

# Small Capital Value Project Project Initiation Document To Request Programming in the 2016 SHOPP

PROJECT LOCATION: State Highways in San Luis Obispo and Santa Barbara Counties

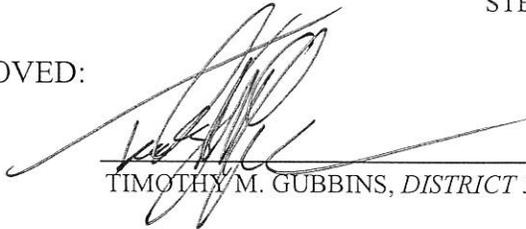
APPROVAL RECOMMENDED:

  
DEB LARSON, DISTRICT PROGRAM ADVISOR

APPROVAL RECOMMENDED:

  
STEVE DIGRAZIA, PROJECT MANAGER

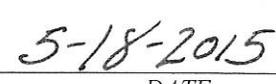
APPROVED:

  
TIMOTHY M. GUBBINS, DISTRICT 5 DIRECTOR

  
DATE

This project initiation document 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



## 1. INITIATING OFFICE/INITIATOR

The Program Manager for the Highway Safety Improvement Program has established that a project is needed that meets the qualification for the Collision Severity Reduction Program (Program Code 201.015).

This Project Initiation Document provides conceptual approval of the proposal and a recommendation to program the project into the current State Highway Operation and Protection Program. A project report will serve as final approval of the proposal.

## 2. PURPOSE AND NEED

### **Purpose:**

Advance warning signs provide road users of unexpected conditions on or adjacent to the roadway that might not be readily apparent. This project proposes to replace existing, replace/supplement existing, and/or place horizontal alignment signs (curve warning signs) in new locations where necessary on all State Routes in San Luis Obispo and Santa Barbara Counties so that they comply with California Manual on Uniform Traffic Control Devices (CA MUTCD) 2012, Table 2C-5.

### **Need:**

A need for this project was identified through the Division of Traffic Operations, Office of Performance, Highway Safety and Operational Improvement Program (HSOIP) process by District Traffic Safety staff and concurrence was received from the Division of Traffic Operations, Office of Traffic Safety Program. It is possible that all existing horizontal alignment signs in San Luis Obispo and Santa Barbara Counties may not meet the requirements of the CA MUTCD 2012, Table 2C-5. The CA MUTCD 2012, in compliance with Federal MUTCD, requires that all horizontal alignment signs must meet the necessary requirements by 12/31/2019.

## 3. DEFICIENCY SUMMARY

Existing horizontal alignment signs (curve warning signs) in San Luis Obispo and Santa Barbara Counties may not comply with current standards as required per Table 2C-5 of the CA MUTCD 2012. The CA MUTCD 2012, in compliance with federal MUTCD, requires that all horizontal alignment signs meet current standards by 12/31/2019.

#### 4. PROJECT PROPOSAL

The Department's proposal is to approve this report to proceed to the project report and design phases. During the project report phase, an engineering study will be conducted for each route with the use of a device similar to Reiker's Curve Advisory Reporting Systems (CARS). The study will determine appropriate locations for horizontal alignment warning signs that would comply with CA MUTCD 2012, Table 2C-5.

##### R/W

No new right of way will be needed. The project will be constructed within the existing right of way. The need for temporary construction easements is not anticipated. Right of way capital estimate is for utility relocation and mitigation.

##### Disposal Site

A dedicated disposal site will not be needed for this project since only a small volume of excess material will potentially be generated at each location.

##### Utilities

There is a possibility of a utility conflict due to the depth of excavation for the sign posts. Each location will be researched for utility conflicts and if necessary underground utilities will be positively located. Utility relocations are not anticipated due to the design and construction flexibility in the exact placement of the signs, but a minor amount of right of way capital has been estimated in case sign relocation is not feasible and utility relocation is the only viable option.

##### Environmental

The anticipated environmental document for the proposed project is a Mitigated Negative Declaration/Categorical Exclusion. This document level has been selected based on potential impacts to biological resources.

## 5. FUNDING/PROGRAMMING

### Funding

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

### Programming

Fund Source	Fiscal Year Estimate								
	16/17	17/18	18/19	19/20				Future	Total
20.XX.201.015									
Component	In thousands of dollars (\$1,000)								
PA&ED Support	780								780
PS&E Support			1,125						1,125
Right-of-Way Support			41						41
Construction Support			629						629
Right-of-Way			48						48
Construction			2,084						2,084
Total	780		3,927						4,707

*Note: Support categories are the same as those identified by SB 45. Support Costs escalated at 3%. Construction Capital escalated at 5% per year. Support Cost ratio: 121% (All Support Costs divided by the sum of the escalated Construction Capital and escalated R/W Capital).*

*Support Cost Assumptions: Project Approval and Environmental Document (PA&ED) support costs based on no major issues during the environmental review and approval. Right Way support cost assumes minor utility relocation and/or verification work.*

*The project support budget (in dollars) was developed from the accepted workplan (in hours by task) based upon the "Rate Matrix" set for the Cost Centers with Source Unit by District as loaded into Project Resource and Schedule Management (PRSM) as of February, 2015.*

### Workplan Assumptions and Constraints

- The project will be programmed in the 2016 SHOPP cycle.
- The project will be completed within the plan in the programming documents. If there are changes to the scope, schedule, or cost a Project Change Request (PCR) may be needed to document the changes.
- The workplan will be monitored and controlled by the Project Development Team (PDT) through-out the project's lifecycle.
- Project Development Team (PDT) members will identify and communicate changes (assumptions, constraints, risks, scope, schedule and / or budget) to the appropriate Task Manager, Project Manager, and The 201.015 District

Program Advisor immediately so that the Team may assess potential actions, impacts and categorize (avoid, transfer, mitigate, exploit, share, enhance or accept) the proposed change to the project. Accepted changes to the initial scope of work whether they are an increase or a decrease will be assessed by the PDT and the workplan will be re-examined as needed to adjust the budget in hours and/or dollars to address the accepted changes. At every phase, the PDT will assess if an opportunity exists to capture any time savings that will accelerate the advertisement of this project.

## 6. PROJECT COST ESTIMATE

ITEM	SAN LUIS OBISPO COUNTY	SANTA BARBARA COUNTY	SUB-TOTAL
On-Ramps	99	108	207
Off-Ramps	103	119	222
Along Route	1050	650	1700
TOTAL NUMBER OF LOCATION			2129
Assume a lump sum average cost per curve/location of \$ 700.			
1864 locations X \$700 = \$1,490,300, USE Est. Roadway Costs= \$1,500,000			
Environmental Construction Capital, Visual Resources Costs=\$300,000			
<b>Estimated Total Cost = \$1,800,000</b>			

## 7. SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	07/01/2016
BEGIN ENVIRONMENTAL	M020	01/10/2017
CIRCULATE DED EXTERNALLY	M120	03/15/2018
PA & ED	M200	07/09/2018
PS&E TO DOE	M377	02/28/2019
DRAFT STRUCTURES PS&E	M378	01/22/2019
RIGHT OF WAY CERTIFICATION	M410	02/28/2019
READY TO LIST	M460	06/10/2019
FUND ALLOCATION	M470	08/06/2019
HEADQUARTERS ADVERTISE	M480	08/27/2019
AWARD	M495	10/30/2019
APPROVE CONTRACT	M500	11/14/2019
CONTRACT ACCEPTANCE	M600	05/11/2020
END PROJECT	M800	07/08/2020

## 8. RISKS

The primary risk associated with this project is that the exact number and location of the horizontal alignment signs will not be known until an engineering study is completed during PA&ED. In general the probabilities are low or very low of realizing a potential risk because of the flexibility in the exact placement of the warning signs.

This risk has a number of potential consequences:

1. There is a low probability with moderate impact that after completion of the engineering study more locations and signs than estimated will be needed, increasing the project construction cost and support costs.
2. There is a low probability with moderate risk that when the locations are known, one or more of these locations will unavoidably impact an environmentally sensitive area leading to increased cost and schedule delays.
3. There is a very low probability with moderate risk that when the locations are known, one or more of these locations will unavoidably impact an existing utility line increasing the project cost and causing schedule delays.
4. There is a low probability with moderate risk that the right of way lead time will require 24 months as opposed to 8 months lead time provided in the current schedule.
5. There is a low probability with moderate risk that due to the large number of potential signs and resulting current schedule, a possibility exists that there could be a delay in obtaining signs in a timely manner when ordered during construction.

## 9. FHWA COORDINATION

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

## 10. ATTACHMENT (15)

- A. Vicinity/Location Map (1)
- B. Storm Water Data Report-signed cover sheet (1)
- C. Preliminary Environmental Analysis Report (12)
- D. Document Distribution List (1)