

COUNCIL ACTION FORM

SUBJECT: 2012/13 FLOOD RESPONSE AND MITIGATION PROJECT (NORTHRIDGE PARKWAY SUBDIVISION) & 2009/10 STORM WATER FACILITY REHABILITATION PROGRAM (MOORE MEMORIAL PARK)

BACKGROUND:

During the past three years, Public Works staff and Clapsaddle-Garber Associates (CGA) have held numerous neighborhood project meetings, have met with the Parks and Recreation Commission twice, and have come before City Council on several occasions to give updates on progress in working to address localized flooding in the Northridge Parkway area. At the May 14, 2013 City Council meeting, Council unanimously agreed to move forward with a mitigation project using local funds.

The resulting project includes installing new storm sewer pipes/culvert/intakes, creating a vegetated swale between the two electrical sub-stations, grading to create overland flow paths in the backyards of 2406 & 2412 Ridgetop Circle, and modifying the storm sewer in existing Basin 2. Additionally, the Moore Memorial Park Pond will be drained, cleaned of excess silt, and reshaped to accommodate additional flood storage, and existing trees within the water line of the pond will be removed. In addition, the outlet will be modified to reduce current flows, and an inlet forebay will be created and native landscaping planted to improve water quality.

One "Add Alternate" includes material and installation of filtration systems made of sand and iron filings is also included for consideration. This type of water quality improvement has been shown to reduce phosphorus run-off from fertilizers used in the area into bodies of water. Filtration systems such as these have been installed in Minnesota and in Storm Lake, Iowa. The estimated cost of this alternative is \$3,000.

A second "Add Alternate" includes material and installation of limestone blocks, limestone slabs, and emergent (aquatic) plants. This alternate would bring some additional features into the park pond area like have been created in other parks around Ames. The estimated cost of this alternative is \$9,500.

During a meeting between Parks and Recreation staff, Public Works staff and CGA, the construction project along with long-term maintenance and future opportunities that may be available following this project were discussed. One idea that was discussed at the meeting was the option for future use of the pond for fish habitat. Parks and Recreation staff along with CGA met with Department of Natural Resources (DNR) Fisheries staff to discuss the improvements and what additional considerations would need to be implemented to also create a healthy fish habitat. There are only subtle changes to the original planned project that have been incorporate, which will create this habitat. The

Parks and Recreation Commission members have been supportive of the planned improvements within Moore Memorial Park. During that meeting, DNR said that they would stock the pond with fish at a time in the future if the City desires.

CGA has completed plans and specifications for the project with estimated construction costs of \$522,860, which includes the two add alternates for installation of the sand/iron filings filtration system as well as the limestone block/slabs and emergent plants. Engineering and administration costs are estimated to be \$78,500 bringing total estimated costs to \$601,360.

Included in the 2012/13 Capital Improvements Plan (CIP) is a program entitled Flood Response and Mitigation Projects that includes \$820,000 in General Obligation Bonds and \$325,000 in Storm Sewer Utility Funds for total program funding of \$1,145,000. As part of the 2009/10 CIP, Moore Memorial Park basin improvements were included in the Storm Water Facility Rehabilitation Program with funding in the amount of \$100,000 from Storm Sewer Utility Funds. The unspent portion of these funds (\$98,998) continues to be carried forward with budget amendments in anticipation of still making the necessary maintenance improvements to the basin once the flood mitigation project solution is finalized. These maintenance improvements are noted above. This funding can be combined with this flood mitigation project to make all of the improvements at one time.

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

Projects Currently Proposed	City Cost
Utah Drive Landslide (combined with 2010/11 Storm Water Facility Rehabilitation Program – Spring Valley Subdivision) (Contract award amount)	\$175,000
Trail Ridge Landslide (estimated cost)	\$420,000
Stuart Smith Park Bank Stabilization Project – (Total project estimated at \$695,000)	\$120,000 (Local Match)
2012/13 Flood Response and Mitigation (Northridge Parkway Subdivision) & 2009/10 Storm Water Facility Rehabilitation Program (Moore Memorial Park) (Estimated cost for this project w/ Engineering/Contract Admin.)	\$601,360
North Riverside Water Main (actual cost)	\$ 66,882 (Local Match plus Engineering Inspection)
TOTAL ESTIMATED EXPENSES	\$1,383,242

Below is a **summary of funding** for this program:

Funding Source	Funding Amount
2009/10 Storm Water Facility Rehabilitation Program (Storm Sewer Utility Funds)	\$98,998
2011/12 Storm Sewer Improvement Program (Storm Sewer Utility Funds)	\$70,000
2011/12 Low Point Drainage Program (Storm Sewer Utility Funds)	\$70,000
2012/13 Flood Response and Mitigation Projects (G.O. Bonds)	\$820,000
2012/13 Flood Response and Mitigation Projects (Storm Sewer Utility Funds)	\$325,000
TOTAL FUNDING	\$1,383,998

ALTERNATIVES:

1. Approve the 2012/13 Flood Response and Mitigation (Northridge Parkway Subdivision) & 2009/10 Storm Water Facility Rehabilitation Program (Moore Memorial Park) by establishing October 2, 2013, as the date of letting and October 8, 2013, as the date for report of bids.
2. Do not proceed with this project.

MANAGER’S RECOMMENDED ACTION:

Public Works staff and CGA have put forth great effort to work with Northridge Parkway residents, Arbor on the Green residents, the Parks and Recreation Commission, other City departments, private utility companies, and DNR Fisheries staff on this project. The project will be effective in mitigating neighborhood flooding, will improve water quality from the storm water runoff, and is acceptable to area residents. As shown above, adequate local funding is available for this project. Construction is anticipated during winter/spring with a May 31, 2014 completion date. **Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.**