



## Legislation Text

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File #: 2019-399, Version: 1

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**Contract No. 1900134**

**Springwells Water Treatment Plant Low Lift Suction Gate Replacement**

**CIP# 114002/ BCE 69.2**

Agenda of: December 11, 2019

Item No.: **2019-399**

Amount: \$13,733,521.00

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

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

**DATE:** November 6, 2019

**RE:** **Contract No. 1900134**  
**Springwells Water Treatment Plant Low Lift Suction Gate**  
**Vendor: Barton Malow Company**

### **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. 1900134 "Springwells Water Treatment Plant Low Lift Suction Gate" with Barton Malow Company, at a cost not to exceed \$13,733,521.00 for a duration of 730 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

Currently there exists only one suction flume isolation broome gate that can be inserted in one of eight possible locations at any given time. All eight pumps discharge into a common discharge collection channel which provides raw water to both the 1930 and 1958 raw water conduits. The only means of isolating these conduits from the discharge collection channel is via the use of two bulkhead-style gates which can be placed in any of the five (5) guide systems located in the

discharge collection channel.

Under a separate future contract, GLWA intends to replace the low lift pumping units, inclusive of suction piping and associated isolation valves, pumping units, and discharge piping and associated discharge control valves located in the dry interior of the Low Lift Station. In order to complete this replacement, each pumping unit needs to be isolated from the raw water supply system. Currently, the only means of isolating each low lift pumping unit from the suction ring under this future contract is the use of the existing deteriorated broome gate and associated deteriorated guide rail and seat frame systems at the inlet to each of the eight suction flumes. Due to the age and condition of the existing gate, guide rail systems, and seating frames, inserting the existing broome gate does not provide adequate isolation to execute replacement of the low lift pumping units. Therefore, this project involves replacing the existing broome gate and associated guides with new roller gates, guides, frames, and other associated improvements.

### **JUSTIFICATION**

The existing gates, guides and appurtenances that isolate the low lift pumps from the raw water suction ring and isolate sections of the low lift discharge channel in the Springwells Water Treatment Plant Low Lift Station were installed in 1930 and are in need of replacement. The new roller gate and bulkhead-style gate systems will be designed and constructed to meet plant operations and maintenance needs. This project involves furnishing and installing two (2) new 6-foot by 6-foot roller gates; eight (8) sets of roller gate guides, rails, and frames; two (2) new bulkhead-style gates; five (5) sets of bulkhead-style gate guides; and miscellaneous drain valve replacements in the vicinity of the gate work. Most of this construction work will be conducted with the use of underwater divers so as to not disrupt normal plant operation.

### **FINANCIAL PLAN IMPACT**

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

**Funding Source:** Water Construction Bond

**Cost Center:** Water Engineering

**Expense Type:** Construction (5519-882111.000-616900-114002)

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

#### **Fiscal Year**

FY 2020 Budget	\$ 3,590,000.00
FY 2021 Budget	8,157,000.00
FY 2022 Budget	<u>1,986,521.00</u>
Financial Plan Estimate	\$13,733,521.00
Proposed Contract Award	<u>13,733,521.00</u>

Estimating Variance	\$	0.00
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### **SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT**

This project is the replacement of existing gates, guides and appurtenances at the low lift pumps and raw water suction ring at Springwells Water Treatment Plant. Cost savings are not determinable at the time of this award.

### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on November 13, 2019. 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.