

MEMORANDUM

Date: November 14, 2022

To: Honorable Mayor and Commissioners

CC: Todd Stoughton, Interim City Manager

From: Ian McDowell, P.E., City Engineer

Subject: Approving a change order for the construction contract with Charley Toppino &

Sons, Inc. for Richard A. Heyman Environmental Protection Facility aeration

systems upgrade project.

Action Statement

This resolution would approve a change order to the contract with Charley Toppino & Sons, Inc. in the amount of \$11,710.98 for the Richard A. Heyman Environmental Protection Facility (RAHEPF) aeration systems upgrades project.

Background

In 2021, CTS was awarded a construction contract according to their response to ITB 21-006 for the aeration systems upgrade project to increase control, energy efficiency, and redundancy at the wastewater treatment plant (WWTP) as well upgrades to the existing plant electrical switchgear.

The existing aeration system consists of two multistage centrifugal blowers with associated mechanical piping, electrical and instrumentation and controls components. The existing layout was designed with space and piping connections for the addition of a third blower unit in the future. Based on daily log data, only one blower is required to meet the plant's needs approximately 88% of the time. A design was completed in 2021 for an additional blower as the City desired to increase air control, energy efficiency and redundancy at the facility. It is anticipated that energy savings can be obtained by optimizing process control and by utilizing newer blower technology which is inherently more efficient. City staff have reviewed and approved the recommendations (blower type selection and process control strategy) from the initial evaluation phase, and the blower technology and improved process control upgrades have been incorporated into the detailed design phase. A 23% (\$41,319) reduction in annual operating expenses is expected. Total savings over a 20-year period is expected to be approximately \$571,665.

Purpose and Justification

As the construction contract was awarded for both the installation of the electrical switchgear and aeration blower, accommodations for the electrical needs of the new blower were accounted for in the design of the replacement switchgear. As design issues with the existing switchgear have temporarily delayed progress of the replacement switchgear, changes are required to facilitate the completion of the aeration blower project.

The proposed change order in the amount of \$11,710.98 is to supply and install an additional electrical circuit breaker necessary to power the new aeration blower from an existing motor control center (MCC). With this breaker installed, the blowers can be put into operation and the project closed out.

Financial

This change order for the aeration basin blower upgrades project is the fourth change order. As the previous change orders total \$40,503.72, approval is required per Sec. 2-845 Change orders (a) as the cumulative change order total will now exceed \$50,000, (\$51,674.70). Funds for this change order are available in project SE35031801.

Recommendation

Staff recommends approving the change order for the construction contract with Charley Toppino & Sons, Inc. in the amount of \$11,710.98 and authorizing the City Manager to execute this agreement and any necessary budget transfer/amendments.