

SBD – CM REVIEW FORM

To: Project Review and Analysis Section – A/E
From: SBD CM Vivian Forhat-Diaz
Department: WASD
Date: 01/12/15

Contact: Patty David
RESUBMITTAL: No

PROJECT NUMBER: DB14-WASD-05
PROJECT TITLE: Design-Build Services to furnish and install a 48-inch Force Main along North Miami Ave. from N.W. 8 St. along to 36 St. and along N.E. 36 St from North Miami Ave. to N.E. 2nd Ave.
PROJECT LOCATION: North Miami Ave. from N.W. 8 St to 36 St. and along N.E. 36 St. from North Miami Ave. to N.E. 2 Ave.

SCOPE OF WORK/DESCRIPTION:

The Design-Builder services will include, but is not limited to engineering, design, survey, technical specifications, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new 48 -inch sewer force main. The Design-Builder should also comply with all other required construction methods for this work, including those to minimize noise, dust, and other impacts to surrounding residential neighborhoods. The design and construction services rendered by the Design-Builder shall result in a complete, functional, and operable piping project with a minimum 80 year design life. Design-Builder shall include, but not be limited to the following:

- Furnish and install approximately 12,700 linear feet of 48-inch Prestressed Concrete Cylinder Pipe (PCCP) and fittings.
- Construct three (3) micro-tunnels with 48-inch carrier mains inside 72-inch steel casings under the railroad crossing along North Miami Avenue at N.W. 19 Street, under the railroad crossing at N.E. 36 Street and North Federal. Furnish and install the 1-inch thick 72-inch casings; furnishing and installing casing spacers; constructing jacking and receiving pits for the micro-tunnel; Construct approximately ten (10) Access Manhole assemblies; Furnish and install ten (10) 48-inch Plug Valves; furnish and install one (1) 42-inch plug valve; furnish and install three (3) 36-inch Plug Valves;
- Provide a tapping connection to an existing 48-inch Ductile Iron Pipe force main at the intersection of N.W. 8 Street and North Miami Avenue, including furnishing and installing a 48-inch x 36-inch tapping sleeve, a 36-inch FLG. X M.J. tapping valve, complete with riser pipe, valve box and cover, and polyethylene encasement;
- Cut-in connection to an existing 36-inch water main to include all costs in dewatering the existing sewage force main and hauling wastewater; making a tapping connection including furnishing and installing tapping saddles and tapping valves;
- Install a pipe in a hydrocarbon contaminated area; providing a Certified Hygienist certified by the American Board of Industrial Hygiene or a State of Florida Registered Engineer licensed in Environmental Discipline;
- Construct air release valve assemblies at all high points of the force main; Relocate of existing utilities in conflict with the route of the force main; Remove and legally disposing of unsuitable fill; furnishing and installing suitable backfill for pipe bedding and backfill, if needed; Clean and testing the main;
- Provide temporary pavement; making permanent paving repairs to include milling and resurfacing; providing traffic control; sidewalk and curb and gutter restoration; restoration of any facilities damaged during construction to a condition equal or better than before the start of construction; provide all other appurtenant and miscellaneous items and work for a complete and fully functional installation.

Additionally, the Design-Builder shall design and construct all ancillary piping, tapping, temporary bypass, and tie-in connections to facilitate successful construction and commissioning the new 48-inch sewer force main without any interruption of service to the existing Miami-Dade Water and Sewer Department's customers.

SPECIAL REQUIREMENTS:

Lead Designers:

1. The Lead Designer firm performing the design of the force main installation must have a minimum of 10 years from the date of this solicitation designed at least 3 pressure pipeline installation projects in an urban environment consisting of a minimum of 10,000 total linear feet of minimum 42-inch nominal diameter concrete cylinder pressure pipe (PCCP).
2. The firm performing the design of the micro-tunnel must have designed at least 3 micro-tunneling projects within the last 10 years from the date of this solicitation consisting of a minimum sum total of 1,000-feet in length and 42-inch nominal diameter of the carrier
3. The design firm and/or Sub-consultants performing design for the deep shafts shall have designed at least 1 deep shaft project to support a tunnel boring operation within the last 10 years from the date of this solicitation. The shaft shall have been at least at least 30-foot deep (below grade).

Sub-consultants: Sub-consultants to the Design-Builder or Lead Designer providing services under A/E technical certification categories must provide at least 3 projects that were completed within the last 10 years from the date of this solicitation that involved the main project elements for which the sub-consultant is being proposed, unless the experience and qualifications of the Lead Designer listed above require otherwise. The Lead Designer firm or its Sub-consultant performing design for the deep shafts shall have designed a deep shaft project to support a micro-tunneling operation. The shaft shall be at least 30-foot deep (below grade).

Small Business Development Signature: Vivian Forhat-Diaz Date: 01/12/15

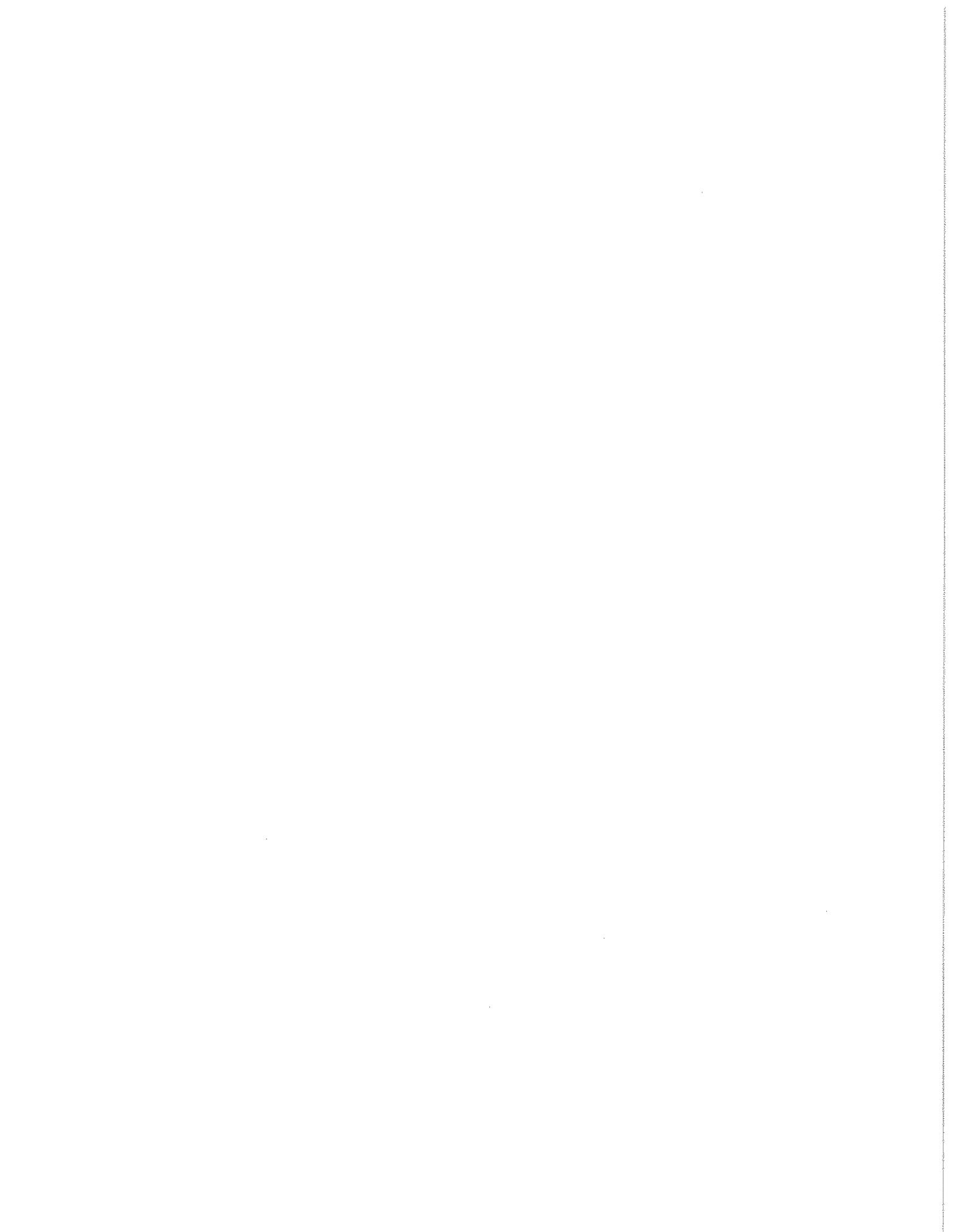
*Trades/Subtrades identified for possible subcontracting opportunities by SBD CM

WASD is recommending 17.5 % goal for SBE-A/E participation

PROJECT NUMBER: DB14-WASD-05 (Continuation)

CATEGORIES	PERCENTAGE	COMMENTS
		PRIME
6.01 Water And Sanitary Sewer Systems - Water Distribution And Sanitary Sewage Collection And Transmission Systems	45%	Must meet special Requirements. * Possible Small Business Participation
16.00 General Civil Engineering	20%	
17.00 Engineering Construction Management	10%	
		SUB-CONSULTANTS
3.02A Highway Systems – Tunnel Design	5%	Must meet special Requirements. * Possible Small Business Participation
9.01 Soils, Foundations And Material Testing - Drilling, Subsurface Investigations And Seismographic Services	1%	
9.02 Soils, Foundations And Material Testing - Geotechnical And Materials Engineering Services	2%	
9.03 Soils, Foundations And Material Testing – Concrete and Asphalt Testing Services	0.5%	
9.04 Soils, Foundations And Material Testing - Non-Destructive Testing And Inspections	0.5%	
9.06 Soils, Foundations And Material Testing – Materials Testing/Consulting/Training Industrial Hygiene	0.5%	
10.02 Geology Services	1%	
10.05 Environmental Engineering - Contamination Assessment And Monitoring	0.5%	
10.06 Environmental Engineering – Remedial Action Plan Design	0.5%	
10.07 Environmental Engineering - Remedial Action Plan Implementation/Operation/Maintenance	0.5%	
11.00 General Structural Engineering	10%	
15.01 Surveying And Mapping - Land Surveying	2%	
15.03 Underground Utility Location	1%	
TOAL COST including 10% Contingency	\$2,471,251.00	
TOTAL	100%	

WASD is recommending 17.5 % goal for SBE-A/E participation.



SBD – CM REVIEW FORM

To: Project Review and Analysis Section – CONSTRUCTION

From: SBD CM Vivian Forhat-Diaz

Department: WASD

Date: 01/12/15

Contact: Patty David

RESUBMITTAL: No

PROJECT NUMBER: DB14-WASD-05

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PROJECT LOCATION: North Miami Ave. from N.W. 8 St to 36 St. and along N.E. 36 St. from North Miami Ave. to N.E. 2 Ave.

SCOPE OF WORK/DESCRIPTION:

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- Furnish and install approximately 12,700 linear feet of 48-inch Prestressed Concrete Cylinder Pipe (PCCP) and fittings.
- Construct three (3) micro-tunnels with 48-inch carrier mains inside 72-inch steel casings under the railroad crossing along North Miami Avenue at N.W. 19 Street, under the railroad crossing at N.E. 36 Street and North Federal. Furnish and install the 1-inch thick 72-inch casings; furnishing and installing casing spacers; constructing jacking and receiving pits for the micro-tunnel; Construct approximately ten (10) Access Manhole assemblies; Furnish and install ten (10) 48-inch Plug Valves; furnish and install one (1) 42-inch plug valve; furnish and install three (3) 36-inch Plug Valves;
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- Provide temporary pavement; making permanent paving repairs to include milling and resurfacing; providing traffic control; sidewalk and curb and gutter restoration; restoration of any facilities damaged during construction to a condition equal or better than before the start of construction; provide all other appurtenant and miscellaneous items and work for a complete and fully functional installation.

Additionally, the Design-Builder shall design and construct all ancillary piping, tapping, temporary bypass, and tie-in connections to facilitate successful construction and commissioning the new 48-inch sewer force main without any interruption of service to the existing Miami-Dade Water and Sewer Department's customers.

SPECIAL REQUIREMENTS:

Lead Constructor:

- 1 The Lead Constructor within the Design-Builder shall perform the force main installation work, must have a minimum 4 years total industry experience as of the date of this solicitation and must have constructed at least 3 force main projects of similar size and complexity in an urban environment. A minimum total of 10,000 total linear feet of installation and minimum 42-inch nominal diameter of such pressure pipeline installation is required in the last 10 years from the date of this solicitation.
- 2 The construction firm performing the micro-tunneling work must have constructed at least 3 micro-tunneling projects of similar size and complexity within the last 10 years from the date of this solicitation. A minimum sum total of 1,200 linear feet of installation and minimum 42-inch nominal diameter carrier main of such tunnel installation is required.
- 3 The construction firm or specialty subcontractor performing the shaft construction shall have successfully constructed at least 3 deep shafts that were at least 30-foot deep (below grade). At least 2 of these shafts must have been extended below groundwater and required means of controlling inflow and bottom heave of the shaft.
- 4 The construction firm or specialty subcontractor performing the installation of the carrier pipe within the casing pipe shall have successfully completed at least 1 project involving the installation of a carrier pipe of minimum 42-inches inside diameter, similar pipe material, installation length that exceeds 1,000-feet and grout fill of the annular space between casing and carrier pipe.
- 5 The construction firm or specialty subcontractor performing the tapping of the operating 60-inch diameter prestressed concrete cylinder pipe water transmission main shall have successfully completed at least 1 project of similar size and type.

Small Business Development Signature: Vivian Forhat-Diaz Date: 01/12/15

*Trades/Subtrades identified for possible subcontracting opportunities by SBD CM

WASD is recommending 12.82 % goal for SBE-Construction participation

PROJECT NUMBER: DB14-WASD-05 (Continuation)

CATEGORIES	Amount	COMMENTS
		PRIME
Mobilization & Demobilization	\$150,000.00	Must meet special requirements mentioned above. *Possible Subcontracting opportunities
MOT	\$611,037.56	
48" Microtunnel (N. Miami Ave. & NE/NW 8th St)	\$1,171,300.00	
48" Microtunnel Railroad Crossing (N. Miami Ave. & NW 19th St)	\$1,307,500.00	
48" Microtunnel Railroad Crossing (NE 36 ST & NE 2nd Ave)	\$871,000.00	
48" PCCP for Sanitary Sewer Force Main (Material)	\$7,593,600.00	
48" PCCP for Sanitary Sewer Force Main (Installation)	\$797,472.00	
48" PCCP for Sanitary Sewer Force Main under I-395 ramp (Installation) Open trench inst.	\$39,200.00	
42" PCCP for Sanitary Sewer Force Main (Material)	\$8,480.00	
42" PCCP for Sanitary Sewer Force Main (Installation) Open trench	\$680.00	
48" FLGxFLG Plug Valve (Material)	\$1,491,750.00	
48" FLGxFLG Plug Valve (Installation)	\$74,000.00	
Accesss Manhole Assemblies (Material)	\$40,000.00	
Accesss Manhole Assemblies (Installation)	\$40,000.00	
F&I Cut in Tee Connection	\$61,527.00	
36" FLGxFLG Plug Valve (Material) (3 valves)	\$222,000.00	
36" FLGxFLG Plug Valve (Installation)	\$5,200.00	
36" FLGxFLG Plug Valve (Installation)	\$5,200.00	
36" FLGxFLG Plug Valve (Installation)	\$5,200.00	
Tapping connection to existing 48" DIP Force Main including all appurtenance	\$77,810.00	
		General Engineering Contractor/Paving Contractor
Dewatering the existing sewage force main pipe	\$12,000.00	*Possible Subcontracting opportunities
Limerock Base for Type I permanent paving repairs	\$125,411.00	
Asphaltic Concrete surface for Type I Permanent Paving	\$135,058.00	
Milling existing asphalt pavement 1" average	\$122,440.00	
Resurfacing using Type V Permanent Paving	\$208,148.00	
Limerock Base for Type II permanent paving repairs	\$21,555.00	
Asphaltic Concrete surface for Type II Permanent Paving	\$19,032.00	
Milling existing asphalt pavement 2.5" average	\$21,925.00	
Resurfacing using 1" Structural Asphalt	\$39,465.00	
		Pipeline Engineering Contractor
F&I 12" & 16" water main pipe and fittings for relocations	\$712,986.00	*Possible Subcontracting opportunities
F, I, O & Maintain a sewer bypass pumping system	\$8,000.00	
Automatic Air Release Valve assemblies	\$28,000.00	
		Concrete Contractor
Restoration and construction of concrete sidewalk, concrete curb and gutter, also for curb ramp, per F.D.O.T. Standard and for curb ramp detectable warning surface per F.D.O.T. Standard	\$91,655.63	*Possible Subcontracting opportunities

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PROJECT NUMBER: DB14-WASD-05 (Continuation)

		Pavement Marking Contractor
Replacement Pavement markings	\$10,000.00	*Possible Subcontracting opportunities
Total Base Construction Cost	\$16,128,632.00	
Contingency Allowance (5%)	\$806,432.00	
Base Construction including Contingency	\$16,935,064.00	
Dedicated Allowance including Off-Duty Officer	\$1,302,680.00	
Permits Allowance	\$483,859.00	
Total Construction Cost	\$18,721,603.00	

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