

**SACRAMENTO PLACERVILLE
TRANSPORTATION CORRIDOR
JOINT POWERS AUTHORITY**

PROPOSAL FOR
**SPTC-JPA BRIDGE AND CULVERT
INSPECTIONS**

JULY 28, 2023

DE DOKKEN
ENGINEERING



DOKKEN ENGINEERING

Transportation Solutions from Concept to Construction

July 28, 2023

Attention: Brett Bollinger, SPTC_JPA CEO
City of Folsom
C/O City Clerk's Office
50 Natoma Street
Folsom, CA 95630

DOKKEN ENGINEERING TEAM

Project Manager | Tim Osterkamp, PE
Project Engineer | Tony Powers, PE
Lead Engineers | Fortunato Enriquez, PE
Jeremy Nottnagel, PE

RE: REQUEST FOR PROPOSALS (RFP) TO PROVIDE PROFESSIONAL ENGINEERING SERVICES FOR SPTC JPA BRIDGE AND CULVERT INSPECTIONS

Dear Mr. Bollinger,

For the past 37 years, Dokken Engineering has provided "turnkey" solutions for our public works clients. Understanding the objectives of our clients has provided successful delivery of over 2,500 projects in our history.

Dokken Engineering has extensive experience inspecting and evaluating bridges and culverts. Combined, our proposed key staff have inspected over 350 bridges for the purpose of identifying and documenting maintenance and repair needs. This experience has come through a combination of Bridge Preventive Maintenance Program projects, individual maintenance projects, and emergency response projects which have included fires, scour from large storms, observed rot in timber support members, and vehicle impacts. One local inspection and rehabilitation project was the Rainbow Bridge Maintenance project, in which Tim Osterkamp was the Project Manager, and Tony Powers was the Project Engineer and lead inspector for in-depth inspection and mapping of spalls, cracks and other deficiencies.

Our team consists of staff that has successfully completed many similar projects. Tim Osterkamp, our Project Manager, brings over 35 years of experience with expertise in management and structural design of transportation projects, and has personally inspected over 200 bridges. He will be supported by a team he personally selected, as shown above, based on their experience with projects requiring similar inspection and reporting services as the those stated in the RFP.

The Dokken Team's delivery success and long history of completing projects and deliverables on schedule and within budget will meet the SPTC JPA's needs. Dokken will complete the inspections and reports within 5 months of receiving the notice to proceed.

Dokken Engineering's mission is to provide superior service to our clients for all their transit and the related civil engineering needs. We strive to be responsive and flexible to our clients, which results in projects being delivered on time and within budget. We appreciate your consideration of our Proposal, and we are very excited for this opportunity to work with the SPTC JPA.

Sincerely,

Tim Osterkamp, PE
Project Manager
Dokken Engineering
tosterkamp@dokkenengineering.com

SECTION 1 - SCOPE OF WORK

Dokken Engineering's proposed scope of work for this project is as follows:

TASK 1 – PROJECT MANAGEMENT AND MEETINGS

Communication is the key to a successful project. Dokken Engineering's Project Manager will be very "hands-on" and will be involved in all facets of the project. Project management and coordination will be continuous activities from the scoping/negotiations phase through the final deliverable.

Dokken Engineering will coordinate up to two (2) project meetings to:

- Review project status, schedule and budget
- Gather available information from the JPA
- Make decisions
- Present results of inspections

The meetings are anticipated at the following milestones:

- A kickoff meeting, or when field visits are completed
- Completion of the Inspection Report

As part of Dokken Engineering's routine quality control procedures, all deliverables will be reviewed by an independent engineer not otherwise involved in the project.

Task 1 Deliverables: *Project Meeting Agendas and Minutes (2)*

TASK 2 – ASSESS BRIDGES

TASK 2.1 REVIEW AVAILABLE INFORMATION AND PERFORM FIELD INSPECTIONS

Prior to visiting the bridges, Dokken Engineering will review all available information, including site maps and as-built plans, if available. Each bridge along the corridor will be inspected, with the following information documented:

- Bridge location Post Mile and coordinates
- Complete bridge description
- Field inspection findings including member conditions, scour, timber rot, concrete spalls, paint, utilities, etc.
- Maintenance needs and recommendations
- Photos
- Maintenance construction cost estimates
- Field Measure Member dimensions. It is assumed specialized equipment such as manlifts or snoopers will not be needed to measure dimensions. Member sizes out of reach of ladders will be estimated.

Dokken possesses highly accurate handheld GPS units, with accuracy to within 12 to 18 inches. The units interface with a mini-iPad. The anticipated location of each structure, based on Post Mile, can be programmed into the unit and used to quickly locate bridges by observing the estimated location on a mini-iPad map. Once the structure is found in the field, the begin and end coordinates of each structure can be gathered. Using these units will reduce time spent searching for the structure and will accelerate information gathering.



TASK 2.2 PERFORM CAPACITY ANALYSIS

Prior to performing capacity analysis, expected material properties will be researched and documented. Capacities will be estimated based on measured member field dimensions and will concentrate on superstructure capacities. Foundation properties are unknown and will not be possible to estimate. Assumptions will be made for concrete member reinforcement.

TASK 2.3 BRIDGE REPORT

A Bridge Report will be prepared including field observations and measurements, maintenance activity recommendations, results of the capacity analysis, and construction cost estimate to perform maintenance activities. The Report will typically be one to two pages and include photos documenting each structure.

Task 2 Deliverables: *Draft and Final Bridge Report*

TASK 3 – ASSESS CULVERTS

TASK 3.1 REVIEW AVAILABLE INFORMATION AND PERFORM FIELD INSPECTIONS

Prior to visiting the culvert, Dokken Engineering will review all available information, including site maps and as-built plans, if available. Each culvert along the corridor will be inspected, with the following information documented:

- Culvert location Post Mile and coordinates
- Complete Culvert description including type, size, confirm total length (if possible), headwall description, if applicable, etc.
- Field inspection findings. This may be limited to visual inspection at the inlet and outlet, erosion observations, headwall observation (if applicable).
- Observed maintenance needs and recommendations (may be limited based on accessibility into the culvert).
- Photos
- The inlet and outlet of each culvert will be located by GPS.



Dokken possesses highly accurate handheld GPS units, with accuracy to within 12 to 18 inches. The units interface with a mini-iPad. The anticipated location of each structure, based on Post Mile, can be programmed into the unit and used to quickly locate the culverts by observing the estimated location on a mini-iPad map. Once the structure is found in the field, the begin and end coordinates of each culvert can be gathered. Using these units will reduce time spent searching for the culvert and will accelerate information gathering.

TASK 3.2 CULVERT REPORT

A Culvert Report will be prepared, including: field observations and measurements and maintenance activity recommendations. The Report will typically be one to two pages and include photos documenting each culvert.

Task 3 Deliverables: *Draft and Final Culvert Report*

PROJECT SCHEDULE

The schedule will be determined upon notice to proceed. It is anticipated five months will be required to complete the inspection, bridge analysis and reports. We will commence work immediately upon receiving the notice to proceed.