

**COUNCIL ACTION FORM**

**SUBJECT: 2014/15 SANITARY SEWER REHABILITATION  
(MANHOLE REHABILITATION – BASINS 1 & 5)**

**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 (I&I, 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, it is evident that there are over \$25 million worth of immediate 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.

These projects were shown in the CIP beginning in 2014/15. Funding comes from the State Revolving Fund (SRF) in the amount of \$3,470,000 for each year with an annual increase of 5% for inflation. Repayment of the SRF loans will be from revenues generated in the Sanitary Sewer Fund.

A SRF Planning and Design Loan for \$375,000 was approved by City Council in March 2014. This loan was secured in order to hire a consultant to help determine the best action plan for implementation of system repairs, as well as for design services for the first two years of projects. At the September 23, 2014 meeting, City Council approved the engineering services agreement with V&K along with WHKS & Company of Mason City, Iowa to assist in the evaluation of the data.

**This is the first project to come out of the study, and was selected to have an immediate impact by removing Inflow & Infiltration (I&I) to regain some capacity in the existing sewer mains.** This also means that the amount of clean water that enters the system will be reduced, thus reducing the amount of water required to be treated at the plant.

Plans and specifications have been completed with estimated costs of \$2,093,440. Engineering and administration are estimated at \$420,000, bringing the total estimated project cost to \$2,513,440. Funding for this project is in the amount of \$3,270,000 from State Revolving Funds as included in the 2014/15 Budget.

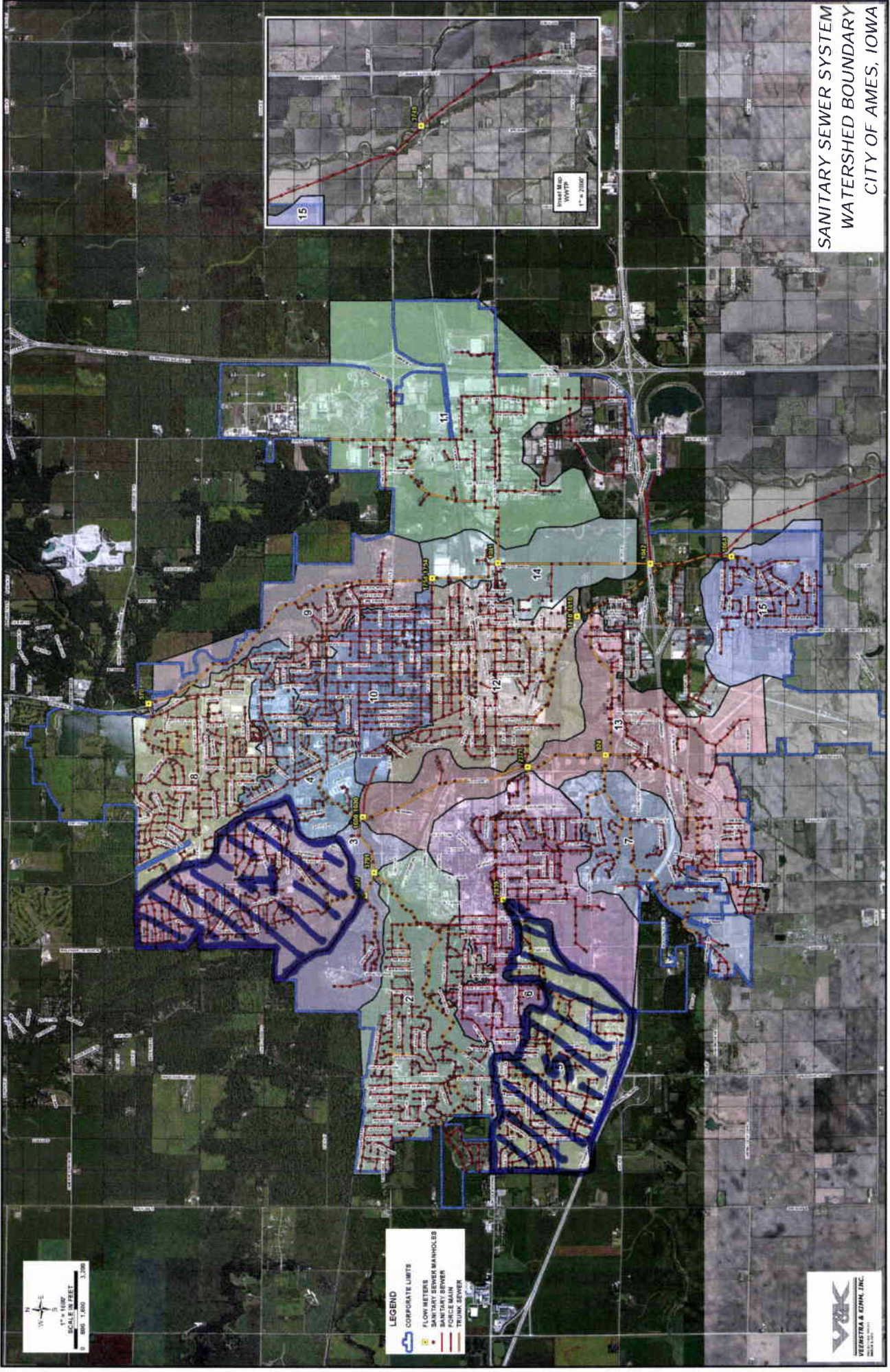
**ALTERNATIVES:**

1. Approve the 2014/15 Sanitary Sewer Rehabilitation (Manhole Rehabilitation – Basin 1 & 5) by establishing July 22, 2015, as the date of letting and July 28, 2015, as the date for report of bids.
2. Direct staff to revise the project.

**MANAGER'S RECOMMENDED ACTION:**

This project represents City Council's commitment to improve the sanitary sewer system. This is the first of several large projects which will have an immediate impact by removing Inflow & Infiltration to regain valuable capacity in existing sanitary sewer mains.

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



**SANITARY SEWER SYSTEM  
WATERSHED BOUNDARY  
CITY OF AMES, IOWA**

1" = 100'  
 SCALE IN FEET  
 0 500 1,000 2,000

**LEGEND**  
 CORPORATE LIMITS  
 FLOW METERS  
 SANITARY SEWER MANHOLES  
 SANITARY SEWER  
 FORCE MAIN  
 TRUNK SEWER

