

Council Meeting of November 4, 2015

Agenda Item No. 5c

REQUEST FOR COUNCIL ACTION

SUBJECT: Storm Water Enterprise Fund Emergency Funding

SUMMARY: Consider increasing the funding allotment by \$1,500,000 for a slip lining project along 7800 South and 4000 West on an emergency basis due to pipeline failure, in current FY 15-16 budget. No increase in the stormwater user fee is necessary.

FISCAL AND/OR

ASSET IMPACT: Additional \$1,500,000 from an increase in the bond issue from \$5,000,000 to \$6,500,000.

STAFF RECOMMENDATION:

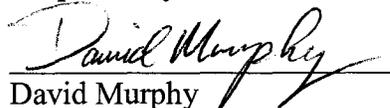
Staff recommends the additional allocation based upon project needs as reflected within this report.

MOTION RECOMMENDED:

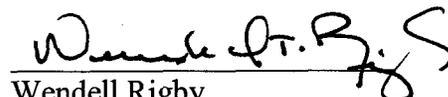
"I move to adopt Resolution No. 15-202 authorizing staff increase the storm water bond issue from \$5,000,000 to \$6,500,000 for the 7800 South 4000 West Slip Lining Project."

Roll Call vote required

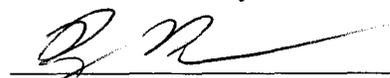
Prepared by:


David Murphy
Engineering Manager for CIP

Recommended by:


Wendell Rigby
Public Works Director

Recommended by:


Ryan Bradshaw
Finance Manager

Recommended by:


Mark R. Palesh
City Manager

BACKGROUND DISCUSSION:

Objective

The repair of an existing 27-inch corrugated metal pipe (CMP) with a new PVC style liner to rehabilitate the failed pipeline. In the last month the pipeline has failed twice resulting in sink holes being created in the west-bound lane, north lane of 7000 South. The city was very lucky no one was injured during these two incidents.

History

In the summer of 1980 (35 plus years ago), the City undertook a project to place a storm drain line from the intersection of 4000 West and 7800 South to the Utah and Salt Lake Distribution Canal at 2900 West and 7800 South. Then, in 1985, an extension of this storm drain collection system was added as a 21-inch corrugated metal pipe from 4000 West and 7800 South to the south along 4000 west to 8400 South. These pipes have had irrigation and storm waters running in them almost constantly since their original dates of installation, and both pipelines are presently in a failed condition. Several sections were replaced during the 7800 South Phase 3 project in 2008 and 2009, expending more than \$82,000, but there was not enough funding to fully replace the entire system at that time.

Moreover, it should be noted that the water quality running through this pipe during the irrigation season of April 15 through October 15 is of a corrosive nature and harmful to a metal pipe. The replacement pipe is expected to be of a PVC material, which will withstand this corrosion issue into the future. The normal life expectancy for any CMP is typically 50 years, but not when flowing constantly. When flowing constantly, this life expectancy will be reduced by abrasion (sand loads and gravel loads) and natural corrosion.

Recent internal video review of the pipeline demonstrates the failure mechanism for this pipe. Bed loads (sand and gravel), as well as corrosion, have eroded the pipe invert (bottom of pipe). This condition has caused structural failure of the pipe in at least two instances in the past month, requiring immediate repair. UDOT has asked the City when the rest of this pipeline can be rehabilitated due to the threat of potential imminent failure for other portions of this pipeline.

Existing Situation

The current situation must be corrected, as the pipeline is still used and required for ultimate storm drain capacity along 4000 West and 7800 South. The sooner this work is accomplished, the sooner the reduction of potential hazard to the public will be removed. Please see photos included with this report for examples of the pipeline failures. Some of the videos will be presented at City Council meeting.

Existing Efforts

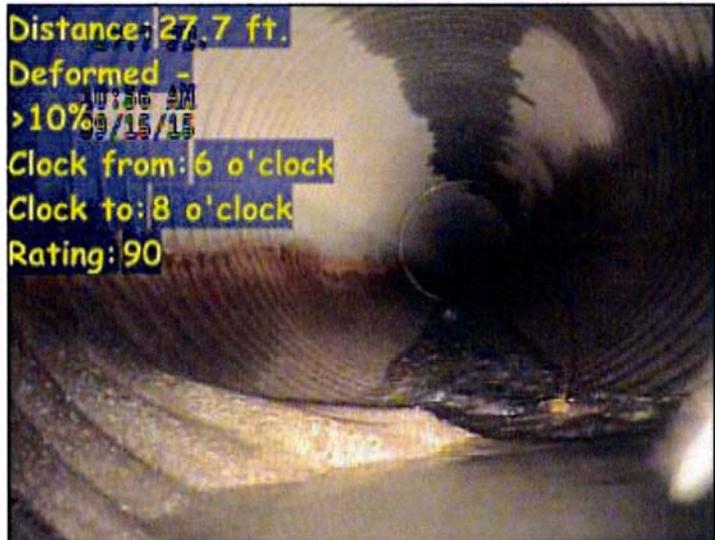
Staff have already expended time, materials, and labor to repair the pipe and replace the failed portions of the pipe with a pipe that will withstand the rigors of the water corrosion and weight of the vehicles traveling over the top of this pipeline. The 7800 S Phase 3 work expended approximately \$82,000 to replace 500 feet that was too badly damaged in 2008 to remain in service, and Public Works storm drain crews have replaced another 30 feet for \$20,000.

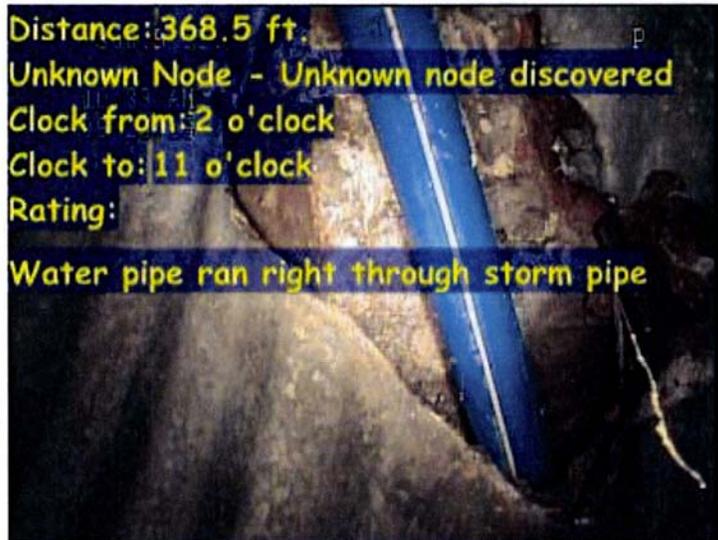
Proposal

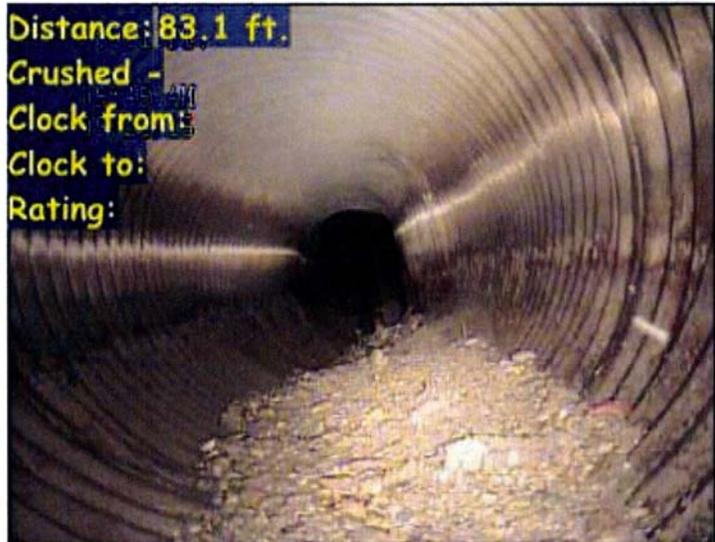
To be able to repair this pipeline before any further failures, which may cause injury or loss of life, it is proposed that the bond for the Storm Drain Enterprise Fund be increased from \$5,000,000 to \$6,500,000, a \$1,500,000 increase to the bond to cover the expense of this pipeline rehabilitation project. Any funds remaining from this amount will be used on other storm drain projects on a priority basis. No increase in the stormwater user fee is required for this proposal.

Expenses under the Proposal

Design and construction money is included within the \$1,500,000 budget.







THE CITY OF WEST JORDAN, UTAH

A Municipal Corporation

RESOLUTION NO. 15-202

A RESOLUTION AUTHORIZING AN INCREASE OF THE STORM WATER BOND

Whereas, the City Council of the City of West Jordan has reviewed documentation to increase the storm water funding by an amount not to exceed \$1,500,000; and

Whereas, the City Council desires to increase the storm water bond from \$5,000,000 to \$6,500,000.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH:

Section 1. Staff is hereby authorized to increase the storm water bond by \$1,500,000.

Section 2. This Resolution shall take effect immediately.

Adopted by the City Council of West Jordan, Utah, this 4th day of November 2015.

Kim V. Rolfe
Mayor

ATTEST:

Melanie S. Briggs
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Sophie Rice	_____	_____
Ben Southworth	_____	_____
Mayor Kim V. Rolfe	_____	_____