ITEM # <u>18</u> DATE: 08-09-16

COUNCIL ACTION FORM

SUBJECT: SQUAW CREEK WATER MAIN PROTECTION PROJECT

BACKGROUND:

Included in the 2012-2017 Capital Improvements Plan (CIP) was a program entitled Flood Response and Mitigation Projects that funded by \$820,000 in General Obligation Bonds and \$325,000 in Storm Sewer Utility Funds. Portions of this funding were used on a flood mitigation project in Northridge Subdivision/Moore Memorial Park and for bank stabilization near Utah Drive and another location near North Riverside. Those three projects are now complete. The two remaining projects are the Trail Ridge Landslide project and the Squaw Creek Water Main Protection project (this project). Unspent local funding totaling \$628,737 has been carried forward for these projects.

On March 22, 2016, City Council approved a Grant Agreement with Federal Emergency Management Agency's (FEMA)/ Iowa Homeland Security and Emergency Management Department (HSEMD) for Phase II of the City of Ames, Squaw Creek Water Main Protection Project. Under this agreement, FEMA and the State of Iowa (through Iowa Homeland Security) pay up to \$571,370 (85%) for this project, with the City contributing \$100,830 (15%). This project has been actively pursued with these agencies since the 2010 floods.

The alternative recommended in the October 2015 Phase I report to progress toward Phase II (construction) is based on a stream restoration approach utilizing integrated/bioengineering techniques. The bank stabilization technique will consist of flattening the banks, construction of terraces within the banks, utilization of revetment stone for stabilization at lower elevations (up to the terrace), and structural soil (soil filled rock) with native plantings at elevations above the terrace. The project will also consist of installing a rock flume (rip rap) downstream of the low head dam to eliminate the eddy pool contributing to the bank erosion.

Snyder & Associates has prepared plans and specifications with an estimated construction cost of \$391,909. The consulting engineer and City staff have coordinated construction activities with Iowa State University and will continue to keep them informed as construction commences and progresses toward completion.

The funding and estimated costs for this project are shown below:

Revenue		Expenses	
Grants	\$571,370	Engineering Design & Inspection	\$111,900
City of Ames	\$100,830	Construction	\$391,909
Total	\$672,200	Total	\$503,809

ALTERNATIVES:

- 1. Approve plans and specifications for the Squaw Creek Water Main Protection Project and establish September 7, 2016, as the date of letting and September 13, 2016, as the date for report of bids.
- 2. Do not approve this project.

MANAGER'S RECOMMENDED ACTION:

By setting the bid letting date for Phase II, the City is working toward protecting the existing 24-inch water main under Squaw Creek at Lincoln Way using the authorized federal, state, and local funding as approved by City Council on March 22, 2016. This project approach will also improve ecological functions and aquatic habitat, as well as reduce the area disturbed by the project. Delay of this project could jeopardize receipt of federal and state funding, due to this project being on an extremely tight schedule as directed by FEMA.

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