

COUNCIL ACTION FORM

SUBJECT: REPAIR OF SQUAW CREEK SHARED USE PATH BRIDGE

BACKGROUND:

On February 12, 2009, it was reported that the bridge located along the granular shared use path approximately 1,300 feet south of South 4th Street over Squaw Creek was experiencing an abrupt drop in the surface deck. Staff investigated and found that the northeast side of the bridge had dropped due to ice damage to the piers in that section. Because it was found to be structurally deficient, this pedestrian and bicycle bridge was then closed to traffic due to the unsafe conditions. Staff contacted WHKS & Co., who performs the City's biennial bridge inspection, to conduct an emergency analysis of the structural integrity of this bridge.

This former railway bridge is a steel thru-girder span over the main channel of Squaw Creek with several approach spans on both sides. The piers are constructed of timber piles and timber cap beams with miscellaneous timber cribbing and bracing. A preliminary visual inspection and field review revealed a failure of the east side of the north pier supporting the main steel thru-girder span, which had completely lost bearing on the northeast side and was sagging approximately one foot. Several pier piles had failed and several others were completely missing. This caused the two near (south) side cap beams to fail and fall into the stream, which in turn caused the steel girder and bearing to sag. The steel structure itself appeared to be in sound condition and showed no visual signs of damage. The bridge continues to settle (over two feet at this time) and remains closed to traffic.

As directed by City Council, staff continues to pursue federal funding for the extension of Grand Avenue from Squaw Creek Drive to South 16th Street. This project is currently included in the 2011/12 Capital Improvements Plan. **When Grand Avenue is extended to South 16th Street, a new bridge including a shared use path on the west side of the bridge will be constructed, thereby replacing this damaged structure. It should be noted that federal funding for the Grand Avenue extension is not guaranteed.**

If City Council chooses to repair the existing bridge, structural engineers at WHKS have provided a recommended course of action at a total estimated cost of \$60,000, including design (\$10,000) and construction contingency. Structural engineering drawings would need to be developed in order to obtain competitive sealed bids for the repair. As a part of the engineering work, it is recommended that the piles in the south pier be inspected and sounded to ensure the structural integrity of those piers. Furthermore, due to the deteriorating condition of the bridge, it is recommended that it be included in the routine biennial City of Ames bridge inspections until the time that the bridge is replaced.

Should the Council choose to remove the existing bridge, staff has received estimates that the cost of demolition could range from \$30,000 to \$85,000.

There is no ready source of funding for these emergency repairs. Damage to bridges is not covered under the City's property insurance. General Obligation (GO) bonds cannot be used for multi-purpose trails. Road Use Tax (RUT) monies can be used for this purpose, but the RUT fund balance cannot bear this additional cost.

The Local Option Sales Tax (LOT) fund is the remaining potential source for this repair. Such funding could come from the LOT fund balance, by freeing up LOT funding through substituting GO bonds for a project currently budgeted from the LOT fund, or by delaying the 2009/10 and subsequent years' Shared Use Path System Expansion projects in the Capital Improvements Plan.

Staff has been receiving citizen several calls per week asking if and when this bridge will be repaired and the path to south Ames reopened. The shared use path is currently blocked on the north edge of this bridge and at South 16th Street on the south.

ALTERNATIVES:

1. Direct staff to work with WHKS and Co. to prepare plans and specifications for repairs to the bridge.
2. Direct staff to have the bridge demolished.
3. Direct staff to leave the bridge in the current condition and maintain closure to traffic until such time as the bridge is replaced as part of the Grand Avenue extension project. However, the bridge should be removed if it is in danger of falling into Squaw Creek.

MANAGER'S RECOMMENDED ACTION:

The timing of ice flow damage to this bridge is unfortunate. Within three years, we hope to have received federal funding and replace this bridge as part of the Grand Avenue extension project. However, funding for that project is not assured, and it could be much longer before Grand Avenue is extended.

Meanwhile, a number of our citizens who regularly use this shared use path are unable to travel between South 16th Street and the South Lincoln Way area. The only alternatives for pedestrians and cyclists is to go west to use the trail along the west side of University Boulevard, or to go east and use a route of travel that has only limited shared use trails.

The City is committed to retaining this shared use path. A new bridge adjacent to Greenbriar Park is currently under construction with an anticipated opening of mid-July, 2009. The developer agreement for the Grand Aspen Subdivision, 3rd Addition provides for hard-surfacing of this path by the time Grand Avenue is extended. **The key issue now is thus whether or not \$60,000 should be spent for a bridge that may only be in service for three years.**

In light of the requests for service being received from citizens, it is the City Manager's recommendation that the City Council adopt Alternative No. 1, thereby directing staff to work with the structural engineer to prepare plans and specifications for repairs to the bridge. This engineering work, estimated at \$10,000, can be covered from the available balance in the Local Option Sales Tax Fund.

After plans and specifications are prepared, the project will then be sent out for bids. The price of bids received may ultimately influence Council's decision on whether or not to proceed with repairs to the bridge.