

## SBD - CM Review Form

<b>To:</b>	Project Review & Analysis - Construction		
<b>From:</b>	SBD CM - Eddy V. Etienne Jr.		
<b>Department:</b>	Miami Dade County Water & Sewer Department	<b>Contact:</b>	Patty Palomo
<b>Date:</b>	6/20/2016	<b>Resubmittal:</b>	No

<b>PROJECT NUMBER:</b>	DB16-WASD-01 Design-Build Services for the Construction of South District Wastewater Treatment Plant and Central District Wastewater Treatment Plant
<b>PROJECT TITLE:</b>	Sludge Thickening and Dewatering Buildings
<b>PROJECT LOCATION:</b>	3071 SW 38th Ave, Miami, FL 33146

**SCOPE OF WORK/DESCRIPTION: CD PROJECTS 1.06 and 1.08 SDWWTP SLUDGE THICKENING AND DEWATERING BUILDING** - The Design-Builder shall provide all resources and professional services to perform the planning, engineering design, coordination with Water and Sewer Operations, permitting, construction, furnishing of all materials, fabrication and installation, labor and equipment necessary for the construction of all civil/site, process mechanical, architectural, structural, electrical, instrumentation, plumbing, Heat Ventilation Air Conditioning (HVAC), fire protection, odor control components and all other necessary components to facilitate successful design, construction and commissioning of the new Sludge Thickening and Dewatering Building located at 8950 S.W. 232 Street, Miami, FL 33190. The SDWWTP has an average annual daily flow (AADF) of 112.5 million gallons per day (MGD).

The Design-Builder shall follow the Design Criteria Package inclusive of CD design standards for the development of this Project. The minimum design life shall be twenty (20) years for major electrical and mechanical equipment, with the exception of Variable Frequency Drives (VFDs) that shall have a design life of fifteen (15) years. Structures shall have a minimum design life of fifty (50) years.

**CD PROJECTS 2.12, 2.13, 2.16, and 2.18(2) CDWWTP SLUDGE THICKENING AND DEWATERING BUILDING** - The Design-Builder shall provide all resources and professional services to perform the planning, engineering design, coordination with Water and Sewer Operations, permitting, construction, furnishing of all materials, fabrication and installation, labor and equipment necessary for the construction of all civil/site, process mechanical, architectural, structural, electrical, instrumentation, plumbing, HVAC, fire protection, odor control components and all other necessary components to facilitate successful design, construction and commissioning of the new dewatering/thickening facilities located at the CDWWTP, located at 3989 Rickenbacker Causeway, Key Biscayne, FL 33149. The CDWWTP has an AADF of 143 MGD.

The Design-Builder shall follow the Design Criteria Package inclusive of CD design standards for the development of this Project. The minimum design life shall be twenty (20) years for major electrical and mechanical equipment, with the exception of Variable Frequency Drives (VFDs) that shall have a design life of fifteen (15) years. Structures shall have a minimum design life of fifty (50) years.

**SPECIAL REQUIREMENTS:** T.C. - 6.03 Lead A/E Water and Sanitary Sewer Systems – Water and Sanitary Sewage Treatment Plants

- 11.00 Lead A/E General Structural Engineering
- 16.00 Lead A/E General Civil Engineering
- 17.00 Lead A/E Engineering Construction Management
- 12.00 Other General Mechanical Engineering
- 13.00 Other General Electrical Engineering
- 9.02 Other Soils, Foundations and Materials Testing- Geotechnical and Materials Engineering Services
- 9.03 Other Soils, Foundations and Materials Testing- Concrete and Asphalt Testing Services

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10.00 Other Environmental Engineering

14.00 Other Architecture

15.00 Other Surveying and Mapping

TRADES/SUBTRADES		AMOUNT	PERCENTAGE	COMMENTS
				Prime
SDWWTP	Mobilization	\$1,393,000.00	1.09%	
SDWWTP	Mobilization	\$1,393,000.00	1.09%	
SDWWTP	Payment & Performance Bonds	\$190,000.00	0.15%	
SDWWTP	Payment & Performance Bonds	\$190,000.00	0.15%	
SDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$293,000.00	0.23%	
SDWWTP	Furnish and Install Digested Sludge Pipeline	\$379,000.00	0.30%	
SDWWTP	Furnish and Install Thickened Sludge Pipeline	\$107,000.00	0.08%	
SDWWTP	Furnish and Install Centrate Pipeline	\$100,000.00	0.08%	
SDWWTP	Furnish and Install Thickening Centrifuge System	\$9,593,000.00	7.49%	
SDWWTP	Furnish and Install Dewatering Centrifuge System	\$6,347,000.00	4.96%	
SDWWTP	Furnish and Install Centrate Pump System	\$1,059,000.00	0.83%	Must meet Special Requirements. *Possible opportunities for Small Businesses
SDWWTP	Furnish and Install Dewatered Cake Pump System	\$339,000.00	0.26%	
SDWWTP	Furnish and Install Dewatered Cake Storage System	\$3,305,000.00	2.58%	
SDWWTP	Furnish and Install Biofilter Odor Control System	\$1,207,000.00	0.94%	
SDWWTP	Furnish and Install Biofilter Odor Control System	\$1,207,000.00	0.94%	
SDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,741,000.00	1.36%	
SDWWTP	Furnish and Install Dewatering Dry Polymer System	\$1,630,000.00	1.27%	
SDWWTP	Site Electrical (including installation of all electrical equipment)	\$2,906,000.00	2.27%	
SDWWTP	Site Electrical (including installation of all electrical equipment)	\$2,906,000.00	2.27%	

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	TRADES/SUBTRADES	AMOUNT	PERCENTAGE	COMMENTS
SDWWTP	Site Civil (including demolition of existing dewatering building, underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$877,000.00	0.69%	
SDWWTP	Site Civil (including demolition of existing dewatering building, underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$877,000.00	0.69%	
SDWWTP	Thickening/Dewatering Building	\$5,950,000.00	4.65%	
SDWWTP	Thickening/Dewatering Building	\$5,950,000.00	4.65%	
CDWWTP	Mobilization	\$1,264,000.00	0.99%	
CDWWTP	Mobilization	\$1,264,000.00	0.99%	
CDWWTP	Mobilization	\$1,264,000.00	0.99%	
CDWWTP	Payment & Performance Bonds	\$192,000.00	0.15%	
CDWWTP	Payment & Performance Bonds	\$192,000.00	0.15%	
CDWWTP	Payment & Performance Bonds	\$192,000.00	0.15%	
CDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$91,000.00	0.07%	Must meet Special Requirements. *Possible opportunities for Small Businesses
CDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$91,000.00	0.07%	
CDWWTP	Furnish and Install Digested Sludge Pipeline	\$180,000.00	0.14%	
CDWWTP	Furnish and Install Thickened Sludge Pipeline	\$206,000.00	0.16%	
CDWWTP	Furnish and Install Thickened Sludge Pipeline	\$206,000.00	0.16%	
CDWWTP	Furnish and Install Centrate Pipeline	\$437,000.00	0.34%	
CDWWTP	Furnish and Install Thickening Centrifuge System	\$6,667,000.00	5.21%	
CDWWTP	Furnish and Install Thickening Centrifuge System	\$7,255,000.00	5.67%	
CDWWTP	Furnish and Install Dewatering Centrifuge System	\$6,892,000.00	5.38%	
CDWWTP	Furnish and Install Centrate Pump System	\$1,806,000.00	1.41%	
CDWWTP	Furnish and Install Dewatered Cake Pump System	\$433,000.00	0.34%	

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	TRADES/SUBTRADES	AMOUNT	PERCENTAGE	COMMENTS
CDWWTP	Furnish and Install Dewatered Cake Storage System	\$7,050,000.00	5.51%	Must meet Special Requirements. *Possible opportunities for Small Businesses
CDWWTP	Furnish and Install Biofilter Odor Control System	\$4,803,000.00	3.75%	
CDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,001,000.00	0.78%	
CDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,001,000.00	0.78%	
CDWWTP	Furnish and Install Dewatering Dry Polymer System	\$1,969,000.00	1.54%	
CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,360,000.00	2.62%	
CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,507,000.00	2.74%	
CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,360,000.00	2.62%	
CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$460,000.00	0.36%	
CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$460,000.00	0.36%	
CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$460,000.00	0.36%	
CDWWTP	Thickening/Dewatering Building	\$5,304,000.00	4.14%	
CDWWTP	Thickening/Dewatering Building	\$5,304,000.00	4.14%	
CDWWTP	Thickening/Dewatering Building	\$5,304,000.00	4.14%	
<b>BASE TOTAL</b>		\$121,914,000.00	95.24%	
Contingency Allowance (5% of Base Estimate)		\$6,095,700.00	4.76%	
<b>TOTAL AMOUNT</b>		\$128,009,700.00	100.00%	

Small Business Development Signature:  Date: 6-20-16  
 \*Trades/Sub-Trades identified for possible subcontracting opportunities by SBD CM  
 WASD is recommending **9.43% SBE/Construction and 2.00% SBE/Goods & Services**