



## Legislation Text

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File #: 2021-130, Version: 1

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### **Proposed Contract 2003785 Dye Testing Services and As-Needed Engineering**

Agenda of: April 28, 2021

Item No.: **2021-130**

Amount: \$2,634,875.00

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

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

**Date:** April 8, 2021

**RE:** **Proposed Contract 2003785  
Dye Testing Services and As-Needed Engineering  
Vendor: Applied Science, Inc.**

### **MOTION**

Upon recommendation of Suzanne Coffey, Chief Planning Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 2003785, "Dye Testing Services and As-Needed Engineering" with Applied Science, Inc., at a cost not to exceed \$2,634,875.00 for a duration of 60 months;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

The Contract No. 2003785 "Dye Testing Services and As-Needed Engineering" replaces the contract CS-236 "Dye Testing Services". The dye dilution testing services will be the focus of this contract, which has been routinely performed on the sewer meters in the Greater Detroit Regional Sewer System (GDRSS) since 1996. There are a total of 54 sewer metering sites in the GDRSS. These meters are part of the ongoing meter accuracy verification program established by GLWA as part of "Good Metering Practices" program. The meter verification program provides periodic and independent review of meter performance to assess accuracy of operation. The independent flow

checking method selected by Wastewater Analytical Task Force (WATF) is dye dilution testing. The dye dilution testing protocols were developed by the GDRSS project team with assistance from WATF, previously known as Flow Metering Task Force.

Dye dilution testing has been found to provide a consistent standard by which all metering accuracy can be assessed. The selected method involves the highly accurate injection of a conservative tracer, in this case a fluorescing dye, into flows passing through the flow meters that are to be tested. The downstream fluorescence is measured in the flow stream and a flow estimate is calculated using these measurements. The comparison of these estimates of flow to the meter measurements of flow is used to calculate meter adjustment factors.

The last solicitation for dye dilution services for the regional system was done in 2010 by DWSD. That contract was assumed by GLWA in 2016. This is the first solicitation that GLWA is doing for these services. The pricing in the 2010 contract has been held since that time.

### **JUSTIFICATION**

This contract is necessary to ensure that the GLWA sewage metering system is collecting accurate data and functioning well. High quality sewage flow data and analyses are critical to the establishment of sewer SHARES, which is the method by which GLWA's wastewater charges are allocated among members. The meter verification program provides periodic and independent review of meter performance to assess accuracy of operation. The dye dilution testing is the independent flow checking method selected by WATF. The As-Needed Engineering line item of the contract includes master meter design and construction; including engineering study, preliminary and final design, permitting and bid assistance, construction administration and any other related services that are needed to support the sewage and water meter upgrade and replacement program.

Below is a summary of the significant elements of the contract compared to the previous contract executed in 2010.

- The unit prices for each dye dilution test are approximately 6% higher than the 2010 contract pricing.
- The hourly rates for as-needed services, such as analytical tasks and representation at the Wastewater Analytics Task Force, are approximately 12.5% higher, on average, than the current contract pricing.
- We have added as-needed engineering services for both sewage and water meters of approximately \$100,000.00 per year, for a total of \$500,000.00 for the full five years.

### **FINANCIAL PLAN IMPACT**

**Summary:** The services outlined under this contract encompasses Operations & Maintenance

(O&M) expense only. The FY 2021 budget and five-year financial plan was based on previous experience and work performed. The value of this contract exceeds the current financial plan in total. Potential positive variances of other contractual services as well as the use of this service may vary by year. If necessary, a budget amendment will be processed to transfer funds from Unallocated Reserves to fund the variance on this contract.

**Funding Source:** Operations and Maintenance (5910 - Water)

**Cost Centers:** Systems Analytics (886401)

**Expense Type:** Contractual Operating Services - Sewer Only (617902)

**Estimated Financial Plan by Year and Related Estimating Variance:**

<u>Fiscal Year</u>	<u>Amount</u>
FY 2021 Budget (prorated)	\$112,500.00
FY 2022 Financial Plan	425,000.00
FY 2023 Financial Plan	425,000.00
FY 2024 Financial Plan	425,000.00
FY 2025 Financial Plan	425,000.00
FY 2026 Financial Plan	<u>425,000.00</u>
Total Financial Plan	\$2,327,500.00
Proposed Contract Award	<u>2,634,875.00</u>
Estimated Variance to Plan	(\$307,375.00)

**SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT**

The award of this contract provides a potential negative variance of (\$307,375.00). Total financial plan of \$2,327,500.00 less the maximum contract value of \$2,634,875.00.

**COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on April 14, 2021. 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.