



12/16/2021

To: Mayor and City Council members

Memo detailing the upcoming construction contract award for improvements in the Willowcrest Subdivision, including re-capitalizing the streets, drainage, and sanitary sewer infrastructure. Lowest responsible bidder is within estimates and budget with a known contractor that has demonstrated past good performance.

-Trent

# Memo

**To:** Clay Pearson, City Manager  
**From:** Jameson Appel, Project Manager  
**CC:** Trent Epperson, Deputy City Manager  
Robert D. Upton, P.E., Director of Engineering & Public Works  
Skipper Jones, Assistant Director of Capital Projects  
Eric Hammond, Assistant Director of Public Works  
David Van Riper, Assistant Director of Public Works

**Date:** December 16, 2021

**Re:** Pre-Award Memo for Construction of the Willowcrest Subdivision Paving, Drainage, and Sanitary Improvements

## Executive Summary

This memo provides information on the Willowcrest Subdivision Paving, Drainage, and Sanitary Improvement project's bid phase and forthcoming proposed award of a contract for construction to Tandem Services, LLC and an additional contract for Material Testing Services to Raba Kistner, Inc. The contracts are both scheduled for presentation to Council on the January 10<sup>th</sup>, 2022 meeting agenda.

## Background

The project area, located in Willowcrest Subdivision, is bounded by Cherry Street, Woody Road, W. Plum Street, and Mykawa Road. The 2019 Bond project will provide drainage improvements which include upsizing and rerouting the existing storm sewer to convey the 3-year storm event as required by the current City drainage standards, redirecting flows to utilize the BDD4 storm sewer conveyance that flows north along Mykawa Road and construction of a new detention pond near the intersection of Orange and Mykawa. Additionally, the project will rehabilitate the sanitary sewer system.

Several homes in this neighborhood have a history of repetitive loss despite its location outside of the FEMA mapped 100-year flood hazard zone. Most of the flooding problems can be associated with the original undersized storm sewer system. This was an area identified in the Harvey Drainage Assessment Report as a local drainage improvement project. The project will improve internal collection capacity and conveyance within the subdivision and the conveyance out to Town Ditch and to Clear Creek.

The subdivision was built in the 1970s and has also been identified as an area with high inflow and infiltration (I & I) into the sanitary sewer system. The collection system consists of approximately 12,500 LF of sanitary sewer pipe and 40 plus manholes now nearly 50 years old. The system is located in the backyards of the homes and is very difficult to access and as a result difficult to maintain. The project will rehabilitate the sanitary sewer system through pipe bursting in order to accommodate the access issues and will include repairing and recoating manholes.

## Project Scope

The Contract entails the removal and reconstruction of the storm sewer system, residential street paving, sanitary sewer rehabilitation, replacement of water line crossings and construction of an approximately 5-acre detention pond. The scope of work for the storm sewer system consists of the removal of 15-inch to 36-inch storm sewer and realignment of the proposed 18-inch to 48-inch Reinforced Concrete Pipe (RCP), 4'x3' Reinforced Concrete Box (RCB) and 5'x3' RCB storm sewer by open cut. The project also includes reconstruction of approximately 2.7 miles of 28-foot wide 7-inch concrete pavement, 0.26 miles of 22-foot wide asphalt pavement, including 2,000 linear feet of roadside ditch regrading, 5.3 miles of 5-foot sidewalk and reconstruction of concrete driveways. The proposed sanitary sewer rehabilitation includes trenchless construction of the existing 8-inch to 12-inch sanitary sewer by pipe burst method and work also includes rehabilitation of the existing sanitary sewer manholes. Detention pond construction includes pond excavation, backslope swales, outfall pipe, concrete pilot channel and slope paving. Additionally, the project requirements

include traffic control, miscellaneous signage, SWPPP measures, tree protection plan and other items to facilitate construction of this project.

In summary, the project will completely update the subdivision’s drainage, sanitary sewer, and road infrastructure. The water lines were already replaced approximately three years ago.

Council awarded a design contract to Cobb Fendley Associates in August of 2019. The project is part of the approved 2019 Drainage Bond Package.

**Current Status**

The design documents were completed in October 2021 and advertisement began the same month. The project was bid utilizing (Local Gov’t Code Chapter 271, subchapter B) Lowest Responsible Bidder. The pre bid meeting was held November 9th, 2021 with bid opening occurring December 8th, 2021.

A total of two contractors submitted bids with the apparent Lowest Responsible Bidder being Tandem Services, LLC with a submitted bid of \$12,159,919.20. The Engineers Opinion of Probable Cost was \$14,812,969 approximately 18% above the apparent low bidder.

Name	Address	Response Total
Tandem Services, LLC	Friendswood	\$12,159,919.20
Total Contracting Limited	Houston	\$15,996,680.18

Tandem Services, LLC has worked with the City of Pearland on multiple projects producing high quality work completed on time and in budget. Tandem Services, LLC has also worked with Cobb Fendley on similar past projects and the Engineer of Record confirms they have demonstrated timeliness and quality of work. Staff has received a positive Engineer’s Recommendation and plans to present the construction contract to Council on January 10<sup>th</sup>, 2022. Review of the bid proposal by Staff and the Engineer of Record has determined that the construction proposal is complete and reasonable.

**Next Steps**

Upon Council approval and award, Staff will hold the preconstruction conference in January 2022 and issue the notice to proceed. The detention pond design will be presented to Brazoria County Drainage District #4 board at the February 2022 meeting. Construction duration is 660 days after issuance of notice to proceed. Once completed the project will alleviate drainage issues by bringing the subdivision up to the current 3-year design criteria and mitigate high sanitary sewer I & I within the neighborhood.

**Budget Info**

Drainage:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds	2020	2,086,000		2,086,000
General Obligation Bonds	2021 PIB	1,500,000		1,500,000
General Obligation Bonds	TBS 2022	12,340,000		12,340,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
<b>Total Funding Sources</b>		<b>15,926,000</b>	<b>-</b>	<b>15,926,000</b>

<b>Expenditures</b>	<b>To Date</b>	<b>Future</b>	<b>Total</b>
PER			-
Land	1,217,131	25,000	1,242,131
Design	980,458		980,458
Construction		10,851,515	10,851,515
Construction Management/Inspection			-
Construction Materials Testing		148,912	148,912
FF&E			-
<b>Total Expenditures</b>	<b>2,197,589</b>	<b>11,025,427</b>	<b>13,223,017</b>

<b>Project Contingency</b>	<b>17%</b>	<b>2,702,983</b>
<b>Project Balance</b>		

Sewer:

<b>Funding Sources</b>	<b>Series</b>	<b>To Date</b>	<b>Future</b>	<b>Total Budget</b>
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds				-
System Revenue - Cash		336,000		336,000
W/S Revenue Bonds	2020B	1,300,000		1,300,000
Impact Fee - Debt				-
Other Funding Sources				-
<b>Total Funding Sources</b>		<b>1,636,000</b>	<b>-</b>	<b>1,636,000</b>

<b>Expenditures</b>	<b>To Date</b>	<b>Future</b>	<b>Total</b>
PER			-
Land			-
Design	185,350		185,350
Construction		1,308,404	1,308,404
Construction Management/Inspection			-
Construction Materials Testing		30,971	30,971
FF&E			-
<b>Total Expenditures</b>	<b>185,350</b>	<b>1,339,375</b>	<b>1,524,725</b>

<b>Project Contingency</b>	<b>1%</b>	<b>21,246</b>
<b>Project Balance</b>		

### Schedule Info

	<b>Base Line</b>	<b>Current</b>
<b>Design Start</b>	August-19	August-19
<b>Bid Start</b>	September-20	October-21
<b>Construction Start</b>	January-22	
<b>Construction Completion</b>	April-24	

\*The need to construct a detention pond to maximize project benefit and the subsequent land acquisition caused delay to the project schedule.

**Recommendation**

Staff will recommend Council approve the construction contract for Tandem Services, LLC in the amount of \$12,159,919.20 at the January 10<sup>th</sup> agenda. Staff will also recommend the approval for professional services for construction materials testing to Raba Kistner, Inc. in the amount of \$179,883.

**Previous Memos**

07/25/19, 04/09/20, 09/10/20, 4/08/21, 8/26/21

**Map**

