

TO: James L. App, City Manager
FROM: Doug Monn, Public Works Director
SUBJECT: Engineering Inspection Services – Wastewater Bridge Lines
DATE: March 18, 2008

NEEDS: For the City Council to consider awarding a contract to evaluate the condition of the City's three (3) existing sewer pipe bridges.

- FACTS:**
1. The City has three sewer pipe bridges that cross the Salinas River:
 - a) The North Suspension Bridge was constructed in the early 1970s and is located at North River Road. It transfers flow from Lift Station No. 1 on the east side of the Salinas River across the Salinas River to the Wastewater Treatment Plant.
 - b) The South Suspension Bridge was built in the early 1970s and is located at the south end of the City at Ramada Drive and transfers flow from Lift Station No. 2 on the west side of the Salinas River to the east side at Charolais Road.
 - c) The Moss Avenue Sewer Bridge was built in the 1950s and is located behind Ferro Lane. Sewer flow is transferred across a deep ravine and into the sewer main in Creston Road.
 2. As a result of the age of these bridges, Sewer Maintenance staff suggests the bridges be evaluated to assess their structural integrity, overall condition, and to identify and quantify maintenance or repairs needed to extend their life.
 3. Staff issued a Request for Proposal to solicit a scope of work and fee proposal to perform the evaluation.
 4. Staff received three responses:

URS	\$ 24,982
Adko.....	\$ 26,728
Boyle	\$ 41,042
 5. Staff reviewed the proposals and determined that the proposal submitted by URS is complete and addresses the City's requirements.

ANALYSIS & CONCLUSION: It is critical that the integrity of these sewer pipe bridges is preserved. The risk of leakage and/or failure with the potential of a sewer spill into the Salinas River can be reduced through proper structural assessment and associated repairs/maintenance.

POLICY REFERENCE: Wastewater Operations Manual

FISCAL IMPACT: The Wastewater Maintenance and Operations Budget has a balance of \$69,352.74 for professional services. There are adequate resources required for the work.

- OPTIONS:**
- a. Authorize the City Manager to enter into an Agreement with URS Corporation to perform inspection services for the City's 3 sewer suspension bridges for a not-to-exceed fee of \$24,982.
 - b. Amend, modify, or reject the above option.

Prepared by: Ditas Esperanza, P.E., Capital Projects Engineer

- Attachments (1)
1) Scope of Work



1380 Lead Hill Boulevard, Suite 100
Roseville, California 95661-2997
Tel: (916) 784-3900
Fax: (916) 784-0211

January 25, 2008

Ms. Ditas Esperanza, P.E.
Capital Projects Engineer
City of Paso Robles
1000 Sprint Street
Paso Robles, CA 93446

Re: Proposal for Evaluation of the City's Existing Sewer Suspension Bridges

Dear Ms. Esperanza:

We thank you for this opportunity to present our proposal to provide an evaluation of the City's two existing sewer suspension bridges and the existing steel bents supporting the Moss Avenue pipe. Our proposal, which is organized according to your Request for Proposal content requirements, presents our scope of work, fee proposal, similar inspection projects, and firm qualifications including resumes.

We have reviewed the available documents provided to us. We have also performed site visits and an inspectability review in order to develop a thorough understanding of your project. To satisfactorily administer this project we have assigned a bridge condition inspection team who has completed similar projects and is well versed in Caltrans and AASHTO guidelines, and most importantly, is excited about the opportunity to work on your project.

Firm Capabilities and Specialization: URS is the # 1 engineering firm in the country for the 7th consecutive year, as ranked by the 2007 Engineering News Record (ENR). We have an unparalleled depth of services and expertise in our firm. All inspection services for this project will be provided by highly experienced staff located in our Roseville office.

Qualifications and Experience: Leading our team for this contract will be **Martin (Marty) Jackson, P.E., as Project Manager/Inspector**. Marty's career includes 30 years experience in transportation projects and over \$100 million in construction projects. His well-rounded experience as Construction Project Manager, Resident Engineer, Construction Superintendent, Bridge Condition Evaluator, Inspector, and Project Designer gives him an in-depth understanding of the steps needed to assess and deliver a project. Marty will be assisted by **George Rowe, P.E.**, one of our Bridge Inspectors who has a thorough knowledge and experience with suspension bridge inspection evaluations.

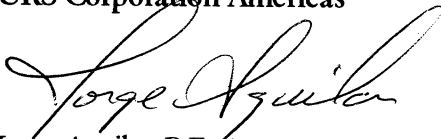
Nature and Relevance of Recently Completed Work: Marty has well-rounded experience as Bridge Condition Evaluator of existing bridges, Resident Engineer of steel and concrete bridge construction projects, Bridge and Building Supervisor (structure and utility maintenance section) as CSX Transportation (formerly Chessie System RR) employee, and design of bridges. This experience includes cable-stay, structural steel, concrete, prestressed concrete, timber, and movable bascule bridges. Marty's experience as the Independent Design Check Engineer for the cable support tower of the Kap Shui Mun Bridge in Hong Kong (one of the world's longest cable-stay bridges) strengthened his awareness of the various loads affecting cable-stay bridges. Marty recently served as the Resident Engineer responsible for the successful construction of a \$3 million pump station system for the State Reclamation District in West Sacramento. Marty also recently completed condition evaluation of the Shasta Dam steel girder bridge.

Ms. Ditas Esperanza, P.E.
Capital Projects Engineer
City of Paso Robles
January 25, 2008
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We have reviewed the sample contract provided and are confident we can come to a mutually agreeable working agreement as we have for the many contracts we've executed with the City of Paso Robles in the past. Our past performance and client satisfaction is outstanding and you can be assured URS will meet your expectations for responsive service, adherence to schedule, and reliable professional recommendations. Please contact me at jorge_aguilar@urscorp.com or Marty at marty_jackson@urscorp.com if you have questions.

Sincerely,

URS Corporation Americas

A handwritten signature in cursive script that reads "Jorge Aguilar". The signature is written in black ink and is positioned above the printed name and title.

Jorge Aguilar, P.E.
Vice President and Principal-in-Charge



PROJECT SCOPE OF WORK

The work will be divided into the following tasks with a brief description of each task:

TASK 1 – INSPECTION PREPARATION

1. City will provide URS drawings and other necessary documentation (record plans and specifications, previous inspections reports, repair records, etc.) in advance of our site visit and throughout the course of the work.
2. URS will review details shown in the drawings and other necessary documentation provided by the City and prepare for the on-site condition inspection of the existing suspension cable bridges and the “Moss Avenue Bridge”.

TASK 2 – TRAVEL & ON-SITE INSPECTION

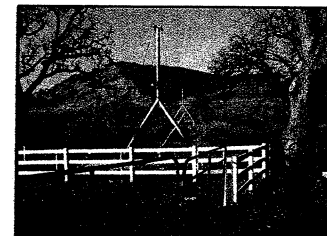
1. URS will initially meet on-site with City staff (a 2-hour maximum duration is anticipated) at the kickoff of the site inspection. At this on-site meeting it is anticipated the City will discuss with URS any background data and site specifics to ensure the work is completed as planned.
2. URS will then follow-up with a visual inspection of the following existing sewer bridges located in Paso Robles:
 - ❖ North Pipe: The 35(+/-) year old suspension cable bridge that carries a main trunk sewer across the Salinas River.
 - ❖ South Pipe: The 35(+/-) year old suspension cable bridge that carries a main trunk sewer across the Salinas River.
 - ❖ Moss Avenue Pipe: The 55(+/-) year old system of four steel pipe frame bents supporting the existing Moss Avenue sewer pipe.
3. URS will perform a visual inspection of the exterior of the bridge structures and all supports, anchors, piping and connections to evaluate their condition and determine if they are structurally sound in terms of surface coating, mechanical connections, cables supports, etc.
4. URS will use a boom manlift vehicle for a close-up inspection and dye penetrate testing of the most critical connections of the suspension cables at the top of the existing towers.

TASK 3 – INSPECTION REPORT

1. URS will prepare a Report outlining the condition of the noted suspension bridges. Our Report shall provide recommendations and related cost estimates for maintenance and/or repairs. Our Report shall also include a photographic record of the existing bridge conditions.

TASK 4 – REPORT PRESENTATION & CLOSURE

1. URS will meet with City staff (a 2-hour maximum duration is anticipated) to summarize and discuss the findings noted in our Report.
2. At this time a structural analysis (i.e., modeling or other engineering analysis of design) of the existing bridge is not required.





FEE PROPOSAL

Our success on recent local road and bridge projects has demonstrated our capability to budget and contain costs. We have also demonstrated to our clients our experience with and practical means of successfully mitigating unanticipated issues that develop.

**COST PROPOSAL FOR
CONDITION EVALUATION OF
3 EXISTING SEWER SUSPENSION CABLE BRIDGES**

**Submitted by: URS Corporation
January 25, 2008**

<u>TASK 1-Inspection Preparation</u>	<u>Hours</u>	<u>Loaded Rate</u>		<u>Total</u>
Martin Jackson-Project Manager & Inspector	12	\$ 158.37	\$	1,900.44
George Rowe-Inspector	8	\$ 144.13	\$	1,153.04
<u>Direct Costs</u>				
Supplies, Camera, Film, Delivery, etc.			\$	30.70
Total Task 1			\$	3,084.18
<u>TASK 2- Travel & On-Site Inspection</u>				
Martin Jackson-Project Manager & Inspector	32	\$ 158.37	\$	5,067.84
George Rowe-Inspector	32	\$ 144.13	\$	4,612.16
<u>Direct Costs</u>				
1 Vehicle @ \$75.00/day/vehicle			\$	300.00
1 Boom Manlift Vehicle (1 day rental from Quinn Rental in Paso Robles)			\$	900.00
Hotel & Meals			\$	860.00
Supplies, Camera, Film, Delivery, etc.			\$	53.50
Total Task 2			\$	11,793.50
<u>TASK 3-Inspection Report</u>				
Martin Jackson-Project Manager & Inspector	24	\$ 158.37	\$	3,800.88
George Rowe-Inspector	12	\$ 144.13	\$	1,729.56
<u>Direct Costs</u>				
Supplies, Camera, Film, Delivery, etc.			\$	100.00
Total Task 3			\$	5,630.44
<u>TASK 4-Report Presentation & Closure</u>				
Martin Jackson-Project Manager & Inspector	16	\$ 158.37	\$	2,533.92
George Rowe-Inspector	12	\$ 144.13	\$	1,729.56
<u>Direct Costs</u>				
1 Vehicle @ \$75.00/day/vehicle			\$	75.00
Meals			\$	80.00
Supplies, Camera, Film, Delivery, etc.			\$	55.70
Total Task 4			\$	4,474.18
TOTAL COST PROPOSAL			\$	24,982.30