

COUNCIL ACTION FORM

SUBJECT: 2018/19 SANITARY SEWER REHABILITATION (SIPHONS)

BACKGROUND:

This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the city. The goal of this program is to remove major sources of inflow/infiltration as a means of lowering the peak wet weather flow at the treatment plant. Work typically 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. The specific project locations were identified through the Sanitary Sewer System Evaluation, which began in 2012.

The sixth rehabilitation project is to rehabilitate siphon structures, which are sewer mains that dip below a creek or river and raise up on the other side. There are seven siphons that will be addressed through this project. This project was selected to have an immediate impact by removing Inflow & Infiltration (I&I) in these older sewer mains that were installed with non-sealed joints, the industry standard at the time. By eliminating I&I in sewer mains, the sanitary sewer system will regain some capacity.

Items of work in the contract include heavy clean, ream, pre- and post – cleaning CCTV, and rehabilitate inlet and outlet structures. The cleaning removes grit, grease, hard deposits, tuberculation and/or rust from the pipes. These rehabilitation methods minimize the impact to residents and will reduce the amount of clean water that enters the system, thus reducing the amount of water needing treatment at the plant.

On September 24, 2019, a single bid for the project was received as follows:

<i>Bidder</i>	<i>Amount</i>
<i>Engineer's estimate</i>	<i>\$900,000.00</i>
Synergy Contracting, LLC	\$1,440,778.00

City staff contacted potential bidders to understand why additional bids were not received. The information provided indicated that the siphon locations are difficult to access, and therefore it is challenging to anticipate the actual costs to perform the work described in the scope of services. After evaluating the bid received, staff recommends proceeding with award to remove significant inflow/infiltration entering the sanitary sewer system and regain capacity within the system. Overall, sufficient funding is available from the 2018/19 and 2019/20 Sanitary Sewer Rehabilitation Program budgets to award this project along with the Munn Woods

rehabilitation project. Additional sanitary sewer rehabilitation projects will continue next fiscal year.

Revenue and expenses associated with the two projects in this program are estimated as follows:

	Available Revenue	Estimated Expenses
State Revolving Fund (2018/19)	\$3,570,000	
State Revolving Funds (2019/20)	\$3,684,000	
2018/19 Sanitary Sewer Rehab (Wilson & 15 th) (Awarded)		\$2,663,751.50
2018/19 Sanitary Sewer Rehab (Siphons) (this project)		\$1,440,778.00
2019/20 Sanitary Sewer Rehab (Munn Woods)		\$2,190,212.40
Engineering/Administration (Est.)		\$ 959,000.00
	\$7,254,000	\$7,253,741.90

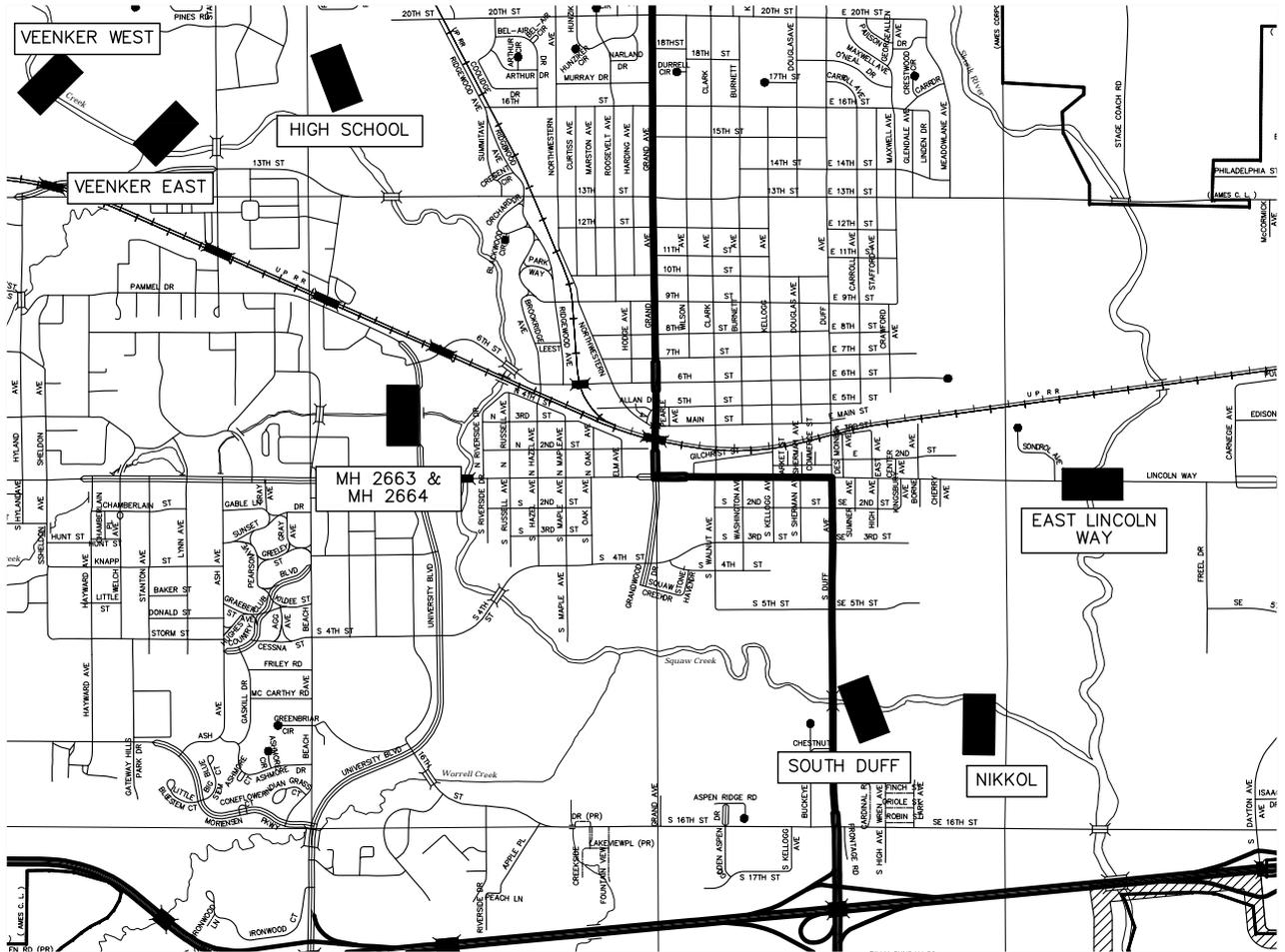
ALTERNATIVES:

1. a. Approve the final plans and specifications for this project.
- b. Award the 2018/19 Sanitary Sewer Rehabilitation (Siphon) project to Synergy Contracting, LLC of Bondurant, Iowa in the amount of \$1,440,778.
2. Do not proceed with this project.

CITY MANAGER'S RECOMMENDED ACTION:

By approving final plans and specifications and awarding the contract, this project will provide substantial improvements to the sanitary sewer system. **Difficulty in accessing the siphons have contributed to the high bid. However, this project to rehabilitate several siphon locations (see attached map) will have an immediate impact by removing Inflow & Infiltration to regain valuable capacity in the City's existing sanitary sewer mains. During heavy rain events, including floods, siphons are located where inflow & infiltration issues arise, such as drainage ways and watersheds. These modifications will also contribute to lowering emergency response needs during flood events.**

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.



LOCATION MAP – VARIOUS LOCATIONS WITHIN THE CITY OF AMES
(NOT TO SCALE)