



City of Kansas City, Missouri

Docket Memo

Ordinance/Resolution #

Submitted Department/Preparer: Water Services

Docket memos are required on all ordinances initiated by a Department Director. More information can be found in [Administrative Regulation \(AR\) 4-1](#).

Executive Summary

Authorizing a \$400,000.00 design professional services contract with Jacobs Engineering Group, Inc. for the Smart Sewer Flow Data Analytics project; and authorizing two successive one-year renewal options for a maximum expenditure of \$1,200,000.00 with further City Council approval.

Discussion

Project Justification

In 2010, the City of Kansas City, Missouri entered into a Consent Decree with the United States Environmental Protection Agency (EPA) to reduce the volume and frequency of overflows from the City's sewer system over a 25-year period. In March 2021, the Consent Decree was modified to include additional interim and revised final performance criteria and to extend its duration to 30 years. The City's Smart Sewer Program is currently in year 13 of a 30-year implementation period.

The Smart Sewer program uses strategic, data-driven solutions and innovative overflow control technologies to ensure the improvements and investments we make today will last for generations to come. Smart solutions capitalize on enhanced sewer system asset condition and performance data, and innovative technologies to minimize cost and maximize the benefits. Combined with continued efforts on the system-wide hydraulic model and asset data management systems, the sensor network and data analytics will support KC Water's continued journey of digital transformation to optimize needed capital investments for the Smart Sewer Program implementation, as well as necessary system operational, maintenance and asset management expenditures.

The City is continuing to operate, maintain, and expand the existing Smart Sensor Network within the sewer system and continues data collection services. The purpose of this project is to utilize data collected from the Smart Sensor Network to perform data analytics in support of various sewer management functions, to support the development of strategies for evolving data driven system engineering, operations, and maintenance, and to support data dashboards and decision support systems.

Project Description:

The scope of work to be performed under this contract entails the following services:

- Developing near- and long-term strategies to advance the data-driven sewer system operations.



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- Developing/maintaining/enhancing the roadmap for data dashboards for an Intelligent Wastewater Platform.
- Advancing data analytics to serve multiple use cases with deep learning and intelligence interfaced with KC Water’s new wastewater SCADA system.

This contract will have a 12-month service period, in the amount of \$400,000.00.

Solicitation:

The Request for Proposals/Qualifications for this project was advertised in accordance with the City’s requirements on November 19, 2021. Three proposals were received on December 20, 2021.

Consultant Selection/Subcontracting Participation:

Jacobs Engineering Group, Inc. was selected for this project in accordance with Code of Ordinance Section 3-31(b)(1), Citywide selection with subcontracting participation of 8% MBE and 8% WBE.

Other Proposals Received:

Tetra Tech, Inc.

Xylem Inc.

Estimated Project Cost:

The City’s estimated cost for this project is \$400,000.00.

Fiscal Impact

1. Is this legislation included in the adopted budget? Yes No

2. What is the funding source?

24-8110-807769-611040-81000977; \$400,000.00

3. How does the legislation affect the current fiscal year?

Work on this project will begin in FY24. Invoices will be submitted by the Design Professional on a monthly basis.

4. Does the legislation have fiscal impact in future fiscal years? Please notate the difference between one-time and recurring costs.

Funds encumbered in the current fiscal year will be disbursed over subsequent fiscal years, as necessary. Work on the project is anticipated to be complete within 365 calendar days from Notice to Proceed.



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5. Does the legislation generate revenue, leverage outside funding, or deliver a return on investment?

No.

Office of Management and Budget Review

(OMB Staff will complete this section.)

- 1. This legislation is supported by the general fund. Yes No
- 2. This fund has a structural imbalance. Yes No

Additional Discussion (if needed)

Click or tap here to enter text.

Citywide Business Plan (CWBP) Impact

View the [FY23 Citywide Business Plan](#)

Which CWBP goal is most impacted by this legislation?

Infrastructure and Accessibility (Press tab after selecting.)

Which objectives are impacted by this legislation (select all that apply):

- Enhance the City's connectivity, resiliency, and equity through a safe, efficient, convenient, inclusive, accessible, sustainable and better connected multi-modal transportation system
- Develop environmentally sound and sustainable infrastructure strategies that improve quality of life and foster economic growth
- Increase and support local workforce development and minority, women, and locally-owned businesses
- Engage in efforts to strategically invest in the City's infrastructure and explore emerging technologies
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Prior Legislation

None

Service Level Impacts

This project will provide data analytics for the sewer system's smart sensor network to support the optimization of sewer system capacity and associated pumping and treatment facilities.

Other Impacts

1. What will be the potential health impacts to any affected groups?

None.

2. How have those groups been engaged and involved in the development of this ordinance?

N/A

3. How does this legislation contribute to a sustainable Kansas City?

This project helps promote environmental quality, social equity, and economic vitality.

4. Does the ordinance/resolution include Civil Rights antidiscrimination requirements in compliance with the Code of Ordinances (Chapter 38, titled "Civil Rights")?

Yes. CREO KC established 8% MBE and 8% WBE goals on this project on September 3, 2021.

5. Has the ordinance/resolution been submitted for review of economic equity & inclusion requirements in compliance with the Code of Ordinances (Chapter 3, titled "Contracts and Leases")?

Yes. The Contractor Utilization Plan, Letters of Intent to Subcontract and Timetable documents were submitted to CREO KC for review on September 7, 2022, and were approved on September 9, 2022, with 8% MBE and 8% WBE participation.