

ST-2A: Headworks 3, Oxygenation Trains 9 & 10, and Substation 57/58

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

CLIENT NAME

Miami-Dade Water and Sewer Department

CONTRACT NUMBER

S-931

TIMELINE

SCHEDULED ADVERTISEMENT

January 2021

SCHEDULED BID OPENING

March 2021

SCHEDULED PROJECT AWARD

August 2021



Contact Information

For additional information please call Mr. Isaac Smith at (786) 552-8989 or send electronic mail to: Isaac.Smith@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. ISAAC SMITH 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 to construct and provide fully functional systems consisting of a new influent force-main tie-in on SW 232nd Street, new influent metering valve box, a new headworks building (Headworks 3) with an attached odor control building, construction of two new oxygenation trains (Ox. Trains 9 and 10), construction of a new substation and electrical building, and the integration of these new structures with the rest of the plant. at the South District Wastewater Treatment Plant (SDWWTP), located at 8950 SW 232nd Street Miami, Florida, 33190.

Specifically, the work includes but is not limited to:

1. Demolition - Site
 - a. Demolition of select existing piping, pavement, conduits and duct banks as indicated in the Plans
2. Construction –232nd Street Force-main Tie-in, Influent Metering Valve Box, Headworks 3, Odor Control Building, and Process Drain Lift Station
 - a. Construction of a connection to an existing plant 72-inch influent force main header located on SW 232nd Street.
 - b. Construction of a new influent valve box which will regulate the flow to a new headworks building.
 - c. Construction of a new headworks building and grit chamber (Headworks 3).
 - d. Construction of a new lift station which will receive flow from the process drains from the new headworks.

Project Scope (Continued)

- e. Construction of interconnecting piping between existing and new facilities.
 - f. Furnishing and installation of pumps, screens, collectors, conveyors, gates, valves, and other process mechanical equipment.
 - g. Furnishing and installation of fire alarm systems, electrical systems, SCADA system, MCCs, conduits, duct banks, control panels and lighting systems.
 - h. Furnishing and installation of new sensors, including flowmeters, wastewater samplers and other instruments.
 - i. Furnishing and installation of new fire suppression systems, HVAC systems, water source heat pumps (WHPs) cooling water pumps (CWPs), cooling towers (CTs), fans, air ducts and air purification systems.
 - j. Furnishing and installation, doors, windows, skylights, and rollup doors.
 - k. Furnishing and installation of all plumbing.
 - l. Furnishing and installation of all appurtenances for electrical and control room.
3. Construction – Substation 57/58
 - a. Construction of Substation 57/58 to power all new process areas that are part of the Work.
 - b. Furnishing and installation of new fire alarm system, electrical systems, SCADA system, transformers, switchgears, MCCs, conduits, duct banks, control panels and lighting systems.
 - c. Furnishing and installation of new HVAC systems, water source heat pumps (WHPs), cooling water pumps (CWPs), cooling towers (CTs), fans, air ducts and air purification system.
 - d. Furnishing and installation, doors, windows and rollup doors, plumbing and all appurtenances for control room.
 4. Construction – Ox. Trains 9 and 10 and Sampling Building
 - a. Construction of two (2) new Oxygenation Trains and Sampling Building.
 - b. Construction of interconnecting piping between existing and new facilities.
 - c. Furnishing and installation of new mechanical aerators, blowers, pumps, gates, valves, and other process mechanical equipment.
 - d. Furnishing and installation of new exterior lighting systems.
 - e. Furnishing and installation of new sensors, including flowmeters, gas samplers, wastewater analyzers, and gas detection.
 5. Construction – O2 Trains 9-12 Electrical Building
 - a. Construction of one (1) new electrical building for oxygenation trains 9 and 10.
 - b. Furnishing and installation of new fire alarm system, electrical systems, SCADA system, conduits, MCCs, VFDs, control panels, fire alarm, and lighting systems.
 - c. Furnishing and installation of new HVAC systems, water source heat pumps (WHPs) cooling water pumps (CWPs), cooling towers (CTs), fans, air ducts and air purification system.
 - d. Furnishing and installation, doors, windows and rollup doors, plumbing and all appurtenances for control room
 6. Construction – Site and Yard Piping
 - a. Site grading and construction of new yard piping and electrical conduits to connect new structures to the SDWWTP existing electrical, water, sewer, process water, fire alarm and SCADA systems.
 - b. Construction of new pavement and sidewalks around new structures.
 - c. Improvements to the SDWWTP potable water, fire water and plant water distribution networks, including replacement of existing yard piping and inclusive of a new potable water force main connection in SW 232nd Street.
 - d. Contractor is responsible for groundwater dewatering as well as any dewatering and disposal of dewatered fluids from the pipe itself for all tie-ins.
 - e. Isolation valves are available for all tie-ins; however, the Contractor shall assume that all tie-ins will require additional temporary isolation provided by the Contractor should the isolation valves not completely shut.