ITEM: <u>28</u> DATE: <u>01-23-18</u>

## **COUNCIL ACTION FORM**

SUBJECT: 2014/15 SANITARY SEWER REHABILITATION (MANHOLE REHABILITATION – FLOOD PRONE MANHOLES)

## **BACKGROUND:**

The ability of the sanitary sewer system to convey wastewater well into the future is dependent on the removal of the current large amount of infiltration and inflow (or I/I) in the system that occurs during wet weather. In order to minimize the need for costly expansions to the City's Water Pollution Control (WPC) facility, as well as to convey flows from new development as the City grows, the City must work to reduce the overall I/I in the system.

In March 2012 the City entered into a Sanitary Sewer System Evaluation agreement with Veenstra & Kimm, Inc. (V&K) from West Des Moines, Iowa. This included a comprehensive and systematic evaluation for identifying the defects that could contribute I/I across the entire, City-wide sanitary sewer system. This evaluation has been underway for several years. With the data collection phase complete, there are over \$25 million of structural improvements needed in the sanitary sewer system.

Current and future CIP projects for the sanitary sewer system are based on the results of this evaluation. Work includes rehabilitation such as the lining of existing mains or spray lining of existing structures, as well as complete removal and replacement of structures and sanitary sewer mains. Funding for these projects in the CIP comes from the State Revolving Fund (SRF) beginning in FY 2014/15 in the amount of \$3,470,000. Repayment of the SRF loans is from revenues generated in the Sanitary Sewer Fund.

This is the second project to come out of the study, and was selected to have an immediate impact by removing Inflow & Infiltration (I&I) in manholes that are in areas prone to flooding. By eliminating I/I in these manholes, the existing sewer mains will regain some capacity. Items of work in the contract included replacement of existing manhole castings, installation of new external seals, and chemical grouting and cementitious lining of existing manholes. These rehabilitation methods reduces the amount of clean water that enters the system, thus reducing the amount of water needing treatment at the plant.

On May 24, 2016 City Council awarded this project to Save Our Sewers of Cedar Rapids, lowa, in the amount of \$1,032,105.23. Change Order 1 was an increase in the amount of \$29,790 for additional barrel and cone manhole sections as part of this project. Change Order 2 was a decrease in the amount of \$8,227.52 for balancing the contract to reflect actual field quantities. Construction was completed in the amount of \$1,053,667.71.

Revenue and expenses associated with this program are estimated as follows:

	Available Revenue	Estimated Expenses
State Revolving Funds 2014/15 Sanitary Sewer Rehab (Manhole Rehab	\$ 3,270,000	
in Basins 1 & 5) ( <i>Actual – separate contract</i> ) <b>2014/15 Sanitary Sewer Rehab (Manhole</b>		\$ 1,624,944.96
Rehab – Flood Prone Manholes) (this project) Engineering/Admin/Construction Inspection		\$ 1,053,667.71
(Both Projects)		\$ 577,619.04
	\$ 3,270,000	\$ 3,256,231.71

## **ALTERNATIVES:**

- 1. Accept the 2014/15 Sanitary Sewer Rehabilitation (Flood Prone Manholes) as completed by Save Our Sewers of Cedar Rapids, Iowa, in the amount of \$1,053,667.71.
- 2. Direct additional work and do not proceed with closing the project at this time.

## **MANAGER'S RECOMMENDED ACTION:**

This project was completed in accordance with the approved plans and specifications. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.