

COUNCIL ACTION FORM

SUBJECT: SANITARY SEWER SYSTEM EVALUATION

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) in the system that occurs during rain events. In order to minimize the need for costly expansions to the 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. To help accomplish this goal, a 2008 Sanitary Sewer System Study recommended development of a full Sanitary Sewer System Evaluation (SSSE).

This evaluation is a comprehensive and systematic program for identifying the defects that could contribute I/I across the entire city-wide sanitary sewer system. It also involves prioritizing those defects and establishing rehabilitation costs so that repairs can be included in the Capital Improvements Plan. The SSSE program generally consists of the following tasks: data collection, sewer televising, smoke testing, manhole inspection, dye testing, and sump pump inspection. Not only will the SSSE identify sources of I/I, it will also identify areas of aging infrastructure in need of repair to prevent unexpected failures and emergency repairs. In line with this goal, staff has already begun manhole inspections for the highest priority areas revealed during the 2008 and 2010 floods.

Additionally, this evaluation will analyze the benefit/cost of the City's Footing Drain Grant Program, which was put on hiatus two years ago, and will make a recommendation on whether or not this suspended program may be beneficial to the community.

This SSSE study is occurring concurrent with the WPC facility's Long-Range Facility Plan. The results of these two studies will be used to prioritize wet weather flow mitigation activities in the collection system and at the treatment plant. Depending on the outcome of these studies, the funds being programmed for the WPC Equalization Basin Expansion project could be diverted to more cost-effective mitigation activities.

This project was included in the 2010/11 and 2011/12 approved budgets with financing in the amount of \$1,560,000. An additional \$1,000,000 is included in the 2012/13 approved budget, for total funding of \$2,560,000.

Proposals for this work were received from twelve engineering firms, and were evaluated according to the following criteria: Project Understanding, Design Team, Key Personnel, Previous Experience, Project Approach, Responsiveness, Ability to Perform Work, Proposed Project Design/Letting Schedule, and Estimated Contract Cost. Listed below is the rating information based on this evaluation:

Sanitary Sewer System Written Evaluation Proposal Ratings		
Firm	Ranking	Estimated Fee
Stanley Consultants	1	\$2,010,000
Veenstra & Kimm	2	\$2,018,500
WHKS & Co.	3	\$2,008,000
FOTH	4	\$1,934,000
RJN Group (w/ Shive Hattery)	5	\$1,821,490
HR Green	6	\$2,897,575
Burns & McDonnell	7	\$1,999,234
Bartlett & West	8	\$2,545,000
Short Elliott Hendrickson	9	\$1,648,900
HDR	10	\$2,031,927
AECOM	11	\$2,070,445
Stantec	12	\$2,293,870

It should be noted that some of the consulting firms included above were proposing to televise less than the required 100% of the sanitary sewer system which was asked for as part of the Request for Proposals.

Based upon this initial review, the engineering consultant teams were narrowed to three firms for further on-site interviews. Listed below is the rating information based on those interviews:

Sanitary Sewer System Evaluation Interview Ratings		
Firm	Ranking	Estimated Fee
Veenstra & Kimm	1	\$2,018,500
Stanley Consultants	2	\$2,010,000
WHKS	3	\$2,008,000

Staff has negotiated a contract with the highest rated firm, Veenstra & Kimm, Inc. (V&K) from West Des Moines, Iowa. This consultant has a strong history of successfully completing sanitary sewer system evaluations, which was evident in the interview process. They brought strong ideas for how to adapt a program to the Ames Community, how to best approach each task (including flow monitoring) to achieve the best data collection possible, and included a public relations component that will collect and provide information to the citizens and businesses of Ames throughout the project.

Upon completing the negotiations with V&K, the proposed contract amount is not to exceed \$2,198,500. The reason this fee is greater than the amount reflected above is because their proposed fee includes all of the components included in the Request for Proposals, plus the installation of permanent flow meters to be able to demonstrate successful removal of I/I from the sanitary sewer system, as well as costs for root cleaning and protruding sanitary sewer tap removal that would prevent televising of the entire sanitary sewer system, which is highly likely to be necessary as part of the project.

ALTERNATIVES:

1. Approve the engineering services agreement for the Sanitary Sewer System Evaluation with Veenstra & Kimm, Inc. from West Des Moines, Iowa, in an amount not to exceed \$2,198,500.
2. Direct staff to negotiate an engineering agreement with one of the other consulting firms.
3. Direct staff to make changes to the project.

MANAGER'S RECOMMENDED ACTION:

This project is critical in several respects. It will assist us in ensuring that we have a sanitary sewer system capable of handling future demands, along with meeting the standards set by the Iowa Department of Natural Resources (DNR).

V&K is committed to this project and to an aggressive schedule so that we can have a successful evaluation of the sanitary system. Flow monitoring is the first activity to begin right away in order to get information from spring rain events. Additionally, televising of the sewer, manhole inspections, and smoke testing will begin immediately to take advantage of the current weather conditions.

A project website will be established in the near future where residents and businesses can access current sewer evaluation activities. A Cable Channel 12 show will run explaining smoke testing and the potential impacts to areas residents and businesses. The video is general information and advice, but will periodically be updated with specific dates running along the bottom of the video. A general public informational meeting is scheduled for 5:30 PM the evening of April 3, 2012 in the Council Chambers, which will be the first of numerous meetings to gather input from the public. Overall the project is expected to proceed into 2014, including providing a project update to DNR by July 1, 2014.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the engineering services agreement for the Sanitary Sewer System Evaluation with Veenstra & Kimm, Inc. from West Des Moines, Iowa, in an amount not to exceed \$2,198,500.

In addition to this contract with Veenstra & Kimm, remaining funds will be used for project management and contract administration. This large, multi-year project is important to the community and to the integrity of our sanitary sewer system. In consideration of the current workload of Public Works staff, it is the intent to hire additional engineering consultants to aid with project management and quality control of the field data collected, as well as the hydraulic model of the system.