

DEPARTMENT INPUT
CONSTRUCTION CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Check applicable Ordinance(s): 90-143 Responsible Wage and Benefits 03-237 (formerly 03-1) Community Workforce Program

PROJECT INFORMATION See attachment

Contract/Project/*Work Order No.: S-891

*Reference corresponding project number when submitting a work order

Contract/Project Title: CD 2.19(2) CO-GEN FACILITY AND 2.01(6) ELECTRICAL IMPROVEMENTS

Description/Scope of Work: See Attached

Estimated Cost: 30603100 Funding Source: Other (specify)

**Location of Project (street address or beginning and ending points) i.e. 12345 NE 23rd Ct or Starts at 135 St. ends at 145 St.
3989 Rickenbacker Causeway, Miami-Dade County, Florida 33149**

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CWP) See attachment

Engineer/Department or Agency's estimated required workforce for Project Work Order :

Trade/Skills Required	Est. # of workforce required per trade	Est. # of total days to complete job
N/A		
N/A		
N/A		

Comments: Not Applicable, Project is not in a DTA.

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
0	\$	0%	
0	\$	0%	
0	\$	0%	

RECOMMENDATION

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

Basis for Recommendation: Availability among SBE subcontractors.

Date submitted to DBD: 09/22/2016

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, Manager
Construction Contracts Section

Department: Miami-Dade Water and Sewer Department

Contract Title: CD 2.19(2) CO-GEN FACILITY AND 2.01(6) ELECTRICAL IMPROVEMENTS

Contract No.: S-891

Estimate Amount: \$ 30,603,100 [\$27,821,000 Construction + \$ 2,782,100 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Construction – 4.00%
Analysis for Recommendation (Attached)



Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

This project is one in a series of projects that are being processed under Section 2-8.1.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance.

The scope of work consist of furnishing all materials, labor and equipment necessary for the construction of Consent Decree Project 2.19(2), Co-Gen Facility, and Project 2.01(6) Electrical Improvements at the Central District Wastewater Treatment Plant (CDWWTP), located in Virginia Key, 3989 Rickenbacker Causeway, Section 16, Township 54, Range 42, Miami-Dade County, Florida 33149. The purpose of this project is to install a Biological Hydrogen Sulfide (H₂S) Biogas Treatment System that will reduce the concentration of H₂S in the biogas produced by the digesters during treatment of sanitary sewer at the plant.

The project consists of installing a new Biological H₂S Biogas Treatment System including five bioreactor vessels and equipment containers, a new Co-Gen Switchgear Building that will replace the existing electrical rooms in the Co-Gen Building and substations No. 17 and 18, a new Biogas Treatment Electrical Building, installation of biogas piping from the Plant 1 digesters to the Biological H₂S Treatment System and from the Biological H₂S Treatment System to the co-generation engines in the Co-Gen Building, and replacement of eight rotary sliding vane compressor systems.

QUALIFICATIONS OF BIDDERS:

Bidders shall demonstrate relevant minimum experience by submitting proof with their bid contract experience as required below:

- a. Bidder must be experienced in wastewater treatment facility construction, including installation of process equipment, biogas piping and gas handling equipment, HVAC equipment, medium and low voltage electrical power systems, and instrumentation and controls including connections into an existing SCADA. The bidder shall be experienced in performing work while maintaining operations of a wastewater facility.
- b. The Bidder must have successfully completed the construction and/or rehabilitation of a minimum of three (3) project including biogas piping and gas handling equipment within the last ten (10) years, which must have had a minimum construction cost of \$5 million dollars.
- c. The Bidder or Bidder's Electrical Subcontractor shall have successfully completed a minimum of three (3) projects demonstrating experience with installation of electrical equipment rated for medium and low voltage power supply (i.e. min. 480V).

LICENSES: The types of licenses required are: State General Contractor, General Engineering 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: Not Applicable, as Project is not in a DTA

Contract No. S-891 - CD 2.19(2) & CD 2.01(6)				
Analysis for SBE-Construction Goal - 4 %				
Item	Description	Estimated Cost	% of Item to Base Bid	CSBE Availability
<u>1. GENERAL CONDITIONS</u>				
a)	Mobilization & Shop drawing submittal	\$ 966,000	3.16%	
<u>2. SITEWORK</u>				
a)	Preparatory work for Contractors staging area; excavation/backfill; asphalt demo and paving; concrete demolition.	\$ 249,200	0.81%	0.81%
<u>3. CO-GEN SWITCHGEAR BLDG</u>				
a)	Construction of new Co-Gen Switchgear Building and any related work in adjacent Existing Co-Gen Building, Substation 17 and 18 Building, and Substation 17A and 18A Building. Including auger cast piling; switchgear to Co-Gen; main switchgear; substation switchgears; structural components; all building mechanical and electrical; and all instrumentation, testing and control work.	\$ 10,433,000	34.09%	
b)	Demolition of existing substation; site preparation; excavation and disposal of unsuitable backfill material; general site civil work, grading, underground water and sewer utilities; structural and architectural features; General electrical, conduits and wiring.	\$ 598,000	1.95%	1.95%
<u>4. BIOGAS TREATMENT ELECTRICAL BUILDING</u>				
a)	Construction of new Biogas Treatment Electrical Building and any associated work in electrical rooms of existing Plant 2 Compressor Building and existing Dewatering Building. Including	\$ 1,240,200	4.05%	
b)	Furnishing and installing structural and architectural features and components; General electrical, conduit & wiring and lighting.	\$ 118,500	0.39%	0.39%
<u>5. BIOLOGICAL H2S TREATMENT SYSTEM</u>				
a)	New Biological H2S Treatment System, including Biological Sweetening System; coalescing filters; Moisture Removal System; structural components; electrical work; instrumentation, testing & control work.	\$ 9,517,200	31.10%	

b)	Site preparation; yard piping; site civil work including paving, grading, drainage and underground utilities	\$ 204,800	0.67%	0.67%
6. NEW BIOGAS / SLUDGE GAS PIPING & CONTROLS				
a)	Biogas / sludge gas HDPE yard piping; 316 stainless steel aboveground piping, pipe supports and valves; structural components; electrical work, sensors, instrumentation, testing and controls.	\$ 1,795,900	5.87%	
b)	Excavation, trenching and backfilling; paving, piping, fittings and grading	\$ 51,100	0.17%	0.17%
7. ROTARY VANE COMPRESSOR - CO-GEN BLDG.				
a)	Replacement of four (4) rotary sliding vane compressor systems at the existing Co-Gen Building; related electrical, instrumentation and control work.	\$ 1,250,100	4.08%	
8. ROTARY VANE COMPRESSOR - PLANT 2 COMPRESSOR BUILDING				
a)	Replacement of four (4) rotary sliding vane compressor systems at the existing Co-Gen Building; related electrical, instrumentation and control work.	\$ 1,397,000	4.56%	
SUB-TOTAL		\$27,821,000		
Contingency allowance (10%)		\$ 2,782,100	9.09%	
Total		\$30,603,100	100%	3.99%

CSBE TOTAL 4.00%

**DEPARTMENTAL INPUT
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

To: Gary T. Hartfield, Division Director
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Department: Miami-Dade Water and Sewer Department

Contract Title: CD 2.19(2) CO-GEN FACILITY AND 2.01(6) ELECTRICAL IMPROVEMENTS

Contract No.: S-891

Estimate Amount: \$ 30,603,100 [\$27,821,000 Construction + \$ 2,782,100 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 1.12%

Analysis for Recommendation (Attached)



Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

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The scope of work consist of furnishing all materials, labor and equipment necessary for the construction of Consent Decree Project 2.19(2), Co-Gen Facility, and Project 2.01(6) Electrical Improvements at the Central District Wastewater Treatment Plant (CDWWTP), located in Virginia Key, 3989 Rickenbacker Causeway, Section 16, Township 54, Range 42, Miami-Dade County, Florida 33149. The purpose of this project is to install a Biological Hydrogen Sulfide (H₂S) Biogas Treatment System that will reduce the concentration of H₂S in the biogas produced by the digesters during treatment of sanitary sewer at the plant.

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The Department has evaluated the project for possible opportunities for participation in the area of SBE-Goods and Services. The possible areas of subcontracting are in the area of Piling Systems, Structural, Electrical, Instrumentation, Coating & Waterproofing, Sidewalk Construction and Paving. Our recommendation is in the area of Goods: for Clean Fill, piping and fittings; and Services: for demolition, Concrete Sidewalk, Paving, Painting, Waterproofing and HVAC for the project.

Analysis for Small Business Enterprise – Goods and Services Recommendation				
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability
1.	GOODS: Precast Structural Members Mechanical Process Equipment Electrical Switchgear Instrumentation & Controls Clean Fill Piping & Fittings	X X X	 X X X	 X X
2.	SERVICES Auger Cast Piling Structural Electrical Instrumentation Roofing Paving Painting Waterproofing HVAC & Plumbing Utility Piping	 X X	 X X X X X X X X	 X X X X