

**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 are 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, and 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. (See attached aerial map.)

This project will include 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. The project has been submitted to Federal Emergency Management Agency (FEMA) as an improved (revised) project. On September 12, 2012, bids on this project were received as follows:

	<u>Base Bid</u>	<u>Alternate 1</u>	<u>Total</u>
Engineering Estimate	\$387,000	\$108,500	\$495,500
Peterson Contractors, Inc.	\$386,552.75	\$113,394.00	\$499,946.75
Con-Struct, Inc.	\$443,406.00	\$103,710.00	\$547,116.00
Jensen, Construction, Co.	\$445,616.50	\$128,104.00	\$573,720.50
TK Concrete, Inc.	\$473,947.00	\$134,480.00	\$608,427.00

**Bank Erosion Project near 326 N. Riverside Drive (Base Bid)**

Inspection and administration is estimated to cost \$5,000 and engineering design was \$24,600, bringing total project costs to \$416,152.75. This project is expected to receive 85% reimbursement from FEMA for construction and engineering. The local share of \$62,423 needed for this project can be funded from the 2012/13 Flood Response and Mitigation Program, as shown in the Capital Improvements Plan (CIP) and summarized below:

## Flood Response and Mitigation CIP Program Summary

Projects Currently Proposed	City Cost
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 base bid)</b>	<b>\$ 62,423</b> (Local Match)
<b>TOTAL</b>	<b>\$732,423</b>

The CIP's Flood Response and Mitigation Program has total funding in 2012/13 of \$1,145,000, comprised of \$850,000 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 \$412,577 for additional flood mitigation projects.

### **Bank Erosion Project north of Stuart Smith Park (Alternate 1)**

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 that the City would 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 is estimated at \$2,500, bringing **total estimated costs to \$155,694**. **Therefore, local funds are needed in the amount of \$42,466 to cover the matching requirement and costs over the maximum FEMA reimbursement.**

A construction contract for the Squaw Creek Pedestrian Bridge was recently awarded by City Council with total estimated costs of \$334,400. General Obligation Bond funding of \$400,000 was issued for this bridge project. Staff was recently informed that FEMA has approved federal funding of \$54,700 for this project, which means **there will be approximately \$120,000 of excess General Obligation Bonds available from the bridge project**. **That savings can be used to fund the \$42,466 needed for the local share of the trail relocation and bank stabilization portion of this project.**

**ALTERNATIVES:**

- 1a. Accept the report of bids for the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park).
  - b. Approve the final plans and specifications for the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park).
  - c. Award the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park), Base Bid and Alternate 1 to Peterson Contractors, Inc. of Reinbeck, Iowa, in the amount of \$499,946.75.
  - d. Authorize the use of approximately \$43,000 of G.O. Bond proceeds now available from the Squaw Creek Pedestrian Bridge project to fund the Stuart Smith bank erosion project.
2. Reject the bids for this project and rebid the project at some future date.

**MANAGER'S RECOMMENDED ACTION:**

By approving the report of bids and awarding the contract, it will be possible to move forward with these flood repairs and have them completed by next spring.

**Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby accepting the report of bids, approving final plans and specifications, and awarding the Flood Damage – Bank Erosion (Near 326 N. Riverside and Stuart Smith Park), Peterson Contractors, Inc. of Reinbeck, Iowa, in the amount of \$499,946.75. In addition, this alternative will authorize the use of approximately \$43,000 of G.O. Bond proceeds now available from the Squaw Creek Pedestrian Bridge project to fund the Stuart Smith bank erosion project.**