

Construction Update

Agenda Item D.2

September 20, 2021

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Construction Manager
Tampa Bay Water



**6 projects closed out
Total cost of \$6.4 million – 6.2% under budget**

1. Tampa Bypass Canal Pump Station Starters Replacement
2. Surface Water Treatment Plant Entrance Canopy
3. South-Central Hillsborough Wellfield Generators & Pump Motors Replacement
4. South-Central Hillsborough Wellfield Improvements
5. High Service Pump Station Switchgear & Generator Controls Upgrades
6. Purchasing Warehouse Replacement



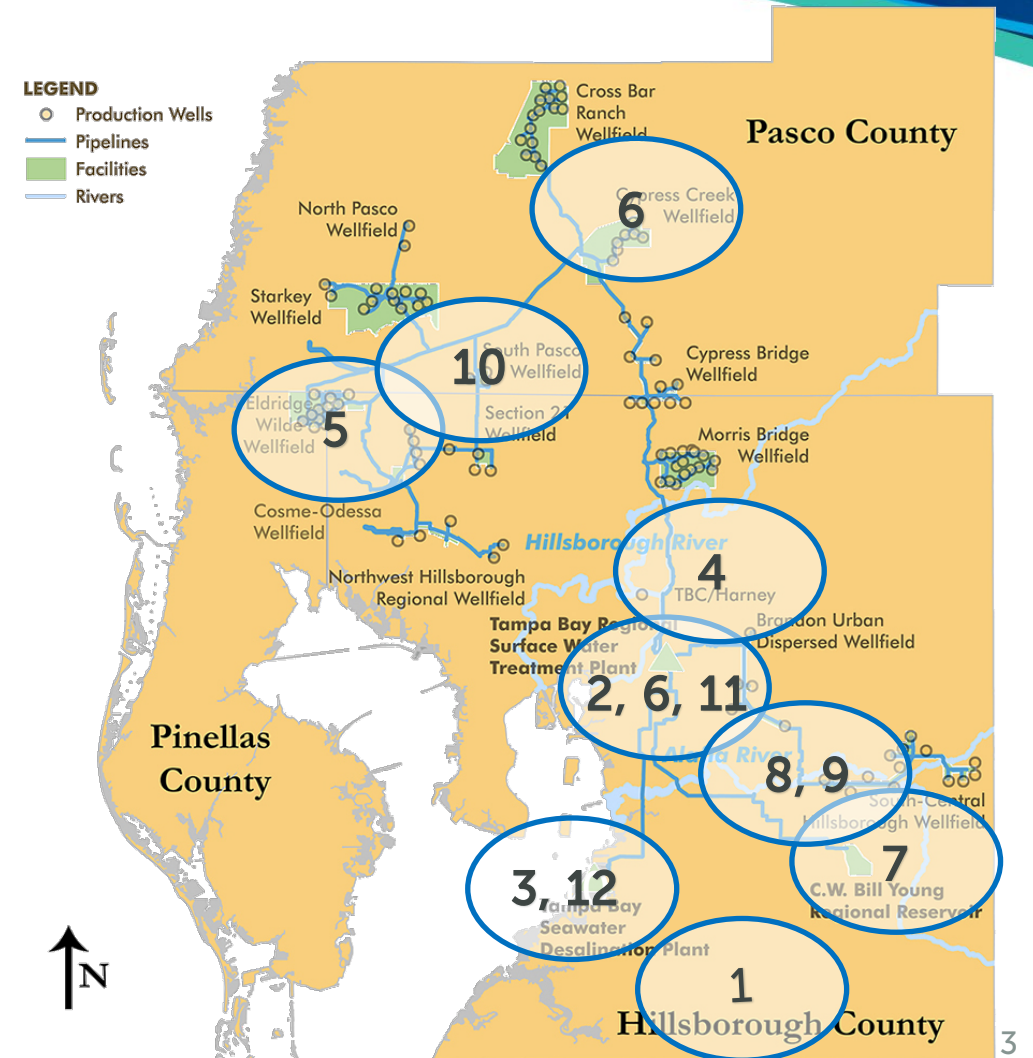
New Purchasing Warehouse storage area

Current Construction Overview Map

Current Projects:

1. South Hillsborough test well
2. Regional Facility Pump Station expansion
3. Tampa Bay Desalination Facility intake connection improvements, phase 1
4. Tampa Bypass Canal gates automation
5. Eldridge-Wilde Wellfield improvements
6. Cypress Creek Water Treatment Plant & High Service Pump Station diesel piping improvements
7. C.W. Bill Young Regional Reservoir solar energy system
8. Brandon Booster Station, GMP 1 – Lithia flow control valve
9. Brandon Booster Station, GMP 2 – Early purchase of material
10. South Pasco Water Treatment Plant caustic feed system
11. Repump Station Raw Water Line valve repair
12. Tampa Bay Desalination Facility finished water line repair

Total construction cost: \$25.3 million



South Hillsborough Wellfield Test Well

- To further assess feasibility of developing new wellfield



Drill rigs set up for the test well and a monitor well



Collecting water samples



Cutting samples

Cost: \$906,290

Completion of construction: September 2021

- Increases pumping capacity at the High Service Pump Station



Pump and motor set in place



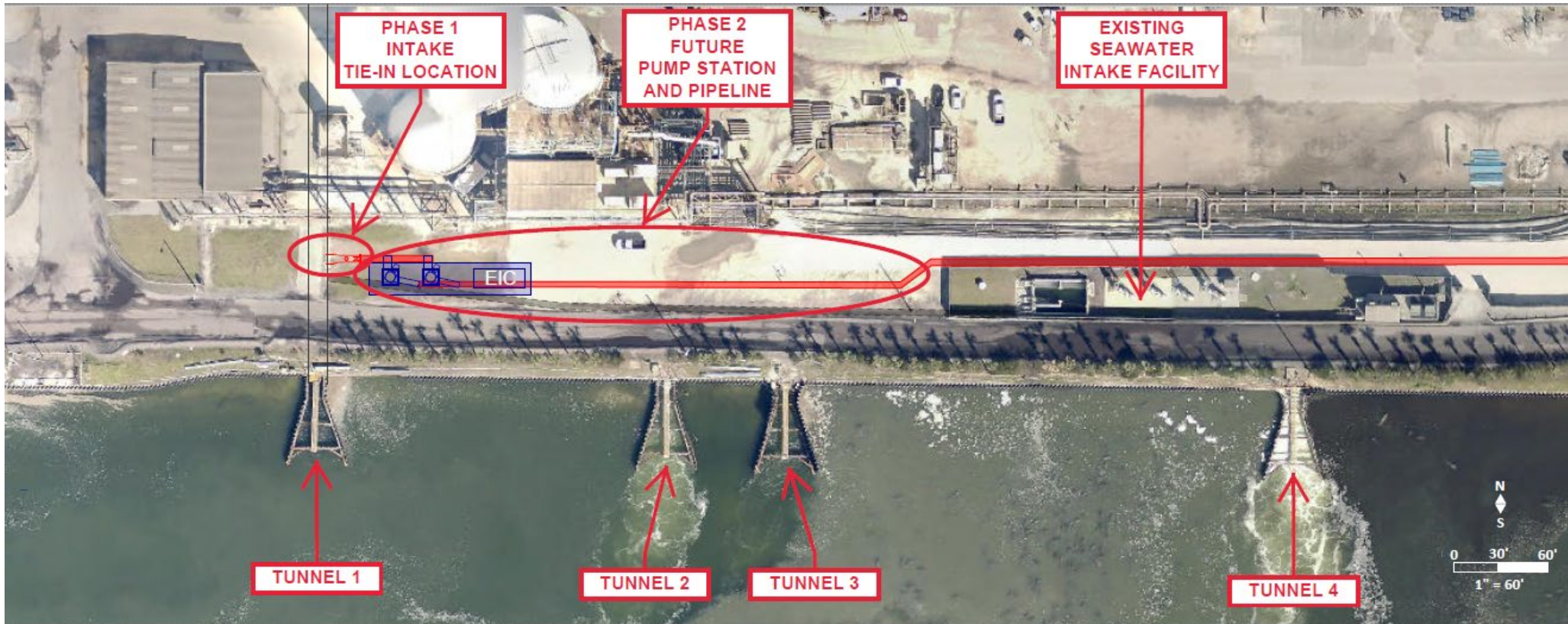
Variable Frequency Drive and Breaker

Cost: \$2,168,480 (co-funded by the Southwest Florida Water Management District)

Completion: May 2022

Tampa Bay Desalination Facility Intake Connection Improvements, Phase 1

- Provides an additional seawater intake location



Aerial photo of Desal intake locations

Tampa Bay Desalination Facility Intake Connection Improvements, Phase 1



Excavate and expose the side of the tunnel



Cut 6' x 6' opening inside of tunnel



Manhole for valve and 54" stub-out pipe

Cost: \$1,726,000

Completion: December 2021

Tampa Bypass Canal Gates Automation

- Automates the existing manual slide gates at three flood control structures



Automated actuator



Motorized actuator
connected to the gate



Setting the open/close limit
switches

Cost: \$1,028,250 (co-funded by the Southwest Florida Water Management District)
Completion: December 2021

Eldridge-Wilde Wellfield Improvements

- Replaces pumps, motors, wellhouses, metering devices and repairs access roads



Wellhouse to be replaced



New gate valves to be installed



New access road installation

Cost: \$13,321,865 (up to \$750,000 in state funding)

Completion: Summer 2023

Eldridge-Wilde Wellfield Improvements

- Powerline replacement to well sites



Existing powerlines



Clearing of Cypress Trails property



Access road to Lake Dan Preserve

Cost: Tampa Electric \$ 531,528
Duke Energy \$ 959,879
Completion: Late 2022

- Automates filling and prevents spills



High Service Pump Station diesel fuel tanks



Corrosion in fuel tank to be replaced

Cost: \$373,200
Completion: Spring 2022

- Offsets commercial electric consumption with solar power



Planned location of panels



Site of the new solar array



Example of a solar array

Cost: \$1,495,671

Completion: Summer 2022

New projects getting started

Project	Contract Amount	Planned Completion
Brandon Booster Station, 1 Lithia point of connection flow control valve	\$ 263,050	Feb 2022
Brandon Booster Station, 2 Early equipment procurement	\$ 3,865,759	Feb 2023
South Pasco Water Treatment Plant caustic feed system	\$ 1,118,050	Sep 2022
Repump station raw water line valve repair	\$ 942,902	Feb 2022
Tampa Bay Desalination Facility finished water line repair	\$ 660,000	Nov 2021





Questions

