

City of Naperville

400 S. Eagle Street Naperville, IL 60540

Legislation Text

File #: 23-0690, Version: 1

CITY COUNCIL AGENDA ITEM

ACTION REQUESTED:

Approve the Emergency Procurement 23-175 West-Southwest Elevated Tank Painting Project - Additional Work to ERA-Valdivia Contractors, Inc. for an amount not to exceed \$581,000

DEPARTMENT: Water Utilities

SUBMITTED BY: Darrell Blenniss, Director

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

ERA-Valdivia Contractors, Inc. (EVC) is currently in the process of completing the West-Southwest Elevated Tank painting project, as specified in Contract 22-024. This work is in its final stages of completion with the exterior painting remaining.

While performing work on the tank column exterior, EVC encountered conditions with existing coatings that differed from those specified. The existing topcoat was degraded and flaked off at a rate greater than anticipated when cleaned with a power washer according to the specifications. The process left a residue on the column that may inhibit the adhesion of the new coating materials.

EVC consulted with the paint manufacturer, Sherwin-Williams, and concluded that existing conditions were marginal to meet work specifications. At question were the adhesion qualities of existing coatings and if they can accept additional coats of paint as specified.

On May 30, 2023, EVC requested guidance from the City on how to proceed.

DISCUSSION:

Water Utilities staff contacted Dixon Engineering Inc. (Dixon), an independent third party, to inspect the existing coating conditions of the column exterior and provide opinions with recommendations on how to continue with this work. Dixon performed adhesion testing, based upon a scale of A0 (poor) to A5 (very good), on the column exterior and attained the following adhesion results:

- a. Topcoat results were very poor (A0)
- b. Intermediate coat results were slightly better but still poor (A1)
- c. Epoxy prime coat results, where tested, were very good, (A5)

Dixon recommended that the exterior column be cleaned with a high-pressure power wash to remove the remaining topcoat and loose intermediary coating and to continue with the new coating

File #: 23-0690, Version: 1

application as originally specified. Dixon worked with EVC staff on-site and tested this process on the column exterior with successful results.

After EVC completed the additional power washing, additional inspection services were requested from Dixon to evaluate the conditions prior to coating to verify that conditions are acceptable for proper coating adhesion. Dixon was unable to commit to the additional inspection, so staff sought proposals from alternate firms. KLM Engineering, Inc. accepted the assignment.

On June 5, representatives from the City, EVC, KLM, and Sherwin-Williams convened on-site for an evaluation prior to coating. KLM performed destructive testing of existing coatings on the exterior of the column and bowl collecting chips for analysis. These chips as well as chips collected from the ground were analyzed and KLM determined that the existing coating, from the original construction, was applied over mill scale. Mill scale is a type of iron oxide that is formed on the surface of the steel during the hot-rolling process. KLM advised that mill scale is detrimental to any coating system as well as the life of the tank. It cannot be overcoated, and it must be removed prior to application of any protective coatings.

Based on this finding, staff recommend the removal of all existing coatings on the exterior of the column and bowl, followed by the application of a zinc prime coat prior to the application of the coatings specified in the contract. The additional work will be performed by EVC for an amount not to exceed \$581,000. This additional work requires that time be added to the project completion date of June 30, 2023. The expected completion date is now July 8; however, staff is seeking an additional 60 days to accommodate unforeseen issues that may arise with work schedules.

The new completion date will be August 29, 2023

Staff is recommending the emergency procurement be awarded to ERA-Valdivia Contractors to prevent/minimize the serious disruption of water services.

FISCAL IMPACT:

WU046 - West SW Waterworks Elevated

Improvements to the West-Southwest Elevated Tank were previously awarded for an amount of \$845,050, plus a 3% contingency. The 2023 budget includes \$1,000,000 for this project. The requested change order to add \$581,000 exceeds the budget for this project by \$426,050; however, the additional amount can be accommodated within the Water Capital Fund budget due to delays in other planned projects.

Account Number	Fund Description	Total Budget Amount
41252000-551502	Water Capital Fund	\$39,813,900