

Project Purpose

This project replaced 65 Butterfly Valves ranging in size from 8-inches to 24-inches in the Novelty Hill Pump Station and Operations Center Tank site.

Background

Water maintenance staff discovered a consistent valve isolation problem that had degraded over a number of years while performing maintenance at the Novelty Hill Pump Station and the Novelty Hill Operations Center Tank site. The City maintains 65 Butterfly Valves to isolate sections of the piping within the facilities. These valves range in size from 8-inches to 24-inches. These Butterfly Valves had degraded to a point that they could not form a water-tight seal when closed because the rubber valve seats were crumbling away, making it very difficult for the MOC staff to isolate parts of these facilities. During the initial investigation of the problem staff employed a corrosion expert to evaluate the condition of the valves and pipe in both facilities. The results of this evaluation revealed consistent corrosion of the pipe spools as well as failure of the valve seats in both facilities.

Project Description

This project replaced 65 Butterfly Valves ranging in size from 8-inches to 24-inches as well as a majority of the corroded pipe spools in the Novelty Hill Pump Station and Operations Center Tank site. The construction allows the MOC staff to isolate parts of the Novelty Hill Facilities to perform maintenance. During this rehabilitation process of the valves and pipe spools a seismic control valve operator was installed at the tank sites to isolate the tank water supply in the event of a significant seismic event. The location of the project is in the Novelty Hill Pump Station and Novelty Hill Operations Center - both located near the intersection of NE Novelty Hill Road and Trilogy Parkway NE. Construction began on October 1, 2018 and was complete on June 13, 2019.

Budget

The construction project cost exceeded the bid amount by approximately \$8,000 due to a change order to add additional pipe flange hardware to repair leaks that were not apparent during design. The additional cost was within the project's planned contingency.

IV. PREVIOUS DISCUSSIONS HELD

Date (MM/DD/YYYY)	Action / Committee Presentation
07/12/2016	Planning and Public Works Committee
08/16/2016	Approve Consultant Services Contract
03/13/2018	Planning and Public Works Committee
04/03/2018	Approve Supplemental Consultant Agreement No. 1
04/03/2018	Award of Bid
Today	Accept Construction

V. IMPACT

A. Service/Delivery:

This project reduced the risk of seismic failure and improved maintenance at the Novelty Hill Water System Facilities.

B. Fiscal Note:

Estimated costs for the project are shown below.

Current Project Budget:

Novelty Hill Water Fund	\$1,570,616
Total Funding	\$1,570,616

Estimated Project Costs:

Design Phase	\$274,182
Construction Phase	<u>\$1,265,817</u>
Total Estimated Project Cost	\$1,539,999

Budget Difference \$30,617

Transfer To Novelty Hill Water Fund \$30,617

VI. ALTERNATIVES TO STAFF RECOMMENDATION

None

VII. TIME CONSTRAINTS

Following project acceptance, in accordance with RCW 60.28, the contract retainage will be released upon receipt of clearances from the Washington State Departments of Revenue and Labor and Industries, and a mandatory 45-day waiting period for filing claims and liens

VIII. LIST OF ATTACHMENTS

A. Vicinity Map