# COUNCIL ACTION FORM

## SUBJECT: ENGINEERING SERVICES FOR THE WATER POLLUTION CONTROL FACILITY DIGESTER PUMPS, PIPING, AND VALVES REPLACEMENT PROJECT

## BACKGROUND:

On May 9, 2017 the City Council awarded a contract for engineering services to Strand Associates, Inc. of Madison, Wisconsin for design of the Water Pollution Control Facility (WPCF) Pump, Piping, and Valve Replacement Project in an amount not to exceed \$127,700. During preliminary design, Strand reviewed the applicable building code requirements related the digester complex along with standards set by the National Fire Protection Association (NFPA) for wastewater treatment plants (NFPA Standard 820). The overall goal of these standards is to improve workplace safety by providing protection against fire and explosive hazards.

The Digester Complex was originally designed and constructed in accordance with the building codes that were in place at the time. Based on Strand's review, however, the complex does not comply with current NFPA and National Electric Code (NEC) requirements. Strand has recommended the City upgrade the electrical system to meet the current code as a part of the Pump, Piping, and Valve Replacement Project.

A separate Gas Piping and Safety Equipment Replacement project is scheduled for the coming fiscal year (FY 18/19). Similar code deficiencies will arise when that project is initiated. Strand is recommending that the City also proceed with that separate project at the same time. Combining these two projects and addressing the code issues all at once will minimize plant operational issues and help to reduce the overall construction costs.

Combining the two projects together results in an estimated total project cost of \$3,323,000. A summary of the revised project budget is shown below.

Replace Pump Room Pipes & Valves	\$ 543,000
Replace Primary Pumps	360,000
Replace Secondary Pumps	336,000
Replace Gas Piping & Safety Equipment	1,404,000
NFPA Code Upgrades	600,000
Misc. Components	80,000
Combined Project Total	3,323,000

This is an increase of approximately \$856,000 over what was previously shown in the Capital Improvements Plan. The increase will be shown as a new element in Year 1 of

the 2018-2023 CIP that will be presented to Council in January 2018. Staff has identified savings in the current year from other CIP projects to partially offset the increased project cost.

Structural Rehabilitation	\$ 488,661
Screw Pump Rebuild	63,447
Administration Building HVAC Replacement	52,522
Identified Savings	\$ 604,630

# These offsetting reductions will be made as a part of the FY 2017/18 mid-year budget adjustments. The remaining \$251,370 will come from the available Sewer Fund balance.

Staff has worked with Strand to develop a revised scope of work for the design of the combined project. The contract change order for Strand to complete the additional engineering design will be an increase of \$171,000, bringing their total contract amount to \$298,700. This design fee is approximately 10% of the estimated construction costs, which is in line with the industry standard for similar engineering services.

# ALTERNATIVES:

- 1. Authorize Change Order Number 1 for additional engineering services to Strand Associates, Inc. of Madison, Wisconsin for the WPCF Pump, Piping, and Valve Replacement Project in an additional amount not to exceed \$171,000.
- 2. Do not authorize the change order to the contract at this time.

## MANAGER'S RECOMMENDED ACTION:

Staff has determined that it is in the best interest of the City to move forward with this change to the contract. Delaying design to issue a new Request for Proposals (RFP) could delay the project six months and leaves the safety issue unaddressed longer. Combining these projects will provide cost savings to the City in both construction and design, and provide less operational cost in taking down digesters multiple times. The working relationship with Strand has been excellent to date for the project and staff expects it to continue into the future. It is staff's opinion that the dollar amount proposed by Strand for the additional work appears to be reasonable for the additional scope of work, and as a rough percentage of the estimated construction costs it is in line with W&PC's recent experience with other consultants on other projects.

Therefore, it is the recommendation of the City Manager that the City Council adopt alternative 1 as described above.