



Legislation Details (With Text)

File #: 2018-691 **Version:** 1 **Name:**
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On agenda: 4/25/2018 **Final action:** 4/25/2018
Title: GLWA-CON-109 Change Order No. 1
Emergency Refurbishment of Storm Pump #5 and #7, Upgrade of Pump #5 and Motor Control Center
Upgrade for Eight Storm Pumps for Freud Pumping Station
Sponsors: Cheryl Porter
Indexes: Water Operations
Code sections:
Attachments: 1. GLWA-CON-109 CO 1 Procurement Report, 2. GLWA-CON-109 CO 1 Procurement Checklist

Date	Ver.	Action By	Action	Result
4/25/2018	1	Board of Directors	Approved	Pass
4/11/2018	1	Operations and Resources Committee	Recommended for Approval	Pass

GLWA-CON-109 Change Order No. 1

Emergency Refurbishment of Storm Pump #5 and #7, Upgrade of Pump #5 and Motor Control Center Upgrade for Eight Storm Pumps for Freud Pumping Station

Agenda of: April 25, 2018

Item No.: **2018-691**

Amount: \$886,684.07

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: **April 4, 2018**

RE: **Contract No. GLWA-CON-109 Change Order No. 1**
Emergency Refurbishment of Storm Pump #5 and #7, Upgrade of Pump #5 and Motor Control Center Upgrade for Eight Storm Pumps for Freud Pumping Station
Vendor: Lakeshore Global Corporation

MOTION

Upon recommendation of Cheryl Porter, Chief Operating Officer - Water and Field Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. GLWA-CON-109 Change Order No. 1, "Emergency Refurbishment of Storm Pump #5 and #7, Upgrade of Pump #5 and Motor Control Center Upgrade for Eight Storm Pumps for Freud Pumping Station" with Lakeshore Global Corporation, at a cost of \$886,684.07 for a total contract cost not to exceed \$4,850,573.93 for a duration of twenty-seven (27) months;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

During the course of this emergency project, it became apparent that several changes to the original scope of work were necessary for the project to achieve its goals of upgrading the Freud Pump Station for more reliable service and performance during storm events. Therefore, GLWA requests to make the following changes to the scope of work as specified below:

- 1) Storm Pump No. 5 was originally to be upgraded; however, on further investigation the pump requires replacement.
- 2) Storm Pump No. 1 became non-operational after the contract was executed.
- 3) During the course of the project, it was determined that the existing thermal monitoring system for the pumps was out of service. Running the pumps without thermal overload protection would put them at risk for catastrophic failure. Therefore, the resistive temperature detector (RTD) system needs replacement and upgrades to provide monitoring and protection for all eight storm water pumps.
- 4) In order to provide better access for the work, and to remove non-functional boilers, GLWA requests that the existing access door be modified from a single door to a double door.

The final completion date remains November 30, 2018.

JUSTIFICATION

The justification for the above changes is based on the actual conditions encountered during the course of this emergency project. Additional justification for each item is discussed below:

- 1) The original scope of work for the project called for the upgrade of Storm Pump #5. However, the condition of the pump was assessed once it was removed from the station, and it was determined that replacement was the only appropriate option to restore the system capacity at the additional cost of \$360,932.25.
- 2) The original scope of work did not include Storm Pump No. 1. However, the pump became non-operational due to a mechanical defect during the course of the work and requires repair in order to restore the overall station pumping capacity at the additional cost of \$175,522.62.

- 3) The original scope of work did not address the thermal protection system. During the course of the work it was determined that the existing thermal monitoring and protection system for the pumps was non-functioning and requires a substantial upgrade to hardware and software to provide adequate protection to all eight storm water pumps. This work is necessary to protect the new, upgraded, and existing motors at the station to prevent a catastrophic failure which could occur with non-thermally monitored/protected motors. The cost for the replacement of the RTD system and upgrade to provide monitoring and protection for all eight storm water pumps is \$293,960.20.
- 4) During the course of the work, it is necessary to improve the access to the station and remove two, non-functioning boilers. This aides in completing the work and was cost effective for GLWA to complete as part of this project. The cost to modify the existing access door from a single door to a double door and to remove two boilers is \$56,269.00.

The total cost for Change Order No. 1: \$886,684.07

FINANCIAL PLAN IMPACT

Summary: Funds are provided from the WRRF Allowance CIP 260100. A budget amendment will reflect reallocation of funds in fiscal year 2018 to CIP 232002 post approval.

Funding Source: Sewer Construction Bond Fund

Cost Center: Wastewater Engineering (892211)

Expense Type: Construction (5421-892211.000-616900-232002)

Budget Amendment Reallocation: see table below.

CIP	Amount
260100: WRRF Allowance	(\$886,684.07)
232002: CON-109	\$886,684.07

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on April 11, 2018. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution subject to receiving information on the allowances and how that impacts the budget.

SHARED SERVICES IMPACT

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