname							
American River Bridge Rehabilitation							
Location/Description							
In the city of Sacramento, from north of B Street Underpass to north of Exposition Boulevard Overcrossing at the American River Bridge No. 24 -0003 and Cal Expo Undercrossing No. 24-0133. Widen and replace bridge deck and construct 0.14 mile of Class I bike and pedestrian path as a complete streets element. This is a Construction Manager/General Contractor (CMGC) project. (Additional \$2,700,000 contribution for Const Cap from the City of Sacramento.) (G13 Contingency)							
Legislative Districts							
Assembly:	07	Senate:	06	Congressional:	06		
PERFORMANCE MEASURES							
	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Bridge Health		166055.0			166055	Square feet of bridge deck
Programmed Condition	Bridge Health	264920.0	6028.0			270948	Square feet of bridge deck
Project Milestone						Actual	Planned
Project Approval and Environmental Document Milestone						02/17/21	
Right of Way Certification Milestone							07/01/23
Ready to List for Advertisement Milestone							08/01/23
Begin Construction Milestone (Approve Contract)							02/01/24
FUNDING (Allocated amounts are shaded) -- NOTED :- \$2,700,000 contribution for Const Cap from the City of Sacramento							
Component	Fiscal Year	Local Funds	SHOPP				Total
PA&ED	17/18		4,340				4,340
PS&E	20/21		12,000				12,000
RW Support	20/21		600				600
Const Support	23/24		19,000				19,000
RW Capital	23/24		7,634				7,634
Const Capital	23/24	2,700	139,300				142,000
Total		2,700	182,874				185,574

**REVISED SUPPLEMENTAL PROJECT SCOPE
SUMMARY REPORT No.2**

(BRIDGE REHABILITATION PROJECT)

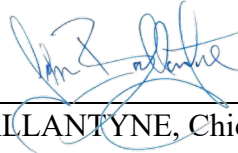
To Address changes to the Original document

On Route 51 in Sacramento County, in Sacramento

Between Elvas Underpass

And 0.1 Mile South of Exposition Blvd

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:



JOHN BALLANTYNE, Chief, North Region Right of Way

APPROVAL RECOMMENDED:



CLARK A. PERI, Project Manager

APPROVED:



for

AMARJEET S. BENIPAL, District Director

03/12/2021

Date



Sac 51 Bridge Rehabilitation
03-3F070
Revised Supplemental Project Scope Summary Report No.2
03-Sac-51-2.0/3.5

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

Andrew Huang

03/10/2021

REGISTERED CIVIL ENGINEER

DATE



Executive Summary:

This Revised Supplemental Project Scope Summary Report No.2 (SPSSR#2) serves to update the previously approved Revised SPSSR dated 2/27/2021. This Supplemental SPSSR includes the following modifications to the previous approved SPSSR.

This Revised SPSSR No.2 memorandum addresses changes to the following:

- Section 1 - Introduction
 - Revision to the Construction Capital in Table 1
- Section 4 – Purpose and Need
 - Under Section 4 item C Traffic, Table 6 and the items describing accident numbers has been revised.
- Section 5 - Alternatives
 - Revision to Alternative 1 to include Complete Streets Elements and rumble strip descriptions in the body of the description.
 - Revision to Table 8 to reflect any changes in construction capital and right of way costs
- Section 8 – Funding, Programming, and Estimate
 - A PCR was approved by Caltrans HQ on January 22, 2021 to increase RW Capital from \$2M to \$10.9M, increase Construction Capital from \$123M to \$135M, reduce Construction Support from \$22M to \$19M, and move the delivery year to 23/24 FY. The PCR will be submitted to the March 2021 CTC meeting for final approval.
 - In January 2021, HQ approved \$4.3M in 2020 SHOPP Complete Streets Reservation funds to add a Class I bike/ped path. A PCR was submitted to HQ in March 2021 to add the \$4.3M and increase Construction Capital from \$135M to \$139.3M, and reduce RW Capital from \$10.9M to \$7.634M. The PCR will be submitted to the May 2021 CTC meeting for final approval.
 - Revision to Table 9 to reflect changes in project funding based on PCRs listed above.
- Attachment D – Traffic Data & Accident Report
 - Updated “Table B – Selective Accident Rate Calculation”
- Attachment M – Right of Way Data sheet
 - Update to the Right of Way Costs
- Attachment Z – Performance Measure Sheet
 - Performance measures revised to include Complete Street elements that are being proposed on the project
- Attachment AA – Cost Estimate
 - Revision to Construction Capital of the project and Right of Way cost updates for Alternatives 1, 2, and 3.
- Attachment AB – Programming Sheet
 - Revision to the programmed construction capital costs

1. INTRODUCTION

This project proposes to rehabilitate the American River Bridge (Br. No. 24-0003) by removing and replacing the existing concrete deck, removing and replacing the steel girder post-tensioning systems in spans 1 and 2, modify existing soundwall, install sheet piling around piers for scour mitigation, construct concrete catcher blocks, widen the bridge to accommodate traffic during construction, add a Class I bike/pedestrian path, and plan for future transportation needs on State Route (SR) 51.

Table 1 – Project Summary

Project Limits	03-Sac-51 - PM 2.0/3.5	
Number of Alternatives	4	
	Current Cost Estimate:	Escalated Cost Estimate:
Capital Outlay Support		\$36,537,000
Capital Outlay Construction	\$119,000,000	\$139,300,000
Capital Outlay Right-of-Way	\$6,789,652	\$7,634,000
Funding Source	SHOPP, Bridge Rehabilitation (20.XX.201.110)	
Funding Year	2021/2022 FY	
Type of Facility	Multi-lane Freeway	
Number of Structures	2	
SHOPP Project Output	2 Bridges	
Environmental Determination or Document	Initial Study/Mitigated Negative Declaration (CEQA)/Categorical Exclusion (NEPA)	
Legal Description	In Sacramento County, In Sacramento from Elvas Underpass to 0.1 Miles South of Exposition Blvd	
Project Development Category	4A	

4. PURPOSE AND NEED

C. Traffic

Accident History and Safety

Per Traffic Safety’s review of Traffic Accident Surveillance and Analysis System (TASAS) collision data between July 1, 2017 and June 30, 2020 was performed to evaluate the collision history for this location. The data was separated into two reports based on the travel direction on the roadway into the northbound (NB) and southbound (SB) directions. For the NB direction there were 225 collisions identified that included 1 fatal collision, 64 injury collisions, and 160 property damage only (PDO) collisions. For the SB direction 165 collisions were identified that included 1 fatal collision, 57 injury collisions, and 107 PDO collisions.

Collision rates for this location and similar statewide facilities are shown in the table below.

Table 6: TASAS Collision Rate (July 1, 2017 to June 30, 2020)

Location	Collisions	Actual Rates (Collisions/MVM)			Statewide Average Rate (Collisions/MVM)		
		Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
Sac-51- PM 2.0/3.5 (NB), 2000’ West of Elvas Rail Underpass to 700’ North of Exposition Blvd Bridge	225	0.007	0.46	1.61	0.005	0.31	0.95
Sac-51- PM 2.0/3.5 (SB), 2000’ West of Elvas Rail Underpass to 700’ North of Exposition Blvd Bridge	165	0.007	0.41	1.18	0.005	0.31	0.95

Collision rates listed in the table above indicate that the Fatal + Injury and Total collision rates are above the statewide collision rates for similar facilities across the state.

A review of the collision data indicates the following types of collisions: For the NB direction there was 1 head-on collision, 44 sideswipe collisions, **135 rear end collisions**, 5 broadside collisions, 34 collisions where vehicles hit type of object, 4 collisions where a vehicle overturned, and 2 collisions listed as “other”. For the SB direction there was 1 head-on collision, 49 sideswipe collisions, **79 rear end collisions**, 7 broadside collisions, 23 collisions where a vehicle hit an object, and 6 collisions involving a vehicle that overturned.

A breakdown of collisions by the primary collision factor for the NB direction include: 10 under the influence of alcohol or drugs, 4 following other vehicles too close, 31 improper turning movements, 136 speed (driving too fast for roadway conditions), 38 listed other violations, and 6 listed “other than the driver” as the primary collision factor. For the SB direction the breakdown includes: 11 under the influence of alcohol or drugs, 2 following other vehicles too close, 40 improper turning movements, 75 speed (driving too fast for roadway conditions), 34 listed other violations, 2 listed “other than the driver” as the primary collision factor and one could not determine a primary collision factor. A further review of the collision data indicates that most of the collisions occurred during clear weather, during daylight hours and in dry roadway conditions.

The primary pattern of collisions identified for this location is congestion related during the afternoon commute time. Evidence of the congestion related pattern is seen in the higher number of rear end collisions coupled with a small number of sideswipe collisions. Even though speed is listed as the primary collision factor in a high number of the collisions, the vehicle code section most often listed in the collision reports is CVC 22350 which includes provisions for driving too fast for roadway conditions (i.e. congested conditions). Another indicator of the congested related collision pattern is that a higher number of the collisions are the less severe PDO or complaint of pain injury collisions that likely occurred at slower speeds due to the congestion experienced on the roadway. The collision rates are reflective of this identified pattern. Traffic Safety could not identify any secondary pattern of collisions.

The table below shows the maximum collisions reduced by applying rumble strips.

SR-51 Proposed Limits PM 2-3.5	Collisions-3 years	Collisions For 3 Years	Potential Collisions Reduced /Reduction Factor
	7/1/2017-06/30/2020	Total Hit Objects	10 years Life (by 50%) Per HSIP Guidelines
SB Direction-Rumble Strips	165	23	275X0.3584(Fixed Object) =98
NB Direction-Rumble Strips	225	34	375X0.3584(Fixed Object)=134

0.3584 (CRF) from Clearing House: Install Shoulder Rumble Strips for fixed objects for all Crash Severity

See **Attachment D, Traffic Data & Accident Report**

5. ALTERNATIVES

5A. Preferred Alternative

Due to the large volume of traffic that uses SR 51, the Traffic Management Plan (TMP) recommends keeping 3 lanes of traffic open in each direction of travel during construction. In order to accommodate this recommendation, the bridge must be widened permanently to keep three lanes open for traffic during construction and to allow the space for the contractor to work.

Alternative 1

The project scope for Alternative 1 includes the following elements:

- Remove and replace the existing concrete bridge deck (Bridge number 24-0003), with a 1¼” thicker deck than existing.
- Widen the American River Bridge (Br. No. 24-0003) to maintain 3 lanes of traffic in each direction during construction.
- Provide a 14’ bike/pedestrian path on the northbound side of the bridge separated from the traffic by a concrete barrier. The bike/pedestrian path will extend from levee to levee. Portions of the path outside of the bridge limits and within State right-of way will be funded with 2020 funds. Bike/ped path sections outside of State right-of-way will be funded by the City of Sacramento.
- Widen the substructure and superstructure by 54’-11” ± on the northbound side of the structure.
- Widen the approaches of SR 51 to accommodate the widening of the

- American River Bridge.
- Modification of an existing soundwall on the southeast side of the American River bridge.
- Construct Rumble Strips along the project
- Construct 30' approach slabs.
- Strengthen existing girders
- Lengthen a box culvert to the East, North of the American River Bridge
- Install Overhead Sign
- Widen bridge abutments, footings, bents, and piers supported by piles.
- Install permanent sheet piles at piers 4-6 for scour mitigation.
- Construct temporary construction access trestles and cofferdams to facilitate construction on in-water piers.
- Install lighting on the proposed bike/pedestrian path.
- Create a temporary construction access road across a wetland area or/and use existing dirt road to access the construction site
- Construct median barrier (Type 60) and bridge barrier (Type 842).
- Upgrade existing metal beam guardrail to Midwest Guardrail System
- Replace steel girder post-tensioning system at spans 1 & 2.
- Construct concrete catcher blocks underneath existing girders.
- Install new joint seals.
- Near abutment 1, construct a retaining wall and soundwall from the modified soundwall along the Northbound side of the highway, near the Southeast quadrant of the American River Bridge and extend the retaining wall down the bike/pedestrian path.
- Construct retaining walls between American River Bridge and Cal Expo Undercrossing
- Remove vegetation and trees to accommodate widening of SR 51 (CapCity) for bridge deck construction staging.
- Modify Exposition Blvd. Northbound Off-Ramp
- Widen Cal Expo Undercrossing (Br. No. 24-0133) on the Northbound side
- Modify the Exposition Boulevard Off-ramp in the Northbound direction

Planting and Mitigation

Strategies for minimal environmental impact will be coordinated with permitting agencies and finalized during the design phase. ESA fencing will be employed to delineate environmentally sensitive areas to be avoided during construction. Environmental mitigation will be pursued and coordinated with permitting agencies for on-site planting and other allowable mitigation methods.

Design Exceptions:

This alternative includes:

1. Propagating non-standard existing superelevation
2. Improving superelevation transition lengths
3. Improving non-standard horizontal stopping sight distance

4. Widening existing inside and outside shoulders to current standard
5. Improving non-standard vertical stopping sight distances.

This project proposes an improvement to existing non-standard geometric features, although not meeting current standards. Improvements to existing non-standard geometric features may reduce occurrences of incidents.

5B. Rejected Alternative

Table 8 - Estimated Construction Costs

	<u>ALTERNATIVE 1</u> Minimum widening for constructability, bike path (Escalated)	<u>ALTERNATIVE 2</u> Minimum deck widening, ultimate substructure width, bike path (Escalated)	<u>ALTERNATIVE 3</u> Full widening to match future corridor widening, bike path (Escalated)
ROADWAY ITEMS	\$58,000,000	\$64,300,000	\$65,100,000
STRUCTURE ITEMS	\$81,300,000	\$125,100,000	\$142,400,000
SUBTOTAL CONSTRUCTION COST	\$139,300,000	\$189,400,000	\$207,500,000
RIGHT OF WAY	\$7,634,000	\$10,900,000	\$10,900,000
TOTAL CAPITAL OUTLAY COST	\$147,000,000	\$200,300,000	\$218,400,000

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

It has been determined that this project is eligible for Federal-aid funding. The project is currently programmed in the 2020 SHOPP as a G-13 Contingency Project under the Bridge Rehabilitation Program (20.XX.201.110). Per the current pending PCRs, construction funding will be programmed at \$139,300,000 for Construction Capital and \$19,000,000 for Construction Support, See Table 9 below.

Programming

Per the current HQ approved PCR, the project will be programmed for delivery in the 23/24 fiscal year. The Programming sheet for current Capital and Support costs is presented in *Attachment AB*.

Table 9 – Project Support & Cost Estimate for Alternative 1

Fund Source	Estimated Cost by Fiscal Year in Thousands (\$1,000)								Program Amount
	Prior	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Future	Total	
20.XX.201.110									
Component									
PA&ED Support	4980	0	0	0	0	0	0	4980	4974**
PS&E Support	0	0	11966****	0	0	0	0	11966	12000
Right-of-Way Support	0	0	590****	0	0	0	0	590	600
Construction Support	0	0	0	0	0	18619***	0	18619	22000*
Right-of-Way	0	0	0	0	0	7634***	0	7634	2000
Construction	0	0	0	0	0	139300*****	0	139300	123000*
Total	4980	0	12556	0	0	165553	0	183089	164574

*G-13 Contingency Project

**Includes approved G-12 funds

*** A PCR was approved by Caltrans HQ on January 22, 2021 to increase RW Capital and Construction Capital, reduce Construction Support, and move the delivery year to 23/24 FY. The PCR will be submitted for final approval at the March 2021 CTC meeting.

****PS&E and RW support is programmed in 2019/2020 FY. A SHOPP allocation time extension request for PS&E and RW support was approved at the June 2020 CTC meeting.

***** A PCR was submitted to HQ in March 2021 to add \$4.3M to Construction Capital from the competitive portion of the 2020 SHOPP Complete Streets Reservation (CSR) to add 0.14 lane mile of Class I bike/ped path outside of the bridge limits and within State right-of-way. The City of Sacramento will fund \$2.7M for the bike/ped sections outside of State right-of-way.

The support/capital cost ratio is 24.62% for Alternative 1

See **Attachment AA**, *Cost Estimates*

See **Attachment AB**, *Programming Sheet*.

9. DELIVERY SCHEDULE

Table 10 – Project Schedule

Project Milestones		Milestone Date	Milestone Designation (Target/Actual)
		(Month/Day/Year)	
ID NEED	M000	08/05/11	A
APPROVE PID	M010	06/29/15	A
PROGRAM PROJECT	M015	10/22/15	A
BEGIN ENVIRONMENTAL	M020	09/01/16	A
BEGIN PROJECT	M040	12/10/15	A
CIRCULATE DPR & DED EXTERNALLY	M120	10/22/20	A
APPROVE FED	M160	02/17/21	A
PA & ED	M200	02/17/21	A
RECEIVE COMPLETE	M221	01/23/20	A
R/W REQUESTS	M224	02/27/20	A
REGULAR R/W	M225	02/23/21	A
GENERAL PLANS	M275	03/27/20	A
CIRCULATE PLANS IN DISTRICT	M300	02/01/23	T
30% CONST REVIEW	M311	05/01/21	T
60% CONST REVIEW	M313	02/01/22	T
95% CONST REVIEW	M315	04/01/23	T
PS&E TO DOE	M377	05/01/23	T
DRAFT STRUCTURES PS&E	M378	02/01/23	T
PROJECT PS&E	M380	07/01/23	T
R/W CERT	M410	07/01/23	T
DCR	M430	07/15/23	T
RTL	M460	08/01/23	T
FUND ALLOCATION	M470	10/01/23	T
HQ ADVERT	M480	10/15/23	T
BIDS OPEN	M490	12/15/23	T
AWARD	M495	01/15/24	T
APPROVE CONTRACT	M500	02/01/24	T
CONTRACT ACCEPT	M600	12/01/27	T
FINAL REPORT	M700	12/01/28	T
END PROJECT EXP	M800	02/01/30	T
FINAL PROJECT	M900	12/01/31	T

ATTACHMENT D
TRAFFIC DATA & ACCIDENT REPORT



Memorandum

*Serious drought!
Help Save Water!*

To: **Andrew Huang**
Design M7

Date: 06/29/2020
File: 03-SAC-051 PM 2.0/3.5
EA: 03-3F070
EFIS: 0312000054

Sathish Prakash

From: **Sathish Prakash**
Advance Planning, Modeling, & Forecasting

Re: TRAFFIC DATA

The traffic data that you requested via e-mail on 11/26/2019 is listed below.

Scenario/ Analysis Year	Location	Direction	AADT		% Truck	Peak Hour		% Truck
			Total	Truck		Total	Truck	
Existing Year 2019	Postmile 2.0 to 3.5 on SR 51	NB	84,867	3,564	4.2%	5,658	164	2.9%
		SB	92,333	3,970	4.3%	5,842	214	3.7%

Scenario/ Analysis Year	Location	Direction	AADT		% Truck	Peak Hour		% Truck
			Total	Truck		Total	Truck	
No Build Opening 2022 Year	Postmile 2.0 to 3.5 on SR 51	NB	86,112	3,617	4.2%	5,756	167	2.9%
		SB	93,688	4,029	4.3%	5,944	217	3.7%
No Build Design 2042 Year	Postmile 2.0 to 3.5 on SR 51	NB	94,541	3,971	4.2%	6,297	183	2.9%
		SB	102,859	4,423	4.3%	6,503	238	3.7%
No Build Design 2062 Year	Postmile 2.0 to 3.5 on SR 51	NB	103,018	4,327	4.2%	6,888	200	2.9%
		SB	112,082	4,820	4.3%	7,112	260	3.7%

Life Cycle Cost Analysis	
Construction Year AADT for both directions	179,800
2-axle Truck % (of AADT)	1.60
3-axle, 4-axle and 5+axle Truck % (of AADT)	2.60

If you have any questions or need additional information, please contact James Hoong at (530) 741-5175.

OTM22130

Table B - Selective Accident Rate Calculation

Policy controlling the use of Traffic Accident Surveillance and Analysis System (TASAS) - Transportation Systems Network (TSN) Reports

1. TASAS - TSN has officially replaced the TASAS - "Legacy" database.
2. Reports from TSN are to be used and interpreted by the California Department of Transportation (Caltrans) officials or authorized representative.
3. Electronic versions of these reports may be emailed between Caltrans' employees only using the State computer system.
4. The contents of these reports shall be considered confidential and may be privileged pursuant to 23 U.S.C. Section 409, and are for the sole use of the intended recipient(s). Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message. Do not print, copy or forward.

OTM22130

Table B - Selective Accident Rate Calculation

Report Parameters-

Event ID: 4287170
Request Name: SAC 51
Ref Date: 01/15/2021

Request- & Line	L O C	D I R	L S C	Route/Location	Begin Date	End Date	Rate Type	Out Seq	Override Rates			Override ADT		Req. Type	Com- bine?	Excl Ramp?
									Rate	Inj%	Fat%	Main	Cross			
1 1	H	N	I	03 SAC 051 03 SAC 051	002.000 - 003.500	01-JUL-17	30-JUN-20	N	L					N	N	Y

Event Log:

Job id is : 195861 Accidents Table B Request SAC 51 Submitted by T3SRAISI
03 SAC 051 2 - 03 SAC 051 3.5 07/01/2017 TO 06/30/2020

Location Description	Rate Group (RUS)	No. of Accidents / Significance							Pers Kld Inj	ADT Main X-St	Total MV+ or MVM	Accident Rates					
		Tot	Fat	Inj	F+I	Multi Veh	Wet	Dark				Fat	F+I	Tot	Fat	F+I	Tot
03 SAC 051 002.000 - 03 SAC 051 003.499 0001-0001 2017-07-01 2020-06-30	1.500 MI H 36 mo. NORTH U	225 H99	1	64 H99	65 H99	193	30 H99	80 H99	2 83	85.1	139.90	0.007	.46	1.61	0.005	.31	.95

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

OTM22130

Table B - Selective Accident Rate Calculation

Policy controlling the use of Traffic Accident Surveillance and Analysis System (TASAS) - Transportation Systems Network (TSN) Reports

1. TASAS - TSN has officially replaced the TASAS - "Legacy" database.
2. Reports from TSN are to be used and interpreted by the California Department of Transportation (Caltrans) officials or authorized representative.
3. Electronic versions of these reports may be emailed between Caltrans' employees only using the State computer system.
4. The contents of these reports shall be considered confidential and may be privileged pursuant to 23 U.S.C. Section 409, and are for the sole use of the intended recipient(s). Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message. Do not print, copy or forward.

OTM22130

Table B - Selective Accident Rate Calculation

Report Parameters-

Event ID: 4287171
Request Name: SAC 51
Ref Date: 01/15/2021

Request- & Line	L O C	D I R	L S C	Route/Location	Begin Date	End Date	Rate Type	Out Seq	Override Rates			Override ADT		Req. Type	Com- bine?	Excl Ramp?
									Rate	Inj%	Fat%	Main	Cross			
1 2	H	S	I	03 SAC 051 03 SAC 051	002.000 - 003.500	01-JUL-17	30-JUN-20	N	L					N	N	Y

Event Log:

Job id is : 195862 Accidents Table B Request SAC 51 Submitted by T3SRAISI
03 SAC 051 2 - 03 SAC 051 3.5 07/01/2017 TO 06/30/2020

Location Description	Rate Group (RUS)	No. of Accidents / Significance									ADT Main X-St	Total MV+ or MVM	Accident Rates					
		Tot	Fat	Inj	F+I	Multi Veh	Wet	Dark	Pers Kld Inj	Fat			F+I	Tot	Fat	F+I	Tot	
03 SAC 051 002.000 - 03 SAC 051 003.499 0001-0002 2017-07-01 2020-06-30	1.500 MI H 36 mo. SOUTH U	165 H99	1	57 H97	58 H97	139	27 H97	71 H99	1	85.1	139.90	0.007	.41	1.18	0.005	.31	.95	

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

ATTACHMENT M
RIGHT OF WAY DATA SHEET

MEMORANDUM

*Making Conservation
a California Way of Life.*

To: ANAND MAGANTI
Design Engineer
Department of Transportation

Date: February 2, 2021

Attention: ANDREW HUANG
Project Engineer

File: 03-SAC-51-PM 2.0/3.5
EFIS No.: 03 1200 0054
EA: 3F070
Alternate: 1

From: JANEL D. WILSON
Assistant Chief
North Region Right of Way
Marysville



Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

Project Description: This project proposes to rehabilitate the American River Bridge (Br. No. 24-0003) by removing and replacing the existing concrete deck, removing and replacing the steel girder post-tensioning systems in spans 1 and 2, modify existing soundwall, install sheet piling around piers for scour mitigation, construct concrete catcher blocks, widen the bridge to accommodate traffic during construction, add a Class I bike/pedestrian path, and plan for future transportation needs on State Route (SR) 51.

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on January 22, 2021.

Right of Way Lead Time will require a minimum of 21 months after receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD) and Certificate of Sufficiency (COS). A minimum of 18 months prior to certification will be required from submittal of the last map or revision. Shorter lead times may require additional support resources and may adversely affect delivery of Right of Way Certification.

Attachment:
Right of Way Data Sheet

cc. Clark Peri

California State Transportation Agency
RIGHT OF WAY DATASHEET



EA: 3F070
PROJECT NO.: 03 1200 0054
LOCATION: 03-SAC-51-PM 2.0/3.5
DESCRIPTION: Bridge deck replacement.

ALTERNATE: 1
DATE: 2/2/2021
DATASHEET TYPE: Revision

1. Right of Way Cost Estimate:

	<u>Current Value Future Use</u>	<u>Escalation Rate</u>	<u>Escalated Value</u>
A. Total Acquisition Cost	\$2,044,119	5%	\$2,298,977
B. Appraisal Fees Estimate	\$15,000	N/A	\$15,000
C. Mitigation Acquisition & Credits	\$4,032,000	5%	\$4,534,705
D. Project Development Permit Fees	\$60,151	5%	\$67,650
Subtotal	<u>\$6,151,269</u>		<u>\$6,916,331</u>
E. Utility Relocation (State's Share)	\$629,383	5%	\$707,854
(Owner's Share: _____ \$400,000)			
F. Relocation Assistance (RAP)	\$0		\$0
G. Clearance/Demolition	\$0		\$0
H. Title & Escrow	\$9,000	5%	\$10,122
I. Total Estimated Right of Way Cost	<u>\$6,789,652</u>	Rounded	<u>\$7,634,000 *</u>
J. Phase 4 estimated expenses			
Railroad	<u>\$0</u>		
Construction Contract Work	<u>\$0</u>		
2. Current Date of Project Approval (PA&ED)	<u>February 15, 2021</u>		
Current Date of Right of Way Certification	<u>July 1, 2023</u>		

3. Parcel Data:

Type	Dual/Appr	Utilities	Railroad
X	<u>0</u>	U4 - 1	C&M Agreement
A	<u>0</u>	-2	<u>0</u>
B	<u>0</u>	-3	<u>0</u>
C	<u>6</u>	-4	<u>0</u>
D	<u>3</u>	U5 - 7	<u>1</u>
RR	<u>0</u>	-8	<u>0</u>
Total	<u>9</u>	-9	<u>0</u>
Excess	<u>0</u>		

Areas:	Mitigation	Misc. R/W Work
R/W	Impacts	RAP Displacees
<u>1.89 AC</u>	<u>4</u>	<u>N/A</u>
TCE	Parcels	Clear/Demo
<u>51.05 AC</u>	<u>0</u>	<u>N/A</u>
Excess	Credits	PTE Construct
<u>N/A</u>	<u>0</u>	<u>N/A</u>
Mitigation	Lump Sum	Condemnation
<u>N/A</u>	<u>4</u>	<u>1</u>
	Env PTE	USA Involvement
	<u>10</u>	<u>No</u>

4. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

Acquisitions of fee, permanent easements and temporary construction easements (TCEs) required from property owned by the State of California, Sacramento and San Joaquin Drainage District, City of Sacramento and County of Sacramento.

5. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No X

6. Are RAP displacements required?

Yes _____ No X

No. of single family N/A

No. of business/nonprofit N/A

No. of multi-family N/A

No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated _____ N/A

N/A Sufficient replacement housing will be available without last resort housing.

N/A Sufficient replacement housing will not be available without last resort housing.

7. Is there an effect on assessed valuation?

Yes _____ No X Not Significant _____

8. Are there any items of Construction Contract Work?

Yes _____ No X

There is no Construction Contract Work associated with the project.

9. Are utility facilities or rights of way affected?

Yes X No _____

Names of Utility Companies requiring verification only.

AT&T, PG&E (gas), SMUD (electric/gas), CenturyLink, Charter Communications, City of Sacramento-Utility Department, City of Sacramento-Public Works, Comcast Cable, Elk Grove Water Works, Frontier Communications, Integra Inc., Kinder Morgan, Level 3 Communications, Mpower Communications, Sacramento Area Sewer District (SASD), Sacramento Suburban Water District, Sprint, Verizon, XO Communications, Western Area Power Administration (WAPA), and Zayo Group.

Names of Utility Companies requiring involvements.

SASD (sewer lines - abandoned); electrical transmission OH lines for SMUD, PGE, and WAPA
SMUD also has an underground electrical-transmission line, AT&T (underground fiber optic along UPRR tracks), and Charter Communications (underground fiber optic along UPRR tracks).

Additional information concerning Utility Involvement on this project.

Bridge widening will interfere with the existing SASD forced mains that parallels near planned construction. Structures wants to positively locate to determine their plan of action when developing the contract. The other site for positive location includes an area that will place a wing wall due to the increased lanes placement. The amount of slope that will be shifted indicates the SMUD site could be covered or affected by construction; current design indicates the utility owner and Structures Construction will avoid the UO's facilities.

10. Are railroad facilities or rights of way affected?

Yes X No _____ Phase 4 Capital \$0

There are Union Pacific Railroad Co tracks within the project limits that will not be affected by work. A Railroad Clearance Memo with short clauses SSP's will be sent to the OE with the RW Cert Request.

11. Are USA Lands or Rights Affected?

Yes _____ No X Phase 4 Capital \$0

Agencies Involved:

US Forest Service _____

BLM _____

Army Corps of Engineers _____

National Parks _____

BIA _____

Veterans Administration _____

US Fish & Wildlife _____

GSA _____

Rights or Permissions to acquire:

Easement _____

Special Use Permit _____

Courtesy Letter _____

Right of Way Grant _____

Cooperative Work Agreement _____

Cost Recovery _____

Mineral Agreement _____

Letter of Concurrence _____

Timber Sale _____

There is no federal land on this project.

12. Is an RE Office required for the project?

Yes _____ No X

13. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident X

14. Are there material borrow and/or disposal sites required?

No X Optional _____ Mandatory _____

15. Are there potential relinquishments and/or abandonments?

Yes _____ No X

16. Are there any existing and/or potential airspace sites?

Yes _____ No X

17. What type of mitigation is required for the project?

Riparian, fish habitat, impacts to waters, and valley elderberry longhorn beetle habitat mitigation anticipated.

18. Is it anticipated that Caltrans will perform all Right of Way work?

Yes X No _____

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of 21 months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of 18 months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting conditions: (Check boxes that apply.)

- Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- Design will secure necessary encroachment permits from local agencies, Reclamation Districts, Central Valley Flood Protection Board, etc. in advance of construction.
- Utility lead time begins after PA&ED is met and we have received conflict maps.
- If the contractor requires a staging area, Standard Specifications (Sections 5-1.32) indicates that the contractor will be responsible for securing locations for staging and storage.

Evaluation Prepared By:

Right of Way: Patrick Rego Date 2/2/2021
 PATRICK REGO
 Associate Right of Way Agent

Recommended: Robert Odom Date 02/02/2021
 ROBERT ODOM
 Acting Senior Right of Way Agent
 Appraise/Acquire, Estimating, & RAP Branch
 Marysville

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

Janel D. Wilson Date 2/2/21
 JANEL D. WILSON
 Assistant Chief
 North Region Right of Way
 Marysville

Reviewed By

RW Planning & Management: Eric Ybarra Date 2/1/21
 ERIC YBARRA

ATTACHMENT Z
PERFORMANCE MEASURE SHEET

SHOPP Project - Accomplishment - Performance Measures - Benefits

District: 03 Tool ID: 13289 Project ID: 0312000054 EA: 3F070 Co-Rte-PM: All Locations View/Print PIR (Performance) Report

Bridge Pavement Drainage Facilities Safety Mobility Roadside Complete Streets Sustainability /Climate Change Advance Mitigation/Mitigation Major Damage Green-house Gases Relinquishment

Performance & Accomplishments (PPC)									
	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Assets in Good Cond	Assets in Fair Cond	Assets in Poor Cond	New Asset Added	Comment
1	Bridge Rail (201.112)	Bridge Rail Replacement and Upgrade	LF	7977.000	1818.000	3636.000		2523.000	
2	Bridge Rehabilitation (201.110, .111, .113, .322)	Bridge Health	SF	270948.000		166055.000		104893.000	
3		Bridge Scour Mitigation				160027.000			
4	Bridge Approach Slabs (201.110, .111, .113, .322)	No Performance Objective in the SHSMP	SF	9100.000			5800.000	3300.000	
5	Fish Passage	No Performance Objective in the SHSMP	Yes/No	No					No
6	Number of Bridges	No Performance Objective in the SHSMP	EA	2.000					
7	Replace/Install Culverts (201.151)	No Performance Objective in the SHSMP	EA	1.000	1.000				
8	Replace Install/Culverts (201.151)	Drainage System Restoration	LF	278.000	258.000			20.000	
9	Fish Passage in the Priority List	No Performance Objective in the SHSMP	EA	0.000			0.000		
10	Fish Passage Not in the Priority List	No Performance Objective in the SHSMP	EA	0.000					
11	Median Barrier (201.010, .015)	No Performance Objective in the SHSMP	LF	4400.000			4332.000	68.000	
12	Guard Rail (201.010, .015)	No Performance Objective in the SHSMP	LF	953.000				953.000	
13	Lighting - Rehabilitation (201.170)	Lighting Rehabilitation	EA	10.000				10.000	New
14	Vehicle detection (201.315)	Transportation Management Systems	EA	1.000			1.000		
15	Roadside Weather Information Station (201.315)	Transportation Management Systems	EA	1.000			1.000		
16	Worker Safety - Safe Access	Roadside Safety Improvements	Location	3.000			3.000		3 MVPs
17	Class I Bike Paths (201.999)	No Performance Objective in the SHSMP	Linear Miles	0.510				0.510	
18	Is any location within the project limits Ped/Bike accessible?	No Performance Objective in the SHSMP	Yes/No	Yes					
19	Retaining Wall	No Performance Objective in the SHSMP	SF	4576.370				4576.370	

Draft Programming Performance Summary (All Locations)

Program Code	Activity Category	Asset Class	Asset	Performance Value	Performance Measure	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Total	Post Good	New	Post Good+New	Post-Fair	Post-Poor	Post-Total
201.110	Bridge - Health	Primary	Bridge	2.0	Bridge(s)	Square Feet	0.0	166,055.0	0.0	166,055.0	166,055.0	104893.0	270,948.0	0.0	0.0	270,948.0

Notes:

- The crosswalk for reporting performance in the "Programming Performance Summary" is under development. For discrepancies or errors, please notify AM Tool admins via e-mail at CT-TAM@dot.ca.gov.
- The data summarized in the table represents the performance reported or to be reported in CTIPS.
- Programming only requires the breakdown of Good, Fair and Poor for Primary and Supplementary Asset Classes
- Reporting of bridge pre and post conditions may appear to contain errors if the project has more than one bridge. For example, a project with 10 bridges (9 health, and 1 rail replacement) under program code 201.110 Bridge Health will not include the area of the 1 bridge with rail replacement only. However, programming requires that the Health condition of all 10 bridges to be reported.
- Bridge Health pre- and post-conditions are required for all bridge objective projects, even when no work in Bridge Health is done. Next version of the summary will include the Bridge Health pre- and post-condition for all bridge projects.
- For Facilities program codes there are no Activity Detail in the tool to identify the number of locations required by Programming.

ATTACHMENT AA
COST ESTIMATES

**PROJECT
PLANNING COST ESTIMATE ©**

EA: 03-3F070

EA: 03-3F070 PID: 312000054

PID: 312000054

District-County-Route: 03-SAC-51

PM: 2.00 - 3.50

Type of Estimate : Project Approval and Environmental Document (PA&ED)

Program Code : 20.XX.201.110

Project Limits : Elvas West/East Structures to Exposition Blvd

Project Description: In Sacramento County, widen and replace bridge deck of the American River Bridge (Br. No. 24-0003)

Scope : Grind and pave asphalt, Replace/Increase thickness of American River Bridge, Widen existing shoulders, modify soundwalls, install retaining walls, lengthen Cal Expo Underpass, modify superstructure and substructure

Alternative : 1

SUMMARY OF PROJECT COST ESTIMATE

	<u>Current Year Cost</u>	<u>Escalated Cost</u>
TOTAL ROADWAY COST	\$ 49,539,500	\$ 57,989,599
TOTAL STRUCTURES COST	\$ 69,407,000	\$ 81,245,957
SUBTOTAL CONSTRUCTION COST	\$ 118,946,500	\$ 139,235,556
TOTAL RIGHT OF WAY COST	\$ 6,789,652	\$ 7,634,000
TOTAL CAPITAL OUTLAY COSTS	\$ 125,737,000	\$ 146,870,000
PA/ED SUPPORT	\$ -	\$ -
PS&E SUPPORT	\$ -	\$ -
RIGHT OF WAY SUPPORT	\$ -	\$ -
CONSTRUCTION SUPPORT	\$ -	\$ -
TOTAL SUPPORT COST	\$ -	\$ -

TOTAL PROJECT COST	\$ 126,000,000	\$ 147,000,000
---------------------------	-----------------------	-----------------------

Programmed Amount

Month / Year

Date of Estimate (Month/Year) _____ 1 / 2021

Estimated Construction Start (Month/Year) _____ 2 / 2024

Number of Working Days = 700

Estimated Mid-Point of Construction (Month/Year) _____ 5 / 2026

Estimated Construction End (Month/Year) _____ 12 / 2027

Number of Plant Establishment Days

Estimated Project Schedule

PID Approval 6/29/2015

PA/ED Approval 1/29/2021

PS&E 5/1/2021

RTL 8/1/2023

Begin Construction 2/1/2024

Reviewed by District O.E. or
Cost Estimate Certifier

Office Engineer / Cost Estimate Certifier Date (xxx) xxx-xxxx Phone

Approved by Project Manager

Project Manager Date (xxx) xxx-xxxx Phone

PROJECT COST ESTIMATE

EA: 03-3F070 PID: 312000054

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 1,582,000
2	Pavement Structural Section	\$ 3,861,700
3	Drainage	\$ 2,702,800
4	Specialty Items	\$ 10,969,400
5	Environmental	\$ 5,557,500
6	Traffic Items	\$ 3,820,100
7	Detours	\$ -
8	Minor Items	\$ 1,709,700
9	Roadway Mobilization	\$ 3,020,400
10	Supplemental Work	\$ 2,315,400
11	State Furnished	\$ 3,359,100
12	Time-Related Overhead	\$ 4,179,700
13	Total Roadway Contingency	\$ 6,461,700
TOTAL ROADWAY ITEMS		\$ 49,539,500

Estimate Prepared By : Andrew Huang, PE 2/26/2020 (530) 741-4534
Name and Title Date Phone

Estimate Reviewed By : _____
Name and Title Date Phone

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

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY	7,000	x	55.00	= \$	385,000
19010X	Roadway Excavation (Insert Type) ADL	CY	2,000	x	190.00	= \$	380,000
19801X	Imported Borrow	CY/TON	26,000	x	30.00	= \$	780,000
194001	Ditch Excavation	CY		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
17010X	Clearing & Grubbing	LS/ACRE	1	x	12,000.00	= \$	12,000
100100	Develop Water Supply	LS	1	x	25,000.00	= \$	25,000
19801X	Imported Borrow	CY/TON		x	85.00	= \$	-
21012X	Duff	CRE/SQFT		x		= \$	-
XXXXXX	Some Item	Unit		x		= \$	-

TOTAL EARTHWORK SECTION ITEMS	\$ 1,582,000
--------------------------------------	---------------------

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY	6,080	x	300.00	= \$	1,824,000
400050	Continuously Reinforced Concrete Pavement	CY		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	7,700	x	140.00	= \$	1,078,000
26020X	Class 2 Aggregate Base	CY	4,052	x	75.00	= \$	303,900
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
414240	Isolation Joint Seal (Asphalt Rubber)	LF		x		= \$	-
414241	Isolation Joint Seal (Silicone)	LF		x		= \$	-
280010	Rapid Strength Concrete Base	CY		x		= \$	-
410096	Drill and Bond (Dowel Bar)	EA		x		= \$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON		x		= \$	-
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005	Tack Coat	TON	2	x	1,800.00	= \$	3,600
377501	Slurry Seal	TON		x		= \$	-
374493	Polymer Asphaltic Emulsion (Seal Coat)	TON		x		= \$	-
370001	Sand Cover (Seal)	TON		x		= \$	-
731530	Minor Concrete (Textured Paving)	CY	6,266	x	20.00	= \$	125,320
731502	Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X	Place Hot Mix Asphalt Dike (Insert Type)	LF		x		= \$	-
398100	Remove Asphalt Concrete Dike	LF		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
398300	Remove Base and Surfacing	CY		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
41800X	Remove Concrete Pavement	SQYD/CY		x		= \$	-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD		x		= \$	-
398200	Cold Plane Asphalt Concrete Pavement	SQYD	19,315	x	7.00	= \$	135,205
846046	6" Rumble Strip (Asphalt Concrete Pavement)	STA	120	x	70.00	= \$	8,400
846049	6" Rumble Strip (Concrete Pavement)	STA		x		= \$	-
846051	12" Rumble Strip (Asphalt Concrete Pavement)	STA		x		= \$	-
846052	12" Rumble Strip (Concrete Pavement)	STA		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
394095	Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
XXXXXX	Lean Concrete Base	CY	2,254	x	170.00	= \$	383,180

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$ 3,861,700
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SECTION 3: DRAINAGE

Item code	Unit	Quantity	Unit Price (\$)	Cost
71013X Remove Culvert	EA/LF	600	x 60.00	= \$ 36,000
710240 Modify Inlet	EA		x	= \$ -
710370 Sand Backfill	CY		x	= \$ -
71010X Abandon Culvert	EA/LF		x	= \$ -
710196 Adjust Inlet	LF		x	= \$ -
710262 Cap Inlet	EA	6	x 600.00	= \$ 3,600
510501 Minor Concrete	CY		x	= \$ -
510502 Minor Concrete (Minor Structure)	CY	60	x 3,000.00	= \$ 180,000
731627 Minor Concrete (Curb, Sidewalk, and Curb Ramp)	CY		x	= \$ -
6101XX XX" Alternative Pipe Culvert (Insert Type)	LF	3,000	x 200.00	= \$ 600,000
6411XX XX" Plastic Pipe	LF		x	= \$ -
65XXXX XX" Reinforced Concrete Pipe (Insert Type)	LF		x	= \$ -
6811XX XX" Plastic Pipe (Edge Drain)	LF		x	= \$ -
6901XX XX" Corrugated Steel Pipe Downdrain (0.XXX" Th	LF		x	= \$ -
7006XX XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x	= \$ -
7032XX XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x	= \$ -
7050XX XX" Steel Flared End Section	EA		x	= \$ -
703233 Grated Line Drain	LF		x	= \$ -
72XXXX Rock Slope Protection (Type and Method)	CY/TON		x	= \$ -
72901X Rock Slope Protection Fabric (Insert Class)	SQYD		x	= \$ -
721420 Concrete (Ditch Lining)	CY		x	= \$ -
XXXXXX Culvert Lengthening	CY	1	x 1,500,000.00	= \$ 1,500,000
750001 Miscellaneous Iron and Steel	LB	20,780	x 4.00	= \$ 83,120
XXXXXX Additional Drainage	LS	1	x 300,000.00	= \$ 300,000
TOTAL DRAINAGE ITEMS				\$ 2,702,800

SECTION 4: SPECIALTY ITEMS

Item code	Unit	Quantity	Unit Price (\$)	Cost
520103 Bar Reinforced Steel (Retaining Wall)	LB		x	= \$ -
5100XX Structural Concrete	CY		x	= \$ -
510060 Structural Concrete, Retaining Wall	CY	1,000	x 900.00	= \$ 900,000
5201XX Bar Reinforcing Steel	LB		x	= \$ -
080050 Progress Schedule (Critical Path Method)	LS		x	= \$ -
582001 Sound Wall (Masonry Block)	SQFT		x	= \$ -
510530 Minor Concrete (Wall)	CY		x	= \$ -
60005X Remove Sound Wall	LF	800	x 50.00	= \$ 40,000
070030 Lead Compliance Plan	LS		x	= \$ -
141120 Treated Wood Waste	LB		x	= \$ -
839750 Remove Barrier	LF	3,207	x 50.00	= \$ 160,350
839752 Remove Guardrail	LF	1,500	x 12.00	= \$ 18,000
710167 Remove Flared End Section	EA		x	= \$ -
8000XX Chain Link Fence (Insert Type)	LF	2,500	x 15.00	= \$ 37,500
80XXXX XX" Chain Link Gate (Type CL-X)	EA		x	= \$ -
8320XX Midwest Guardrail System (Insert Type)	LF	1,300	x 45.00	= \$ 58,500
839301 Single Thrie Beam Barrier	LF		x	= \$ -
839310 Double Thrie Beam Barrier	LF		x	= \$ -
839521 Cable Railing	LF		x	= \$ -
839566 Terminal System (Type CAT)	EA		x	= \$ -
839584 Alternative In-line Terminal System	EA		x	= \$ -
839585 Alternative Flared Terminal System	EA		x	= \$ -
4906XX XX" Cast-In-Drilled-Hole Concrete Piling	LF		x	= \$ -
8396XX Crash Cushion (Insert Type)	EA		x	= \$ -
8331XX Concrete Barrier (Insert Type)	LF	6,300	x 250.00	= \$ 1,575,000
475010 Retaining Wall (Masonry Wall)	LS		x	= \$ -
511035 Architectural Treatment	SQFT		x	= \$ -
780460 Anti-Graffiti Coating	SQFT		x	= \$ -
780450 Rock Stain	SQFT		x	= \$ -
4730XX Reinforced Concrete Crib Wall (Insert Type)	SQFT		x	= \$ -
83954X Transition Railing (Insert Type)	EA		x	= \$ -
780440 Prepare and Stain Concrete	SQFT		x	= \$ -
839561 Rail Tensioning Assembly	EA		x	= \$ -
XXXXXX Bike Facility	LS	1	x 500,000.00	= \$ 500,000
XXXXXX Sound Wall (Masonry Block) & Retaining walls	LS	1	x 7,680,000.00	= \$ 7,680,000
83958X End Anchor Assembly (Insert Type)	EA		x	= \$ -
TOTAL SPECIALTY ITEMS				\$ 10,969,400

Effective immediately, districts must input estimated item quantities in blue text above in the PRSM database for the pay items listed in the Design Memo, dated April 9, 2018, when Project Report is approved ([Link to Design Memo](#)).

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
Biological Mitigation (on-site)	LS	x	= \$	-
80010X Temporary Fence (Insert Type)	LF	x	= \$	-
130670 Temporary Reinforced Silt Fence	LF	x	= \$	-
<i>Subtotal Environmental Mitigation</i>				\$ -

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	x	= \$	-
20XXXX Irrigation System	LS	x	= \$	-
204099 Plant Establishment Work	LS	1 x	200,000.00 = \$	200,000
20XXXX Follow-up Landscape Project	LS	x	= \$	-
206405 Remove Irrigation Facility	LS	x	= \$	-
204096 Maintain Existing Planted Areas	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil	CY/TON	x	= \$	-
200114 Rock Blanket	3QFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
995100 Water Meter Charges	LS	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend X" Conduit (Use for Extension of Irrigation	LF	x	= \$	-
<i>Subtotal Landscape and Irrigation</i>				\$ 200,000

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
211111 Permanent Erosion Control Establishment Work	LS	x	= \$	-
XXXXXX Erosion Control Items	LS	1 x	350000.00 = \$	350,000
210010 Move-In/Move-Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (Insert Type)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	3QFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	x	= \$	-
210610 Compost	CY	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
<i>Subtotal Erosion Control</i>				\$ 350,000

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	1 x	7,500.00 = \$	7,500
130200 Prepare WPCP	LS	x	= \$	-
130100 Job Site Management	LS	x	= \$	-
130330 Storm Water Annual Report	EA	x	= \$	-
XXXXXX Construction Site Management	LS	1 x	500,000.00 = \$	500,000
130310 Rain Event Action Plan	EA	x	= \$	-
130320 Storm Water Sampling and Analysis Day	EA	x	= \$	-
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQYD	x	= \$	-
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	x	= \$	-
130900 Temporary Concrete Washout	LS	x	= \$	-
130710 Temporary Construction Entrance	EA	x	= \$	-
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
XXXXXX SWPPP BMPS	LS	1 x	4,500,000.00 = \$	4,500,000
130730 Street Sweeping	LS	x	= \$	-
<i>Subtotal NPDES</i>				\$ 5,007,500

TOTAL ENVIRONMENTAL	\$ 5,557,500
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Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	x	= \$	-
066596 Additional Water Pollution Control**	LS	x	= \$	-
066597 Storm Water Sampling and Analysis***	LS	24 x	300.00 = \$	7,200
XXXXXX Some Item	LS	x	= \$	-
<i>Subtotal Supplemental Work for NDPS</i>				\$ 7,200

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

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code	Unit	Quantity	Unit Price (\$)	Cost
870200 Lighting System	LS	x	= \$	-
870300 Sign Illumination System	LS	x	= \$	-
870400 Signal and Lighting System	LS	x	= \$	-
870510 Ramp Metering System	LS	x	= \$	-
87181X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Insert Type)	LB	x	= \$	-
5602XX Install Sign Structure (Insert Type)	EA	4	x 30,000.00 = \$	120,000
4980XX XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
87011X Inductive Loop Detector	EA/LS	x	= \$	-
870600 Traffic Monitoring Station System	LS	x	= \$	-
56804X Remove Sign Structure	EA/LS	x	= \$	-
568054 Reconstruct Sign Structure	EA	x	= \$	-
568060 Modify Sign Structure	EA	x	= \$	-
870009 Elements During Construction	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Traffic Electrical	LS	1	x 500,000.00 = \$	500,000
Subtotal Traffic Electrical				\$ 620,000

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
820840 Roadside Sign - One Post	EA	x	= \$	-
820850 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign Structure (Insert Type)	SQFT	x	= \$	-
820890 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
846020 Remove Painted Traffic Stripe	LF	x	= \$	-
141102 Remove Yellow Painted Traffic Stripe (Hazardous V	LF	x	= \$	-
846025 Remove Painted Pavement Marking	SQFT	x	= \$	-
820250 Remove Roadside Sign	EA	x	= \$	-
820530 Reset Roadside Sign	EA	x	= \$	-
820610 Relocate Roadside Sign	EA	x	= \$	-
8101XX Delineator (Insert Class)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night V	LF	x	= \$	-
846012 Thermoplastic Crosswalk and Pavement Marking (Enhanced Wet Night Visibility)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	x	= \$	-
XXXXXX Signing & Striping Estimate	LS	1	x 625,000.00 = \$	625,000
Subtotal Traffic Signing and Striping				\$ 625,000

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Sign	EA/LS	x	= \$	-
Subtotal Traffic Management Plan				\$ -

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120198 Plastic Traffic Drums	EA	x	= \$	-
12016X Channelizer (Insert Type)	EA	x	= \$	-
120116 Type II Barricade	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	12	x 9,000.00 = \$	108,000
120100 Traffic Control System	LS	1	x 100,000.00 = \$	100,000
129110 Temporary Crash Cushion	EA	x	= \$	-
XXXXXX Portable Changeable Message Signs	LS	4	x 25,000.00 = \$	100,000
129000 Temporary Railing (Type K)	LF	25,160	x 40.00 = \$	1,006,400
XXXXXX Remove Temporary Traffic Striping	LF	140,070	x 1.00 = \$	140,070
120151 Temporary Traffic Stripe (Paint)	LF	140,070	x 8.00 = \$	1,120,560
120149 Temporary Pavement Marking (Paint)	LF	x	= \$	-
120152 Temporary Pavement Marking (Tape)	SQFT	x	= \$	-
8101XX Delineator (Insert Class)	EA	x	= \$	-
Subtotal Stage Construction and Traffic Handling				\$ 2,575,030

TOTAL TRAFFIC ITEMS	\$ 3,820,100
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

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

SUBTOTAL SECTIONS 1 through 7 \$ 28,493,500

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items				
ADA Items			0.0%	\$ -
8B - Bike Path Items				
Bike Path Items			0.0%	\$ -
8C - Other Minor Items				
Other Minor Items			3.0%	\$ 854,805
Total of Section 1-7	\$ 28,493,500	x	6.0%	= \$ 1,709,610
TOTAL MINOR ITEMS				\$ 1,709,700

SECTIONS 9: ROADWAY MOBILIZATION *

Item code				
999990	Total Section 1-8	\$ 30,203,200	x 10%	= \$ 3,020,320
TOTAL ROADWAY MOBILIZATION				\$ 3,020,400

SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)	Cost
066670 Payment Adjustments For Price Index Fluctuations	LS	1	x 100,000.00	= \$ 100,000
066094 Value Analysis	LS	1	x 50,000.00	= \$ 50,000
066070 Maintain Traffic	LS	1	x 560,000.00	= \$ 560,000
XXXXXX Traffic Management Plan - Public Information	LS	1	x 100,000.00	= \$ 100,000
066919 Dispute Resolution Board	LS	1	x 45,000.00	= \$ 45,000
066921 Dispute Resolution Advisor	LS	1	x 5,000.00	= \$ 5,000
066015 Federal Trainee Program	LS	1	x 150,000.00	= \$ 150,000
066610 Partnering	LS	1	x 90,000.00	= \$ 90,000
066204 Remove Rock and Debris	LS		x	= \$ -
066222 Locate Existing Crossover	LS		x	= \$ -
XXXXXX Some Item	Unit		x	= \$ -
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<i>= \$ 7,200</i>
Total Section 1-8	\$ 30,203,200		4%	= \$ 1,208,128
TOTAL SUPPLEMENTAL WORK				\$ 2,315,400

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
066105	Resident Engineers Office	LS	1	x	380,000.00	=	\$380,000
066063	Traffic Management Plan - Public Information	LS		x		=	\$0
066901	Water Expenses	LS		x		=	\$0
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS		x		=	\$0
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS	350	x	2,300.00	=	\$805,000
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS	1	x	100,000.00	=	\$100,000
066916	Annual Construction General Permit Fee	LS		x		=	\$0
XXXXXX	Traffic Control Per day	Unit	700	x	2,100.00	=	\$1,470,000
Total Section 1-8			\$ 30,203,200		2%	=	\$ 604,064

TOTAL STATE FURNISHED \$3,359,100

SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$83,593,200 (used to calculate total TRO)
 Total Construction Cost (excluding TRO and Contingency) \$108,305,100 (used to check if project capital cost is greater than \$5 million including contingency)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price (\$)	=	Cost
090100	Time-Related Overhead	WD	700	X	\$5,971	=	\$4,179,700

TOTAL TIME-RELATED OVERHEAD \$4,179,700

SECTION 13: ROADWAY CONTINGENCY*

Risk Amount from Risk Register	(for Known Risks)	5%	\$2,000,000
Additional or Residual Contingency	(for Unknown/Undefined Risks)	10%	\$4,307,780
Total Section 1-12	\$ 43,077,800	x	15% = \$6,461,670

TOTAL CONTINGENCY* \$6,461,700

II. STRUCTURE ITEMS

	<u>Bridge 1</u>		<u>Bridge 2</u>		
DATE OF ESTIMATE	11/05/20		00/00/00		00/00/00
Bridge Name	Elvas Pump Plant (NB Side Only)		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number			57-XXX		57-XXX
Structure Type			XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Bridge Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)			XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$52,215,000		\$1,175,000		\$0

	<u>Building 1</u>				
DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Building Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Building Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$53,390,000
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TOTAL COST OF BUILDINGS	\$0
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Time-Related Overhead	10%	\$5,339,000
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STRUCTURES MOBILIZATION	10%	\$5,339,000
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STRUCTURES CONTINGENCY*	10%	\$5,339,000
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TOTAL COST OF STRUCTURES	\$69,407,000
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

_____ Date

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

			<i>Current Value Future Use</i>		<i>Escalated Value</i>
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	\$	0	\$ 0
	A2)	Acquisition of Offsite Mitigation	\$	0	\$ 0
	A3)	Railroad Acquisition	\$	0	\$ 0
B)	B1)	Utility Relocation (State Share)	\$	0	\$ 0
	B2)	Potholing (Design Phase)	\$	0	\$ 0
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	\$	0	\$ 0
D)		RAP and/or Last Resort Housing	\$	0	\$ 0
E)		Clearance & Demolition	\$	0	\$ 0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0	\$ 0
G)		Title and Escrow	\$	0	\$ 0
H)		Environmental Review	\$	0	\$ 0
I)		Condemnation Settlements <u>0%</u>	\$	0	\$ 0
J)		Design Appreciation Factor <u>0%</u>	\$	0	\$ 0
K)		Utility Relocation (Construction Cost)	\$	0	\$ 0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$6,789,652
M)	TOTAL R/W ESTIMATE: Escalated	\$7,634,000
N)	RIGHT OF WAY SUPPORT	\$0

Support Cost Estimate
Prepared By _____ Project Coordinator¹ _____ Phone _____

Utility Estimate Prepared
By _____ Utility Coordinator² _____ Phone _____

R/W Acquisition Estimate
Prepared By _____ Right of Way Estimator³ _____ Phone _____

Note: Items G & H applied to items A + B
¹ When estimate has Support Costs only ² When estimate has Utility Relocation ³ When R/W Acquisition is required

V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

From sheet 1 of 11:		Month	/	Year
Enter in just the blue cells.	Date of Estimate (Month/Year)	1	/	2021
	Estimated Construction Start (Month/Year)	2	/	2024
	Number of Working Days	700	WD	
	Estimated Mid-Point of Construction (Month/Year)	5	/	2026
	Estimated Construction End (Month/Year)	12	/	2027
	Years of Escalation (to mid-point of Construction)	5.3	years	
	Fixed Escalation Rate	<input type="text"/>		

ESCALATED CONSTRUCTION COSTS

ROADWAY ITEMS	\$ 49,539,500
STRUCTURE ITEMS	\$ 69,407,000
SUBTOTAL CONSTRUCTION COST	\$ 118,946,500

Alternative method below is provided: If you have different escalation rate for each year in the table below, and partial rate for partial last year to get the total escalated costs.

Enter escalation rates up to the year of mid-point of construction. Partial for partial year. Leave rest blank.

May use different rate for each year if needed.

YEAR	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	FUTURE
FORECASTED ESCALATION RATE*			3.2%	3.2%	3.2%	3.2%	3.2%				0.0%

ESCALATED CONSTRUCTION COSTS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	FUTURE	TOTAL ESCALATED COSTS
ROADWAY ITEMS	\$ 49,539,500	\$ 49,539,500.00	\$ 51,124,764	\$ 52,760,756	\$ 54,449,101	\$ 56,191,472	\$ 57,989,599	\$ 57,989,599	\$ 57,989,599	\$ 57,989,599	\$ 57,989,599	\$ 57,989,599
STRUCTURE ITEMS	\$ 69,407,000	\$ 69,407,000	\$ 71,628,024	\$ 73,920,121	\$ 76,285,565	\$ 78,726,703	\$ 81,245,957	\$ 81,245,957	\$ 81,245,957	\$ 81,245,957	\$ 81,245,957	\$ 81,245,957
SUBTOTAL	\$ 118,946,500	\$ 118,946,500	\$ 122,752,788	\$ 126,680,877	\$ 130,734,665	\$ 134,918,175	\$ 139,235,556	\$ 139,235,556	\$ 139,235,556	\$ 139,235,556	\$ 139,235,556	\$ 139,235,556

*Enter in the blue input cells only. Enter escalation rates up to the estimated year of construction start or mid-point of construction. After that year leave it blank.

Adjust current and last year escalation rates by prioritizing them for partial years.

ATTACHMENT AB
PROGRAMMING SHEET

Programming Sheet with Risk and OE



AMS ID: 0312000054 EA: 03-3F070 COUNTY: SAC ROUTE: 051 POSTMILE: 2/3.5

Project Manager: PERI, CLARK A	PM Assistant: PEREZ, LACEY C	Project Nickname: American River Bridge
Project Description - Long: In the city of Sacramento at the American River Bridge No.24-0003 from north of B Street Underpass to north of Exposition		
Work Description - Long: Widen and replace bridge deck		
PPNO: 6402	Program: shopp	RPT: No Funding: No PROGRAM YR: 2022 Working Days: 270
Open for Time: Yes	Subprogram: Bridge Rehabilitation	CT Status: APL RMP: A RMP Date: 13/05/2014
10 Yr SHOPP: Yes	AADD: Yes	Dist: SHOPP MAJOR FED Aid Eligible: YES (PE & RW Only)

MS	MS Description	MS Date	
M000	ID NEED	08/05/2011	(A)
M010	APPROVE PID	06/29/2015	(A)
M015	PROG PROJ	10/22/2015	(A)
M020	BEGIN ENVIRO	09/01/2016	(A)
M040	BEGIN PROJ	12/10/2015	(A)
M060	CIRC DPR & DED INT	04/20/2020	(A)
M100	APPROVE DPR	10/12/2020	(A)
M120	CIRC DPR & DED EXT	10/22/2020	(A)
M160	APPROVE FED	02/17/2021	(A)
M200	PA&ED	02/17/2021	(A)
M221	RECEIVE COMPLETE	01/23/2020	(A)
M224	R/W REQTS	02/27/2020	(A)
M225	REGULAR R/W	02/23/2021	(A)
M275	GENERAL PLANS	03/27/2020	(A)
M300	CIRC PLANS IN DIST	02/01/2023	(T)
M311	30% CONST REVIEW	05/01/2021	(T)
M313	60% CONST REVIEW	02/01/2022	(T)
M315	95% CONST REVIEW	04/01/2023	(T)
M377	PS&E TO DOE	05/01/2023	(T)
M378	DRAFT STRUC PS&E	02/01/2023	(T)
M380	PROJ PS&E	07/01/2023	(T)
M410	R/W CERT	07/01/2023	(T)
M430	DCR	07/15/2023	(T)
M460	RTL	08/01/2023	(T)
M470	FUND ALLOCATION	10/01/2023	(T)
M480	HQ ADVERT	10/15/2023	(T)
M490	BIDS OPEN	12/15/2023	(T)
M495	AWARD	01/15/2024	(T)
M500	APPROVE CONTRACT	02/01/2024	(T)
M600	CONTRACT ACCEPT	12/01/2027	(T)
M700	FINAL REPORT	12/01/2028	(T)
M800	END PROJ EXP	02/01/2030	(T)
M900	FINAL PROJ	12/01/2031	(T)

Env	EA, EIR
Capital Cost Estimates (\$k)	
	Amount \$k EST Date
Roadway	49528 03/01/21
Structures	69407 03/01/21
Const Total	118935
ROW	7634 02/02/21
Total	126569
Risk & Operating Expense Budget	
	Risk Bud. (\$k) OE (\$k)
Phase 0 - PAED	\$0 \$0
Phase 1 - PS&E	\$0 \$0
Phase 2 - RW	\$0 \$0
Phase 3 - Con	\$0 \$0
Phase 4 - Con Cap	\$0 \$0
Phase 9 - RW Cap	\$0 \$0
Total	\$0 \$0
Note: For Phase 0, 1, 2 and 3, only enter Risk Budget amount if not already entered in PRSM	

Funding Info (\$k)						
Fund Source	PA&ED	PS&E	ROW	CON	ROW CAP	CON CAP
4050201.110	0	0	0	0	0	0
2010201.110	4974	12000	600	0	0	0
2020201.110	0	0	0	0	2000	0
Total:	4,974	12,000	600	0	2,000	0

Capital Cost Est.(\$k)	
FY Mid M500-M600	2026
CC Escalation %:	3.20%
CC Escalated \$:	139,222
ROW CAPITAL:	7,634
TOTAL:	146,856

PROJECT SUPPORT COSTS (\$k)									
Phase Esc. Rate	PRIOR ACT \$	FY20/21 ETC (0.00%)	FY21/22 (3.20%)	FY22/23 (2.00%)	FY23/24 (2.00%)	FY24/25 (2.00%)	Future (2.00%)	Total	Sup/Cap %
0	4,834	147	0	0	0	0	0	4,980	3.39%
1	0	1,491	4,925	4,656	895	0	0	11,966	8.15%
2	0	39	129	131	38	39	214	590	0.40%
3	0	0	0	0	1,747	4,308	12,564	18,619	12.68%
TOTAL SUPPORT COSTS:								36,155	24.62%
TOTAL PROJECT COSTS:								183,011	

PROJECT SUPPORT PYs									
Division	PRIOR ACT PYs	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs	
03 ENV	0.19	0.00	0.01	0.02	0.00	0.00	0.00	0.23	
03 ESR	0.61	0.01	0.05	0.04	0.01	0.00	0.02	0.74	
03 ADMN	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.09	
03 CONS	0.06	0.06	0.07	0.16	2.48	5.83	19.02	27.67	
03 ENVM	3.26	1.65	5.08	4.50	0.18	0.15	0.89	15.71	
03 ESRV	0.64	0.12	0.30	0.62	0.31	0.10	0.42	2.52	
03 PPM	0.84	0.26	0.18	0.18	0.30	0.47	2.21	4.45	
03 PRJD	4.87	2.05	6.56	5.19	0.05	0.02	0.06	18.81	
03 PROJ	0.00	0.03	0.09	0.09	0.05	0.00	0.00	0.27	
03 RWLS	0.68	0.31	0.97	0.91	0.11	0.09	0.46	3.53	
03 SURV	1.16	0.05	0.16	0.22	0.09	0.09	0.37	2.14	
03 TO3	1.98	0.00	0.00	0.00	0.00	0.00	0.00	1.98	

Programming Sheet with Risk and OE



AMS ID: 0312000054 EA: 03-3F070 COUNTY: SAC ROUTE: 051 POSTMILE: 2/3.5

Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
03 TPLN	0.84	1.35	4.34	4.34	2.56	0.00	0.00	13.43
03 TROP	0.97	0.29	0.92	0.90	0.14	0.06	0.15	3.43
03 TOTALS :	16.15	6.21	18.73	17.17	6.28	6.81	23.60	95.00
Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
59 GS	2.06	0.01	0.05	0.08	0.02	0.03	0.08	2.33
59 METS	0.04	0.00	0.00	0.00	0.42	1.01	2.44	3.90
59 PPM	0.13	0.01	0.04	0.04	0.21	0.01	0.04	0.47
59 SCON	0.06	0.05	0.15	0.22	3.69	8.90	22.28	35.34
59 SDSN	2.68	1.85	5.17	4.69	0.58	0.45	1.38	16.80
59 SP&I	0.36	0.20	0.64	0.58	0.29	0.01	0.03	2.12
59 TOTALS :	5.33	2.12	6.05	5.61	5.21	10.41	26.25	60.96
Division	PRIOR ACT PYS	2021 ETC PYs	2022 ETC PYs	2023 ETC PYs	2024 ETC PYs	2025 ETC PYs	Future ETC PYs	Total ETC PYs
	7.50	0.00	0.00	0.00	0.00	0.00	0.00	7.50
TOTALS :	7.50	0.00	0.00	0.00	0.00	0.00	0.00	7.50
PROJECT TOTALS:	28.98	8.33	24.78	22.78	11.49	17.22	49.85	163.46

Comments: