

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-889

*Reference corresponding project number when submitting a work order

Contract/Project Title: CD 2.15(1) PLANT 2 CLUSTER 1 DIGESTER UPGRADES

Description/Scope of Work: In general, the project consists of furnishing all materials, labor, and equipment necessary for upgrades to the existing Plant 2 Digester Cluster 1 facility and electrical Substation 15 and 16 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.

Estimated Cost: 29821902 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, Virginia Key, 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: 04/21/2016

Contact Person: Isaac Smith

Telephone No.: 786-552-8255

**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 2.15(1) PLANT 2 CLUSTER 1 DIGESTER UPGRADES

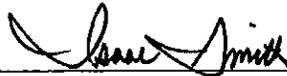
Contract No.: S-889

Estimate Amount: \$29,821,902 [\$27,110,820 Construction + \$2,711,082 Contingency]

Funding Source: EW 685, Revenue Bonds Sold

Small Business Enterprise – Construction – 9.54%

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 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance.

In general, the project consists of furnishing all materials, labor, and equipment necessary for upgrades to the existing Plant 2 Digester Cluster 1 facility and electrical Substation 15 and 16 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 scope of work includes, but is not limited to, furnishing all materials, labor, and equipment necessary for replacement of all existing equipment, valves, piping; and appurtenances; electrical panels, conduits, cables, and lighting; instrumentation and controls; building mechanical; and architectural doors, windows, and louvers within the digester Control Building and inside Digester Tank Nos. 1, 2, and 4; new digester covers for Digester Tank Nos. 1, 2, and 4; new valve vault for Digester Cluster 1, replacement of all digester header yard piping beyond the valve vault which connects the Plant 2 Digester Clusters (including sanitary, hot water supply, hot water return, thickened sludge, and digester gas yard piping beyond valve vault); extension of the existing Electrical Room at the Control Building; structural repairs to and recoating of Control Building and Digester Tank Nos. 1, 2, and 4; and demolition of existing electrical substation buildings in order to construct two new electrical substation buildings.

QUALIFICATIONS OF BIDDERS:

Bidders shall submit proof that his/her firm has at least the minimum successful contract experience as requested below:

- a. The Contractor shall be experienced in the construction of new or rehabilitation of existing wastewater treatment plant biosolids systems, which include return/waste activated sludge pump stations, sludge thickening, digester, and dewatering systems.
- b. The Contractor must have successfully completed the construction of three (3) projects which included new wastewater digester tanks or rehabilitation of existing wastewater digester tanks. A minimum of one of project shall include the installation of new digester tank floating covers.
- c. The Contractor or Contractor's Electrical Subcontractor shall have successfully completed a minimum of three (3) projects demonstrating experience with medium or high voltage power supply systems, including transformers and switchgear.

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: Not Applicable, project is not located in a DTA.

Analysis for SBE Recommendation					
Recommendation - 9.54%					
Item No.	Description	Cost	Item %	SBE Amt.	SBE %
1	Site Mobilization & Demobilization	\$ 1,614,520	5.41%		
2	Yard Piping	\$ 84,660	0.28%	33,860.00	0.11%
3	Process Piping modifications	\$ 49,560	0.17%	12,560.00	0.04%
4	Sludge transfer pumps, recirculation pumps & appurtenances	\$ 96,020	0.32%		
5	Electrical and instrumentation equipment salvaged inside the Control Building	\$ 186,860	0.63%	50,860.00	0.17%
6	Waste gas flare, including gas piping and control valves	\$ 31,460	0.11%	8,000.00	0.03%
7	Building Demolition	\$ 240,220	0.81%	140,000.00	0.47%
8	Site Civil Work: clearing and grubbing, dewatering, erosion control, compaction, fencing, grading, restoration of roadways, sidewalks, and sodding	\$ 2,106,850	7.06%	421,370.00	1.41%
9	Structural/architectural work: roofing, windows, doors; metal stairs; louvers; and all other necessary structural components	\$ 595,330	2.00%	178,600.00	0.60%
10	Process Mechanical in Digester Cluster Control Building	\$ 1,814,160	6.08%	320,800.00	1.08%
11	Tube-in-Tube type Heat Exchangers	\$ 662,240	2.22%		
12	Sludge recirculation chopper pump and motors assemblies	\$ 155,560	0.52%		
13	Radial beam type floating digester covers, flame arrestors, and appurtenances	\$ 2,644,320	8.87%		
14	Linear motion mixer systems and appurtenances	\$ 1,195,380	4.01%		
15	Sludge transfer pumps	\$ 210,200	0.70%		
16	Gas boosters blowers	\$ 79,500	0.27%		
17	Waste gas burner system	\$ 650,580	2.18%		
18	Carbon steel floating digester covers and accessories	\$ 2,193,360	7.35%	210,300.00	0.71%
19	HVAC and Filter system	\$ 206,070	0.69%	166,000.00	0.56%
20	Electrical: MCCs, VFDs, enclosures, lightning protection, etc.	\$ 2,189,660	7.34%	437,900.00	1.47%
21	Systems Integration; programming & SCADA Digester Cluster 1 and Electrical Substations 15 and 16	\$ 1,081,390	3.63%		
22	Electrical Substations No. 15 and No. 16 -	\$ 2,275,380	7.63%	608,800.00	2.04%

	Facility Construction				
23	Electrical Substations No. 15 and No. 16 - Transformers, primary switches, etc.	\$ 493,990	1.66%		
24	For startup, testing and commissioning	\$ 169,970	0.57%		
25	Finishing and coating	\$ 450,090	1.51%	150,000.00	0.50%
26	Final clean up	\$ 32,090	0.11%	32,090.00	0.11%
27	Concrete restoration	\$ 100,000	0.34%	75,000.00	0.25%
28	Stainless steel radial beam type floating digester covers	\$ 5,501,400	18.45%		
	Subtotal	\$ 27,110,820		2,846,140.00	9.54%
	Contingency Allowance	\$ 2,711,082	9.09%		
	SBE TOTAL	\$ 29,821,902	100.00%		

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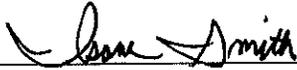
Contract No.: S-889

Estimate Amount: \$29,821,902 [\$27,110,820 Construction + \$2,711,082 Contingency]

Funding Source: EW 685, Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 1.66%

Analysis for Recommendation (Attached)



Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

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CONSIDERATIONS FOR ANALYSIS:

1. The project involves the construction of a new and rehabilitation of a wastewater treatment plant biosolids system. This sub-system of the plant includes very large, expensive and specialized equipment. During normal operations the metal digester covers float above the structure.
2. The major portions of the work involves the construction of two electrical substation facilities and structural repairs, including covers, to several digester tanks.
3. 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 Biosolids Systems Electrical Switchgear Instrumentation & Controls Piping & Fittings Backfill & Bedding Sodding	X X X X X	 X X X	 X X X
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Paving Civil Site work Systems Integration Sidewalk Utility Piping Finishing Painting Plumbing Fencing	X X	 X X X X X X X X X X X	X X X X X X X X X X