

City of Sacramento

Legislation Text

File #: 2019-00618, **Version:** 1

Title:

Agreement: Supervisory Control and Data Acquisition System Support Services

File ID: 2019-00618

Location: Citywide

Recommendation:

Pass a Motion authorizing the City Manager or the City Manager's designee to execute a Professional Services Agreement with West Yost Associates to provide engineering services for the Supervisory Control and Data Acquisition System (SCADA) improvements program, for an amount not-to-exceed \$418,673.

Contact: Charley Cunningham, Project Manager (916) 808-5518; Dave Hansen, Supervising Engineer (916) 808-1421; Dan Sherry, Engineering & Water Resources Division Manager, (916) 808-1419; Department of Utilities

Presenter: None

Attachments:

- 1-Description/Analysis
- 2-Agreement

Description/Analysis

Issue Detail: Staff recommends Council approve a professional services agreement with West Yost Associates, for engineering services for the SCADA improvements program. In 2018 West Yost Associates prepared a master plan for the City which identified several areas of improvement for the SCADA system. West Yost will implement the SCADA Master Plan recommendations that include updating existing instrumentation and hardware standard specifications, updating programming standards used for Human Machine Interface (HMI) and Programmable Logic Controllers (PLC), and SCADA network design support.

Policy Considerations: City Council approval is required for professional service agreements of

\$100,000 or more per City Code 3.64.020.

Economic Impacts: None.

Environmental Considerations: Approval of the proposed agreement is exempt from the requirements of the California Environmental Quality Act (“CEQA”), under CEQA Guidelines Section 15061(b)(3), which states that CEQA applies only to project that have the potential for causing a significant effect on the environment. The current activity involves contracting for engineering services, which will not have a significant effect on the environment.

Sustainability: The proposed project is consistent with the 2035 General Plan as it improves infrastructure reliability by improving the monitoring and operating conditions of our Water, Sewer, and Drainage systems through our SCADA control system.

Commission/Committee Action: Not applicable.

Rationale for Recommendation: On June 1, 2018, a Request for Qualifications (Q18141311005) was advertised and issued on PlanetBids to pre-qualify engineering firms for various on-call consultant services. Five consulting firms, Saber Engineering, West Yost Associates, Northern Digital, Woodard & Curran and Carollo Engineers submitted Statements of Qualifications for On-Call consultant services for the SCADA system support.

A panel of three City staff members evaluated the proposals and chose the three highest-ranked firms for the On-Call SCADA list. The three firms are Saber Engineering, West Yost Associates, and Carollo Engineers. Of these three firms, West Yost Associates has the most knowledge, expertise and experience to provide these specific services.

Financial Considerations: The proposed agreement is for an amount not-to-exceed of \$418,673. There are sufficient funds available in the SCADA Planning Program (I14010900) to approve the agreement.

There are no General Funds allocated or planned for this project.

Local Business Enterprise (LBE): West Yost Associates is an LBE.

Background: The City of Sacramento, DOU owns and operates over 200 facilities throughout the City which include water, wastewater, stormwater and combined sewer systems. These systems are monitored and controlled by a SCADA system. In 2018, DOU selected West Yost Associates to develop a SCADA Master Plan, which evaluated the Department’s existing and ongoing SCADA projects and initiatives to validate the approach and provide a SCADA Program with scope and level of effort estimate for needed improvements.

The Master Plan evaluation considered the existing SCADA communications network, control system hardware/software, and on-going projects intended to modernize and improve the system. The document included a technical baseline assessment, with key alternatives and assumptions used to drive recommendations for system improvement. Significant input from DOU was included through all stages of the document development.

The system evaluation revealed most of the SCADA system hardware is no longer actively produced (i.e. End of Commercialization) by the manufacturer. DOU's ability to maintain the control system, in good working order, may be significantly impacted and thus could affect DOU's ability to deliver its core mission.

The recommendations have been compiled into the DOU SCADA Program. The Program includes communications network and control system detailed design and a multi-phased implementation approach for improvements and network migration. The Program intent is to upgrade the SCADA system in a reasonable timeframe expanding on DOU's on-going network and control system improvements with further considerations for maintainability, consistency, standardization, and cybersecurity.

Due to the complexity of the work and other on-going DOU activities, DOU is recommending continuing support from West Yost for SCADA projects and initiatives to be implemented in Fiscal Year 2020. This includes project management support, updating existing instrumentation and hardware standard specifications, updating programming standards, and SCADA network design support.