



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: August 20, 2018

Re: Setting a Public Hearing – Henderson Branch Sewer Extension

Executive Summary

Staff has prepared for Council consideration a resolution setting a public hearing on September 4, 2018 for the design and construction of sanitary sewers to serve the Henderson Branch Watershed.

The proposed sanitary sewer system improvement project includes the design and construction of approximately 8,600 linear feet of sewer that would ultimately serve the entire 1300 acre Henderson Branch watershed and an additional 800 acres of property adjacent to the watershed. The estimated construction cost for this project is \$4,300,000. The project is proposed to be funded by a combination of sewer bond funds in the amount of \$2.6 million and a contribution from the Boone County Regional Sewer District in the amount of \$628,047 and the remaining \$1,071,953 would be provided from Sewer Utility enterprise funds.

Discussion

In 1973, Black and Veatch completed a Sewer Master Plan for the City of Columbia. The main objective of the plan was to identify an area for watershed protection. In order to protect human health and the environment, the recommendations included creating a regional sanitary sewer collection and treatment system and reducing sewer treatment discharge points within the identified watershed protection area. The identification of a watershed protection area in the plan qualified the City to be eligible for Federal and State grants for sewer improvements. The City's Regional Wastewater Treatment Plant and trunk sewers were constructed in the late 1970s and early 1980s. The majority of the funding was provided through United States Environmental Protection Agency (EPA) construction grants to serve as a regional facility for protection of the watershed. Up to 90 percent of the funding for the Perche Creek, Hinkson Creek and Bear Creek outfall sewers was provided through these grants. The construction of the outfall sewers and the City's Regional Wastewater Treatment Plant greatly improved water quality of the local streams.

In 2007, the Council adopted an updated Sewer Master Plan that defined a new watershed protection area or service area. This plan continued with the concept of regionalization for protection of the watersheds. More than 100 sewer treatment facilities have been removed from service and connected to the City's Regional Wastewater Treatment Plant since it was constructed and placed in service in 1983.

The Sewer Master Plan approved by Council in 2007 included the Henderson Branch Sewer Extension as a future project which continues the EPA endorsed concept of regionalizing



sewer collection and treatment for the protection of human health and the environment. The project consists of extending public sewer from the existing Perche Creek Interceptor sewer to a point west and north of the I-70 and US-40 interchange, as shown on the attached diagram. The construction of this sewer would allow for the elimination of at least two existing sewage treatment facilities that discharge a total of approximately 17,500 gallons of effluent per day into Henderson Branch. Removing these point discharges will result in improved water quality for both Henderson Branch and Perche Creeks. This project will also allow for the removal of three additional treatment facilities operated by the Boone County Regional Sewer District and provide for future development to have access to a regional public sewer system. This project was included as a proposed bond funded project in the ballot issue approved by voters in November 2013.

Fiscal Impact

Short-Term Impact: The total construction cost of the Henderson Branch Sewer Extension is estimated to be \$4,300,000 for a gravity sewer or \$3,100,000 for a combination gravity sewer and lift station. The BCRSD will provide funding in the amount of \$628,047.00, \$2,600,000.00 will be funded from Sewer Bonds and \$1,071,953.00 is available from Sewer Utility enterprise revenue funds.

Long-Term Impact: The annual maintenance cost for the sanitary sewer collection system has averaged \$0.995 per foot based on the past averages. This corresponds to an annual cost of approximately \$8,557.00 for collection system maintenance; however, this cost will not be incurred during the first five years. Treatment costs have averaged \$0.0012 per gallon recently. This corresponds to an initial annual cost of \$7665 for treatment.

Vision & Strategic Plan Impact

Strategic Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Economy, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Infrastructure, Tertiary Impact: Economic Development

Legislative History

Date	Action
05/21/2018	B100-18 Authorizing construction of sanitary sewer to serve the Henderson Branch Watershed; calling for bids through the Purchasing Division. <i>Defeated</i>
05/21/2018	B101-18 Authorizing the acquisition of easements for construction of sanitary sewer to serve the Henderson Branch Watershed.



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05/21/2018	<i>Withdrawn</i> B102-18 Authorizing an annexation agreement with Bechtold Properties LLC for properties located on West Highway 40.
05/21/2018	<i>Withdrawn</i> B103-18 Authorizing an annexation agreement with VH Properties LLC for properties location on Highway UU and West Van Horn Tavern Road. <i>Withdrawn</i>
05/15/2017	(PH15-17) Public Hearing
04/17/2017	(R52-17) Resolution setting a Public Hearing for May 15, 2017
11/07/2016	(PH20-16) Public Hearing
10/03/2016	(PH20-16) Public Hearing
07/05/2016	(PH20-16) Public Hearing
06/06/2016	(R60-16) Resolution setting a Public Hearing for July 5, 2016
02/02/2016	Interested Parties Meeting
08/17/2015	(B232-15) Amending the General Cooperative Agreement with Boone County Regional Sewer District
08/03/2015	(R125-15) Engineering Services Agreement with HDR Engineering for the Henderson Branch Sewer Extension Project
03/18/2015	(Ord22383) Authorizing the issuance of Sewerage System Revenue Bonds, Series 2015, in the aggregate principal amount on not to exceed \$20,500.00
03/03/2015	(R11-15A) Authorizing the offering for sale of not to exceed \$20,500.00 principal amount of Sewage System Revenue Bonds, Series 2015, of the City of Columbia, Missouri.
07/22/2014	(R125-14) Transferring funds to offset expenditures relating to the November 2013 Special Bond Election for sanitary sewer improvements.
01/02/2014	(Ord21742) Declaring the results of the Special Election held in the City of Columbia, Missouri on November 5, 2013.
08/05/2013	(Ord21760) Calling a special election on whether to issue the Sewer System Revenue Bonds in the amount of \$32,340,000 for constructing, improving, repairing, rehabilitating, replacing, equipping, expanding, and extending the city-owned sewerage system.
07/01/2013	Pre-Council Meeting – General Obligation Bond Projects – Infrastructure Ballot Presentation
05/20/2013	Pre-Council Meeting – November Storm Water / Sewer Ballot Issue – Sewer Utility Presentation – Storm Sales Tax Presentation
01/01/2007	Public Hearing – Sewer Master Plan
12/04/2006	(R262-06) Setting a Public Hearing to consider adopting the Sewer Utility Master Plan



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Suggested Council Action

Council motion to approve the resolution setting a Public Hearing on September 4, 2018 for the Henderson Branch Sewer Extension Project.