

**COUNCIL ACTION FORM**

**SUBJECT:**     **FLOOD DAMAGE – SQUAW CREEK BANK EROSION PROJECTS**

**BACKGROUND:**

During the floods of 2010, bank erosion damage occurred in several locations. Two such locations were in close proximity on the banks of Squaw Creek north of Lincoln Way. The first location involved bank erosion over a 16-inch water main on the east side of the creek near North Riverside Drive. The second location eroded part of the park system path on the west side of the creek along the eastern edge of Stuart Smith Park.

This project included installation of sheet pile to protect the 16-inch water main on the east side of the creek, installation of rip rap along the western bank, and the relocation of the trail in Stuart Smith Park farther to the west.

On October 9, 2012, City Council awarded the project to Peterson Contractors, Inc. of Reinbeck, Iowa, in the amount of \$499,946.75. Construction was completed in the amount of \$498,419.40. One change order, a savings in the amount of \$1,527.36, was processed for this project. This change order was the balancing change order and was administratively approved by staff (in accordance with purchasing policy) and balanced the actual field installed quantities.

**Bank Erosion Project near 326 N. Riverside Drive**

Engineering design was \$24,600, and inspection and administration was \$4,856, bringing total costs for the Base Bid to \$418,365.77. This project is expected to receive 85% reimbursement from Federal Emergency Management Agency (FEMA) for construction and engineering. The local share of \$62,755 needed for this project is funded from the 2012/13 Flood Response and Mitigation Program, with anticipated expenses shown in the Capital Improvements Plan below.

Below is a summary of the Flood Response and Mitigation CIP Program:

<b>Projects Currently Proposed</b>	<b>City Cost</b>
Utah Drive Landslide	\$250,000
Trail Ridge Landslide	\$250,000
Water Main Protection at S. Smith Park	\$120,000 (Local Match)
Northridge Subdivision localized flooding	\$ 50,000 (Local Match)
<b>N. Riverside Water Main (this project)</b>	<b><u>\$ 62,755</u></b> (Local Match)
<b>TOTAL</b>	<b>\$732,755</b>

The 2012/13 Flood Response and Mitigation Program has total funding in the amount of \$1,145,000, comprised of \$820,000 in General Obligation Bonds and \$325,000 from the Storm Sewer Utility Fund. If all projects are approved as shown above, this would leave a balance of \$412,245 for additional flood mitigation projects.

### **Bank Erosion Project north of Stuart Smith Park**

Upon initial site visit from FEMA, the City was directed to design a project using sheet piling for bank protection and identified an estimated cost of \$133,210. The FEMA participation cap would be 85% of that amount. An initial project was designed using the FEMA directed sheet piling method; however, the estimated costs were found to be in excess of \$250,000. The engineering was increased by a change order approved by City Council on May 8, 2012, due to needed revisions to the project approach because of these excessive costs for the original project concept of using sheet piling.

The project design was then revised to utilize rip rap and was submitted as an improved (revised) project to FEMA, meaning the City will only be eligible to receive 85% of the \$133,210 originally identified by **FEMA, which is \$113,228**. Engineering design was \$39,800, and inspection and administration was \$4,570.36, bringing total costs to \$153,880.05. Therefore, local funds in the amount of \$40,652 are required for this project. Local funds to cover the \$40,652 were identified from savings from the Squaw Creek Pedestrian Bridge project (approximately \$120,000 in GO Bond savings is available). City Council authorized the use of these savings on October 9, 2012.

### **ALTERNATIVES:**

1. Accept the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park) project as completed by Peterson Contractors, Inc. of Reinbeck, Iowa, in the amount of \$498,419.40.
2. Direct staff to pursue modifications to the project.

### **MANAGER'S RECOMMENDED ACTION:**

The project is now complete in accordance with the approved plans and specifications and is within the approved budget.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby accepting the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park), as completed by Peterson Contractors, Inc. of Reinbeck, Iowa, in the amount of \$498,419.40.