



Department Source: City Utilities - Solid Waste

To: City Council

From: City Manager & Staff

Council Meeting Date: July 3, 2017

Re: Public Hearing - Landfill Leachate Handling and Storage Project

## Executive Summary

Public Hearing for the construction of the Leachate Handling and Storage Project at the Columbia Landfill. The Leachate Handling and Storage Project includes improvements, repairs and upgrades to the existing leachate collection and storage facilities at the Columbia Landfill. The construction cost is estimated to be \$560,000 and is funded by Solid Waste Enterprise Funds.

## Discussion

This proposed Leachate Handling and Storage project involves; dewatering existing leachate storage ponds, removing and disposing of solids within the existing leachate storage basins, testing and repairing existing HDPE basin liners, installing new recirculation pumps, piping and aeration equipment. This project is being designed by Burns and McDonnell. The estimated construction cost for this project is \$560,000.

The landfill leachate collection and storage system currently collects leachate from Cells #1-5, has the ability to inject leachate into Cells #4 and #5 and can discharge leachate to the sanitary sewer system as needed. Discharging the landfill leachate to the sanitary sewer system is the most cost effective disposal option for the Solid Waste Utility. In order to comply with state and federal regulations, the Sewer Utility issued an industrial pre-treatment permit to the landfill as a condition of accepting landfill leachate into the sanitary sewer collection system. The pre-treatment permit limits the ammonia concentrations that are allowed in the leachate. The proposed leachate handling and storage improvement project provides leachate treatment to reduce ammonia concentrations. This proactive measure will help ensure the landfill remains in compliance with the pre-treatment permit.

Leachate collection piping and leachate injection improvements for the Bioreactor Cell #6 are included in the scope of work of the Bioreactor Landfill Cell #6 project. The Leachate Handling and Storage Project and the Bioreactor Landfill Cell #6 project will be bid and constructed together as a single project.

## Fiscal Impact

Short-Term Impact: The estimated construction cost for this project is \$560,000 and will be funded with Solid Waste Utility Enterprise Funds.



Long-Term Impact: The costs to operate the landfill are included in the annual operations budget. The addition of this cell is not anticipated to result in a significant change to the annual landfill operating budget of approximately \$4 million.

## Vision & Strategic Plan Impact

### Vision Impacts:

Primary Impact: Community Facilities & Services, Secondary Impact: Environment, Tertiary Impact: Not Applicable

### Strategic Plan Impacts:

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

### Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Infrastructure, Tertiary Impact: Livable & Sustainable Communities

## Legislative History

Date	Action
06/05/2017	R69-17 Setting a public hearing: proposed construction of improvements, repairs and upgrades to the leachate collection and storage facilities at the Columbia Sanitary Landfill.
06/06/2016	Agreement with Burns & McDonnell Engineering Company, Inc. for Bioreactor Landfill Cell #6 Construction Documents and Leachate Study & Design

## Suggested Council Action

Council should direct staff to proceed with the Landfill Leachate Handling and Storage Project following public input and Council discussion.