CTC-0001 (NEW 07/2018)

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 PROJECT BASELINE AGREEMENT

Santa Maria River Bridge Replacement (05-1H440)

	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 Santa Maria River Bridge Replacement (05-1H440),
2.1	effective on,
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 <i>Santa Maria River Bridge Replacement (05-1H440)</i> , 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 <i>Insert Number</i> , "Adoption of Program of Projects for the Active Transportation Program", dated
	Resolution <i>Insert Number</i> , "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 05/13/2020
	Resolution <i>Insert Number</i> , "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

Project Baseline Agreement Page 1 of 3

- 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 <u>Exhibit B</u>. 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

Project Baseline Agreement Page 2 of 3

SIGNATURE PAGE TO PROJECT BASELINE AGREEMENT

Santa Maria River Bridge Replacement (05-1H440)

Resolution SHOPP-P-2021-05B

Just While	02/01/2021
Timothy M. Gubbins	Date
District Director, California Department of Transportation, District 5	
B-Ali	3/4/2021 Date
Toks Omishakin	Date
Director, California Department of Transportation	
Wilch W-	04/05/21
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

22/23

33,880

50,751

Const Capital

Total

BASELINE AGR		_I AIXIIVI	ILIVI OI IIVAIV	OI OINIAIIC	514			Date:	02/01/3	21 08:16:39 AM
District		A	Project	ın	PPNO				_	. 1 00.10.39 AW
			Project						Manager	,
05	1H4	440	05160000		2650			BORDER	S, JUSTIN W	
County	Ro	ute	Begin Postmile	End Postmile		Implementing Agency				
SLO	SLO 1 0.0 0.3 PA&ED		Ca	Itrans						
					PS&E			Ca	ltrans	
					Right of V	Nay		Ca	ltrans	
					Construc	tion		Ca	ltrans	
Project Nicknam	ie									
Santa Maria Rive	r Bridge Rep	lacemen	nt							
Location/Descri	ption									
Near Guadalupe,	at the Santa	Maria R	River Bridge No.	49-0042; als	so in Santa	Barbara Co	unty (PM 50.	3/50.6). Th	e bridge is s	cour critical and
needs to be repla	ced. The exi	sting brid	dge will be used	for traffic ha	andling durii	ng construct	ion and then	demolishe	d. The highw	ay will need to
be realigned as a	result of the	new brid	dge location. Th	e new bridge	e will provid	e standard l	ane and sho	ulder width:	s and include	e a protected
walkway.				_						
Legislative Distr	icts									
Assembly:		35, 37	Sena	te:	17, 19)	Congressional: 24			24
PERFORMANCE	MEASURE	s	•				•			
		Prim	nary Asset	Good	Fair	Poor	New	Total		Units
Existing Cor	ndition	Brid	dge Scour			39826		39826	S	quare feet
		M	litigation							
Programmed (Condition	Brid	dge Scour	39826			26474	66300	OO Square feet	
		M	litigation							_
Project Mileston	es								Actual	Planned
Project Approval	and Environi	mental D	ocument Milest	one					12/09/20	
Right of Way Cer	tification Mile	estone								08/15/22
Ready to List for	Advertiseme	nt Milesto	one							01/03/23
Begin Construction	n Milestone	(Approve	e Contract)							10/02/23
FUNDING (Alloc	ated amoun	ts are sh	haded)							
Component	Fiscal Ye	ear	SHOPP							Total
PA&ED	17/18		2,294							2,294
PS&E	20/21		3,718							3,718
RW Support	20/21		455							455
Const Support	22/23		9,660							9,660
RW Capital	22/23		744							744

33,880

50,751

Date

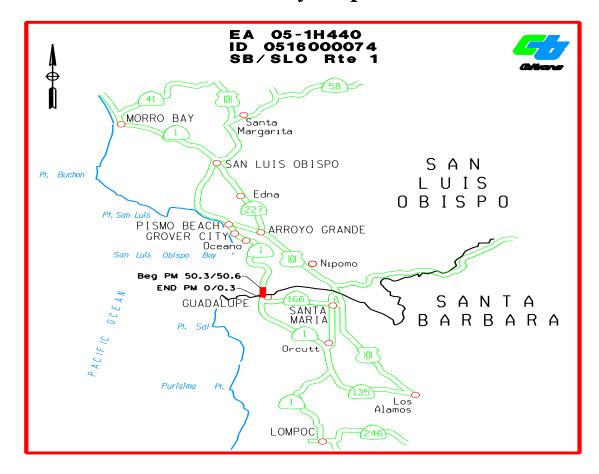
Project Report

To Request Project Approval

On State Route 1 in Santa Barbara and San Luis Obispo Counties At Santa Maria River Bridge (Br. No. 49-0042)

TIMOTHY M. GUBBINS, District 5 Director

Vicinity Map



Project Location Map



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

REGISTERED CIVIL ENGINEER

DATE

Rebecca Franco-Munoz

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05 – SB, SLO - 1 – PM 50.3/50.6, 0.0/0.3 05-1H440 – 0516000074 – PPNO 2650 – TID 9228 20.xx.201.110 – Bridge Rehabilitation and Replacement Program November 2020

1. INTRODUCTION

Project Description:

The project, located on State Route 1 (SR 1) in San Luis Obispo (SLO) and Santa Barbara (SB) Counties in and near Guadalupe (between SB Post Mile (PM) 50.3/50.6 and SLO (PM) 0.0/0.3), proposes to remove and replace the existing 1,200 feet long scour critical Santa Maria River Bridge (49-0042) with a new structure 1,275 feet long immediately adjacent and parallel to the existing structure. The roadway approaches to the new structure would be reconstructed to conform to the existing highway approximately 1,000 feet south and north of the new south and north ends of the new bridge. Utility relocation and right of way will be required.

The preferred alternative generally includes constructing 2-12 feet lanes with 8 feet shoulders throughout the limits of the project. Pedestrian access is being provided along the west side of the roadway via the construction of an American with Disability Act (ADA) compliant sidewalk and the 8 feet shoulder north of the new structure. Bicycles will have access via the 8 feet shoulders. A sidewalk would be constructed on the east side of the roadway from just north of 11th Street to 12th Street to fill in the gap that currently exists. In order to separate turning traffic from through traffic, a left turn lane from southbound SR 1 to eastbound 12th Street would be constructed. The 12th Street intersection would be modified to accommodate the new alignment and the left turn lane.

There have been no changes to the scope of structures work for the preferred alternatives since the Advance Planning Study (APS) was received in July of 2020 during the development of the Project Approval & Environmental Document (PAED).

Table 1

	Table 1					
Project Limits 05-SB, SLO-1						
	PM 50.3/50.6, 0.0/0.3					
Number of Alternatives	1					
	Current Cost Estimate:	Escalated Cost Estimate:				
Capital Outlay Support	\$12,282,000	\$13,027,000				
Capital Outlay Construction	\$29,728,000 \$33,262,000					
Capital Outlay Right-of-Way	\$643,000 \$744,000					
Funding Source	2020 State Highway O	peration and Protection				
	Program (SHOPP) – 201.110 Bridge Rehabilitation					
	and Replacement Program					
Funding Year	2022/23					
Type of Facility	2-Lane Conventional Highway					
Number of Structures	1					
SHOPP Project Output	Existing Deck Area: 39,826 Square Feet (SQ					
	FEET)					
	New Deck Area: 26,47	74 SQ FEET New				
	Proposed Deck Area of	New Bridge: 1 Bridge,				
	66,300 SQ FEET From	Poor to Good (26,474 SQ				
	Feet new)					
Environmental Determination		tal Quality Act (CEQA) –				
or Document		l Negative Declaration (IS-				
	1	onmental Policy Act (NEPA)				
	- Environmental Asses	_				
	Significant Impact (EA-FONSI).					
Legal Description	In Santa Barbara and San Luis Obispo Counties					
	From 0.3 Mile South to 0.3 Mile North of Santa					
D i i D i i i G i	Maria River Bridge					
Project Development Category	4B					

2. RECOMMENDATION

It is recommended that the Project Report (PR) be approved using the preferred alternative (replacing the structure) and that the project proceed to the next phase.

The City of Guadalupe has been consulted with respect to the recommended plans. Their views have been considered, and the local agencies are in general accord with the plan as presented.

3. BACKGROUND

Project History

A Structure Maintenance and Investigations (SM&I) Bridge Maintenance Strategy Meeting was convened on February 6, 2017 (Attachment P). It was recommended that the bridge be replaced. This bridge has a National Bridge Inventory Item 113 Code of 3 and found to be scour critical. (See Structure Maintenance and Investigation Report- Attachment Q). Bridge foundations were determined to be unstable for calculated scour conditions and several piers would not have sufficient pile bearing capacity during a 100-year flood event (Hydraulic Report and Scour Plan of Action, Attachment O). This bridge has a sandy bed material, braided low flows, with an unstable channel subject to debris build up and potential liquefaction.



Two-foot scour hole at Pier 8, debris build-up and skew.

In addition to the scour criticality, the bridge exhibits significant deck and soffit distress. Numerous soffit spalls with exposed rusted rebar, spalls with efflorescence and rust staining leaching from nearly all the construction joints along the closure pour between the precast "T" girders. Historical concrete cores taken from the deck and pier walls tested positive for Alkali Silica Reactivity (ASR). ASR is a chemical reaction between the alkali hydroxides in the pore solution of concrete and certain forms of reactive silica minerals occurring in some aggregates. The reaction product, an alkali-silica gel, will absorb water and swell if the concrete is in a moist environment. The swelling of the gel can lead to expansion and cracking of the concrete. Deck cores also resulted in chloride levels ranging from 1.98 to 7.85 pounds per cubic yard. A chloride content of greater than 3.0 pounds per cubic yard indicates active corrosion.



Typical soffit distress with exposed rusted rebar.



Exposed and corroded rebar in closure pour between "T" girders

The Santa Maria River Bridge was built in 1955 and will be 68 years old by the time of project delivery in 2023. However, it's important to note that a bridge doesn't have an expiration date as the service life depends on many factors including quality of construction, site location and frequency of preventative maintenance. This bridge also has nonstandard steel baluster bridge railing on both sides of the structure.



Image showing baluster bridge railing and spalling concrete

The project was originally programmed as a Long Lead in the 2018 SHOPP to be funded by the Bridge Rehabilitation and Replacement Program (201.110). A Project Initiation Document, Project Study Report – Project Development Support (PSR-PDS) was prepared and subsequently approved on June 22, 2017. Work on the Project Approval & Environmental Document (PA&ED) phase of the project began in July of 2018.

Community Interaction

Multiple community engagement activities have been conducted in the community of Guadalupe regarding transportation needs which included input regarding the Santa Maria River Bridge. The City of Guadalupe, during development of the Guadalupe Mobility Revitalization Plan (2020), met with Caltrans project managers, Design and Planning staff to discuss current and future projects within the City of Guadalupe. Community engagement efforts also included a community survey and virtual workshop conducted in 2020 by Caltrans staff and the City regarding complete streets needs along SR 1 within the city limits. Caltrans is also participating in community engagement efforts coordinated by other agencies regarding the Guadalupe Dunes Trail, Northern Santa Barbara Interim Coastal Trail Study, and Santa Maria River Levee trail.

The City of Guadalupe has finalized their Guadalupe Mobility and Revitalization Plan (March 2020). The Transportation Planning Scoping Information Sheet (TPSIS) that was included with the Project Initiation Document (PID) and is updated and included in the Project Report. See Attachment K.

Existing Facility

Within the limits of the project, SR 1 is a two-lane conventional highway that consists of two 12-feet lanes and shoulders that varies from 4 feet to 14 feet at the southern end to 0 to 2 feet at the northern end. The existing right of way width varies greatly within the project limits with the width typically 80 feet within the City of Guadalupe and ranging from 256 feet down to 65 feet in the rural portions of the project.

The Santa Maria River Bridge (Bridge Number 49-0042) is a two-lane structure with two 12- feet lanes and two 2 feet shoulders with steel baluster bridge railing. The bridge is a slab type structure with twenty-three bent / column supports that runs 1,203 feet. in length. The structure begins at the south bank of the Santa Maria River in Santa Barbara County and ends at the north bank of the river in San Luis Obispo County.

A levee, permitted and operated by the Army Corps of Engineers, runs along the south side of the river on the mountain side of the highway ending at the south end of

the Santa Maria River Bridge.

4. PURPOSE AND NEED

Purpose:

The purpose of the project is to restore the structural integrity of the Santa Maria River Bridge to ensure the serviceability of SR 1.

Need:

The Santa Maria River Bridge (Br No. 49-0042) is scour critical and has a history of Alkali Silica Reactivity (ASR) as documented in the Bridge Maintenance Fact Sheet (Attachment P). Based on the recommendation of the Bridge Maintenance Fact Sheet, Structure Replacement and Improvement Needs Report (STRAIN) and Bridge Inspection Reports (BIR), replacement of Santa Maria River Bridge is required.

A. Problem, Deficiencies, Justification

The existing SR 1 is a 2-lane conventional highway that was built in 1955. SR 1 deficiencies include nonstandard cross slopes at the north and south end of existing Route 1 where we will conform. Other deficiencies include non-standard shoulder width, and side slopes.

Table 2 below lists the existing shoulder widths and the proposed shoulder widths of SR 1 where shoulder is nonstandard.

Table 2
SR 1 Existing and Proposed Shoulder Widths

LOCATION	PM	STATION	Existing Shoulder Width (feet)		Shot Wi	osed alder dth et)	Impact Type
			SB*	NB*	SB	NB	
11th Street		10+00 to 12+25.90	4	8	4	8	1, 2, 4

Impact Type 1. Earthwork Impact/Costs

- 2. Right of Way (ROW) Impacts/Costs
- 3. Structure Impacts/Costs
- 4. Environmental Impacts/Costs *Southbound (SB), Northbound (NB)

State Planning

The ultimate route concept for Route 1 is to widen non-standard lanes and shoulders; add passing lanes and turn-outs; add channelization for turns; improve local circulation in the City of Guadalupe; provide separated railroad crossing on SR 166 or parallel alignment in Guadalupe and widen Santa Maria River Bridge.

Regional and System Planning

SR 1 is a north-south route that begins in Capistrano Beach in Orange County and runs intermittently up the State of California where it ends at SR 101 in Leggett in Mendocino County. In Santa Barbara and San Luis Obispo Counties it is primarily a two-lane conventional highway that lies within mostly agricultural land. In and near the project, SR 1 runs through agricultural land except at the south end where the roadway lies within the northern limits of the City of Guadalupe.

Within the project limits, SR 1 is classified as Conventional Highway. The latest Transportation Concept Report (TCR), prepared in 2019, for SR 1 in District 5 indicates that this area is functionally classified as rural and a Major Arterial. In long stretches, for example, a few miles north and south of the Santa Barbara/San Luis Obispo County line, the route is a Minor Arterial. The route designations are Interregional Road System, California Legal Truck Network, and Pacific Coast Bicycle Route. Within the City of Guadalupe, a disadvantaged community, SR 1 serves as "Main Street" and has Class II bicycle lanes, is a route for local and regional transit service, and the downtown AMTRAK station is accessed from SR1.

This project is consistent with the Transportation Concept Report 2019. It recommends that the bridge project increase shoulder widths where needed, including on bridge crossing to improve motor vehicle, bicyle and pedestrian operations and safety. The project scope is also consistent with the City of Guadalupe's 2020 Mobility and Revitalization Plan. It addresses the city's vision for improved multimodal transportation in this vicinity. Extensive community engagement activities were conducted during development of the Plan which was funded by a Caltrans Sustainable Transportation Planning Grant. Caltran's District 5 staff participated in community engagement activities.

The City of Guadalupe's 2020 Mobility and Revitalization Plan identifies the need to fill gaps in the pedestrian and bicycle network, improve the safety and comfort of all users that encourages walking and bicycling, and increase connectivity, mobility and accessibility within the community of Guadalupe to key destinations along and near the downtown corridor including businesses, restaurants, AMTRAK station, transit stops, local schools, community parks, and City government offices.

This plan did extensive outreach effort to get massive input from the community including Advisory group meetings, walking and design work shops, focus meetings, concept presentation, business interviews, and community meeting Workshops. With the help of the community these important improvements were identitied:

- Ensuring local connectivity.
- Expanding pedestrian/bike infrastructure.
- Addressing safety concerns.
- Guiding truck access and circulation.
- Curb extensions, at intersections to improve pedestrian safety.
- Lighting improvements including increased number and improved quality of light, especially in Downtown to promote pedestrian and vehicle safety.
- Narrower travel lanes, to slow traffic but not encumber farm vehicles.
- Buffered bike lanes on opposite sides of street or other dedicated, buffered bicycle facility to promote bicycle safety

The City strongly supports the addition of all those improvements as they further the community goals identified in the planning documents to enhance connectivity and mobility options between neighborhoods and the historic town center

The City of Guadalupe is a goods movement hub on the central coast and is a center for agriculture, manufacturing, trucking, warehouse and storage. SR 1 is utilized for the transport of goods out of the region by truck.

SR 1 in this area is part of the California Coastal Trail as well as the Pacific Coast Bike Route.

Local Planning

Planning studies including the City of Guadalupe Bicycle & Pedestrian Master Plan (2014) and the Guadalupe Mobility Revitalization Plan (2020) all demonstrate the need for connectivity and access to bike and pedestrian infrastructure to be incorporated into this bridge project.

In addition, the community of Guadalupe has expressed the need for connectivity and safe access to bike and pedestrian infrastructure. Approximately 500 new homes are being constructed in a new development at the south end of town, resulting in significant population growth for this disadvantaged community.

CONNECTIVITY: Note that bicycle and pedestrian access to and across the bridge will link to and create important connectivity to the community of Guadalupe and the future Santa Maria River levee trail which is currently in

development by the County of Santa Barbara. Directly adjacent to this project and to south of the bridge, the Guadalupe ADA project (05-1E030) is in development with a RTL date of May 2024, that will construct pedestrian improvements, add buffered bicycle lanes and transit stop improvements as well as other improvements.

The preferred alternative is compatible with local plans. The pedestrian walkway and the bicyclist path on the bridge reduces the reliance on automobile travel which reduces air pollution.

Traffic

Current and forecasted traffic volumes along with collision data has been collected for this project. This data is presented below.

Current and Forecasted Traffic

The Design Hourly Volume (DHV) Total and the Annual Average Daily Traffic (AADT) is shown below in Table 1.

TABLE 3 DESIGN DESIGNATION AND TRAFFIC INDEX (TI)

	Year 2017	Year 2035	Year 2045
Annual Average Daily Traffic (AADT)	6,500	7,826	8,190
Design Hour Volume (DHV)	810	933	1,000
Peak Hour Directional Vol % (NB/SB)	47.1/52.9	48.6/51.4	47.7/52.3
Truck Design Hourly Vol % (T)	11	11	11
Traffic Index (TI)	9	10	10.5
Design Speed (NB/SB) (mph)	55/30	55/30	55/30

^{*}Northbound (NB), Southbound (SB), miles per hour (mph)

TRUCKS IN ADT: 7.0% 10 YEAR TI: 8.5 DESIGN SPEED (V): 55/30 MPH 20 YEAR TI: 9.5

Collision Analysis

The following Collision Rate Summary Table shown below shows actual and average collision rates within the project location for the three-year period from January 1, 2016 thru December 21, 2018. The 'actual' collision rate in this segment is lower than the state 'average' for this type of facility. There was 1 reported collision during this three-year period. This collision was a rear end accident near PM 50.5 resulting from an obstruction on the roadway.

The data from the 3-year collision history indicate that the nonstandard side slopes did not contribute to any collisions.

There is no recognizable or correctable trend when reviewing the 3yr collision history.

Table 4

Collision Rate Summary for SB/SLO -1 PM 50.3/50.6, 0.0/0/3 Table B Dates: 01/01/2016 thru 12/31/2018								
		Actual			Averaş	ge		
Locatio	Location		Fatal Fatal + Total Fatal Fa			Fatal	Total	
			Injury			+		
						Injury		
SB/SLO	SR 1	0.00	.31	0.31	0.022	0.51	1.10	

^{*} The numbers in the table are units of collisions per million vehicle miles

5. ALTERNATIVES

Four alternatives, including the no-build alternative, were considered for this project.

These alternatives are discussed below.

5A. Viable Alternatives

The Build Alternative is the structure replacement alternative. The new bridge would be 1,275 feet in length and would be constructed immediately adjacent and parallel to the existing structure. The top deck elevation would be raised approximately 2 feet to accommodate a new profile and a deeper girder section required due to the 100 foot span and (the current span is 50 feet). The roadway approaches to the new structure would be reconstructed to conform to the existing highway approximately 1,000 feet south and north of the new south and north ends of the new bridge.

The scope of work for this alternative generally includes constructing 2-12 feet lanes with 8 feet shoulders throughout the limits of the project. To provide pedestrian access, the project will construct an ADA compliant sidewalk on the west side of the roadway, from just north of 11th Street to the south end of the structure (approximately 850 feet of new sidewalk). A sidewalk would be constructed on the east side of the roadway from just north of 11th Street to 12th Street to fill in the gap that currently exists (approximately 205 feet of new sidewalk). Pedestrians would cross the structure via an 8 foot wide walkway separated from traffic by a concrete barrier. An 8 feet shoulder will provide pedestrian access from the north end of the structure to Thornberry Ave. Bicycles would have access via the 8 feet shoulder. On the east side of the bridge a concrete barrier with bicycle railing is proposed.

To separate turning traffic from through traffic, a left turn lane from southbound SR 1 to eastbound 12th Street would be constructed (Traffic Operations concurs with the left turn lane). The 12th Street intersection would be modified to accommodate the new alignment and the left turn lane.

There were no proposed changes or mitigating features in the project design resulting from the comments received from circulation of the environmental document.

No-build Alternative

The No-build alternative would maintain the existing facility in its present deteriorated condition. The no-build alternative does nothing to address the scour criticality, superstructure and substructure deficiencies of the bridge. The bridge would continue to deteriorate and require an increased maintenance effort to maintain the structure and keep it functionally operational. The no-build alternative would not involve any construction activity.

The Design Standard Decision Document was not required for this project since all proposed design features will be made standard within the project limits.

5B. Rejected Alternatives

Alternative 1

Alternative 1 rehabilitates the existing bridge by replacing the existing girders and railing and modifying the piers as necessary to accommodate the new superstructure. First, it had the greatest bridge construction cost (See Attachment D). And second, although this alternative would address the maintenance issues with the superstructure, it would not address the scour criticality and would not rehabilitate the substructure for Alkali Silica Reactivity (ASR) and chlorides as recommended by the Bridge Maintenance Fact Sheet.

Alternative 2

Alternative 2 replaces the bridge on the same alignment. Although this alternative would address all the structural concerns for the bridge and is comparable in cost (See Attachment D) to the "build" alternative, it would have long term traffic impacts associated with it. This alternative required that one of the two lanes of traffic on the bridge be permanently closed during the duration of construction and that a temporary signal be located at the beginning of construction within the city limits of Guadalupe and one at the end of construction zone near Thornberry Road. This alternative was determined to produce queuing issues with the City of Guadalupe that would impact goods movement and the traveling public for the duration of the project, a minimum of three years.

05-1H440

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

The proposed project is anticipated to contain the following identified hazardous waste issues that could affect the project. The project issues that are identified are routine construction issues that are handled in the construction contract through inclusion of standard provisions.

Aerially deposited lead (ADL) may be an issue on this project. An Aerially Deposited Lead (ADL) study would be performed before final Plans, Specifications and Estimate (PS&E) to evaluate exposed soil for the presence or lack of regulated or hazardous concentrations of lead.

Treated Wood Waste (TWW) is presumed to be hazardous waste and must be managed appropriately when it is removed and disposed of. If yellow traffic stripe in this segment is found to contain lead, it must be managed appropriately when removed and disposed of. Additional studies will be conducted as more project details are available.

The existing bridge will have to be inspected for Asbestos Containing Materials (ACM) and Lead Containing Paint (LCP).

6B. Value Analysis

A Value Analysis will be required for this project. It will be done in the beginning of the PS&E phase.

6C. Resource Conservation

Water conservation is encouraged if the project is constructed in a drought affected area. Temporary fencing could be employed to prevent unnecessary access or unintended impacts to biological resources that are near the work and that warrant protection.

6D. Right-of-Way Issues

Right of way acquisition is required. An additional 2.54 acres of permanent right of way and 0.27 acre of Temporary Construction Easement (TCE) would be needed for this project.

The project would require right of way acquisition from farmland in possession of Williamson Act contract.

The project is not anticipated to result in relocations because the proposed new right of way acquisition would not result in relocation.

Utility relocation is required. Gas lines, electrical power lines, cable, communication lines and telephone power poles need to be relocated. Utilities on the bridge will be located onto the new bridge. The Right-of-Way Data Sheet and biological mitigation estimate are included in Attachment G.

The Southern Pacific Railroad has tracks that run parallel to SR 1 approximately 900 feet to the east of the project location. This project would have no impact to the railroad and no railroad involvement is anticipated.

6E. Environmental Compliance

A proposed Initial Study with Mitigated Negative Declaration (IS-MND) has been prepared for this project under the California Environmental Quality Act (CEQA) and an Environmental Assessment with Finding of No Significant Impact (EA-FONSI) and under the National Environmental Policy Act (NEPA). See Attachment H.

6F. Air Quality Conformity

The project is divided into San Luis Obispo and Santa Barbara Counties. Santa Barbara County is in attainment for all Federal Standards. San Luis Obispo County is in attainment for all Federal Standards except for the eastern portion of the county which is in non-attainment for Federal Ozone Standards. More specifically, the project is located in the western portion of San Luis Obispo County; therefore, conformity requirements do not apply to the project.

6G. Title VI Considerations

The proposed project would not adversely affect any low mobility or minority populations. The new sidewalks would meet ADA standards and would facilitate mobility within this portion of the Guadalupe community.

6H. Noise Abatement Decision Report

Noise abatement was not warranted for this project; therefore, a separate noise

abatement study was not conducted.

6I. Storm Water Compliance

This project is anticipated to have approximately 10.5 acres of Disturbed Soil Area (DSA) requiring implementation of a Storm Water Pollution Prevention Plan (SWPPP). Permanent BMP's are not required for this project since the new impervious surfaces (NIS) is under 1 acre. If the scope of the project changes, and the NIS is over 1 acre then permanent Best Management Practice's (BMP's) will be required.

There is a significant amount of trash in the project area; therefore, it is proposed to add risers or screens to stormwater outlets to capture trash where it's needed and meet new requirements regarding the discharge of trash from our right of way.

A copy of the signed cover sheet of Storm Water Data Report is included as Attachment I.

6J. Highway Planting and Irrigation

There are no irrigation facilities within the project limits and vegetation is naturally occurring consistent with the Santa Maria River riparian habitat. Existing vegetation near the roadway is in poor condition. Native habitat that is removed for construction and access will be restored as per the environmental permits and consistent with the visual impact assessment. Permanent erosion control including native seeding is proposed to stabilize disturbed soil. Street tree planting and other ornamental planting will be proposed in coordination with the City of Guadalupe and other local jurisdictions. Temporary irrigation with a one-year plant establishment period is proposed. Plants will be watered for one year using a temporary irrigation system supplied by a water tanker truck.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

A public hearing date was not offered to the public and the public did not request a public hearing due to Covid-19. The Draft Environmental Document public circulation period was extended for an extra two weeks to maximize the time for public input during the Covid-19 pandemic. None of the comments requested that a public hearing be held for the project. However, more extensive coordination with the local authorities will need to be held during Plans, Specifications and Estimates (PS&E) to make up for the local's lost opportunity of a public hearing.

Route Matters

The existing conventional highway status will not be modified by this project.

Permits

The following permits, licenses, certifications and/or agreements are expected to be required for this project prior to construction:

U.S. Army Corps of Engineers – Section 404 Nationwide Permit for impacts to Waters of the U.S.

U.S. Army Corps of Engineers – Section 408 Alteration of Civil Works Permit for alteration to existing U.S. Army Corps of Engineers public works project

U.S. Fish and Wildlife Service – Section 7 consultation for threatened and endangered species review

National Marine Fisheries Service – Section 7 consultation for threatened and endangered species review

Regional Water Quality Control Board – Section 401 Certification for impacts to Waters of the U.S.

California Department of Fish and Wildlife – Section 1602 Streambed Alteration Agreement for impacts to streams under jurisdiction

California Transportation Commission – Project Funding Approval

Cooperative Agreements

There will be maintenance agreements and cooperative agreements with the City of Guadalupe for the proposed street tree planting and complete street features.

Other Agreements

A Project Specific Maintenance Agreement (PMA) with San Luis Obispo County as well as with Santa Barbara County regarding the maintenance of the sidewalk/pedestrian walkway (surfacing, cleaning including graffiti, etc.) on the new structure will be implemented during PS&E. Caltrans will be pursuing a separate city-wide Landscape Maintenance Agreement (LMA) with the City of Guadalupe in a separate American Disability Act (ADA) project that proposes to improve mobility/accessibility along the SR 1 corridor throughout downtown Guadalupe by bringing ADA ramps to standard. The LMA will include responsibility for maintenance and upkeep of the small sections of sidewalk being constructed within the City of Guadalupe as part of this project.

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Report on Feasibility of Providing Access to Navigable Rivers

There are no navigable waters as defined by the Army Corps of Engineers in the project area.

Public Boat Ramps

There are no public boat ramps that would be affected by the project.

Transportation Management Plan

A Transportation Management Plan (TMP) has been developed for this project and is included as Attachment J. Significant delays are not anticipated due to the low traffic volumes.

Stage Construction

The project proposes to construct the replacement bridge on a new alignment in two stages. The existing bridge would be maintained for traffic use during the first stage of construction and would be demolished in the second stage.

The first stage of construction involves constructing the new roadway alignment and approximately two thirds of the new structure immediately adjacent and parallel to the existing structure. For this stage, the full width of the existing structure would be maintained for traffic. Once this is completed, traffic would be shifted to the new alignment and Stage 2 would begin. Included in Stage 2 is the removal of the old structure and the completion of the remaining widening of the new structure.

It is anticipated that one-way traffic control would be utilized during the work to transition traffic to the new alignment and during the various paving operations.

It is also anticipated that there would be two locations for access to the river bottom during construction. One is located on the west side of the roadway approximately 700 feet south of the existing bridge. This access road would remain in the State Right of Way throughout its length. The second access location is on the east side of the roadway approximately 500 feet north of the existing structure and would also be inside State Right of Way (RW) (newly purchased). This location requires considerable tree removal and earthwork to facilitate the access road.

Accommodation of Oversize Loads

SR 1 is classified as a conventional highway and expressway and the Surface Transportation Assistance Act (STAA) was used for the design vehicle for the design of SR 1.

Graffiti Control

The majority of SR 1 within both Santa Barbara and San Luis Obispo Counties is located in predominantly rural countryside and therefore the highway facilities are not subject to frequent graffiti. The portion of the Route in the vicinity of the project, including the structure that crosses over the Santa Maria River, however, is located at the north end of the City of Guadalupe and that structure has been prone to a significant amount of graffiti. The existing structure is supported on 23 pier walls each approximately 34 feet wide. These flat smooth walls are all covered in graffiti.

The proposed new structure would be subjected to less graffiti due to the type of support system used to hold up the bridge. The new bridge would be constructed on top of round 4 feet diameter columns instead of the flat pier wall type support system. It is anticipated that these support columns would be subjected to less graffiti than the existing support system due to the reduction in surface area.

Asset Management

Within the project limits all assets inside the state right of way would be new.

As a Bridge replacement, this project includes anchor performance measures from four Bridge Asset classes, as well as pavement, drainage, and Complete Streets elements. This project's performance objectives are consistent with the Transportation Asset Management Plan and the Pipeline Performance commitments. The project performance measures are included in Attachment M.

Complete Streets

Bicycling is common along SR 1 throughout most of its length in both Santa Barbara and San Luis Obispo Counties as bicyclist share the road with motor vehicles. SR 1 is part of the Pacific Coast Bike Route. The proposed improvements associated with this project are multimodal. The scope of work for this alternative generally includes constructing 2-12 feet lanes with 8 feet shoulders throughout the limits of the project. The 8 feet shoulders would provide for bicycle travel outside of the traveled lane. To provide pedestrian access, the project will construct an ADA compliant sidewalk on the west side of the roadway, from just north of 11th Street to the south end of the structure (approximately 850 feet of new sidewalk). A sidewalk would be constructed on the east side of the roadway from just north of 11th Street to 12th Street to fill in the gap that currently exists (approximately 205 feet of new sidewalk). Pedestrians would cross the structure via an 8 foot wide walkway separated from traffic by a concrete barrier. An 8 feet shoulder will provide pedestrian access from the north end of the structure to Thornberry Ave. Bicycles would have access via the 8 feet shoulders. On the east side of the bridge a concrete barrier with bicycle railing is proposed.

The Project Development Team met and conducted a site visit with Shannon

Sweeney, City of Guadalupe Public Works Director and City Engineer, to discuss the project and specific complete street improvements. These potential improvements included: striped class II bike lanes leading to the bridge, landscaping, creating a new opportunity for a gateway, and a vista point with wayfinding signage at the sidewalk approaching the bridge and a bike repair station. These potential improvements will be considered further in the PS&E phase.

The City of Guadalupe has finalized their Guadalupe Mobility and Revitalization Plan (March 2020). The Transportation Planning Scoping Information Sheet (TPSIS) included in the Project Initiation Document (PID) was updated and is included in the Project Report. (See Attachment K)

The proposed improvements would not create an impediment to any mode of travel or limit future improvements. A Complete Streets Checklist is included as Attachment L.

Climate Change Considerations

Sea level adaptation measures are not needed for the project because the area is not vulnerable to sea level rise. The elevation of the project is approximately 80 feet above mean sea level. The bridge is inland approximately 4 miles and tsunami models only predict inundation in that region to potentially extend only about 1 mile in from the coast line.

Compost applied to the roadside increases the rate at which carbon dioxide is removed from the atmosphere and converted to plant material and soil organic matter. The net greenhouse gas benefit from applying compost to the roadside can be calculated by using the compost calculator developed by the California Air Resources Board. Additionally, proposed tree planting will also reduce greenhouse gases if desired by the City.

Broadband and Advance Technologies

Caltrans may provide partnering opportunities in planned transportation projects with Wired Broadband Stakeholders to incorporate wired broadband within the State highway right of way. Broadband stakeholders have not contacted Caltrans regarding installing conduits for wired broadband within the project limits.

Salvage and Recycled Material

Asphalt grindings can be incorporated into shoulder backing in approved locations (away from waterways) or recycled at an asphalt plant. The contractor is encouraged to recycle any reusable materials such as steel from guardrail, bridge railing, aluminum from signs, and asphalt grindings.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

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

Programming

The current construction cost estimate for the perferred alternative is \$29,728,000 (October 2020). The current escalated Construction Capital estimate is \$33,262,000. The current escalated Right of Way Capital estimate is \$744,000. The project was initiated in the 2018 State Highway Operation and Protection Program (SHOPP) and is currently programmed in the 2020 SHOPP for delivery in the 22/23 fiscal year funded by the Bridge Preservation, Bridge Rehabilitation and Replacement Program (201.110). The programmed amounts in the table below covers the current escalated Capital and Support cost estimates.

Fund Source							
20.XX.201.110	17/18	18/19	19/20	20/21	21/22	22/23	Total
Component		In	thousar	nds of do	llars (\$1,	000)	
PA&ED Support	2,294						2,294
PS&E Support				3,517			3,517
Right-of-Way Support				455			455
Construction Support						9,660	9,660
Right-of-Way						744	744
Construction						33,880	33,880
Total	2,294			3,972		44,284	50,550

The support cost ratio is 46.0%. This began as a long lead project with the Right of Way and PA&ED support costs programming escalation rates of 5% per year to the beginning of the phase opening date. The programmed PS&E and Construction support cost were escalated at 3.2% until Fiscal Year 20/21 and 2% annually beyond. The Construction capital is escalated at 3.2% annually to the midpoint of the construction season.

Estimate

An 11-page construction capital cost estimate has been prepared for this project and has been included in this document as Attachment F.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	10/3/2017	Actual
BEGIN ENVIRONMENTAL	M020	3/2/2018	Actual
CIRCULATE DPR & DED EXTERNALLY	M120	5/21/2020	Actual
PA & ED	M200	12/11/2020	Target
BEGIN STRUCTURE	M215	1/14/2021	Target
PS&E TO DOE	M377	6/14/2022	Target
DRAFT STRUCTURES PS&E	M378	5/2/2022	Target
PROJECT PS&E	M380	11/10/2022	Target
RIGHT OF WAY CERTIFICATION	M410	8/15/2022	Target
READY TO LIST	M460	1/3/2023	Target
HEADQUARTERS ADVERTISE	M480	7/21/2023	Target
AWARD	M495	10/2/2023	Target
APPROVE CONTRACT	M500	10/2/2023	Target
CONTRACT ACCEPTANCE	M600	2/11/2027	Target
END PROJECT EXPENDITURES	M800	3/29/2028	Target
FINAL PROJECT CLOSEOUT	M900	1/30/2030	Target

10. RISKS

A risk register has been developed by the Project Development Team. The primary risks are discussed below.

Permits from regulatory agencies could be delayed due to additional mitigation measures required for this project. This would create a delay in schedule and or increase in cost.

If the project is not programmed on time, the project schedule would be delayed.

There could be a potential conflict between the proposed work, the work window time frame allowed in the Santa Maria River and the bird nesting season. This would again delay the schedule and or increase the cost of the proposed project.

The Project's Risk Assessment developed by the Project Development Team is included as Attachment E.

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11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

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

Consultation with the Native American Heritage Commission and various Native American tribes was conducted for this project. As part of consultation, letters describing the project and a request for comment and information on Native American concerns were sent on December 19, 2018.

No responses have been received to date. In addition, no tribal cultural resources have been identified in the project area and none are expected to be found. (Cultural Resource Review, September 23, 2019)

The project requires the following coordination:

The following is a list of entities that Caltrans will need to coordinate with on this projects.

US Army Corps of Engineers

Department of the Army Permit for:

Clean Water Act Section 404

Levee Modification Permit Section 408

Rivers and Harbors Act of 1899 Section 9

Rivers and Harbors Act of 1899 Section 10

General Permits (Regional Permit, Nationwide Permit or Programmatic Permit) Standard Permits (Individual Permit or Letter of Permission) Section 9 Permit

California Department of Fish and Wildlife
California Fish and Game Code Section 1602
Lake or Streambed Alteration Agreement

Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification

<u>California Department of Conservation</u> Williamson Act

12. PROJECT REVIEWS

Scoping team field review		Date <u>1/22/18</u>
Scoping team field review attendance roa	ster attached.	
District Program Manager	Kelly McClain	_Date 2/14/20
Headquarters SHOPP Program Advisor	Diana Campbell	_Date 2/7/20
District Maintenance	Steve Talbert	_Date 2/11/20
Headquarters Project Delivery Coordina	tor <u>Paul Gennaro</u>	_Date 8/2020
Project Manager	Justin Borders	Date <u>12/10/19</u>
FHWA n/a		
District Safety Review	Steve Talbert	Date 2/11/20
Constructability Review		

13. PROJECT PERSONNEL

Name	Title/Office	Phone
Justin Borders	Project Manager	805-542-4718
Kelly McClain	Program Advisor	805-549-3278
Scott Shaver	Design Manager	559-230-3118
Rebecca Franco-	Project Engineer	559-243-3528
Munoz		
Madhwesh	Senior Bridge Engineer	916-227-9531
Raghavendrachar		
Hana Mengsteab	Transportation Planner	805-835-6520
Matt Fowler	Senior Environmental Planner	805-542-4603
Geramaldi Geramaldi	Associate-Environmental	805-542-4785
	Planner	
Marshall Garcia	Office Chief Right of Way	805-549-3471
Patrick Stimson	Senior Construction Engineer	805-348-3197
Roger Barnes	Manager, Traffic Operations	805 549-3473
Hallie Holden	Traffic Management Plan	805-549-3216
Scott Dowlan	Senior Landscape Architect	805-542-4750
Pete Riegelhuth	Storm Water Coordinator	805-549-3375
Tom Fisher	Senior Hydraulic Engineer	559-243-3498
Ben Erchul	Hydraulic Engineer	805- 549-3391
Jimmy Ochoa	SHOPP Tool Coordinator	805-549-0209

14. ATTACHMENTS (Number of Pages)

- A. Location Map (1)
- B. Typical Cross Section (5)
- C. Layouts (3)
- D. Advance Planning Study (4)
- E. Risk Register (4)
- F. Cost Estimates (10)
- G. Right of Way Data Sheet (4)
- H. Final Environmental Document (251)
- I. Storm Water Data Report Cover Page (1)
- J. Transportation Management Plan (1)
- K. Transportation Planning Scoping Information Sheet (15)
- L. Complete Streets (2)
- M. SHOPP Tool Performance Printout From Programming Section (1)
- N. Scoping Team Field Review Attendance Roster (1)
- O. Hydraulic Report (12)
- P. Bridge Maintenance Strategy Fact Sheet (Feb. 6, 2017 meeting notes) (4)
- Q. Structure Maintenance and Investigations Report (28)

15. DISTRIBUTION LIST (No. of Copies)

Project Manager
Traffic Operations
Traffic Management
Traffic Safety
Traffic Design
Traffic Electrical Design
Asset Management
Dustin Borders
Roger D. Barnes
Dario A. Senor
Mohammed Qatami
Ali Bakhdoud
Darron Hill

Asset Management Darron Hill
Electrical Systems Julie M. Gonzalez
HQ Maintenance-Concrete Pavement Leonardo Mahserelli

Utility Engineering Workgroup (UEW)

Brian Fuller

OCER Martin Nishikawa
Landscape Architecture Scott Dowlan
Material Engineering Glenn Johnson
Geotechnical Sugnro Cho

Environmental Planning

Maintenance (Pavement/Bridge)

Maintenance

Berkeley Lindt

Hazardous Waste Karl Mikel Hydraulics (D-6) Tom Fisher

PROJECT REPORT

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

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Right of Way Project Coordinator

Right of Way Utilities

Surveys

Nick Tatarian

Surveys Nick Tatarian
Advance Planning Garin Schneider & Jimmy Ochoa

Transportation Planning
HQ Project Coordinator
CR Design Liaison
Patricia Scrivner
Structures DES Technical Design Liaison
Michael Downs

CR Design Liaison Patricia Scrivner
Structures DES Technical Design Liaison Michael Downs
Structures DES Project Liaison Engineer Andrew Tan
Structures – Construction South Andy Gill

Construction – Review Coordinator (2 Copies)

Rae Holmes

Maintenance Storm Water

Juniper Karl

Storm Water Pete Riegelhuth
PPM (Scanned electronic copy) Linda Araujo
Surveys (Electronic Copy) Jeremy Villegas

District Records (Electronic copy)

Pat Duty