

18 June 2020

To: Mayor and City

Council members

We've adjusted drainage plans based on feedback, still meets design criteria, to solve recurring drainage problems in older established area. Moving towards awarding construction this fall. Clay



Piper Road Drainage

Scope: Drainage improvements along Piper Road from FM 518 to Fite Road, will review the existing open ditch drainage system on Piper Road. The project will be to re-grade the ditches and reset driveway culverts to move the high point of the road further north. The project will include an asphalt overlay of the road to repair damage due to the drainage improvements. The improvements will allow for more of the drainage area to flow south to the linear detention pond just east of the elementary school at Fite Road and FM 1128.

Justification: The goal for this project is to relieve periodic flooding and high-water issues along Piper Road by reviewing the drainage flows and regrading the drainage ditches to flow south and directly to Mary's Creek. The area was identified in the Harvey Drainage Assessment Report as a local drainage improvement project.



Project Manager: Darcy Gomez

Designer: Binkley & Barfield Consulting Engineers

Contractor: N/A

Budget Info:

| Funding Sources | Series | To Date | Future | Total Budget |
|------------------------------|----------|------------------|----------|------------------|
| General Revenue - Cash | | | | - |
| Certificates of Obligation | | | | - |
| Certificates of Obligation | | | | - |
| General Obligation Bonds | TBS 2020 | 1,151,000 | | 1,151,000 |
| General Obligation Bonds | | | | - |
| W/S Revenue Bonds | | | | - |
| Impact Fee - Debt | | | | - |
| Other Funding Sources | | | | - |
| Total Funding Sources | | 1,151,000 | - | 1,151,000 |

| Expenditures | To Date | Future | Total |
|------------------------------------|----------------|----------------|------------------|
| PER | | | - |
| Land | | | - |
| Design | 199,807 | | 199,807 |
| Construction | | 807,400 | 807,400 |
| Construction Management/Inspection | | | - |
| Construction Materials Testing | | 20,000 | 20,000 |
| FF&E | | | - |
| Total Expenditures | 199,807 | 827,400 | 1,027,207 |

| | | | |
|------------------------------------|--|--|----------------|
| Project Balance/Contingency | | | 123,793 |
|------------------------------------|--|--|----------------|

Schedule Info:

| | Base Line | Current |
|---|------------------|----------------|
| Design Start | July-19 | August-19 |
| Bid Start | April-20 | October-20 |
| Construction Start | January-21 | |
| Proposed Construction Completion | August-21 | |

Rain Days:

Background:

- The Original option selected from the preliminary engineering report was widening and re-grading roadside ditches, upsizing and resetting culverts and re-establishing the ditch flow lines to redirect the majority of captured flows to the south.
 - Improvements to ditches will required drainage easements, an issue presented to residents in the public meeting, held in November 2019. Residents were unhappy and somewhat unwilling to convey these permanent easements and requested that other options be considered.
 - The Engineer (Binkley and Barfield) agreed to re-evaluate the option to enclose the ditches with pipe still requiring the replacement of culverts beneath driveways but would largely do away with the need for drainage easements and many of the utility relocations.
 - The piped option still allows the expanded drainage area to drain to the south, minimizing the flows to the north which are slowed by uneven culvert flow lines within the FM 518 TXDOT right of way.
 - The design meets the City's drainage criteria standards.

Highlights:

- 60% construction plans depicting the piped in ditches were submitted on May 29, 2020. Staff is currently performing design review and notifying residents of the changes to the design. A new Project Information letter is being prepared to re-affirm those changes, update general project information and schedule, and to discuss property access during the construction phase of the project. Staff will be sending this notice to the residents the week of June 18, 2020.
- As of June 10, 2020, 60% plans were submitted to the Utility Companies for review for any potential conflicts.

Upcoming Work Items:

- The 60% Plan Review Meeting is scheduled for June 23, 2020. Any review comments will be incorporated and addressed in the 90% submission.
- Completion of the Utility Coordination and development of any required work and schedule

Previous Memos:

04.02.2020

Project Location Map:



**CITY OF PEARLAND
Piper Road
Drainage Improvements**

-  Piper Rd
-  Storm Inlet
-  Storm Manhole
-  Storm Lines



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.

1 inch = 300 feet
DECEMBER 2018
GIS DEPARTMENT

