



Legislation Text

File #: 22-0820, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the award of Bid 22-039, Springbrook Water Reclamation Center UV Disinfection Improvements, to Williams Brothers Construction, Inc. for an amount not to exceed \$8,322,000.00, plus a 3% contingency

DEPARTMENT: Water Utilities

SUBMITTED BY: Darrell Blenniss, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

Springbrook Water Reclamation Center (SWRC) is required by the Illinois Environmental Protection Agency (IEPA) to disinfect wastewater effluent prior to releasing it to the DuPage River. The existing disinfection system is a chlorination/de-chlorination system that is nearing the end of its useful life. The system requires constant staff attention and replacement parts have become difficult to source. In addition, the cost of chemicals required to operate the system has increased 50-100%.

As part of the SWRC Facilities Plan project, a disinfection alternatives analysis was performed to evaluate various wastewater disinfection options. Various criteria were examined during the analysis including initial capital cost, annual operating and maintenance cost, 20-year life cycle cost, operational considerations, safety, constructability and environmental/social factors. Ultraviolet (UV) disinfection was chosen as the preferred disinfection method. It has the lowest life-cycle cost, as well as the best non-cost score. This method of disinfection does not involve shipping, storing or dosing of chemicals.

In June 2022, the Water Utilities issued Bid 22-039, Springbrook Water Reclamation Center UV Disinfection Improvements. The project will involve construction of a new UV disinfection system and non-potable water pumping system, including demolition of existing disinfection facilities, modifications to chlorine contact basins for conveyance of wastewater, flow metering, yard piping, outfall construction, UV facility construction, electrical, plumbing, heating, ventilation, structural, and instrumentation and controls construction. The UV equipment was pre-selected in 2021 and pricing was negotiated and fixed at that time. An additive alternate was also included to construct a canopy over the UV channels to protect the equipment from the weather.

DISCUSSION:

Advertisement Date: June 13, 2022 Notices Sent: 275

Opening Date: July 1, 2023 Plan holders: 36
 Proposals Received: 5

Bids were received from the following vendors:

Vendor Name	Base Bid	Alternate Bid	Total Bid
Williams Brothers Construction, Inc.	\$7,970,000	\$352,000	\$8,322,000
Vissering Construction Company	\$8,225,000	\$356,000	\$8,581,000
Joseph J. Henderson & Son, Inc.	\$8,659,000	\$360,000	\$9,019,000
Integral Construction, Inc.	\$8,683,200	\$300,000	\$8,983,200
IHC Construction Companies, LLC	\$8,880,000	\$315,000	\$9,195,000
<i>Engineer's Estimate</i>	<i>\$10,244,750</i>	<i>\$327,250</i>	<i>\$10,572,000</i>

The current bidding climate, as well as continuing supply chain and labor availability issues related to COVID-19, makes estimating project costs difficult, resulting in the engineer's estimate being approximately 27% higher than the bids received. Staff attributes this to pre-selection of the UV equipment which fixed the price for the equipment. Staff evaluated the base bid and additive alternate and recommend proceeding with both the base bid and alternate at this time. Constructing the canopy at this time is recommended due to favorable pricing, avoiding future disruption to the treatment process if the canopy were to be constructed later, and facilitating future year-round disinfection requirements by protecting the equipment from the weather.

This project has a substantial completion date of May 1, 2023 and a final completion date of July 30, 2023. The city's consulting engineer has worked with the low bidder in the past and the work has been satisfactory.

FISCAL IMPACT:

CIP #: WW002 - Springbrook UV Disinfection Installation

UV Disinfection installation is expensed to the account number listed below as a part of the Capital Improvement program. A total of \$4,573,000 is budgeted for WW002 in 2022. Future costs will be budgeted accordingly during the budget cycle.

Account Number	Fund Description	Total Budget Amount
41252000-551502	Water Capital Fund	\$27,438,275

Per Council directive, contingency on construction projects is set at 3% on projects over \$500,000 and 5% on projects under \$500,000.