

City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Sewer/Stormwater To: City Council From: City Manager & Staff Council Meeting Date: April 3, 2017 Re: Public Hearing - Sinclair Road Culvert Replacement at Mill Creek

Executive Summary

Public Hearing for the Sinclair Road Culvert Replacement Project at Mill Creek. The culvert that carries Mill Creek under Sinclair Road is badly deteriorated and in danger of failure. It was on the list of projects associated with the successful Storm Water Utility ballot initiative in 2015. The project budget is \$400,000.

Discussion

Mill Creek flows under Sinclair Road in three, metal culvert pipes, from three to five feet in diameter. The culverts are undersized (installed when the watershed draining to them was farmland), and badly rusted. The bottom has completely rusted away in one pipe and the pipe has begun to fold in on itself.

In the late 2000s, street crews responded to the formation of potholes over the deteriorating culverts by placing a reinforced concrete road section above them. This resolved the problem for a number of years.

In spring of 2016, it was noticed that the entire road was beginning to settle over the culverts. City Utility crews found an eight-foot-deep hole had formed under the road where soil had washed from the roadbed through the holes in the culvert. The hole was filled with approximately 15 cubic yards of concrete and grout.

In addition to being badly deteriorated, the pipes are inadequate to carry stormwater under the road, and are regularly clogged by the debris that washes down Mill Creek. The existing pipes were installed many years ago before appreciable development had occurred in the Mill Creek watershed. The increased runoff from the watershed and increased traffic on the road combine to create an often dangerous condition during heavy rains when the road floods.

Due to limited working room and safety concerns, Sinclair Road will have to be closed during the project. Closing the road will also allow the project to be done as quickly as possible, and every effort is being made to design the project in such a way as to minimize the closure time.

Design of the replacement structure will be planned to accommodate future road and trail plans, although those projects are far in the future.



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Sinclair Road is located entirely within University property at this location. Staff has been in contact with the University about the project, and has explained the need to replace the failing culverts. Staff will inform Columbia Public Schools of the road closure as the project timeline is developed.

This project was identified in the 2015 Storm Water Utility Ballot initiative approved by voters. The project will be funded by Storm Water Utility Funds.

Fiscal Impact

Short-Term Impact: The project estimate is \$400,000, and funding will come from the Storm Water Utility.

Long-Term Impact: Clogging of the culvert will be greatly reduced, thus reducing maintenance costs and the need to staff to routinely remove debris following significant rains.

Vision & Strategic Plan Impact

Vision Impacts:

Primary Impact: Transportation, Secondary Impact: Community Facilities & Services, Tertiary Impact: Environment

Strategic Plan Impacts:

Primary Impact: Public Safety, Secondary Impact: Infrastructure, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Mobility, Connectivity, and Accessibility, Tertiary Impact: Not Applicable

Legislative History	
Date	Action
02/06/2017	(Res. 8-17) Setting Public Hearing – Sinclair Road at Mill Creek Culvert Replacement Project.
04/07/2015	Voters approve rate increase for Stormwater Utility with this

Suggested Council Action

project as one of the priorities.

Following public input and Council discussion, Council should direct staff to proceed with the project.