



Legislation Text

File #: 2022-600, Version: 1

Contract No. 2103350
Pump Station No. 1 Improvements
CIP #211006

Agenda of: January 25, 2023

Item No.: **2022-600**

Amount: \$89,169,985.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Chief Executive Officer
Great Lakes Water Authority

DATE: January 11, 2023

RE: **Contract No. 2103350**
Pump Station No. 1 Improvements
Vendor: Weiss Construction Co., LLC

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. 2103350, "Pump Station No. 1 Improvements" with Weiss Construction Co., LLC, at the cost of not to exceed \$89,169,985.00 for a duration of 1,735 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

GLWA operates and maintains sewage Influent Pumping Station No. 1 (PS-1) at the Water Resource Recovery Facility (WRRF). PS-1 was constructed in the late 1930s. Influent from the collection system flows to PS-1 through the Detroit River Interceptor (DRI) and Oakwood Interceptor. Flow from these two interceptors enters the wet well and is pumped to an elevation that allows the wastewater to flow for primary treatment by gravity.

PS-1 has eight (8) constant speed pumps of various capacities: Pump Nos. 1, 3, 4, 5, 7, and 8 were original to the

station; and Pump Nos. 2 and 6 were added in 1956. The firm capacity of PS-1 is 1,129 Million Gallons per Day (MGD) which accounts for approximately 65% of the primary pumping capacity at the WRRF. The sewage pumps at PS-1 were last rehabilitated in 2004 and 2005. The supporting infrastructure for PS-1, including the electrical, HVAC, plumbing, and instrumentation have exceeded their useful life, and all require rehabilitation to ensure PS-1 can serve the WRRF far into the future.

To further highlight the complexity of this project, the contractor, in coordination with GLWA, will be required to successfully rehabilitate the station while maintaining critical pumping capacity for the WRRF during dry and wet weather events. This effort will require significant coordination with Operation, Maintenance, and our regulatory agency, Department of Environment, Great Lakes, and Energy (EGLE). GLWA through design has been in close communication with EGLE and has aligned the design to maintain needed capacity.

JUSTIFICATION

Pump Station 1 is the larger of the two pump stations responsible for lifting all flows that enter the WRRF. The reliability of the station's pumping capacity is essential for proper wastewater treatment at the WRRF, Pump Station 1 and its supporting infrastructure (HVAC, Plumbing, Electrical, Instrumentation, and site) has exceeded its useful life and is in need for rehabilitation.

Along with rehabilitating PS-1, critical improvements to the electrical and instrumentation systems will allow for removal of old wires/conduits not in use anymore and allow for installation of new equipment necessary to bring PS-1 up to present standards for operations, controls and monitoring. The changes being made to PS-1 also have gone through great detail and coordination with GLWA operations and maintenance staff to ensure when this project is completed that what remains is a system that considers all requirements for operations and maintenance to maximize the operational efficiency of the facility.

The scope of services includes addressing all PS-1 modifications which includes, but is not limited to, rehabilitation of all eight (8) sewage pumps, replacement of associated pump starters and electrical motor control centers, rehabilitation of inlet gates, discharge gates, valves, actuators, HVAC system, electrical and lighting distribution panels, wirings, pull boxes, interior and exterior lightings, etc. The extent of this project includes all ancillary and auxiliary equipment and services (e.g. lubrication system, ventilation, cooling system, pump health monitoring systems, etc.) and associated controls necessary to provide complete and functioning pumping systems. To maintain operations to the existing pumping station, while improving the new electrical system for the rehabilitated station, this project also includes construction of a new electrical building with all new equipment, replacement of wiring from PS-1 to Electrical Building 2 (EB-2), replacement of electrical equipment in EB-2, repairs on architectural features as well as paving and landscaping improvements.

Two bids were received for this project. The bid received was in the amount of \$89,169,985.00 from Weiss Construction Co, and \$98,103,000.00 from FH Paschen, S.N. Nielsen & Associates. Weiss Construction Co. is the lowest responsive responsible bidder.

FINANCIAL PLAN IMPACT

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

Funding Source: Sewer Construction Fund

Cost Center: Wastewater

Expense Type: Construction (5421-892211.000-616900-211006)

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

Fiscal Year

<i>FY 2023 Plan</i>	<i>\$2,654,000.00</i>
<i>FY 2024 Plan</i>	<i>12,613,000.00</i>
<i>FY 2025 Plan</i>	<i>12,579,000.00</i>
<i>FY 2026 Plan</i>	<i>12,579,000.00</i>
<i>FY 2027 Plan</i>	<i>12,613,000.00</i>
<i>FY 2028 Plan</i>	<i>12,613,000.00</i>
<i>FY 2029+ Plan</i>	<i>8,305,000.00</i>
<i>Financial Plan Estimate</i>	<i>\$73,922,000.00</i>
<i>Proposed Contract Award</i>	<i>89,169,985.00</i>
<i>Estimating Variance</i>	<i>(\$15,247,985.00)</i>

A budget amendment will be prepared to adjust the Capital Reserves to allow for alignment of planned spend.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on January 11, 2023. 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.

