

Project Purpose

The purpose of this project is to abandon existing Wastewater Pump Station 15 and replace it with 1,800 feet of gravity-fed sewer line.

Background

Wastewater Pump Station 15 is located in the South Willows Basin on 134th Ct NE and was built in 1985 to serve the Pointe Townhome development. Wastewater Pump Station 15 is nearing the end of its useful life and needs to be upgraded, replaced, or abandoned. BHC provided an alternative design analysis on November 1st, 2019 showing possibilities for rehabilitating the existing pump station or a variety of gravity sewer design options. After reviewing the report, the City decided to abandon the station and construct a new gravity sewer line from the existing pump station eastward down Redmond Way. The cost estimates in the study for rehabilitating the existing station and building a gravity sewer were very similar.

Project Description

The project will abandon the existing pump station and replacing it with 1,800 feet of gravity-fed sewer. This project provides a life expectancy of 100 plus years and eliminates ongoing maintenance and repair costs required for continued operation of the pump station. The new sewer line will include 1,835 linear feet of 8" sewer pipe from the existing pump station location extending south along 134th Ct NE towards Redmond Way, then east along Redmond Way to connect to the existing gravity-fed manhole in 138th Lane NE. The project will provide a sewer main stub to the Redmond neighborhood that is SE of the Redmond Way/132nd Ave NE intersection.

Bid Results

The project was advertised in the Daily Journal of Commerce on February 3rd, 2021, and February 10th, 2021. The City Clerk received bids until 11am, February 25th, 2021. There were two (2) bidders and the bids are summarized below:

Bidder	Business Location	Amount Bid
Interwest Construction, Inc.	Burlington, WA	\$ 2,564,112
KLB Construction, Inc.	Lynnwood, WA	\$ 2,530,225
	<i>Engineer's Estimate</i>	<i>\$ 2,193,971</i>

All bidder's unit prices, extensions and additions have been checked for accuracy and unbalanced bid items. Proposed

Fiscal

The 2019 alternative design analysis predicted that the cost of construction would be \$1,196,767. During design the construction estimate increased to \$2,193,971, which was the estimate at 100% design. The low bidder, KLB, bid the project at \$2,530,226, which

Attachment A

is over the Engineer's estimate by \$336,254. The high construction cost created a project deficit of \$1,429,169.

City staff believe that several factors led to the project surpassing the construction estimate from 2019.

Due to the current construction environment in the Puget Sound region, both overall construction costs and demand for qualified contractor availability is high. While this was generally anticipated, construction pricing has significantly increased more than expected since the 2019 Alternative Study. The pandemic has drastically impacted the construction industry and suppliers and in doing so impacted the construction bid amount.

The 2019 alternative design analysis assumed working hours in Redmond Way would be 8-hour workdays. During the design Public Works Traffic Operations informed the Project Manager that working hours were to be 9am – 4 pm in Redmond Way. Due to the limitation on working hours, the traffic control will have to be set up and removed each day. This will take time away from daily construction progress and will increase the number of working days, thus increasing the cost of construction.

The Alternative Study of the project did not account for a layer of concrete that is under the asphalt in Redmond Way. This concrete will have to be removed during excavation and will add time to the construction duration. Additionally, the study did not account for the costs associated with excavating under the 42" Seattle Tolt water transmission main, and under two large British Petroleum natural gas pipes. All these constructability issues created an increase in construction cost.

Estimated costs for the project are shown below.

Project Budget:

Wastewater CIP	<u>\$2,308,703</u>
Total Funding	\$2,308,703

Estimated Project Costs:

Design Phase	\$460,528
Construction Phase	<u>\$3,277,344</u>
Total Estimated Project Cost	\$3,737,872

