

Memo



To: Clay Pearson, City Manager

From: Susan Johnson, Project Manager

CC: Trent Epperson, Assistant City Manager
Sue Polka, P.E., Director of Engineering and Capital Projects
Skipper Jones, Assistant Director of Capital Projects

Date: April 28, 2016

Re: Mykawa Lift Stations Project

4/27/16
To: Mayor and City Council members
FYI on forthcoming sanitary sewer system improvement project.
Clay

Background

This project was originally identified as two separate projects in the 2000-2030 CIP Master Wastewater Plan. The first was the retirement and relocation of the Mykawa-Scott Lift Station, and the second the retirement of the Orange-Mykawa Lift Station. To coordinate design and construction of these projects with the Mykawa Road Widening Project, and to ensure that this work is completed ahead of the road construction, they have been combined into one project in the current CIP.

The existing Mykawa-Scott Lift Station is located on the east side of Mykawa almost directly across from the Scott Street intersection. This lift station has a modeled capacity of 140 gpm or 0.2 million gallons per day (mgd) and discharges via a force main to the east, eventually discharging into a gravity sewer east of Main Street near McHard Road. The current capacity is insufficient to handle minimal wet weather events without surcharging the upstream sanitary collection system. A new lift station is proposed to replace it in a location east of the proposed Mykawa ROW, and will contain increased pumping capacity which could later be increased again with pump changes or additions. A new 12-inch force main will run approximately 2,500 lf from the new Mykawa-Scott Lift Station to SH35. As a part of the improvements to this sewer basin, the small lift station on Shank Road will be eliminated. Additionally the Orange-Mykawa Lift Station, also in conflict with the Mykawa Road expansion, will be eliminated, and a new 12-inch gravity line installed along Mykawa Road and in a back-lot easement from Orange to the recently completed Walnut Lift Station. This project will also eliminate an inverted siphon just south of the Orange-Mykawa Lift Station.

Schedule and Budget

Consultant selection took place this past February resulting in the selection of 5Engineering, LLC for the project. This firm was selected based on the firm's primary specialty being water/wastewater projects, its experience with similar

projects, and past performance on City projects. The firm has demonstrated that it is capable of providing personal attention in addressing the City's needs, and has a cohesive team that demonstrates ownership of its deliverables.

The overall project budget in the 2016-2020 CIP is \$5,662,920. Staff will be requesting Council approval of a professional services engineering contract in the amount of \$575,590 at the May 9, 2016 meeting. The contract includes the following scope of work and schedule:

Preliminary Engineering Report	May 2016 - 4 months
Surveying and Geotechnical	
Final Design Phase	October 2016 – 9 months
Bid Phase Services	August 2017 – 45 days
Construction Phase	September 2017 – 6 months



CITY OF PEARLAND

Mykawa Lift Stations

LS Lift Stations



1 inch = 750 feet

APRIL 2016
GIS DEPARTMENT

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



Mykawa-Scott Lift Station



Shank Lift Station



Orange-Mykawa Lift Station