

**EXHIBIT A
SJCDPW-RFP-26-02
DESIGN ENGINEERING SERVICES FOR BRIDGE APPROACH RAILINGS REPLACEMENT
– PHASE III PROJECT**

San Joaquin County Department of Public Works (SJCDPW) Preliminary Scope of Work for the Bridge Approach Railings Replacement – Phase III Project.

The bridge approach railings at the following ten bridge locations are situated throughout San Joaquin County.

29C-083 Jack Tone Rd over Calaveras River

29C-147 Eight Mile Rd over Calaveras River

29C-158 Jack Tone Rd over Lone Tree Creek Branch

29C-159 Jack Tone Rd over Temple Creek

29C-160 South Access Rd over North Little Johns Creek

29C-162 Jack Tone Rd over Potter Creek Channel A

29C-163 Jack Tone Rd over Mormon Slough

29C-214 Clements Rd over Mosher Creek Branch

29C-215 Clements Rd over Mosher Creek Branch

29C-231 Howard Rd over San Joaquin River

These bridges were built between 1954 and 1992. The typical speed limit is Prima Facia 55 MPH apart from 29C-083 which has a speed limit of 45 MPH. See attached vicinity map.

The Bridge Approach Railings Replacement – Phase III (Project) aims to replace the existing bridges' approach guardrail systems that are not compliant with current standards with an approach guardrail system that meets current design and safety standards. Caltrans discontinued the ET-Plus end terminal installations in 2014. In 2019, SJCDPW created a master list to identify the bridge approach railings with the old ET-Plus end terminal system. Phase I updated a set of substandard rails from the master list using MASH compliant Sequential Kinking Terminal (MSKT) System utilizing HSIP Cycle 10 State funds only in October 2024. Phase II is currently being designed to update the next set of substandard rails from the master list using local funds only. This project (Phase III) will continue replacing another set of substandard rails using approximately 90% HSIP Cycle 12 funds and 10% local match funds. This upgrade will improve roadway safety and meet current standards.

SJCDPW will solicit qualified consultants to provide professional and technical engineering services for the design of the Project. The selected firm (Consultant) will be requested to enter into a Consultant Services Agreement with SJCDPW as set forth in the Request for Proposal. A consultant will be required to perform the following tasks:

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- Project Management
- Project Surveying, Mapping and Control
- CEQA & NEPA Clearance
- Utility Coordination and Relocation Plan
- Plans, Specifications, and Engineer's Estimate (PS&E)
- Bidding and Post Award Assistance

The Consultant will be required to provide all labor, equipment, tools, and facilities necessary for the completion of the Project's design and environmental clearance.

A consultant firm responding to this Scope of Work for Public Works must submit the following information in their submittal.

A specific project proposal for the Project containing:

- A Scope of Work (i.e. approach/work plan)
- Task Effort Work Sheet(s)
- Schedule

Public Works reserves the right to eliminate or reduce the Scope of Work if sufficient funds are not available for the Project. Proposed costs must be submitted for each of the tasks and subtasks identified here within the Scope of Work.

The preliminary Scope of Work described in this Request for Proposal is provided for guidance only. The Proposal needs to be detailed and defined to accomplish each task successfully. All work must comply with County Standards and Policies, MUTCD, Latest AASHTO Bridge Design Specification, Caltrans Bridge Design Guide, Highway Design Manual, and AASHTO A Policy on Geometric Design of Highways and Streets.

Engineering services will include, but not be limited to, the following:

TASK 1.0 PROJECT MANAGEMENT

Project Management: The Project Manager will be responsible for directing the Project team during the development and execution of the Project, as well as communication with County staff, and documenting the progress and decisions made during the entire Project. This involves all aspects of Project management including budget tracking, schedule, task orders, and quality control.

Project Kick-off Meeting: A Project "Kick-off" meeting will be held following the Notice to Proceed. This meeting includes representatives from the County and Consultant. The primary meeting objectives will be to present the Project and its goals, review the Project scope and action items list, explain the Project schedule, identify key Projects issues, and facilitate discussions and ideas regarding the completion of the Project.

TASK 2.0 PROJECT SURVEYING, MAPPING AND CONTROL

The Consultant shall evaluate if the project can be designed utilizing aerial maps or layout drawings. If not, the Consultant shall conduct a field survey as needed to capture the topographic features needed for the design of the Project.

The survey will include the following:

- Perform a detailed topographic survey to encompass both the proposed and existing approach railings, end terminal system, and the existing bridge location. The topographic survey shall include but not limited to the following: existing utilities, right-of-way, adjoining structure, ditches, irrigation facilities, driveways, access roads, trees, and bridge structure.
- Existing road alignment shall be cross-sectioned at every 25-foot interval to include a 50-foot swatch width starting at the bridge abutment line and extending 25-feet beyond the proposed MSKT impact-head location on the specified side at each bridge location of the Project.
- Prepare a topographic map displaying contours, spot elevations, and R/W limits.

TASK 3.0 ENVIRONMENTAL CLEARANCE

The Project must obtain environmental clearance or categorical exemption in accordance with the California Environmental Quality Act (CEQA) guidelines. The Consultant will develop a Notice of Exemption (NOE) for County review and submittal. The NOE will contain several elements: a brief project description; the location of the project; a finding that the project is exempt from CEQA, including a citation to the appropriate exemption; and a brief statement of the reasons to support the finding that the project is exempt. The Consultant will also produce a vicinity map to be included in the NOE. County staff may provide an example for the Consultant to reference.

The Project must also obtain environmental clearance or categorical exclusion in accordance with the National Environmental Policy Act (NEPA) guidelines. The Consultant will work with Caltrans Local Assistance environmental staff to prepare a Categorical Exclusion as the NEPA approval document for the project and will include avoidance, minimization, and mitigation measures provided in the technical studies prepared.

TASK 4.0 UTILITY COORDINATION AND RELOCATION PLAN

The Consultant will be responsible for all utility coordination and relocation arrangements on the Project. The Consultant will prepare utility "A", "B", and "C" letters, and associated exhibits to provide to the County for review and approval prior to sending them to utility agencies. Utility letters should identify potential conflicts, determine clearance and relocation requirements, and establish the schedules for required utility relocations. The Consultant will be responsible for Project review coordination, permitting, and other necessary coordination with Public Works, and utility companies. The Consultant will meet with utility and conduct field meetings as necessary to coordinate the design of the Project.

TASK 5.0 PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE (PS&E)

TASK 5.1 TECHNICAL SPECIAL PROVISIONS

Project technical specifications must use the latest Caltrans Standards, including special provisions based on Caltrans Standard Special Provisions and County provided boilerplate specifications to be developed in Microsoft Word. The County will provide their boilerplate

specifications for the Consultant to combine with the technical specifications for the 65%, 95% and 100% (final) submittal.

TASK 5.2 PREPARATIONS OF 65% (PS&E)

The purpose of this task is to perform the detailed design of the Project improvements, obtain design approval, produce construction drawings, special provisions, and construction estimate required for the construction documents. The PS&E will be prepared to Caltrans latest standards and in accordance with Public Works policies, procedures, manuals, and standards.

Preliminary Plans and Cost Estimates

Consultant will develop the preliminary plan, aerial, quantity estimates, R/W boundary, and other associated details. These plans will include all details necessary to construct the bridge approach end terminal system, approach railings, and conform or transition to existing bridge barrier railing. The Consultant will prepare PS&E and will include the following minimum items listed below:

- Title/Cover Sheet (Public Works format)
- Layout aerial, plan, and elevation of the bridge approach end terminal system and railings including conform or transition to existing bridge barrier railing
- Roadway Typical Sections (if required)
- Construction details
- Construction area Sign Plans
- Quantity Support Calculations
- Specifications with Working Day Schedule
- Engineer's Estimates

The Consultant will provide the following deliverables for PS&E:

@ 65% stage = Electronic 11X17 set of plans
 Electronic Word Document of the Specifications
 Electronic Excel Document of the Engineer's Estimate
 Working Days Schedule

TASK 5.3 PREPARATIONS OF 95% (PS&E)

The draft PS&E package, along with design, check, and quantity calculations, will be submitted to the County for their review.

@ 95% stage = Electronic 11X17 set of plans
 Electronic Word Document of the specifications
 Electronic Excel Document of the Engineer's Estimate
 Working Days Schedule
 Public Work's original, red-lined set of 65% comments

TASK 5.4 PREPARATIONS OF 100% (FINAL PS&E)

Upon receiving review comments from the County, each comment will be reviewed, discussed, and addressed in writing. Appropriate modifications will then be made to the PS&E, which will be submitted to the County, who will compile and reproduce bid documents for advertising.

@100% (Final) stage = Electronic 11X17 set of plans
Electronic Stamped Contract specifications
Electronic Excel document of the Engineer's Estimate
Design and design check calculation
Quantity checks backup calculation
1 set 11X17 wet signed plans on Mylar (or Public Works approved equivalent)
1 set unbound Stamped Contract specification
Working Days Schedule
Public Works original, red-lined set of 95% comments

Electronic files will be a version of the applicable software as specified below.

- AutoCAD format electronic files - plans and drawings
- Microsoft Word format electronic files - specifications
- Microsoft Excel format electronic files - Engineer's Estimate, quantity check calculations, and working day schedule.

TASK 6.0 BIDDING AND POST AWARD ASSISTANCE

The Consultant will aid during the construction bidding process and construction phase.

TASK 6.1 BIDDING ASSISTANCE

The Consultant will aid during the bidding phase. Assistance will involve providing clarification or answering questions received from prospective bidders, and assistance in preparing an addendum, if necessary. This assistance could include design revisions if Public Works deems it necessary. Public Works will be responsible for receiving all inquiries and providing all responses to questions received during the bidding period.

TASK 6.2 CONSTRUCTION DESIGN ASSISTANCE

It is anticipated that the Consultant will provide design assistance during construction, consisting of field review as requested by Public Works, plus responding to requests for information and reviewing shop drawings and/or manufacture's detail drawings. The Consultant, if necessary, may attend a preconstruction meeting and field meetings to resolve construction issues.

The Consultant will provide Public Works with all engineering records, survey information and data, cross sections, design memorandums, and other information required to construct the Project. If questions arise during construction over the intent of the design, the Consultant and appropriate design team members will be expected to respond to such questions in a timely manner. The Consultant will review, comment, and make recommendations on the construction contractor's material submittals and shop drawings. The Consultant will take measures to ensure the appropriate design team members' services during construction are included as required.