

**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: North District Wastewater Treatment Plant
Pretreatment / Sludge Transfer Rehabilitation

Contract No.: S-871

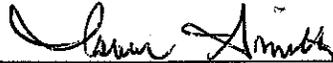
Estimate Amount: \$21,685,257.18 (See Breakdown below)

[\$18,048,900 Construction + \$1,804,890 Contingency + \$1,831,467.18 Dedicated Allowance]

Funding Source: EW 621, Renewal and Replacement Fund

Small Business Enterprise – Construction – 6.19%

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 North District Wastewater Treatment Plant (NDWWTP) provides secondary treatment and tertiary treatment of municipal wastewater for a service area that includes the Northern Portions of Miami-Dade County. The Headworks for the plant is the first of several treatment processes at this facility and it includes screening, primary sludge dewatering, transfer of waste activated sludge and odor control. These facilities are in need of replacement and rehabilitation and are mainly located in two separate buildings, the Pretreatment and Sludge Transfer Building and Aerated Grit/Screening Building.

This project includes the replacement of all nine influent screens, the installation of a new screening conveyance and compaction system at each building; the expansion of an elevated Motor Control Center Room to house new medium and low voltage electrical gear; replacement of the existing primary sludge dewatering system; upgrading the existing ventilation system; as well as other minor structural and mechanical improvements at the NDWWTP, located at 2575 NE 156 Street, N. Miami Beach, FL.

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, as Project is not in a DTA

5	<u>PRETREATMENT BUILDING</u>				
	a) Owner furnished Control Panel & Operator Interface Terminal	\$ 100,000	\$ 10,322,800	51.99%	
	b) Electrical Processing Equipment	\$ 1,675,300			
	c) Six (6) Owner furnished perforated plate screens, motors & appurtenances	\$ 654,000			
	d) Mechanical Process Equipment	\$ 3,644,000			
	e) Structural & Mechanical Modifications	\$ 774,300			
	f) Instrumentation, Controls and System Integration	\$ 295,200			
	g) Epoxytec Uroflex Coating Systems	\$ 3,180,000			
	h) Site Preparation and Excavation	\$ 75,000	\$ 267,600	1.35%	CSBE
	i) Concrete Masonry	\$ 41,000			
	j) Built-up Roofing	\$ 6,500			
	j) Architectural: Doors & Windows	\$ 87,600			
	k) Painting & Finishing	\$ 16,700			
	l) HVAC – 5 Ton & 7.2 Ton A/C Systems	\$ 34,700			
	m) Thermal & Moisture Protection	\$ 6,100			
6	<u>ON-SITE CHLORINE BUILDING</u>				
	a) Owner Furnished Controls and appurtenances	\$ 20,000	\$ 239,000	1.20%	
	b) Structural & Mechanical Modifications	\$ 219,000			
7	<u>PRIMARY SLUDGE HANDLING</u>				
	a) Primary Sludge Pumping Station 1	\$ 165,500	\$ 321,500	1.62%	
	b) Primary Sludge Pumping Station 2	\$ 156,000			
8	<u>ELECTRICAL DISTRIBUTION</u>				
	a) Gen. Electrical, Conduit & Wiring	\$ 570,000	\$ 570,000	2.87%	CSBE
	SUBTOTAL		\$18,048,900.00		
	CONTINGENCY (10%)		\$ 1,804,890.00	9.09%	
	SBE - TOTAL		\$19,853,790.00		
	DEDICATED ALLOWANCES		\$ 1,831,467.18		
	PROJECT GRAND TOTAL		\$21,685,257.18		

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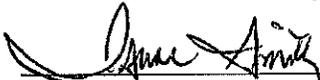
Estimate Amount: \$21,685,257.18 (See Breakdown below)

[\$18,048,900 Construction + \$1,804,890 Contingency + \$1,831,467.18 Dedicated Allowance]

Funding Source: EW 621, Renewal and Replacement Fund

Small Business Enterprise – Goods & Services – 1%

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 work consists of the replacement of all nine influent screens, the installation of a new screening conveyance and compaction system at the Pretreatment and Sludge Transfer Building and Aerated Grit/Screening Building of the North District Wastewater Treatment Plant (NDWWTP); the expansion of an elevated Motor Control Center Room to house new medium and low voltage electrical gear; replacement of the existing primary sludge degritting system; upgrading the existing ventilation system; as well as other minor structural and mechanical improvements.

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 Structural, Electrical, Instrumentation, Earthwork, Testing & Compaction, Milling and Paving. Our recommendation is in the area of Services for Earthwork, Milling and Paving, Testing and Compaction for the project.

Analysis for Small Business Enterprise – Goods and Services Recommendation				
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability
1.	GOODS: Mechanical Process Equipment Electrical Switchgear Instrumentation & Controls	X X X		
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Milling and Paving Earthwork	X	X X X X X	

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-871

*Reference corresponding project number when submitting a work order

Contract/Project Title: North District Wastewater Treatment Plant Pretreatment / Sludge Transfer Rehabilitation

Description/Scope of Work: See Attached

Estimated Cost: 21685257 **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.
2575 NE 156 Street, N. Miami Beach, FL

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 CSBE subcontractors.

Date submitted to DBD: 05/22/2015

Contact Person: Isaac Smith

Telephone No.: 786-268-5196

White Jr., Tyrone (ISD)

From: Smith, Isaac (WASD)
Sent: Friday, May 22, 2015 3:29 PM
To: White Jr., Tyrone (ISD)
Cc: Johnson, Laurie (ISD); Smith, Isaac (WASD)
Subject: RE: Contract S-871 - Project Submittal
Attachments: image001.png; image002.jpg

Good Afternoon Tyrone,

General Justification

First, the Headworks of the plant is first structure through which the wastewater enters. This is not a structure that can be totally taken out of services. Our plan is to be ready to start this project by this dry season. In order to accomplish the project within the time constraints WASD has pre-ordered and will furnish many of the long lead time items. The other constraint is that so that newly installed equipment will work with and be compatible to the plant's existing controls, WASD will furnish certain key pieces of equipment, as enumerated in the SBE-Construction Analysis.

Breakdown - Services

Topographic Survey	\$2,000
Progress Photo	\$5,400
Sodding	\$ 600
Paving	\$49,800
Electrical Sub	\$570,000
Testing & Compaction	\$10,100
Fire Alarm Sub	\$110,000

Unit Cost Listing of Electrical & Mechanical Equipment to be furnished by the Prime.

Electrical Equipment		
Variable Frequency Drive	460V, 350Hp Motor Size	\$375,800
Uninterruptible Power Supply		\$22,800
Transformer	Liquid-Type, 5 kV, 277/480V, 3 PH, 44 KVA	\$111,000
Switchgear	15000 KVA, 5kV SWGR, 480V SWGR	\$400,000
Low Voltage Distribution	Safety Switch, Non-Automatic Transfer Switch, Panel Board, Copper Bus Duct, etc.	\$110,000
Mechanical Process Equipment		
Chemical Metering Pump	\$9,700 ea. – 6 req'd	\$58,200
Screenings Washer/Compactor (20 HP)	\$226,000 – 4 req'd	\$904,000
Degritter Classifier	\$527,000 – 3 req'd	\$1,581,000
Screen, Perforated Plate	\$264,000 – 9 req'd	\$2,376,000

Finally, this is not your typical project where the contractor builds the structure and furnish and install all interior equipment. The key to this project will not only rest with the contractor's experience with this type of construction but also, in his ability to install OFE and synchronize their operations with those that he will provide and all working in harmony with downstream processes at the plant. With so many moving parts, mechanical and electrical processing equipment, it is important that the contract is crafted in such a manner that the contractor has unit responsibility of the

complete and satisfactory operation of the Plant Headworks. Our justification for the recommendation as submitted is, since the heart of the project is electrical & mechanical process equipment (by Huber & EscaMax) , subcontracting this portion would assign more than 51% of the work to a sub.

Thanks,

Isaac Smith, Manager
Miami-Dade County Water & Sewer Department
Construction Contracts Section
3575 S. LeJeune Road, Suite 136, Miami, Florida 33146
Tel. (786) 268-5196 Fax (786) 268-5186

IT STARTS WITH WATER

From: White Jr., Tyrone (ISD)
Sent: Friday, May 22, 2015 10:13 AM
To: Smith, Isaac (WASD)
Cc: Johnson, Laurie (ISD)
Subject: RE: Contract S-871 - Project Submittal
Importance: High

Good morning Isaac,

Can you please provide a detailed cost breakdown of the Goods & Services associated with this contract, identifying all goods & services which will be required by the prime along with justification as to why they cannot be subcontracted out?

Tyrone White
Contract Certification Specialist
Small Business Development Division
Miami-Dade County Internal Services Department
111 NW 1st Street, 19th Floor, Miami, FL 33128
☎ Office: (305) 375-3123 | 📠 Fax: (305) 375-3160
Email: twj@miamidade.gov



“Help stimulate Miami’s economy by supporting Small Businesses”

From: Smith, Isaac (WASD)
Sent: Friday, May 22, 2015 9:05 AM
To: Johnson, Laurie (ISD)
Cc: White Jr., Tyrone (ISD)
Subject: Contract S-871 - Project Submittal

Good Morning Laurie,

Please find WASD’s contract measure analysis and recommendation for Contract S-871, North District Wastewater Treatment Plant Pretreatment / Sludge Transfer Rehabilitation. 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. Be advised **not only**

is this project subject to the consent decree deadline, construction can only occur during the dry season. Therefore, your assistance in expediting this project would be most appreciated.

The project is concerning the plant's Headworks, which is the first of several treatment processes and it includes screening, primary sludge degritting, transfer of waste activated sludge and odor control. This project includes the replacement of all nine influent screens, the installation of a new screening conveyance and compaction system within two buildings; the expansion of an elevated Motor Control Center Room to house new medium and low voltage electrical gear and replacement of the existing primary sludge degritting system. Construction of this project will address activated sludge and odor control issues at the plant.

This project will involve the use numerous specialized equipment, some of which will be Department (due to long lead delivery) and others contractor furnished. The Department will also provide the Control Panel, Operator Interface Terminal and appurtenances to facilitate remote telemetry and control within the plant. However the responsibility of synchronizing and integrating each sub-process, screening and conveyance equipment will be the responsibility of the Contractor.

Thanks

Isaac Smith, Manager
Miami-Dade County Water & Sewer Department
Construction Contracts Section
3575 S. LeJeune Road, Suite 136, Miami, Florida 33146
Tel. (786) 268-5196 Fax (786) 268-5186

IT STARTS WITH WATER