DEPARTMENT INPUT CONSTRUCTION CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Check applicable Ordinance(s): X 90-143 Responsible Wage and Benefits

03-237 (formerly 03-1) Community Workforce Program

<u>PROJECT INFORMATION</u> See attachment

Contract/Project/*Work Order No.: <u>W-943</u>

*Reference corresponding project number when submitting a work order

Contract/Project Title: <u>FURNISH AND INSTALL 36-INCH D.I. WATER MAIN ALONG NW 106 ST.,</u> <u>FROM NW 107 AVE. TO NW SOUTH RIVER DR.</u>

Description/Scope of Work: See Attached

Estimated Cost: <u>9461801</u> Funding Source: <u>General funds</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. Along 106 Street, from NW 107 Ave. to NW South River Drive

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:..

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
SBE-Cons	\$1,480,772	15.65%	
SBE-G&S	\$378,500	4.00%	
	\$	%	

RECOMMENDATION

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

Basis for Recommendation: <u>Due to limited availability, it has been determined that the suggested measures per the attached is appropriate for this project.</u>

Date submitted to DBD:<u>07/08/2019</u> Contact Person:<u>Isaac Smith</u>

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: FURNISH AND INSTALL 36-INCH D.I. WATER MAIN ALONG NW 106 ST., FROM NW 107 AVE. TO NW SOUTH RIVER DR.

Contract No.: W-943

Estimate Amount: \$9,461,801.80 [\$8,601,638.00 Construction + \$860,163.80 Contingency]

Funding Source: Future WASD Revenue Bonds

Small Business Enterprise – Construction – 15.65%

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.

The project consists of furnishing and installing approximately 12,000 linear feet of 36-inch ductile iron pipe and fittings including: 36-inch butterfly valves with reinforced concrete manholes, 8-inch blow-off assemblies; furnishing and constructing air release valve assemblies; making inline connection to a proposed 36-inch water main (FDOT Project # 405615-3-56.01) at NW South River Dr. north west of NW 87 Ave. including mechanical joint restrained solid sleeve; approximately 297 linear feet of micro tunneling under existing FEC railroad right-of-way, with steel casing, drill shafts, and proposed area of construction; approximately 50 linear feet of subaqueous canal crossing at Russian Colony Canal; making an inline connection to existing an 24-inch ductile iron water main at NW 116 Way west of NW 107 Ave., including mechanical joint restrained butterfly valve and concentric reducer; and V-Bio polyethylene encasement for ductile iron pipe and fittings. The Project is located in Sections 32 and 33, Township 52, Range 40, Town of Medley, Miami-Dade County, Florida.

The project also includes providing permanent pavement restoration; full width milling, and asphalt overlay of existing roadways; and, replacing pavement markings. Ancillary work includes all permitting; dewatering; storm water pollution prevention; removing unsuitable soils and installing suitable backfill material where required; replacement of sod and shrubs; tree protection, trimming, root pruning; dewatering the water mains after shutdown; site restoration; performing work with time and weather limitations and other appurtenant and miscellaneous items; Maintenance of Traffic (MOT) plans; providing off-duty police for traffic control as may be required by the Department or governing authorities; and, all work necessary for a complete, fully functional and satisfactory installation.

MINIMUM CONTRACTOR EXPERIENCE:

Bidders shall submit proof that their firm (which can include the experience of key supervisory employees that would man the project) has successfully completed at least three (3) comparable projects meeting the following criteria:

- 1. In addition to the license requirements, the Bidder must have a minimum of three (3) years of experience, under its current business name (which can include the experience of key supervisory employees that would man the project), in the construction of roadway / horizontal projects of similar scope and scale involving public right-of-way construction / installation / repair / replacement of main water distribution systems and/or main sanitary sewer collection systems, and maintenance of vehicular traffic, supported by references for three (3) projects completed within the past five (5) years. Submitted reference Projects must demonstrate that the Bidder served as the Prime Contractor for the referenced Projects provided.
- 2. The Bidder must demonstrate that it has full-time personnel with the necessary experience to perform the Project's Scope of Work. This experience shall include work in successfully completed projects performed by the identified personnel whose bulk of work performed in the public right-of-way is similar in detail to the Project's Scope of Work described in these Solicitation Documents. Demonstrate the experience requirement by:
 - a. Providing a detailed description of at least three (3) projects similar in detail to the Project's Scope of Work described in these Solicitation Documents and in which the Bidder's identified personnel is currently engaged or has completed within the past five (5) years. List and describe the aforementioned projects and state whether the work was performed for the County, other government clients, or private entities.
 - b. For each project listed, the pipe installation shall have been completed and accepted by the project owner prior to the bid submittal date.

CONSIDERATIONS FOR ANALYSIS:

- 1. This project involves installation of a large diameter ductile iron water main piping and butterfly valves, which requires the use of large equipment and capable of deeper trench installations.
- 2. To complete the proper performance and inspection of the subaqueous work, the Contractor shall furnish the services of competent divers.
- 3. The project also includes the construction of approximately 297 linear feet of micro tunneling, under existing FEC railroad right-of-way, with steel casing.
- 4. The project involves an inline connection to an existing 24" water main and a proposed 36" water main, being constructed by others as part of FDOT Project # 405615-3-56.01.
- 5. Recommended opportunity for SBE-Construction participation is in the area of roadway pavement restoration, milling, installation of blow-off assemblies and surface restoration, including replacement of sod and shrubs, tree protection, trimming and root pruning.
- LICENSES: The types of licenses required are: General Engineering, State Underground, Pipeline 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 PARTICIPA	ΓΙΟ	N - CONTRACT	NO. W-943					
ltem	Description		Cost	Availability	SE	BE (\$)	SBE (%)	 G&S(\$)	G&S(%)
1	Mobilization		\$ 305,000.00	3.22%		•		 	
2	Furnishing 36-inch DIP pipe and fittings	\$	2,814,000.00	29.74%					
3	Installing 36-inch DIP pipe and fittings	\$	1,698,100.00	17.95%	\$	400,000.00	4.23%		
4	Microtunnel under FEC Railroad	\$	1,400,000.00	14.80%					
5	Subaqueous canal crossing	\$	94,000.00	0.99%					
6	Furnishing 36" & 24" Butterfly Valve	\$	307,000.00	3.24%				\$ 307,000.00	3.24%
7	Installing 36" & 24" Butterfly Valve	\$	14,500.00	0.15%				 	
8	Constructing air release valves	\$	18,000.00	0.19%	\$	18,000.00	0.19%		
9	Constructing blow-off assemblies	\$	46,000.00	0.49%	\$	36,000.00	0.38%	\$ 10,000.00	0.11%
10	Trench Overcut	\$	55,500.00	0.59%				 	
11	Sheeting and Shoring	\$	84,000.00	0.89%					
12	Restoration of Sodding, Pruning & Tree Prot.	\$	28,000.00	0.30%	\$	28,000.00	0.30%		
13	Guardrail - Removal & Replacement	\$	58,000.00	0.61%	\$	58,000.00	0.61%		
14	Traffic Loop Detection Assemblies	\$	5,500.00	0.06%				\$ 5,500.00	0.06%
15	Concrete, curb & Gutter	\$	162,000.00	1.71%	\$	162,000.00	1.71%		
16	Removal & Disposal - Unsuitable Material	\$	204,000.00	2.16%	\$	204,000.00	2.16%		
17	Additional Suitable Backfill Material	\$	156,000.00	1.65%	\$	100,000.00	1.06%	\$ 56,000.00	0.59%
18	Limerock for Type 1 Paving	\$	114,000.00	1.20%	\$	114,000.00	1.20%		
19	Type 1 - Permanent Paving	\$	62,700.00	0.66%					
20	Milling & Type V paving	\$	329,472.00	3.48%	\$	329,472.00	3.48%		
21	Replacing pavement markings	\$	31,300.00	0.33%	\$	31,300.00	0.33%	 	
22	Furnishing Traffic Control	\$	614,566.00	6.50%					
23	Subtotal	\$	8,601,638.00		\$	1,480,772.00	15.65%	\$ 378,500.00	4.00%
24	Contingency (10%)	\$	860,163.80	9.09%					
25	SBE Total	\$	9,461,801.80	100.00%					

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: FURNISH AND INSTALL 36-INCH D.I. WATER MAIN ALONG NW 106 ST., FROM NW 107 AVE. TO NW SOUTH RIVER DR.

Contract No.: W-943

Estimate Amount: \$9,461,801.80 [\$8,601,638.00 Construction + \$860,163.80 Contingency]

Funding Source: Future WASD Revenue Bonds

Small Business Enterprise – Goods & Services – 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 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance.

The project consists of furnishing all material, labor and equipment for the installation of approximately 12,000 linear feet of 36-inch ductile iron pipe water main, including approximately 297 linear feet of micro tunneling under existing FEC railroad right-of-way, and a subaqueous canal crossing in Sections 32 and 33, Township 52, Range 40, Town of Medley, Miami-Dade County, Florida

CONSIDERATIONS FOR ANALYSIS:

- 1. This project involves installation of over 12,000 linear feet of 36-inch diameter ductile iron water main.
- 2. The project also involves numerous interconnections to existing 24-inch water main and a proposed 36-inch ductile iron water main being constructed by others within an FDOT State Road
- 3. The construction required for this project requires the use of very large machinery to accommodate the depth and trench widths required for large diameter pipe installation.
- 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 are limited opportunities for participation in this project.

- 5. The possible areas of subcontracting are in the area of Maintenance of Traffic, Pavement Marking, Milling, Paving, concrete curb and gutter restoration and geotechnical exploration.
- 6. Therefore, for SBE- Goods and Services the recommended participation goal of 3.16%, in the areas of small diameter ductile iron pipe and fittings, also possible butterfly valves.

Analysis for Small Business Enterprise – Goods and Services Recommendation						
Item	Goods & Services	Prime Contractor	Sub- Contractor	SBE Availability		
1.	GOODS: Ductile Iron Pipe & Fittings Butterfly Valves & Manhole Steel Casing Pipe Limerock Base and Subbase Air release valve assemblies	X X X X	X X X	x x		
2.	SERVICES 36" D.I. Pipe Installation Utility Piping – 8" Blow-off Furnishing Traffic Control Replacing Pavement Markings Roadway Milling Permanent Paving Sodding Replacement Root Pruning & Tree protection	X X	X X X X X X X	X X X X X X		