4/22/2020
To: Mayor and City
Council members
Update on the successful completion of the Mary's Creek
Lift Station reported herein. Clay

Mary's Creek Lift Station Reconstruction

Scope: The work will consist of the installation of a precast concrete wet well, precast valve box, and installation of City-standard submersible pumps, along with associated piping and electrical and control equipment to completely replace the existing lift station. The scope of work will also include paving repairs, traffic control, and a storm water pollution prevention plan.

Justification: This lift station is the last of four below ground stations that require confined space entry for maintenance. The project will convert the 30-year-old Mary's Creek lift station on Longherridge Dr. to a manhole and construct a new lift station. The flow from this manhole would flow to a new site about 20ft. north on city easement and right of way for the construction of a conventional submersible pump lift station. The new station would consist of submersible pumps with guide rail systems, wet well top would be above flood elevation, a new control panel with remote alarming system. Currently the Mary's Creek lift station's pumps and controls are below ground and are at risk of flooding.

Construction Manager: Ronnie Hart

Designer: RG Miller Engineers

Contractor: Reddico Construction Company

Budget Info:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
General Obligation Bonds				-
W/S Revenue Bonds	2018B	663,000		-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		**663,000**	**-**	**663,000**

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	49,971		49,971
Construction	575,708	-4,600	571,108
Construction Management/Inspection			-
Construction Materials Testing	9,334		9,334
FF&E			-
Total Expenditures	**635,013**	**(4,600)**	**630,413**

Project Balance/Contingency	**32,587**

Schedule Info:

	Base Line	*Current*
Design Start	July-18	August-18
Bid Start	January-18	Febuary-18
Construction Start	March-18	August-19
Construction Completion	December-19	March-20

Rain Days: 5

Highlights:

- Notice to Proceed was given on October 14, 2019 after a time extension was requested due to lead time for the pumps and control panel.
- Existing lift station was demolished, and by-pass pumping commenced.
- Well pointing system was utilized to remove ground water.
- New wet well and valve box were installed.
- Pour in place wet well top and hatch for the valve box were constructed.
- Ladders and pipe supports were put place.
- New electrical and piping were completed.
- Wet well and manhole were Sewper Coated.
- New pumps were installed and wired.
- Piping and valves were installed, and pipes coated and sealed.
- Installed a new power underground ductbank and connected permanent power.
- Control panel was installed, and new pumps were started.
- By-pass pump was disconnected and removed from the site.
- Placed slope paving for the ditch next to lift station and installed guard rail system.
- Site restoration was competed by hydro-mulching the areas that were disturbed during construction.
- The overall project budget as noted in the budget chart above, shows an overall budget savings of approximately $32,000.00
- Substantial Completion was given on February 26, 2020
    - Punch List walkthrough resulted in two items for completion – Hydro Seeding of the disturbed areas and installing of the new guard rail system for the lift station.
- **Final Completion was achieved on March 23, 2020**

Project Location Map:

VICINITY MAP

Project Construction Photos:

Existing Lift Station

Existing Lift Station

SWPPP Rock Dam

SWPPP Rock Dam

By-pass pump

Traffic Control

Ground Water

Well pointing system

Well Pointing System

Wet Well

Wet Well installed

Piping installed

Valves and pipes in vault

Form work for lift station hatch entrances

Poured in place lift station hatch

Slope paving and Guardrail

Hydro Mulch

New Lift Station