



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: May 15, 2017

Re: Public Hearing – FY 2017 Sanitary Sewer Main and Manhole Rehabilitation Project

Executive Summary

Public Hearing for the FY 2017 Sanitary Sewer Main and Manhole Rehabilitation Project. This proposed sanitary sewer system improvement will consist of the rehabilitation of approximately 44,000 linear feet of sewer line, rehabilitation of 400 manholes, and 310 lateral connection rehabilitations. The estimated cost of the project is \$2,700,000 and will be paid from Sanitary Sewer Utility funds.

Discussion

The scope of this proposed sanitary sewer system improvement project consists of rehabilitating approximately 44,000 linear feet of sewer line, 400 manholes, and 310 lateral connection repairs. The project will focus on inflow and infiltration (I&I) reduction and repairing structurally deficient sewer lines. Approximately 24,000 feet of sewer will be rehabilitated for I&I reduction and 20,000 linear feet will be rehabilitated due to structural deficiencies of sewer main. The project is anticipated to begin in the summer of 2017, if approved by Council. It is anticipated that by the end of FY2017 that all of the rehabilitation work for the previously studied basins for inflow and infiltration will be completed. An interested parties meeting was held on April 13, 2017 to discuss this project.

Sanitary Sewer Main and Manhole Rehabilitation for I&I Reduction

The I&I reduction work will consist of the rehabilitating approximately 20,000 linear feet of sewer line, 400 manholes and 310 lateral connection repairs. This portion of the project is part of the ongoing effort to reduce the amount of I&I that enters the sanitary sewer system in order to reduce wet weather sanitary overflows and the backups into buildings. The sewer main and manhole rehabilitation work for I&I reduction will be focused in the County House Branch watershed as shown on the attached diagram.

City staff and TREKK Design Group have been working in these areas over the past several years to identify I&I sources and sewer infrastructure rehabilitation needs. The scope of the rehabilitation work for this project was identified by smoke testing, closed circuit TV inspections and GIS data.

Structural Repairs

Along with the I&I rehabilitation needs there are approximately 24,000 linear feet of structurally deficient sewer mains. Structurally deficient sewer mains are pipes that are cracked or broken almost to the point of failure. These sewer mains have been identified by Sewer Utility staff during the performance of routine operation and maintenance activities.



The structurally deficient lines are located in various areas throughout Columbia and need to be repaired in order to keep the sewer collection system functioning properly.

Fiscal Impact

Short-Term Impact: The total project cost, including construction, is estimated at \$2,700,000 and will be paid from Sanitary Sewer Utility funds that were provided as part of the 2013 ballot.

Long-Term Impact: Staff anticipates this project will not change the sewer utility's annual maintenance and operation costs.

Vision & Strategic Plan Impact

Vision Impacts:

Primary Impact: Environment, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Strategic Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Infrastructure, Tertiary Impact: Tertiary

Legislative History

Date	Action
04/17/2017	Setting a public hearing for May 15, 2017 for the construction of the FY2017 sanitary sewer main and manhole rehabilitation project.
06/16/2016	(R61-16) Setting a public hearing for July 5, 2016 for the construction of the FY2016 sanitary sewer main and manhole rehabilitation project.
04/20/2015	(R66-15) Setting a public hearing for May 18, 2015 for the construction of the FY2015 sanitary sewer main and manhole rehabilitation project.
03/03/2014	(R31-14) Setting a public hearing for April 7, 2014 for the construction of the FY2014 sanitary sewer main and manhole rehabilitation project.
04/19/2012	(R40-12) Setting a public hearing for April 2, 2012 for the construction of the FY2012 sanitary sewer main and manhole rehabilitation project.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Suggested Council Action

Council should direct staff to proceed with the FY2017 Sanitary Sewer Main and Manhole Rehabilitation Project following public input and Council discussion.