



TO: Board of Contracts and Awards
FROM: Michael P. Slevin III, P.E., Director, Environmental Services
Geoffrey M. Smyth, P.E., Division Manager, Science and Engineering
COPY: City Council; City Manager; City Clerk; SBE Coordinator; LEAP Coordinator;
Joe Parris, Finance/Purchasing; and Max Drathman, Associate Engineer
SUBJECT: Process Control System Upgrade for the Central and North End Wastewater Treatment
Plants, Request for Proposals Specification No. ES14-0302F – November 4, 2014
DATE: October 20, 2014

SUMMARY:

The Environmental Services Department recommends a contract be awarded to Technical Systems, Inc., Lynnwood, WA, in the amount of \$10,419,581.00, plus a 20 percent contingency, for a cumulative total of \$12,503,497.20, excluding sales tax, budgeted from the ES Wastewater Fund 4300, to completely upgrade the computer control system that governs operations at the Central Wastewater Treatment Plant (CTP) and North End Wastewater Treatment Plant (NETP).

STRATEGIC POLICY PRIORITY:

- Foster neighborhood, community, and economic development vitality and sustainability

This project will allow the wastewater utility to upgrade the functionally obsolete and unreliable existing computer control system at both of the City’s wastewater treatment plants. The upgraded computer control system will give City staff the tools necessary to help ensure the City maximizes the treatment potential at its facilities and to do so at the lowest possible cost, while protecting public health, protecting Commencement Bay, and maximizing sustainability.

BACKGROUND:

ISSUE: The CTP and NETP share a single computer control system for operation and monitoring of treatment processes within each facility. This existing control system was installed at the CTP in the mid-1980s and was expanded to include the NETP in 1997. While the existing system provides operational control and monitoring for much of each facility, there are still important components that are not automated. This project also includes expanding the current level of automation to include the most important treatment process equipment that presently have little to no automation or monitoring.

Tacoma’s wastewater National Pollutant Discharge Elimination System (NPDES) Permits, for the CTP and the NETP, each require a high level of treatment for Tacoma’s wastewater before it can be discharged into Commencement Bay. The equipment and treatment processes necessary to achieve this high level of treatment are complex. A sophisticated controls system is vital to continue meeting the permit requirements. Reliable and well-constructed computer control systems are an extremely important component to the effective operation of these treatment systems.

ALTERNATIVES: The alternative to constructing the proposed project is to continue operating Tacoma’s two wastewater treatment plants with the current computer control system and the current level of automation. This alternative would include numerous increased risks to the City. The primary risk includes violation of the NPDES permits due to ongoing problems associated with the current obsolete and unreliable computer control system.



COMPETITIVE SOLICITATION: Request for Proposals Specification No. ES14-0302F was opened September 9, 2014. Five companies were invited to submit proposals in addition to normal advertising of the project. Four submittals were received. Proposals were thoroughly evaluated by the City’s Selection Advisory Committee, consistent with the City’s Purchasing Policy Manual and TMC 1.06.262 and TMC 1.06.263. Evaluation criteria included factors for background, qualifications, project understanding and delivery approach, price proposal, and sustainability.

<u>Respondent</u>	<u>Location (city and state)</u>	<u>Rank or Score</u>
Technical Systems, Inc.	Lynnwood, WA	1
CH2M HILL Engineers, Inc.	Bellevue, WA	2
Pease & Sons, Inc.	Tacoma, WA	3
Elcon Corporation	Everett, WA	4

Pre-proposal estimate: \$10,659,558.00, excluding sales tax. The recommended award is approximately 2.3 percent below the pre-proposal estimate.

CONTRACT HISTORY: New contract

SUSTAINABILITY: This project will improve the automated control of the City’s wastewater treatment plants and improve the level of control and monitoring of the treatment processes. As a result, this will improve the reliability of the plants and help ensure that Tacoma’s wastewater receives a consistently high level of treatment which will help preserve the water quality of Commencement Bay.

SBE/LEAP COMPLIANCE: The recommended contractor is in compliance with the Small Business Enterprise (SBE) Regulation general requirements per memorandum dated September 16, 2014. The SBE goal for this project is five percent. The SBE participation level of Technical Systems, Inc., the recommended contractor with the highest score, is 2.24 percent. The Local Employment and Apprenticeship Training Program (LEAP) goal is 15 percent of the total construction labor hours.

RECOMMENDATION:

The Environmental Services Department recommends a contract be awarded to Technical Systems, Inc., in the amount of \$10,419,581.00, plus a 20 percent contingency, for a cumulative total of \$12,503,497.20, excluding sales tax, to completely upgrade the computer control system that controls operations at the City’s Central Wastewater Treatment Plant and North End Wastewater Treatment Plant.

FINANCE PURCHASING

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FISCAL IMPACT:

EXPENDITURES:

FUND NUMBER & FUND NAME*	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT**
4300 ES Wastewater Fund	ENV-04006-06	5330100	\$12,503,497.20
TOTAL			\$12,503,497.20

*General Fund: Include Department

**Excluding Applicable Sales Tax

REVENUES:

FUNDING SOURCE*	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT**
4300 ES Wastewater Fund	523900	Rate Revenues	\$12,503,497.20
TOTAL			\$12,503,497.20

*General Fund: Include Department

**Excluding Applicable Sales Tax

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: \$480,903.74

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? Yes