



Memo

To: Clay Pearson, City Manager
From: Skipper Jones, Assistant Director - Projects
CC: Trent Epperson, Deputy City Manager
Robert D. Upton, PE, Director of Engineering and Public Works

Date: May 12, 2022
Re: SWTP Update

Executive Summary

This memo provides information about the progress on the Surface Water Plant project's current status and the continuing impact to the schedule from the delay of critical electrical components. The project remains within budget.

However, the expected completion date (Water into the System) is changing again and will slip beyond June 2023.

Background

The project entails the design and construction of a 10 million gallon per day (MGD) surface water treatment plant to supplement the City's drinking water supply to meet the demands of current and future population growth. The work includes the construction of a transmission line system to bring water from the plant north along Kingsley (CR48) to Broadway and from there to the Kirby Water Plant to the east and FM521 Water Plant on the west end of town. The work also includes the extension of the City's fiber network to provide connectivity to a redundant Data Center to be housed in the Plant Operations building. This project is being delivered through a Construction Manager At Risk (CMAR) contract with PLW Waterworks for a total construction cost of \$137,075,681.

In March 2022, Council received a project and budget update presentation and approved Change Order #8 for three Owner Directed Work Change Directives (WCD1, 2 and 3). This revised the CMAR Contract total to \$137,075,681.

On April 25th Council approved a direct purchase contract with Data Vox in the amount of \$172,617.92 for the provision of Audio-Visual equipment for the Control Room, Conference Room, Break Room and the Multi-purpose Training Room and Lobby. This contract was funded from the Furniture, Fixtures and Equipment in the project budget and does not affect the CMAR contract amount and does not require additional funding.

Schedule Update:

The schedule remains the primary issue of concern for the project as promised electrical equipment, originally scheduled to arrive in February has now been delayed again with delivery scheduled for June 10th by the supplier.

The Main Electrical Switch Gear, furnished under contract with Square D, been reschedule four times:

- The Original ship date was late February 2022, that was delayed to late March due to parts unavailability.

- In mid-March the equipment was re-scheduled April 22nd.
- On April 8th the equipment was pushed to May 17 due to missing parts
- On April 28th the factory stated that the NEW shipment date would be June 3rd due to the extensive testing required.
- **Based on the latest projection the equipment is expected to arrive on June 10th.**

This equipment is required for start-up of the initial treatment processes (Raw Water In-Take and Pre-Treatment) and must pass manufacturer's installation certification to begin demonstration of adequacy of the design for TCEQ. These delays now four months for which the Project Team has managed to develop work arounds for some of this lost time. The Major Electrical sub-contractor has agreed to alter his schedule to work crews 10 hours/ day to limit the impact of these delays as much as possible.

The Project Team is still assessing the impact to the "Water into the System" of these last 42 days since the initial April delivery date.

Budget Update:

There are No pending Change Orders or Owner Directed Changes.

Budget Info:

Funding Sources	Series	To Date	Future	Total Budget
W/S Revenue Bonds	2017B	6,012,500		6,012,500
Impact Fee - Debt	2017B	6,012,500		6,012,500
W/S Revenue Bonds	2018A	4,325,000		4,325,000
Impact Fee - Debt	2018A	4,325,000		4,325,000
W/S Revenue Bonds	2019A	10,500,000		10,500,000
Impact Fee - Debt	2019A	10,500,000		10,500,000
W/S Revenue Bonds	2020A	53,800,000		53,800,000
Impact Fee - Debt	2020A	53,800,000		53,800,000
W/S Revenue Bonds	TBS 2022	13,112,500		13,112,500
Impact Fee - Debt	TBS 2022	13,112,500		13,112,500
Cash				-
Other Funding Sources				-
Total Funding Sources		175,500,000	-	175,500,000

Expenditures	To Date	Future	Total
PER	8,773,058		8,773,058
Land	173,394		173,394
Design	16,338,003	300,000	16,638,003
Construction	136,146,231	1,500,000	137,646,231
Construction Management/Inspection	4,100,474		4,100,474
Construction Materials Testing	462,860		462,860
FF&E	1,130,812	369,188	1,500,000
Total Expenditures	167,124,832	2,169,188	169,294,020

Project Contingency	3.5%	6,205,980
Project Balance		0

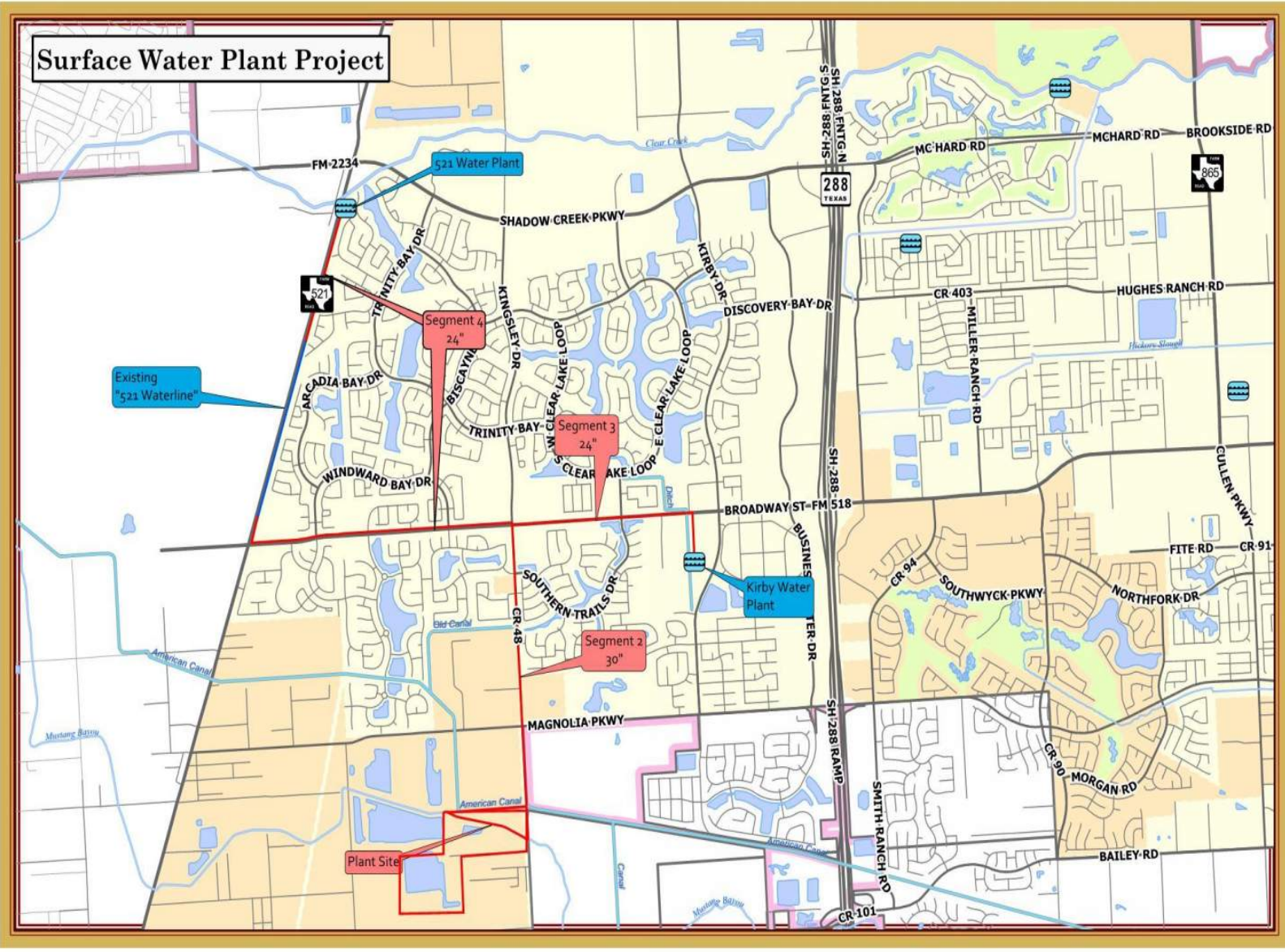
Schedule Info:

	<i>Base Line</i>	<i>Current</i>
<i>Design Start - Package 1</i>	August-19	September-19
<i>Design Start - Package 2</i>	February-19	March-19
<i>Design Start - Package 3</i>	August-19	September-19
<i>Bid Start</i>	March-20	January-19
<i>Construction Start</i>	May-20	June-20
<i>Construction Completion</i>	December-22	June-23

Previous Memos:

6/16/16, 2/2/17, 3/9/17, 4/13/17, 3/29/18, 4/19/18, 1/10/19, 2/21/19, 3/28/19, 8/1/19, 8/8/19, 1/23/20, 3/05/20, 4/16/20, 9/17/20, 3/4/21, 6/10/21, 7/29/21, 11/4/21, 3/10/22, 4/14/22

Project Map:



Project Photos:



Front of the High Service Pump Bldg. public's view of the plant



North side of Administration Bldg. with High Service in background



Overhead of Operations Bldg.



Back side, (west) of Operations Bldg.



Chlorine DiOxide Bldg.



Backside of Chlorine DiOxide Bldg., note roofing materials in foreground



Membrane Bldg., preparing to begin receiving Membrane equipment



Direct overhead view into the Membrane Bldg. showing internal preparations



Raw Water Lift Station and Canal Bank slope paving with debris strainer



Direct overhead view of Raw Water Lift Station showing Debris Vertical Rakes and pump wells



Overall Site View from southeast. Note CMAR's temporary offices and material storage that will be removed to complete installation of finished water transmission line and Plant Service Water ring. CMAR & City Staff will move into Admin and Operations for this installation.