



BOARD OF SUPERVISORS
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: Public Works/Lag San
Department No.: 054
For Agenda Of: 11/13/2018
Placement: Administrative
Estimated Tme:
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Directors, Laguna County Sanitation District

FROM: Department Scott D. McGolpin, P.E., Director, 568-3010
Director(s)

Contact Info: Mark A. Schleich, P.E. , Deputy Director, 882-3605

SUBJECT: Amendment No. 5 to Professional Services Agreement with Carollo Engineers, Incorporated for Engineering Services During Construction of Laguna County Sanitation District Plant Upgrades – Third and Fourth Supervisorial District

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Other Concurrence: Risk Management

As to form: Yes

Recommended Actions:

That the Board of Directors:

- a) Approve and authorize the Chair to execute Amendment No. 5 to the agreement with Carollo Engineers, Incorporated, to add a new scope of work for design assistance and engineering services related to Laguna County Sanitation District wastewater reclamation plant upgrades and to extend the term of the agreement, increasing the contract by \$4,858,622 for a new contract maximum not to exceed \$8,159,261 through December 31, 2023; and
- b) Authorize the Public Works Director, or designee, to approve and execute amendments up to an additional contingency amount of \$150,000 to cover inflationary cost escalations by calendar year if they exceed the assumed escalator set forth in Amendment No. 5; and
- c) Find that the proposed action does not constitute a “Project” within the meaning of the California Environmental Quality Act, pursuant to 14 CCR 15378 (b)(5), in that it is a government administrative activity that will not result in direct or indirect changes in the environment.

Summary Text:

This item is on the agenda in order to consider an amendment to the agreement with Carollo Engineers, Incorporated (not a local vendor) for engineering services related to the Laguna County Sanitation District wastewater reclamation plant upgrade. These services are separated into two distinct service phases that are subsequent to the initial detailed design work. The next phases of work include engineering services during construction, and the design, programming and integration of the Supervisory Control and Data Acquisition (SCADA) systems for the project.

The original agreement to design the new treatment facilities and to prepare plans and specifications for the improvements was approved by your Board on September 22, 2015 and is currently in the amount of \$3,300,639. This scope of work was completed in 2017. Environmental processing and financing is expected to be completed by November 2018 and June 2019 respectively.

The next phase of work for the design engineer includes engineering services during construction, which is a separate scope of work from construction project management services (separate board action and vendor). These tasks primarily include finalizing the plans and specifications, review and approval of equipment and material submittals, input on potential change orders, responding to requests for information (RFIs), as well as startup and optimization of treatment processes, training of staff, preparation of record drawings, and writing operation and maintenance manuals. This phase of work would begin at pre-bid and conclude after project close-out and is expected to not exceed \$2,664,574. This amount is approximately 6.7% of the estimated construction cost (\$39.7 million) and is within the normal range of costs for these services.

An additional scope of work proposed for the design engineer consists of the design, programming and delivery of the SCADA system. In recent years the industry has transitioned this scope of work from a low-bid procurement to a professional service provided by the design engineer given the importance and sensitivity of the SCADA system. SCADA programming and integration services are estimated to cost \$2,194,048.

The total amendment is in the amount of \$4,858,622, which includes an assumed inflationary escalation to labor costs by year, for a revised agreement total of \$8,159,261.

Background:

Upgrades to the existing wastewater reclamation plant are proposed based on the recommendations of the *Wastewater Reclamation Plant Facilities and Financial Master Plan* presented to the Board in October 2011, which assessed the function and usefulness of the existing treatment facilities, evaluated useful lives, and reviewed improvements needed to address regulatory criteria, capacity needs, customer growth, waste flow volumes and loading, and treatment and discharge alternatives. Carollo Engineers, Incorporated and their subconsultant, Cannon Corporation (a Tri-County vendor) were selected through qualifications process and awarded an agreement on September 22, 2015 to provide engineering services to prepare the plans, specifications and estimates for the upgrade improvements in the amount of \$2,980,949.

Amendment No. 1 in the amount of \$38,791 (approved April 5, 2016) addressed electrical safety features of existing and proposed facilities. Amendment No. 2 in the amount of \$105,560 (approved August 1, 2016) addressed flood protection alternatives, storm water collection, and expanding the

existing in-house recycled water system. Amendment No. 3 in the amount of \$163,511 (approved October 4, 2016) addressed the design of new laboratory and control room facilities. Amendment No. 4 in the amount of \$11,828 (approved November 7, 2017) provided for review and input of technical information used for the environmental analysis documentation in the mitigated negative declaration (MND) for CEQA compliance (approved July 3, 2018). The current agreement amount is \$3,300,639.

This amendment addresses two scopes of work that are subsequent to the engineering design phase. The next phase includes engineering services during construction. Construction period services (pre-bid to project startup and optimization) provided under this amendment consists finalizing the plans and specifications, project administration, attending meetings, responding to requests for information from bidding contractors prior to bid and the hired contractor during construction, review of equipment and material submittals, assistance in reviewing proposed construction contract change orders, startup and optimization of equipment, training of staff, and post-construction services related to the preparation of record drawings and operation and maintenance manuals. This scope of work is estimated to not exceed \$2,664,574. This scope of work is separate from the construction project management services to be provided by a separate vendor under separate contract, which relates to construction management, labor compliance, progress payment processing, and construction permit and code compliance.

Another large part of the project involves the integration and implementation of programmable logic controller (PLC) equipment, human machine interface (HMI) systems with supervisory control and data acquisition (SCADA) systems (Task 11) phase of work. The instrumentation requirements were designed by Carollo Engineers, Incorporated in the design scope of work and they are qualified, competent and experienced in the programming, integration and implementation of SCADA systems. Because these systems are highly specialized, can result in variable quality, and usually extends beyond the end of construction, industry practice has transitioned from having the construction contractor provide this work through a sub-vendor as a low-bid item, to a professional service provided by the design engineer. These services consist of programming, assembling and implement these systems during the latter part of the construction period of the project as well as program optimization post construction. This scope of work also includes merging the existing SCADA systems that operate the newer part of the plant onto the new platform in order to avoid having two independent systems. SCADA services are estimated to cost \$2,194,048.

The time period for these services is intended to coincide with the bidding, award, construction and post construction periods in addition to a one-year warranty period for the programming and controls integration work. The current agreement expires December 31, 2018. Based on the duration of the services and anticipated construction period beginning in September 2019, this amendment also extends the agreement termination to December 31, 2023. The estimated total cost for these two scopes of work is \$4,858,622, which includes an assumed escalation of 2.7% for subsequent years. The amended agreement amount would total \$8,159,261. Staff recommends approving these actions to coordinate the engineering work with the project schedule.

Performance Measure:

This amendment will allow for implementation of the proposed plant improvements associated with the Phase 1 upgrade.

Fiscal and Facilities Impacts:

Budgeted: Yes. Funds are planned for expenditure over the course of the next several years.

Fiscal Analysis:

<u>Funding Sources</u>	<u>Current FY Cost:</u>	<u>Annualized On-going Cost:</u>	<u>Total One-Time Project Cost</u>
General Fund			
State			
Federal			
Fees			
LCSD Enterprise Fund			\$ 4,858,622.00
Total	\$	\$	- \$ 4,858,622.00

The cost to perform the project administration and design services is estimated to be \$4,858,622. The source of funds is the Laguna County Sanitation District capital reserve fund. If required, the contingency amount of \$150,000 would be paid from the same source of funds.

Special Instructions:

Retain one original Amendment No. 5 for the Clerk of the Board records and return the other two to the Laguna County Sanitation District office, attention Martin Wilder.

Attachments:

Attachment A: Three (3) original amendments.

Authored by:

Martin Wilder, P.E., Manager

Copy:

Julie Hagen, Deputy Public Works Director of Administration and Finance