# PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY BOARD OF DIRECTORS MEETING April 3, 2024

# ROUTINE STATUS REPORTS ITEM 6

**DeSoto Booster Pumping Station Project** 

# **Project Status Report**

**Project:** Desoto Booster Pump Station Modifications

Formerly Known As – PRMRWSA Project Prairie Pump Station Acquisition and

**Modification Project** 

**Date:** April 3, 2024

Prepared by: Brian P. Bates, P.E., Project Engineer III

The following information summarizes the project description and current status. (see attached general project area figure).

## **Project Description**

The Project Prairie Pump Station Acquisition and Modification project includes the regional purchase of the Pump Station and Storage Facilities from DeSoto County, and modifications to integrate the facility into the regional transmission system. The Facility is strategically located to support current and future regional water supply operations. The project is co-funded by the SWFWMD and the State of Florida. The estimated project cost including the purchase from Desoto County, Design and Construction of Facility modifications is \$1,275,000. This is a Capital Improvements Project (CIP).

The Facility is located on the corner of U.S.17 and S.W. Enterprise Blvd. in DeSoto County and is adjacent and connected to the regional DeSoto County RTM and the bi-directional Phase 1 Regional Interconnect Pipeline. Phase 1 provides a plant-to-plant connection between the Peace River Facility, and the Punta Gorda Shell Creek Water Treatment Facility located in Charlotte County.

#### **Current Operations:**

- Regional pipelines (DeSoto RTM or Phase 1) fill the 0.5-MG finished water storage tank
   water source either the Peace River Facility or the Shell Creek Facility. Under normal operational conditions water is received from the Peace River.
- DeSoto County trims chemical disinfection as needed and pumps water from the storage tank north into their distribution pipeline.

# **Future Operation:**

- Increase Facility flexibility to be able to receive water from Peace River, Shell Creek or DeSoto County, trim and repump water, north, south, or east as needed.
- Provide capabilities to bypass the storage tank and repump, or bypass the facility; as determined by, operations and maintenance, or emergency conditions.

• Provide other capabilities per the Project Prairie Facilities Operational Protocol.

# **Project Scope:**

- Modifications to facility piping and yard piping.
- Upgrades to disinfection chemical(s) storage and feed capabilities.
- Upgrades to SCADA interface, including a new radio and antenna.
- Evaluate existing meters and meter assemblies and make necessary modifications.

#### **Current status**

The Interlocal Agreement, between the Authority and Desoto County for the Acquisition of the Project Prairie Facilities has been executed and recorded. Additionally:

- Contract for Sale Purchase of the Property has been executed.
- Ingress/Egress Easement for the Wastewater Lift Station (for Desoto County) has been executed.

The Authority's Engineer-of-Record (Ardurra) was issued the Notice-to-Proceed for Work Order No. 1 - Design, Permitting and Construction Phase Services on March 25, 2022.

The Project Bid Opening was August 17, 2022. Three Contractors submitted bids on a timely basis. The apparent low bidder was TLC Diversified, Inc. (TLC) at a bid price of \$1,1196,000. Ardurra the EOR reviewed the bids forms, checked TLC references and recommends Award of the Construction Contract to TLC.

At the October 5, 2022, Board Meeting – Board approved the TLC Construction Contract. The P.O. for the Work Order, under TLC's Continuing Services Contract was executed on October 12, 2022, and forwarded to TLC. The Notice-to-Proceed will be issued in early January 2023. Substantial Completion is 145 calendar days from the date of Notice-to-Proceed. Final Completion is 175 calendar days from the date of Notice-to-Proceed.

TLC was issued the Notice-to-Proceed on January 5, 2023, and anticipates mobilizing to the site in July 2023.

As of early May 2023, the SWFWMD FDEP grant agreement is still with District Counsel under review before execution. Once executed by the District, the Cooperative Funding Agreement No. 22CF0003733 will be amended to include pass through Grant Provisions (federal funds), revised total cost and task budgets, and a revised agreement expiration date of March 1, 2024.

September 2023, anticipate the amended SWFWMD FDEP grant agreement to be finalized over next several weeks.

# **Project History Briefing**

**Project:** Desoto Booster Pump Station Modifications

Also Known As - PRMRWSA Project Prairie Pump Station Acquisition and

**Modification Project** 

**Date:** February 7, 2024

Prepared by: Brian P. Bates, P.E., Project Engineer III

The following information summarizes the historical milestones and events of Project Prairie

- October 1, 2021 The Interlocal Agreement, Purchase and Sale Agreement, and Operational Protocol for the acquisition of the Facility from DeSoto County was presented to the Board. Proposed funding sources include \$200,000 from the State of Florida, and \$537,500 each from the Authority and SWFWMD. The total project cost is \$1,275,000.
- October 12, 2021 Authority staff had a meeting to discuss the project and potential modification to the facility. Next steps include an internal meeting with Authority Operations and Maintenance staff, and meeting with DeSoto Operations staff. Upon Board approval of the project, a meeting with be held with the Ardurra (FKA King Engineering). Ardurra designed the Phase 1 Pipeline project which originally included yard piping alternates. The alternates were subsequently removed from the Phase 1 Pipeline final design package due to overall project cost uncertainty. Ardurra (Engineer of Record) is an Authority as needed consultant.
- October 12, 2021 The FDEP Grant Agreement (LPA0208) for \$200,000 was executed by the State. The Grant Agreement will be included on the December 1, 2021, Board Meeting agenda for Board approval.
- November 23, 2021 A meeting between Authority staff and DeSoto County staff was held to discuss the upcoming project and operations of the Facility. In accordance with the acquisitional agreements between the Authority and DeSoto County, DeSoto County Utilities will continue to operate the Facility, subsequent to the purchase.
- December 2021 The Interlocal Agreement between the Authority and DeSoto County for the Acquisition of the Project Prairie Facilities, generally consisting of a 500,000-gallon ground storage tank and associated piping, a 5 MGD booster pump station and chemical feed system, yard piping and emergency generator was Board approved on December 1, 2021, and by the DeSoto County BOCC on December 14, 2021. The Document includes:
  - o Interlocal Agreement providing for Authority acquisition of the Facilities for \$748,731.53 which will be co-funded by SWFWMD and the State of Florida.
  - Contract for the Sales and Purchase of the site property parcel by the Authority for \$36,000 from DeSoto County.

- January 25, 2021 Closing on the purchase/sale of the property with Desoto County was completed.
- January 28, 2021- Authority held a scoping meeting with Ardurra (Engineer-of-Record) at the Project Prairie Facility, to tour the facility and discuss items to be included in Ardurra's scope of work for modifications/upgrades to be included in Ardurra's Work Order for Engineering Services. In general, items discussed included:
  - Underground repumping piping
  - o Meter upgrades
  - o Radio and antenna for Authority to monitor facility operations
  - o SCADA/PLC Systems integration
  - Walmart fire flow pipeline connect directly to Regional Piping
  - o Chemical feed/trim facilities improvements

It is anticipated that Ardurra will submit their draft scope of work in mid-March.

- March 10, 2021- The SWFWMD Q248, Funding Agreement-22CF0003723 for Project Prairie Facilities Acquisition and Modification Project entered into.
- March 25, 2022 Ardurra was issued the Notice-to-Proceed for Work Order 1., for the DeSoto County Pumping Station Modification Project (DCBPS). W.O.1 lump sum cost is \$85,300.
- April 1, 2022 PRMRWSA Staff and Ardurra Staff met with DeSoto Counties Utilities at the DCBPS site to discuss day-to-day operations of the Facility. DeSoto County will continue to operate the Facility for the Authority per the Interlocal Agreement.
- April 14, 2022 The SWFWMD Co-Funding Agreement (Q248) "Task Schedule and Budget Adjustment" was entered into. Construction and Engineering costs were adjusted, and the construction schedule was extended. The total cost for acquisition, design and construction of Facility Improvements did not change.
- May 11, 2022 A Teams meeting was held with Ardurra and Authority staff to discuss progress on the 60% design. Per discussion, the tank inlet meter will be upgraded, and the pump station discharge meter upgrade will most likely be included as an alternative. Ardurra stated that the technical specifications have been completed.
- May 25, 2022 Ardurra Instrumentation and Controls (I & C) Engineer met with Authority staff at the DeSoto Booster Pump Station to gather additional information and discuss existing operation. Discussions included how DeSoto County operates the facility currently, the County SCADA system and a potential new location for the radio antenna tower.
- May 27, 2022 Ardurra and Authority met via teams with the Operations Manager at the Walmart Distribution Center (Stewart Heintz) to discuss the connection and water delivery

for fire flow from the DeSoto Booster Pump Station (DBPS) to the Walmart Distribution Center. Mr. Heintz discuss in general how the Walmart Fire Protection system works, how often they test their fire protection system and the components of the fire protection system. Mr. Heintz stated that Walmart has no issues with the fire flow connection and water delivery service from DBPS. The Authority and Ardurra discussed components of the upcoming project with Mr. Heintz and potential schedule.

- June 5, 2022 Ardurra submitted 90% Interim Drawings and Div. 13 Instrumentation & Control Specifications, based on feedback from the Authority on the 60% Design Drawings and Specifications.
- June 7, 2022 A Design review meeting was held at the Peace River Facility. The meeting attended by Ardurra and Authority staff. Design elements, instrumentation and controls/SCADA, Contract documents/bid form, permitting and the project schedule were discussed.
- June 10, 2022 The Ardurra Interim 90% Design and Div. 13 Instrumentation & Control Specifications were forwarded to the District for review.
- June 17, 2022 The Authority staff held a conference call with Ardurra Instrumentation and Control staff to discuss, equipment upgrades, and coordination between the existing DeSoto County SCADA system and Authority SCADA system.
- June 27, 2022 Ardurra submitted 90% Design Contract Documents for the DeSoto County Pump Station Modifications to the Authority for review.
- July 6, 2022 The Authority forwarded review comments of 90% Design Contract Documents submittal to Ardurra.
- July 13, 2022 Ardurra submitted the Bidding Documents to the Authority for review. The Documents were forwarded to the SWFWMD.
- July 18, 2022 The Invitation to Bid was posted on the Authority Webpage by Procurement. Contractors in the Authority's library of As Needed Construction Contractors: Water Treatment Process & Pipeline Construction, Repair & Replacement were invited to Bid.
- July 18, 2022 Ardurra applied for the FDEP 62-555.900 Specific Permit to Construct PWS Components.
- August 1, 2022 The pre-bid conference was held at the PRF followed by a site visit. Attendees include Authority Staff, Ardurra Staff, SWFWMD Staff and Contractors.
- August 5, 2022 Addendum 1 was posted on the Authority Webpage by Procurement.

- August 17, 2022 Three Bids were timely submitted. The apparent low bidder was TLC Diversified Inc. at \$1,1196,000. Other Contractor Bids included Garney at \$1,500,000 and Kiewit at \$1,432,000.
- August 30, 2022 The Notice of Intended Decision (NOID) was posted on the Authority webpage by Procurement.
- September 8, 2022 FDEP issued the Permit to Construct Permit No. 78714-028-WC. The permit was forwarded to SWFWMD.
- September 19, 2022 Ardurra submitted the Engineers Recommendation Letter for Award Approval to TLC Diversified Inc. Back up included bid forms, bid tab and reference conformations.
- October 5, 2022 The P.O. for the Desoto Booster Pump Station Modifications Project Construction Contract to TLC Diversified was Board Approved. The P.O. is incorporated by reference to the December 1, 2022, Agreement for As Needed Water Treatment and Pipeline Construction, Repair & Replacement services between TLC and the Authority. Funding for the construction includes \$220,484 from SWFWMD and \$975,516 from the Authority system-wide benefit Capital Improvements Project (CIP).
- October 19, 2022 The executed P.O. for the Work Order under TLC's Continuing Services Contract was forwarded to TLC and SWFWMD. The Notice-to-Proceed will be issued to TLC in January 2023. Currently TLC is working on materials submittals and federal funding waivers. SWFWMD and FDEP are currently finalizing the agreement for American Rescue Plan Act federal funds being funneled to SWFWMD via FDEP.
- November 10, 2022 The Authority sent a request to SWFWMD to extend the co-funding agreement expiration date for the following reasons:
  - o impacts of hurricane Ian TLC ongoing projects
  - o hurricane impacts at the Peace River Facility
  - o finalization of the agreement between FDEP and SWFWMD for federal funding

In discussions, all parties Authority, SWFWMD, Ardurra and TLC agreed to a delay of the Notice-to-Proceed until early January 2023.

• January 5, 2023 – The preconstruction meeting was held and attended by TLC, Ardurra, Authority, SWFWMD and DeSoto County, staff. TLC has been providing shop drawing submittals for the project. To date, TLC has sent 23 submittals to Ardurra for review. The Notice to Proceed was issued to TLC on January 5, 2023, the District was copied. TLC anticipates mobilizing to the DeSoto Booster Pump Station project site in July pending material availability (as soon as they have materials to begin Work). Per discussion SWFWMD is going to Amend the CFA (co-funding) Agreement No. 22CF0003733 to

include the full amount of the bid price and extend the co-funding expiration date to March 1, 2024, to address potential supply chain issues.

- January 12, 2023 The Grant Agreement (federal funds) between the FDEP and SWFWMD, is currently with the District General Counsel for review and approval. Once approved and subsequently signed by the District Executive it will go to the District Board, for execution. The CFA amendment will follow and include pass through grant provisions, revised total cost and task budgets, and a revised agreement expiration of March 1, 2024.
- February 15, 2023 Ardurra (EOR) conducted a soil boring at the project radio tower antenna location to confirm foundation design. The report was submitted to Authority for review and forwarded to the Contractor on February 28, 2023.
- February 21, 2023 A meeting was held on site with Authority, TLC and Desoto County Utilities staff. The purpose of the meeting was to review existing Desoto County SCADA/I&C configurations with the TLC I&C subcontractor and review existing facilities and project design upgrades with TLC.
- April 18, 2023 A meeting was held on site with TLC, Authority, Ardurra (EOR) and DeSoto County Utilities staff. The purpose of the meeting was to discuss operations of the DBPS by DeSoto County Utilities, to assist TLC with development of their Construction Sequencing Plan. TLC submitted their Construction Sequencing Plan on April 26<sup>th</sup> and it is currently under review by Ardurra (EOR) and the Authority. TLC is scheduled to begin construction in July 2023.
- May 9, 2023 TLC has submitted 28 shop drawings to Ardurra for review to date. TLC anticipates mobilization for construction in July 2023.
- August 2023 Contractor flagged existing on-site pipework & began delivering pipe and equipment to the project. Hurricane Idalia interrupted progress. Anticipate TLC to continue on-site activities by the end of September.
- September 13, 2023 received updated schedule from TLC which shows Final Completion of project to be February 12, 2024.
- September 18, 2023 assembly, and installation of 24" ductile iron pipe has begun.
- October 9, 2023 on-site coordination meeting held with Ardurra, Authority, Walmart & DeSoto County staff discussing tie-in protocols. Project sign installed.
- October 11, 2023 McKim & Creed worked on existing PLC in preparation of installing new Radio Telemetry Unit and inadvertently cut one neutral circuit & installed another line in wrong location that took out the automatic tank fill valve. Authority Staff & McKim & Creed solved the problem the next day.
- October 16, 2023 24" ductile iron pipe assembly complete and pressure tested.
- October 24, 2023 bacteriological samples passed, awaiting FDEP clearance.

- October 31 November 14, 2023 the City of Arcadia is performing a disinfection "free burn." Tie-in of 24" DIP will occur after free burn has been completed.
- November 15, 2023 poured concrete pad for new antenna tower.
- November 16, 2023 Line-stop & tie-in of 24" DIP scheduled for November 16<sup>th</sup>. Could not complete 24" tie-in as an existing 12" valve would not close to isolate tie-in location. Need additional 12" line-stop.
- December 11, 2023 installed 12" & 16" line stops and performed 24" DIP connection to existing 16" PVC.
- December 12, 2023 12" & 16" line-stops removed, backfilled connection location.
- February 6, 2024 Draining storage tank in order to install new tank isolation valve & influent assembly.
- February 7, 2024 dismantling existing pipework, Jason Burnett working on SCADA improvements.
- February 8, 2024 tank isolation valve installed, installing influent assembly.
- February 16, 2024 new assembly installed; assembly passed visual leak test & grabbed samples for bac-t testing.
- February 22, 2024 uncovered nonworking motor operated valve & confirmed the valve does not close. New fill valve representative, Jason Burnett (SCADA) & electrician onsite working on fill valve calibration. New influent assembly in operation.
- February 26, 2024 through March 1, 2024 coordinating w/Ardurra, Walmart & TLC to develop options for revised effluent assembly bypass needed because as-built information is incorrect and existing valves that need to be closed do not fully close.
- March 4, 2024 inspected Walmart's backflow preventors with Stuart Heintz, Walmart's Maintenance Manager to confirm valves hold eliminating the need for line-stops on the 10" lines between Walmart and the pump station.



