

ST-2C: Chlorine Contact Tank

SDWWTP - 8950 SW 232ND STREET MIAMI, FLORIDA, 33190.

CLIENT NAME

Miami-Dade Water and
Sewer Department

CONTRACT NUMBER

5-932

TIMELINE

SCHEDULED ADVERTISEMENT

February 2022

SCHEDULED BID OPENING

April 2022

SCHEDULED PROJECT AWARD

September 2022



Contact Information

For additional information please call Mr. Paul Adams at (786) 552-8178 or send electronic mail to: Paul.Adams@miamidade.gov

NOTE: AFTER THE ADVERTISEMENT DATE, THIS PROJECT IS UNDER THE CONE OF SILENCE (Pursuant to MDC Section 2-11.1 (t)) ANY E-MAILS SENT TO MR. PAUL ADAMS MUST ALSO COPY THE CLERK OF THE BOARD AT clerk.board@miamidade.gov

PROJECT SCOPE

In general, the project consists of furnishing all materials, labor, and equipment necessary for the construction of a new chlorine contact chamber (CCC 1 O); construction of wellheads for three new injection wells (drilled by others); construction of a 72-inch pipeline to serve as an interconnect between the north and south sides of the effluent loop including a concrete vault for a flowmeter; construction of a 108-inch PCCP line from the filter effluent flume to the Chlorine Contact Chambers (CCC) influent pipe near CCC 9; associated yard piping; and overall site civil grading and drainage improvements at the South District Wastewater Treatment Plant owned by the Miami Dade Water and Sewer Department (WASD) and located at 23300 SW 88th Avenue Miami, FL 33032.

Specifically, the work includes but is not limited to:

1. Civil
 - a. Install sheet piling near CCC 8 and 9, Effluent Pump Station (EPS) 2, and existing injection wells (if needed).
 - b. Install sheet piling as needed for installation of pipelines.
 - c. Install exfiltration trenches for new CCC 10 and piping.
 - d. Dewatering activities.
 - e. Install 72-inch PCCP influent pipe and 60-inch PCCP effluent pipe for CCC10.
 - f. Grade, place aggregate, and pave road around CCC 10.
 - g. Install 72-inch PCCP/DIP EPS effluent pipe as an interconnect between the north and south sides of the effluent loop. Connect 72-inch pipe to EPS 2 discharge pipe.
 - h. Install new 108-inch PCCP line approximately 850 ft in length from the filter effluent flume to a point near CCC-9. Connection of the 108-inch line to the CCCs inlet header creating a loop to optimize hydraulics between filters and CCCs. Installation of flowmeter, gates, valves, and chlorination points.

Project Scope (Continued)

- i. Grading, pavement and site restoration related to pipelines installation.
2. Instrumentation and Control
 - a. Install instrumentation, controls, monitoring equipment, analyzers and conduits and cables for signals to SCADA for CCC 10.
 - b. Install magnetic flowmeters for injection wells.
 - c. Test SCADA system after addition of new injection well wellhead equipment.
 - d. Install instrumentation, controls, monitoring equipment, analyzers and conduits and cables for new effluent sampling station.
 - e. Instrumentation for flowmeter on the 72-inch PCCP/DIP EPS effluent loop interconnect pipe.
 - f. Instrumentation for flowmeter and chlorination on the 108-inch PCCP filter effluent line.
3. Structural
 - a. Form, rebar and pour concrete slabs and exterior walls for CCC 10. Install interior and baffle walls.
 - b. Structural improvements related to the new 72-inch effluent loop interconnect pipe. Flow meter vault.
 - c. Structural improvements related to the 108-inch PCCP line.
 - d. Concrete pads for injection wells IW-18, IW-19, and IW-20.
4. Process Mechanical
 - a. Install sluice gates for CCC 10.
 - b. Install flow meter and valves as needed for new 72-inch effluent loop interconnect pipe. Connect 72- inch pipe to EPS 2 effluent manifold.
 - c. Install stop logs in filter effluent flume at inlet to existing 120-inch and new 108-inch PCCP pipes to CCCs.
 - d. Provide temporary chlorine injection pumps and injection assemblies to be used during shutdowns that bypass existing chlorination points.
 - e. Install flow meter and chlorine injector(s) for new 108-inch PCCP pipes.
5. Electrical
 - a. Install underground ductbanks to and from new structures.
 - b. Install electrical equipment and lighting at CCC 10.
 - c. Electrical terminations for new gates and equipment.
 - d. Electrical terminations for flow meter on 72-inch effluent loop interconnect pipe.
 - e. Electrical design and improvements related to new flowmeters, new chlorination points and new actuators on the 108-inch PCCP pipe.