

3/9/17

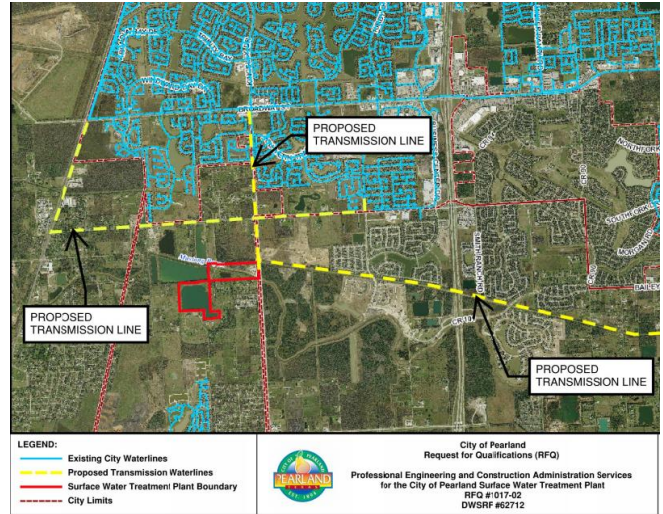
To: Mayor and City Council members

Update on the big surface water treatment plant and related transmission lines, also advanced metering, that we have financed through TWDB. Ready to bring the three design contract packages forward. Clay

Surface Water Plant PH1 (10 MGD)

Scope: Pilot testing, design, and construction of a 10 MGD Surface Water Treatment Plant that will treat raw water from the Gulf Coast Water Authority (GCWA) canal for distribution throughout the City's water system. A future phase will include an additional 10 MGD of capacity. The plant will be located on City property on CR48 south of CR59, which is adjacent to the GCWA canal. Pilot testing will begin in FY2017 followed by design and construction. The project is scheduled to be completed over a five year period with new capacity available by 2022/2023. Installation of fiber to serve the City's SCADA system.

Justification: The project will provide additional potable water capacity to meet demands of northern Brazoria County as the region continues to grow. The 2012 Water Model Update based on growth projections established that the demand for an additional 10 MGD would need to be met by 2022/2023.



Project Manager: Andrea Brinkley

Owner's Representative: Ardurra Group, LLC

Designer/s: N/A

Contractor: N/A

Budget Info for Surface Water Plant:

	<i>Budget</i>	<i>Encumbered</i>	<i>Change Orders</i>	<i>Balance</i>
<i>Prelim. Eng.</i>	\$6,600,000.00	\$376,134.00		\$6,223,866.00
<i>Land</i>				\$0.00
<i>Engineering</i>				\$0.00
<i>Construction</i>				\$0.00
<i>FF&E</i>				\$0.00
<i>Contingency</i>				\$0.00
Total	\$6,600,000.00	\$376,134.00	\$0.00	\$6,223,866.00

Budget Info for Water Meter Changeout:

	<i>Budget</i>	<i>Encumbered</i>	<i>Change Orders</i>	<i>Balance</i>
<i>Prelim. Eng.</i>				\$0.00
<i>Land</i>				\$0.00
<i>Engineering</i>	\$300,000.00	\$2,639.45		\$297,360.55
<i>Construction</i>				\$0.00
<i>FF&E</i>	\$5,500,000.00			\$5,500,000.00
<i>Contingency</i>				\$0.00
Total	\$5,800,000.00	\$2,639.45	\$0.00	\$5,797,360.55

Schedule for Water Meter Changeout:

	<i>Base Line</i>	<i>Current</i>
<i>Design Start</i>	March-17	March-17
<i>Proposed Bid Start</i>	June-17	
<i>Proposed Construction Start</i>	TBD	
<i>Proposed Construction Completion</i>	October-19	

Highlights:

TWDB Funding: Following the Texas Water Development Board approval of the \$159,500,000, in November 2016, both the TWDB and City staff have completed the loan ordinance and pre-loan closing activities. City Council approved the loan ordinance on February 13th, and the loan closing is scheduled for March 9th. The first 2 portions of the loan that are included in this loan closing are: Fund Series 2017A: \$10,225,000 - Water Meter Change out, and 2017B: \$12,025,000 – Surface Water Plant Design.

Update to Owner’s Representative Task #1: The first set of tasks completed by Ardurra were largely related to the funding assistance application to the Texas Water Development Board for the Drinking Water State Revolving Fund. TWDB funding requires an engineering feasibility report, environmental review, cost estimates and a program of scheduled work efforts. TWDB staff requested that the engineering feasibility report be amended to include the Water Meter change out project, as it is part of the work included in the funding and this update is underway. Work to gather water quality data so that the American Canal source water can be analyzed is also underway. This work will create a monitoring plan and establish preliminary water quality goals which will be used to develop the Surface Water Plant water quality parameters.

Task #2, #3: Upcoming work related to the Preliminary Design will require the next two Task Orders to be brought to Council for approval at the end of March. Activities associated with Task #2 includes Advanced Metering Infrastructure and Water meter change out project procurement assistance in accordance with TWDB requirements. The work will include an inventory of the existing water meters in operation, be followed by meeting with potential interested parties via a Request for Expression of Interest process which will allow the City to gain knowledge about meters, communication systems and offerings by specific vendors, and streamline the process for the Request for Proposal for the system. Task Order #3 includes assistance with the following tasks: TWDB funding requirements, Design package scoping and negotiation, update to the City’s Water Master Plan, Design Package 3 Water Line Support, the Development of the Basis of Design for the Surface Water Plant, Pilot Plant Support related to water quality, development of a procurement and construction methodology for the work, Planned Facility Personnel Requirements, Design Deliverable Reviews such as review of Preliminary Engineering Reports, and Project Standards Development to ensure standardization across all design work.

Program Update: The selection process of three Design teams is complete (referenced in the 2/2/17 memo). Staff expects to bring the contracts for Council approval in April. Staff is in the scoping and negotiation stage which will be followed by TWDB review of the proposed scopes as follows:

Package 1: Freese & Nichols Inc: Raw Water System: including canal intake structure and pre-sedimentation basin

Package 2: CDM Smith: Surface Water Purification Plant including operations building

Package 3: Dannenbaum Engineering Corporation: Distribution System including storage tanks, high service pump station/public reception area, and transmission lines.

Previous Memos: 3/3/16, 6/16/16, 12/1/16, 2/2/16.