

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-904

*Reference corresponding project number when submitting a work order

Contract/Project Title: FURNISH AND INSTALL 42-INCH PCCP/HDPE FORCE MAIN ALONG NORTH MIAMI AVENUE FROM NE 36 STREET TO NE 62 NE STREET

Description/Scope of Work: See Attached

Estimated Cost: 16295063 **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.
NE 62 ST & NE 4 AVE to N. Miami Ave. & NE 36 ST

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:Highly specialized work involving the installation of large diameter pipeline by trenchless construction..

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

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

RECOMMENDATION

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

Basis for Recommendation:The project consists of furnishing and installing approximately 3,010 L.F. of 42-inch Prestressed Concrete Cylinder Pipe (P.C.C.P.) and 8,216 L.F. High-Density Polyethylene (H.D.P.E.), valves and fittings via Horizontal Directional Drilling

Date submitted to DBD:05/04/2017

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: FURNISH AND INSTALL 42-INCH PCCP/HDPE FORCE MAIN ALONG
NORTH MIAMI AVENUE FROM NE 36 STREET TO NE 62 NE STREET


Contract No.: S-904

Estimate Amount: \$16,295,063.40 [\$14,813,694.00 Construction + \$1,481,369.40 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Construction – 2.82%

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 3,010 L.F. of 42-inch Prestressed Concrete Cylinder Pipe (P.C.C.P.) and 8,216 L.F. High-Density Polyethylene (H.D.P.E.), valves and fittings. It also includes the furnishing and installation of 60 LF of 24-inch Ductile Iron Pipe (D.I.P.), valves and fittings for force mains. Work includes but is not limited to furnishing and installing the 42-inch and 24-inch pipes with restrained joints where required; valves; automatic air release valve assemblies; and making connection to an existing 30-inch force main at the intersection of NE 62nd Street and NE 4th Avenue. This connection will be made by installing 30 X 24 inches tapping sleeve and a tapping valve on the existing force main. Also, includes the installation of four (4) sections of 42-inch H.D.P.E. force mains through Horizontal Directional Drill. Work includes as well cleaning and testing the proposed force mains.

The project also includes providing Maintenance of Traffic (MOT) plans; providing off-duty police for traffic control as may be required by the Department or governing authorities; 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 force mains after shutdown; site restoration; performing work with time and weather limitations and other appurtenant and miscellaneous items; and, all work necessary for a complete, fully functional and satisfactory installation. The project is located in Section 13, 18, 24 & 25, Township 53 S., Range 41 & 42 E., in Miami-Dade, Florida.

CONSIDERATIONS FOR ANALYSIS:

1. This project involves installation of a large diameter sewage force main involving prestressed concrete cylinder pipe (PCCP). This requires the use of large equipment and capable of deeper trench installations. Trench line shoring and use of highly specialized divers to guide installation will be necessary.
2. In addition, the success of the project involves the trenchless construction of four sections of high density polyethylene (HDPE) pipe via Horizontal Directional Drill, as follows:

Directional Drill 42-Inch HDPE for Section 1 (2,361 LF)
Directional Drill 42-Inch HDPE for Section 2 (2,520 LF)
Directional Drill 42-Inch HDPE for Section 3 (1,573 LF)
Directional Drill 42-Inch HDPE for Section 4 (1,762 LF)
3. Many portions of the work requires the use of heavy equipment, such as the installation of 42-inch eccentric plug valves, PCCP pipe, fittings and specials.
4. Recommended opportunity for SBE-Construction participation is in the area of roadway pavement restoration, milling, drainage and utility relocation, pavement marking restoration, installation of access manholes and ductile iron pipe and fittings.
5. **Therefore, this project is recommended for SBE-Const participation goal of 2.82%.**

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 - Construction				
Recommendation – 2.82% SBE Construction				
Item	Description of Work	Est. Cost	% of Item to Base Bid	SBE Availability
1	Mobilization & Demobilization	\$1,234,474.53	7.58%	
2	Directional Drill 42-Inch HDPE for Section 1 (2,361 LF)	\$2,077,680.00	12.75%	
3	Directional Drill 42-Inch HDPE for Section 2 (2,520 LF)	\$2,217,600.00	13.61%	
4	Directional Drill 42-Inch HDPE for Section 3 (1,573 LF)	\$1,384,240.00	8.49%	
5	Directional Drill 42-Inch HDPE for Section 4 (1,762 LF)	\$1,550,560.00	9.52%	
6	Furnish & Install 42-Inch HDPE Bends & Specials	\$129,200.00	0.79%	
7	Sell & deliver 42-Inch PCCP Pipe	\$1,685,600.00	10.34%	
8	Install 42-Inch PCCP Pipe	\$1,143,800.00	7.02%	
9	Furnish & Install 42-Inch PCCP Bends & Specials	\$534,850.00	3.28%	
10	Furnish & Install 42-Inch Plug Valve & 42" Adapter	\$820,000.00	5.03%	
11	Sell & deliver 24-Inch D.I. Pipe & Fittings	\$9,722.94	0.06%	
12	Install 24-Inch D.I. Pipe & Fittings	\$17,434.00	0.11%	0.11%
13	24 " Plug Valve, 24" Tapping Valve & 24" Tapping sleeve	\$120,000.00	0.74%	0.74%
14	Furnish & Install Access Manholes	\$150,000.00	0.92%	0.92%
15	Constructing Air Release Valves	\$23,555.00	0.14%	0.14%
16	Limerock Base	\$33,748.00	0.21%	
17	Type M Asphaltic Concrete	\$59,488.00	0.37%	0.37%
18	Type V - Asphaltic Concrete	\$140,049.00	0.86%	
19	Milling Nominal - 1-Inch	\$40,687.00	0.25%	0.25%
20	Pavement Marking Restoration	\$43,823.00	0.27%	0.27%
21	For Trench Overcut	\$10,284.00	0.06%	
22	For Sheeting & Shoring	\$109,752.00	0.67%	
23	Drainage - Utility Relocation	\$5,012.00	0.03%	0.03%
24	Traffic Loop Restoration	\$37,660.00	0.23%	
25	Maintenance of Traffic	\$1,234,474.53	7.58%	
	Subtotal	\$14,813,694.00		
	Contingency Allowance	\$1,481,369.40	9.09%	
	SBE TOTAL	\$16,295,063.40	100.00%	2.82%

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Estimate Amount: \$16,295,063.40 [\$14,813,694.00 Construction + \$1,481,369.40 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 6.53%

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.

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CONSIDERATIONS FOR ANALYSIS:

1. This project involves installation 3,010 L.F. of 42-inch diameter sewage force main involving prestressed concrete cylinder pipe (PCCP).
2. In addition, the success of the project involves the trenchless construction of 8,216 L.F. in four sections of high density polyethylene (HDPE) pipe via Horizontal Directional Drill, as follows:
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 are limited opportunities for participation in this project.
4. The possible areas of subcontracting are in the area of Maintenance of Traffic, Pavement Marking, Milling, Paving and Hauling. Our recommendation is in the area of Services for providing Maintenance of Traffic for the project.
5. Therefore, for SBE- Goods and Services the recommended participation goal of 6.53%.

Analysis for Small Business Enterprise – Goods and Services Recommendation					
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability	Value
1.	GOODS:				
	D.I. Pipe & Fittings	X	X	X	0.06%
	Limerock		X	X	0.21%
	42-Inch PCCP	X			
	42-Inch HDPE	X			
2.	SERVICES				
	Pipeline Construction	X			
	Milling & Paving		X		
	Hauling		X	X	0.35%
	Trenchless Pipe Installation				
	Maintenance of Traffic	X	X	X	5.68%
Traffic Loop Restoration	X	X	X	0.23%	

					6.53%