



Legislation Details (With Text)

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Title: RFB-1802410 (GLWA-CON-222A)
Rehabilitation of Various Sampling Sites and Pump Station (PS) No. 2 Ferric Chloride System at Water Resource Recovery Facility (WRRF)

Sponsors: Navid Mehram

Indexes: Wastewater Operations

Code sections:

Attachments: 1. GLWA-CON-222A Procurement Board Summary-RFB 11337-v.1 4.pdf, 2. GLWA-CON-222A Bid Tab

Date	Ver.	Action By	Action	Result
12/12/2018	1	Board of Directors Workshop Meeting	Approved	Pass
12/12/2018	1	Operations and Resources Committee	Recommended for Approval	Pass

RFB-1802410 (GLWA-CON-222A)

Rehabilitation of Various Sampling Sites and Pump Station (PS) No. 2 Ferric Chloride System at Water Resource Recovery Facility (WRRF)

Agenda of: December 12, 2018

Item No.: **2018-1039**

Amount: \$4,756,000.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: December 4, 2018

RE: **RFB-1802410 (GLWA-CON-222A)**

Rehabilitation of Various Sampling Sites and Pump Station (PS) No. 2 Ferric Chloride System at Water Resource Recovery Facility (WRRF)

MOTION

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater Operating Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. RFB-1802410 (GLWA-CON-222A) “Rehabilitation of Various Sampling Sites and Pump Station (PS) No. 2 Ferric Chloride System at Water Resource Recovery Facility (WRRF)” with Commercial Contracting Corporation at a cost not to exceed \$4,756,000.00 for a duration of 24 months;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Wastewater samples are collected from the Water Recovery Resource Facility (WRRF) influent, effluent, and from various other process streams within the plant. These samples are analyzed to determine the strength and composition of sewage in order to effectively treat the wastewater. Each sample collected must be collected, handled, and transported to the laboratories by EPA-approved methods, in a manner that ensures the material represents the conditions that existed at the time of sampling.

Ferric Chloride is added to the influent wastewater at Pump Station No. 2 for the removal of phosphorus in order to meet a National Pollutant Discharge Elimination System (NPDES) permit requirement and to minimize phosphorus discharged into the receiving waters. Ferric Chloride dosage is currently controlled manually.

JUSTIFICATION

Several sampling points at the WRRF (used to monitor influent stream, primary effluent stream, secondary stream, and effluent stream) are experiencing frequent maintenance issues and frequently shut down due to the failure of samplers and associated equipment. The failure to collect proper samples of different wastewater streams can cause incorrect analyses and therefore potential operational errors in the WRRF’s treatment processes which could create permitting or public health problems. The completion of this rehabilitation project will allow for consistent and accurate sampling and will improve process reliability and reporting.

The Ferric Chloride Chemical feed system at Pump Station No. 2 needs urgent rehabilitation since the permanent equipment is now beyond the useful life and is non-operational. Currently, a temporary storage and pumping system has been in place for Ferric Chloride feed at Pump Station No. 2. The project includes real time analyzers to monitor the phosphorus influent and final effluent level to allow GLWA to optimize chemical dosing and, therefore, minimize costs.

Modification and rehabilitation of both the above systems will result in efficient operation and reduced

maintenance costs.

FINANCIAL PLAN IMPACT

Summary: Sufficient funds are provided in the financial plan for this project.

Funding Source: Wastewater Construction Bond

Cost Center: Wastewater Engineering

Expense Type: Construction (5421-892211.000-616900-216004)

Estimated Cost by Year and Related Estimating Variance: See table below.

Fiscal Year

FY 2018 Budget	\$36,000.00
FY 2019 Budget	487,000.00
FY 2020 Budget	3,500,000.00
FY 2021 Budget	<u>500,000.00</u>
Financial Plan Estimate	\$4,523,000.00
Proposed Contract Award	<u>4,756,000.00</u>
Negative Estimating Variance	\$(233,000.00)

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

Cost savings are not determinable at the time of this award.

The award of this contract to the vendor creates a negative estimating variance of \$233,000.00. This variance will be funded from capital reserves.

Project estimate	\$ 4,523,000.00
Proposed award	<u>4,756,000.00</u>
Capital reserve adjustment	\$ (233,000.00)

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on December 12, 2018. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.