

CONTRACT

210913

Ordinance Fact Sheet

Amendment Form

Revised 10-18-2021

<u>Brief Title</u>	<u>Approval Deadline</u>	<u>Reason</u>
Modernization Improvements at the Water Treatment Plant, Amendment No. 3		To authorize execution of an amendment and expenditures.

Reason for Contract

This design professional services project is addressing rehabilitation needs, optimizing the treatment process, increasing the treatment capacity from 240 to 270 million gallons per day (mgd), and eliminating restrictions to increase the hydraulic capacity to 300 mgd to modernize the City's Water Treatment Plant.

This proposed Amendment No. 3 will provide design phase services for Intake and Water Treatment Plant Improvements (primary basins, final basin nos. 3A and 3B, slide gates, and butterfly valves).

Discussion

Contract Summary
City Council approved Ordinance No. 190332 on May 2, 2019 approving a maximum expenditure of \$6,116,000.00 with Black & Veatch Corporation for the Modernization Improvements at the Water Treatment Plant design professional services project.

Contract + Proposed Amendment Cost Summary

Original Contract	\$4,011,980.00
Amendment No. 1	\$0.00
Amendment No. 2	\$1,183,000.00
Proposed Amendment No. 3	\$4,527,732.00
Total:	\$9,722,712.00

Project Justification
The purpose of this project is to modernize Kansas City's Water Treatment Plant by addressing rehabilitation needs, optimizing the treatment process, increasing the treatment capacity from 240 to 270 million gallons per day (mgd), eliminating restrictions to increase the hydraulic capacity to 300 mgd and provide a more reliable, sustainable raw water, pumping and treatment system to support KCMO's growth.

The Water Treatment Plant is located at 1 N.W. Briarcliff Road, in Clay County, Kansas City, Missouri.

Project Description
The scope of services on this project includes preliminary design and final design and bidding services for Construction Bid Packages No. 1 and No. 2.

The Project includes the following major components:

- A facility condition assessment to identify and prioritize rehabilitation improvements;
- Hydraulic evaluations to identify flow restrictions and develop improvements to achieve 300 mgd;
- Computational fluid dynamics (CFD) modeling to identify opportunities to optimize the treatment processes;

Sponsor	Water Services Department
Department or Programs Affected	Water Services Department
Recommended Awardee	Black & Veatch Corporation
Contract Compliance Certification	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
Obtained?	
Opponents	Groups or Individuals None known Reason for Opposition
Responsibilities	Design Engineering: Black & Veatch Corporation Inspections: Construction or Project Management: Service Monitoring:

Policy/Program Impact

Policy or Program Emphasis Change	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Operational Impact Assessment	

Details

- Bench-scale testing of disinfection modifications to achieve the desired capacity during winter months while complying with regulatory requirements, and for optimization of the treatment processes in the Primary and Final Basins and Recarbonation Channel;
- Pilot testing of a high rate settling technology (Plate Settlers) to improve the settling performance within the Final Basins;
- Full-scale filter pilot to evaluate dual media performance;
- Primary Basin equipment modifications to optimize the treatment process;
- Biofiltration evaluation to determine the advantages and disadvantages of implementing this process;
- Tracer testing of two basin trains and the clearwell/reservoir system to update the baffling factor for disinfection;
- Development of a predictive water quality model to facilitate operations under changing water quality conditions and the development of an interactive process flow diagram;
- Preliminary design, final design, and bidding services for two construction bid packages consisting of the replacement of the secondary basin equipment including the launders/weirs, residual collection equipment and the access walkways, and improvements to the primary basins, parshall flumes, disinfection, and filters for increased hydraulic capacity and treatment performance; and
- A Risk and Resiliency Assessment and update to the Emergency Response Plan to comply with the America's Water Infrastructure Act.

The amount of the original contract was \$4,011,980.00.

A no-cost Amendment No. 1 was executed on April 10, 2020 that added language to the contract for purchasing material and equipment that was tax exempted.

A \$1,183,000.00 Amendment No. 2 is currently being executed by the City that will provide construction phase services for the installation of residual collection equipment in the Secondary Basins at the Water Treatment Plant.

This proposed ordinance will authorize a \$4,527,732.00 Amendment No. 3 for design phase services for the Intake and Water Treatment Plant Improvements (primary basins, final basin nos. 3A and 3B, slide gates, butterfly valves, replacement of five (5) current vertical wells with larger diameter vertical wells, construction of horizontal collector wells to increase the overall raw water capacity of wells to 145 + MGD and construction of the associated raw water pipelines to connect the horizontal collector wells together with the existing well field).

Details

Civil Rights and Equal Opportunity Department Approval

Subcontracting goals on this project were 15% MBE and 10% WBE. The Contractor Utilization Plan was approved by the Civil Rights and Equal Opportunity Department on April 30, 2019 with 15% MBE and 10% WBE participation.

The MBE/WBE participation will remain the same with this proposed amendment.

Grant Funding

N/A

Is it good for the children? Yes.

How will this contribute to a sustainable Kansas City?

This project will design reliable water treatment facilities for future demands.

Finances

City's Estimate of Cost	\$ 4,527,732.00
Bid or Proposal Data	<i>Lowest Contract Cost Submitted</i> \$ NA FOR AMENDMENT <i>No .of Proposals Considered</i> <i>Reason for rejecting lowest contract cost submitted</i>
Other Bidders or Contractors Considered	Contract Costs Submitted \$ NA FOR AMENDMENT \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Fund Sources and Appropriation Account Codes	22-8010-807773-B-80002132 = \$4,527,732.00
For This Contract	Water Treatment Facilities Project No 80002132
Source of Future Operating Funds	
Maximum Amount of Proposed AMENDMENT	\$ 4,527,732.00
Amount of Contingency	\$
Engineering & Administration	\$
TOTAL	\$ 4,527,732.00

Estimated Duration of Contract:

Completed by May 31, 2023

Fact Sheet Prepared by:

Leona Walton
Contracts Manager

Date:

9/30/2021

Reviewed by:

D. Matt Bond
Deputy Director

Date:

10/1/2021

Reference Numbers:

Contract No. 9472 / Project No. 80002132

Council Committee Actions

Do Pass	<input type="checkbox"/>	<input type="checkbox"/> Hold
Do Pass (as amended)	<input type="checkbox"/>	<input type="checkbox"/> W/o Recommendation
Committee Sub.	<input type="checkbox"/>	<input type="checkbox"/> Do Not Pass