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.: <u>S905</u>

*Reference corresponding project number when submitting a work order

Contract/Project Title: CD 5.5 Upgrade of Pump Station 0415

Description/Scope of Work: See Attached

Estimated Cost: <u>\$ 5,071,977</u> Funding Source: <u>Other (specify)</u>

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. Pump Station 0415 located at 3750 NW 181st Street, Miami Gardens, Florida

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: Specialized mechanical work involving sofisticated variable Frequency Drive units and controls. The project is required under the USEPA Consent Decree and has an associated deadline to be in service.

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability	
	\$	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: This is the rehabilitation and upgrading of an existing in service Water and Sewer Pump Station required for compliance with the EPA Consent Decree. Pumps and motors are being replaced with a sophisticated Variable Frequency Drive units requiring expertise in control circuitry and system integration. All standard trade work has been identified on attached.

Date submitted to DBD:____ Contact Person:<u>Isaac Smith</u>

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 5.5 UPGRADE OF PUMP STATION 0415

Contract No.: S-905

Estimate Amount: \$4,937,323 [\$4,488,475 Construction + \$448,848 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise - Construction - 17.04% 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 the construction of upgrades to Pump Station 0415, located in Miami Gardens, 3750 NW 181 Street, Section 52, Township 41, Range 08, Miami-Dade County, Florida 33055.

The scope of work consists of furnishing all materials, labor, and equipment necessary to rehabilitate and upgrade Sewage Pump Station 0415 which includes four (4) new vertical centrifugal pumps and motors rated at 300 horsepower, new pump station valves and piping, and an electrical building expansion to install new switchgear and variable frequency drives (VFDs). The upgrades also include the following structural work, architectural work, construction of a new electrical room, complete with HVAC system, refurbishing of the existing odor control room and installation of a new odor control system, replacement of louvers, partial demolition of masonry walls, concrete floors and concrete equipment supports, rehabilitation of wetwell, electrical upgrades, replacement of motor starters with VFDs, replacement of suction and discharge piping and valves, making asphaltic paving repairs, along with civil and site work, including installation of a vortex manhole, site restoration, and all other appurtenant and miscellaneous items and work for a complete, functional and satisfactory installation of the project

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, project is not located in a DTA.

ANALYSIS FOR SBE CONSTRUCTION:

	Sub-Contrac						
	Analysis for	Recon	mendation				
ltem	Description			Est	imated Cost	% of Item to Base Bid	SBE Availability
1	GENERAL CONDITIONS			\$	750 770	15.39%	
	a) Mobilization, including temporary facilities	\$	759,778		759,778	12.33%	
2	SITEWORK			+			
	a) Clearing, grubbing, grading, erosion	\$	10,397	\$	129,500	2.62%	SBE
	b) Demolition, hauling & disposal	\$	110,640				
	c) Pavement Restoration	\$	5,020				
	d) Landscaping	\$	3,443				
3	ARCHITECTURAL						
	a) Masonry walls, stucco, doors & roofing	\$	254,744	\$	501,332	10.15%	SBE
	b) Painting and Coating	\$	13,588				
	c) Repair and Restoration of Concrete						
	Surfaces	\$	233,000				
4	POWER, PROCESS & CONTROLS						
	a) Odor Control System & Canisters	\$	203,971	\$	1,354,911	27.44%	
	b) Variable Frequency Drives & MCC	\$	196,362				
	c) Control Panel & Appurtenances	\$	811,009				
	d) Aux. PLC Panel & Systems Integrator	\$	143,569				
5	YARD PIPING					• • • • • •	
	a) 16 & 24-inch piping & fittings	\$	54,150	\$	106,675	2.16%	SBE
	b) 24-inch French Drain	\$	7,245				
	c) Drainage System	\$	32,490				
	d) Manhole	\$	12,79 0				
6	MECHANICAL						
	a) Pumps, Motors & Accessories	\$	615,670	\$	1,532,351	31.04%	
	b) Interior Piping & Fittings	\$	305,572				
	c) Valves & Flow Control	\$	364,253				
	b) By-Pass Pumping System	\$	246,856				
7	MECHANICAL						
	a) HVAC	\$	91, 9 28	\$	103,928	2.10%	SBE
	b) Plumbing - Water Closet	\$	12,000				
	SUB-TOTAL			\$	4,488,475		
	Contingency allowance (10%)			\$	448,848	9.09%	Total SBE
	SBE TOTAL			\$	4,937,323	100%	17.04

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 5.5 UPGRADE OF PUMP STATION 0415

Contract No.: S-905

Estimate Amount: \$4,937,323 [\$4,488,475 Construction + \$448,848 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 2.24% Analysis for Recommendation (Attached)

Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

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CONSIDERATIONS FOR ANALYSIS:

 The project involves construction and upgrades to an existing regional sewage pump station. This undertaking includes furnishing and installation of very large, expensive equipment, such as: four (4) 300 horsepower pumps and motors with variable frequency drives, medium voltage switchgear and motor control centers

- 2. The project involves the synchronization of multiple processes, remote telemetry and providing the services of a systems integrator.
- 3. The rehabilitation of Pump Station 0415 requires highly skilled trades with special equipment. However, the Small Business Opportunities identified for this project include general site work (i.e., site clearing, grubbing, grading, erosion control, demolition, paving restoration and landscaping), architectural, yard piping, landscaping, demolition, masonry walls, roofing, doors, painting, plumbing and HVAC.
- 4. 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 several opportunities for participation on this project. Please find an analysis and recommended areas of participation for SBE Goods & Services providers:

Item	Goods & Services	Prime Contractor	Sub- Contractor	SBE Availability
1.	GOODS: 300 Horsepower Pumps Pump Motors Mechanical Equipment Electrical Switchgear Variable Frequency Drives Instrumentation & Controls Piping & Fittings Drainage & Catch Basins French Drain	X X X X X X X X	X X X	x x x
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Paving Demolition Civil Site work Systems Integration Utility Piping Concrete Restoration Finishing Painting Plumbing Masonry	X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X

BREAKDOWN OF SBE-GOODS & SERVICES - 2.24%				
Item		Amount		
Temporary Facility	\$	15,000.00		
Drainage System	\$	20,000.00		
French Drain	\$	5,245.00		
Non-Process Plumbing	\$	29,500.00		
Landscaping	\$	1,720.00		
Stucco, Primer & Paint	\$	10,000.00		
Railing & Misc Metals	\$	5,530.00		
Thermal Moisture Protection	\$	13,400.00		
Total	\$	100,395.00		