



## Glenwood Pump Station ARV Replacement

**Location:** Central

**Number:** 26-2021-0030

**GL Number:** 407-000-189-00-01-73

**Phase:** Planning

**Project Manager:** Dale Lough

**GSP Basin:** Glenwood Creek - 2-1705

**Capital Improvement Project**

General Facilities

District Installed Infrastructure

Septic Elimination Program

Developer Reimbursement Program

Fleet & Facilities

**Restoration & Replacement Project**

Restoration & Replacement – Gravity

Restoration & Replacement – PS & FM

Restoration & Replacement – Fleet & Facilities

### Project Definition:

Background. The Glenwood Force Main serves a significant portion of the District’s service area and is considered a backbone of the collection system. The force main system is comprised of an 18-inch PVC pipe with 10 ARV/VRV locations that was installed in 1995. In early 2021, Operations reported to Engineering that the air vacuum valves along the Glenwood force main needed to be retrofitted/repared/replaced. An inspection of the existing air vacuum valves confirmed that the valves were installed without isolation valves, severely complicating the ability to conduct maintenance, repair or replace the valves. Inspection was unable to confirm whether 6 of the valves are operable.

The District completed a transient analysis that confirmed two surge tanks and four valves can provide adequate system protection. One of the valves is located at the pump station and has already been replaced by District staff, leaving three valves to be installed. Due to the criticality of the system, initial project efforts will focus on protection of the force main. Follow-on efforts will determine the method to decommission unused valves.

Objective. Ensure transient protection of the force main to maximize its useful life, ease operability and maintenance of the system, and abandon existing valves that are no longer required.

Scope of Work. Install two surge tanks on the pump station site and install three ARV/VRVs. Abandon existing valves and manholes that will no longer be in service.

Project Statistics. Install two surge tanks and install three ARV/VRVs.

**Photos: (Map of area on the reverse side)**

### Budget Information:

<u>Project Cost Estimate:</u>	
Total Project Cost:	\$3,384,800
Construction Cost:	\$2,650,000
Basis of Estimate:	Planning
Date of Estimate:	Sept. 2023

### Schedule Information:

<u>Activity</u>	<u>Year</u>
Predesign	2021-2022
Permitting	2022-2023
Real Property/ROW	2022-2023
Design	2022-2026
Bid	2024, 2026
Construction	2024, 2026

