# **DEPARTMENT INPUT**

CONSTRUCT	HON CONTRAC	T/PROJECT MEASUR	E ANALISIS AND	RECOMMENDATION
Check applicable Ordina	nce(s): 🛛 90-143 Res	sponsible Wage and Benefits	nsible Wage and Benefits	
	PRO	DJECT INFORMATION	See attachment ⊠	
Contract/Project/*Wo *Reference corresponding		bmitting a work order		
Contract/Project Title OXYGENATION TR	: OCEAN OUTFA AINS 1 - 7 REHABI	LL LEGISLATION PROGR LITATION AND ELECTRI	AM CONSTRUCTION CAL BUILDINGS	PACKAGE ST-1B
Description/Scope of V	Work: See Attached			
Estimated Cost: 81558	Funding	Source: <u>Federal funds</u>		
South District Wast Miami, FL 33190.	e Water Treatment	ning and ending points) i.e. 12 Plant, located in unincorp	oorated Miami Dade (	County at 8950 SW 232nd St,
		ted required workforce for l		
Trade/Skills Required		Est. # of workforce requi	red per trade	Est. # of total days to complete job
N/A				
N/A N/A				
N/A  Comments: The proje and required Davis B	eacon Wages.	mpliance with the State of F  ECOMMENDATION (CS		Legislation. It is funded by WIFIA
N/A  Comments: The proje and required Davis B	eacon Wages.	•	BE) See attachment	,
N/A  Comments: The proje and required Davis B  PROJECT ANALY	eacon Wages. SIS FOR GOAL R	ECOMMENDATION (CS	BE) See attachment	
N/A  Comments: The proje and required Davis B  PROJECT ANALY  Sub-Trade	SIS FOR GOAL R  Est. Cost	ECOMMENDATION (CS  % of Item to Base	BE) See attachment  Bid Avail	

### **RECOMMENDATION**

Set-Aside: Level 1 Level 2 Level 3 Trade Set-Aside Sub-Contractor Goal Workforce Goal No Measure

Basis for Recommendation: Project is for the proposed construction of rehabiliations to 7 oxygenation facilities and
associated electrical buildings at a wastewater plant, the contruction of which includes numerous expensive and complex
process equipment. There are limited avilability of small business participation.

Date submitted to DBD: 02/04/2021

Contact Person: Isaac Smith Telephone No.: (786)552-8989

# DEPARTMENTAL INPUT CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To: Gary T. Hartfield, Division Director

Internal Services Department

Small Business Development Division

From: Isaac Smith, Chief

Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: OCEAN OUTFALL LEGISLATION PROGRAM CONSTRUCTION PACKAGE ST-1B

OXYGENATION TRAINS 1 - 7 REHABILITATION AND ELECTRICAL BUILDINGS

Contract No.: S-935

Estimate Amount: \$81,558,147 [\$74,143,770 Construction + \$7,414,377 Contingency]

Funding Source: EW 667, Revenue Bonds Sold

Water Infrastructure Finance and Innovation Act (WIFIA)

## **Small Business Enterprise – Construction – 12.06%**

**Analysis for Recommendation (Attached)** 

Isaac Smith

Department Head or Authorized Agent

#### **DESCRIPTION OF PROJECT:**

This project is one in a series of projects that are being processed under Section 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance. It is part of the Miami-Dade County's compliance strategy for meeting the State of Florida's Ocean Outfall Legislation (OOL) schedule requirements.

In general, the project consists of furnishing all materials, labor, and equipment necessary for the construction of proposed improvements to seven (7) existing oxygenation trains, construction of two (2) new electrical buildings, yard piping and site improvements at the South District Wastewater Treatment Plant (SDWWTP), located at 8950 SW 232nd Street Miami, Florida.

The scope of work includes, but is not limited to:

- 1. Demolition Site
  - a. Demolition of existing piping, pavement, conduits and duct banks.as indicated in the Plans
- 2. Demolition Oxygenation Trains (Ox. Trains) 1 to 7
  - a. Demolition of existing pipe penetrations into ox trains 1 to 7.
  - b. Enlargement of existing baffle wall openings.
  - c. Demolition of existing effluent weirs.
  - d. Demolition of existing 36-inch RAS pipelines at Ox. Trains 1 to 4 and Ox. Trains 5 to 7.
  - e. Removal and salvage of existing flowmeters and knife gate valves.
  - f. Demolition of existing 48-inch process water connections at Ox. Trains 1 to 7.
  - g. Demolition of existing low-pressure oxygen pipeline as indicated in the contract documents.
  - h. Demolition of existing mechanical aerators.

- Demolition of existing electrical conduits to equipment in the existing concrete slab of Ox.
   Trains 1 to 4 and 5 to 7
- j. Demolition of existing electrical equipment in UNOX Electrical building 1-4 and 5-8 related to the existing oxygenation system in oxygenation trains 1 to 4 and 5 to 7.
- 3. Construction Oxygenation Trains 1 to 7:
  - a. Retrofitting of oxygenation trains with step feed capability.
  - b. Perform structural rehabilitation repairs of ox trains 1 to 7.
  - c. Construction of new concrete slab with electrical conduits and access ramps over existing concrete slab of oxygenation trains 1 to 4 and 5 to 7.
  - d. Furnishing and installation of new mechanical aerators, blowers, gates, valves, and other process mechanical equipment.
  - e. Furnishing and installation of new sensors, including flowmeters, gas samplers, wastewater analyzers, and gas detection.
- 4. Construction Ox. Trains 1-4 and 5-8 Electrical Buildings
  - a. Construction of two (2) new electrical buildings for oxygenation trains 1 to 4 and 5 to 7.
  - b. Furnishing and installation of new fire alarm system, electrical systems, SCADA system (supply of select SCADA equipment by SCADA Equipment Supplier), conduits, MCCs, VFDs, 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.
  - e. Furnishing and installation of all plumbing.
  - f. Furnishing and installation of all appurtenances for control room.
- 5. 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.
  - d. Contractor shall expose all tie-in locations prior to preparation of Shop Drawings.
  - e. Contractor is responsible for groundwater dewatering as well as any dewatering and disposal of dewatered fluids from the pipe itself for all tie-ins.
  - f. 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.

It is Miami-Dade Water and Sewer Department's intent to obtain a completely functional and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this and shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The Contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

#### **QUALIFICATIONS OF BIDDERS:**

- 1. With the bid, the successful Bidder shall submit proof that the firm has at least the minimum successful contract experience as required below for this Contract. Such proof shall consist of a list of projects, completed prior to the bid date, with the names and telephone numbers of the Department's or representatives that the Department can contact to confirm the listed experience.
- 2. The Bidder shall have successfully completed a minimum of one (1) project demonstrating experience with large wastewater treatment upgrade projects having a total construction value of greater than \$75 million and three (3) projects demonstrating experience with large wastewater treatment upgrade projects having a total construction (for each project) of greater than \$25

million. These projects shall have been performed within the past ten (10) years from the date of the Invitation to Bid.

- 3. The Bidder's proposed project manager shall have successfully completed a minimum of one (1) project demonstrating project management experience with large wastewater treatment upgrade projects having a total construction value of greater than \$25 million. This project shall have been performed within the past three (3) years from the date of the Invitation to Bid.
- 4. The Bidder or Bidder's Electrical Subcontractor shall have successfully completed a minimum of three (3) projects demonstrating experience with similar sized MCC's and dedicated electrical buildings for industrial service. These projects shall have been performed within the past ten (10) years from the date of the Invitation to Bid.
- 5. The Bidder or Bidder's Electrical Subcontractor Lead Electrician shall have successfully completed a minimum of one (1) project demonstrating experience with similar sized MCC's and dedicated electrical buildings for industrial service. This project shall have been performed within the past ten (3) years from the date of the Invitation to Bid.

LICENSES: The types of licenses required are: General Engineering, General Building Contractor and/or other categories as applicable by Chapter 489 of the Florida Statutes or Chapter 10 of Miami-Dade County Code.

#### COMMUNITY WORKFORCE PROGRAM

CWP PARTICIPATION: CWP is applicable to this project.

### **SPECIAL FUNDING SOURCES & REQUIREMENTS**

Funding has been approved from the Water Infrastructure Finance Innovation Act (WIFIA) Program. which requires the use of Davis Bacon Wages.

Bidders shall take into consideration and be prepared to fully comply with the requirements provided in the Florida Department of Environmental Protection Supplementary Conditions.

# DEPARTMENTAL INPUT CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To: Gary T. Hartfield, Division Director

Internal Services Department

Small Business Development Division

From: Isaac Smith, Chief

**Construction Contracts Division** 

Department: Miami-Dade Water and Sewer Department

Contract Title: OCEAN OUTFALL LEGISLATION PROGRAM CONSTRUCTION PACKAGE ST-1B

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Estimate Amount: \$81,558,147 [\$74,143,770 Construction + \$7,414,377 Contingency]

Funding Source: EW 667, Revenue Bonds Sold

Water Infrastructure Finance and Innovation Act (WIFIA)

Small Business Enterprise – Goods & Services – 1.12%

**Analysis for Recommendation (Attached)** 

Department Head or Authorized

Department Head or Authorized Agent

### **DESCRIPTION OF PROJECT:**

This project is one in a series of projects that are being processed under Section 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance. It is part of the Miami-Dade County's compliance strategy for meeting the State of Florida's Ocean Outfall Legislation (OOL) schedule requirements.

In general, the project consists of furnishing all materials, labor, and equipment necessary for the construction of proposed improvements to seven (7) existing oxygenation trains, construction of two (2) new electrical buildings, and improvements site and yard piping at the South District Wastewater Treatment Plant (SDWWTP), located at 8950 SW 232nd Street Miami, Florida.

It is Miami-Dade Water and Sewer Department's intent to obtain a completely functional and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this and shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The Contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

#### **SPECIAL FUNDING SOURCES & REQUIREMENTS**

Funding has been approved from the Water Infrastructure Finance Innovation Act (WIFIA) Program, which requires the use of Davis Bacon Wages.

#### **CONSIDERATIONS FOR ANALYSIS:**

- 1. The project involves the construction at an operating wastewater treatment plant, on processes utilizing and working in a pure oxygen rich environment.
- 2. The project also involves the construction of rehabilitation to seven (7) oxygenation trains, which includes 24 mixers, blowers and exhaust fans.
- 3. In addition, the project also includes the proposed construction of two (2) new electrical buildings.
- 4. Items 2 and 3 above includes the installation of very large, expensive and specialized equipment. Item 3 requires the installation of high powered switchgear, breakers, motor control centers, etc.
- 5. The Department has evaluated the project for possible opportunities for participation in the area of SBE Goods and Services. Based on the scope and nature of the work, we have concluded that there are a wide range of opportunities for participation on this project. The recommended areas of participation for SBE Goods & Services providers includes the possible areas:

Analysis for Small Business Enterprise – Goods and Services Recommendation						
Item	Goods & Services	Prime Contractor	Sub- Contractor	SBE Availability		
1.	GOODS:  Mechanical Process Equipment Oxygenation Systems Electrical Switchgear Instrumentation & Controls Piping & Fittings Electrical & Mechanical Sitework & Sodding Architectural	X X X X	X X X X	X X X X		
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Paving Civil Site work Systems Integration Paving Utility Piping Finishing Painting Plumbing Fencing	X X	X X X X X X X X	X X X X X X X X		