


Memorandum

Date: October 4, 2018

To: Gary Hartfield, Division Director
Internal Services Department,
Division of Small Business Development

From: 
Kevin T. Lynskey, Director
Miami-Dade Water and Sewer Department

CONSENT DECREE PROJECT

Subject: **Resubmittal Review Item:** Design-Build Services for the Construction of South and Central District Wastewater Treatment Plants Sludge Thickening and Dewatering Buildings - Project No. DB18-WASD-02

This project is being resubmitted for your review as a result of all proposals rejected under Project No. DB16-WASD-01. The project scope of work has been slightly modified. The minimum experience and qualifications and Small Business Enterprise goals remain the same.

The duration of the proposed Design-Build contract is 879 and 938 calendar days for SDWWTP and CDWWTP, respectively. The total maximum compensation for the Design-Build contract is **\$172,312,334**, which includes the following:

- \$142,085,441 estimated construction cost
- \$ 14,918,971 estimated engineering and architecture services
- \$ 7,104,272 construction contingency fee (5%)
- \$ 1,491,897 engineering contingency fee (10%)
- \$ 2,449,190 dedicated allowance
- \$ 4,262,563 permitting fees (3%)

Firms providing engineering services must be certified in the following technical categories and the respective percentages of the disciplines as indicated below:

TECHNICAL CATEGORY (TC)	DESCRIPTION	TOTAL PERCENTAGE TC (%)	SBE %
6.03 Lead A/E	Water and Sanitary Sewer Systems – Water and Sanitary Sewage Treatment Plants	25%	0%
11.00 Lead A/E	General Structural Engineering	12%	0%

16.00 Lead A/E	General Civil Engineering	10%	0%
17.00 Lead A/E	Engineering Construction Management	10%	0%
12.00 Other	General Mechanical Engineering	5%	3%
13.00 Other	General Electrical Engineering	25%	2%
9.02 Other	Soils, Foundations and Materials Testing- Geotechnical and Materials Engineering Services	3%	3%
9.03 Other	Soils, Foundations and Materials Testing- Concrete and Asphalt Testing Services	1%	1%
10.05 Other	Environmental Engineering- Contamination Assessment and Monitoring	3%	0%
14.00 Other	Architecture	5%	5%
15.01 Other	Surveying and Mapping	1%	0%
	TOTAL	100%	14.00%

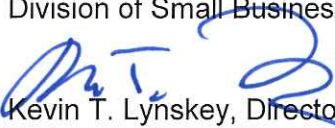
WASD is recommending that the same SBE goal participation recommended under Project DB16-WASD-01 to be utilized for this project. The recommended goals are as follows: 14.00% SBE A/E, 9.43% SBE-Construction, 2% SBE (G/S) and a 10% Community Workforce participation goal. Attached are WASD's Departmental Input Worksheets, the Minimum Experience and Qualifications requirements and the Scope of Services for your review and approval.

If you have any questions, please contact Patty Palomo, Chief, Intergovernmental Affairs Section at Patty.Palomo@miamidade.gov or 786-552-8040.

**DEPARTMENTAL INPUT
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

DATE: October 4, 2018

TO: Gary Hartfield, Division Director
Internal Services Department,
Division of Small Business Development

FROM: 
Kevin T. Lynskey, Director
Water and Sewer Department

CONSENT DECREE PROJECT

CONTRACT TITLE: Design-Build Services for the Construction of South District Wastewater Treatment Plant (SDWWTP) and Central District Wastewater Treatment Plant (CDWWTP) Sludge Thickening and Dewatering Buildings - Project No. DB18-WASD-02

Construction Cost	\$142,085,441
Construction Contingency 5%	\$ 7,104,272
Dedicated Allowances	\$ 2,449,190
Permitting Fees 3%	<u>\$ 4,262,563</u>
TOTAL:	\$155,901,466

ITEM	SUBTRADE			ESTIMATED COST	% OF CONSTRUCTION COST	SBE AVAILABILITY
1	CD 1.06	SDWWTP	Mobilization	\$1,705,025	1.20%	0.00%
2	CD 1.08	SDWWTP	Mobilization	\$1,705,025	1.20%	0.00%
3	CD 1.06	SDWWTP	Payment & Performance Bonds	\$284,171	0.20%	0.00%
4	CD 1.08	SDWWTP	Payment & Performance Bonds	\$284,171	0.20%	0.00%
5	CD 1.06	SDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$284,171	0.20%	0.00%
6	CD 1.08	SDWWTP	Furnish and Install Digested Sludge Pipeline	\$426,256	0.30%	0.00%
7	CD 1.06	SDWWTP	Furnish and Install Thickened Sludge Pipeline	\$142,085	0.10%	0.00%
8	CD 1.08	SDWWTP	Furnish and Install Centrate Pipeline	\$142,085	0.10%	0.00%
9	CD 1.06	SDWWTP	Furnish and Install Thickening Centrifuge System	\$9,803,895	6.90%	0.00%
10	CD 1.08	SDWWTP	Furnish and Install Dewatering Centrifuge System	\$6,820,101	4.80%	0.00%
11	CD 1.08	SDWWTP	Furnish and Install Centrate Pump System	\$1,278,769	0.90%	0.00%
12	CD 1.08	SDWWTP	Furnish and Install Dewatered Cake Pump System	\$426,256	0.30%	0.00%
13	CD 1.08	SDWWTP	Furnish and Install Dewatered Cake Storage System	\$3,552,136	2.50%	0.00%
14	CD 1.08	SDWWTP	Furnish and Install Biofilter Odor Control System	\$2,841,709	2.00%	0.00%
15	CD 1.06	SDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,847,111	1.30%	0.00%

16	CD 1.08	SDWWTP	Furnish and Install Dewatering Dry Polymer System	\$1,847,111	1.30%	0.00%
17	CD 1.06	SDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,339,008	2.35%	0.00%
18	CD 1.08	SDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,339,008	2.35%	0.00%
19	CD 1.06	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.)	\$994,598	0.70%	0.72%
20	CD 1.08	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.)	\$994,598	0.70%	0.72%
21	CD 1.06	SDWWTP	Thickening/Dewatering Building	\$6,749,058	4.75%	1.46%
22	CD 1.08	SDWWTP	Thickening/Dewatering Building	\$6,749,058	4.75%	1.46%
23	CD 2.12	CDWWTP	Mobilization	\$1,420,854	1.00%	0.00%
24	CD 2.13	CDWWTP	Mobilization	\$1,420,854	1.00%	0.00%
25	CD 2.16	CDWWTP	Mobilization	\$1,420,854	1.00%	0.00%
26	CD 2.12	CDWWTP	Payment & Performance Bonds	\$213,128	0.15%	0.00%
27	CD 2.13	CDWWTP	Payment & Performance Bonds	\$213,128	0.15%	0.00%
28	CD 2.16	CDWWTP	Payment & Performance Bonds	\$213,128	0.15%	0.00%
29	CD 2.12	CDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$142,085	0.10%	0.00%
30	CD 2.13	CDWWTP	Furnish and Install Waste Activated Sludge Pipeline	\$142,085	0.10%	0.00%
31	CD 2.16	CDWWTP	Furnish and Install Digested Sludge Pipeline	\$142,085	0.10%	0.00%
32	CD 2.12	CDWWTP	Furnish and Install Thickened Sludge Pipeline	\$284,171	0.20%	0.00%
33	CD 2.13	CDWWTP	Furnish and Install Thickened Sludge Pipeline	\$284,171	0.20%	0.00%
34	CD 2.16	CDWWTP	Furnish and Install Centrate Pipeline	\$426,256	0.30%	0.00%
35	CD 2.12	CDWWTP	Furnish and Install Mechanical Thickening System	\$6,962,187	4.90%	0.00%

36	CD 2.13	CDWWTP	Furnish and Install Mechanical Thickening System	\$6,962,187	4.90%	0.00%
37	CD 2.16	CDWWTP	Furnish and Install Dewatering Centrifuge System	\$14,421,672	10.15%	0.00%
38	CD 2.16	CDWWTP	Furnish and Install Centrate Pump System	\$1,776,068	1.25%	0.00%
39	CD 2.16	CDWWTP	Furnish and Install Dewatered Cake Pump System	\$568,342	0.40%	0.00%
40	CD 2.16	CDWWTP	Furnish and Install Dewatered Cake Storage System	\$8,240,956	5.80%	0.00%
41	CD 2.18(2)	CDWWTP	Furnish and Install Biofilter Odor Control System	\$5,683,418	4.00%	0.00%
42	CD 2.12	CDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,065,641	0.75%	0.00%
43	CD 2.13	CDWWTP	Furnish and Install Thickening Dry Polymer System	\$1,065,641	0.75%	0.00%
44	CD 2.16	CDWWTP	Furnish and Install Dewatering Dry Polymer System	\$2,131,282	1.50%	0.00%
45	CD 2.12	CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,978,392	2.80%	0.00%
46	CD 2.13	CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,978,392	2.80%	0.00%
47	CD 2.16	CDWWTP	Site Electrical (including installation of all electrical equipment)	\$3,978,392	2.80%	0.00%
48	CD 2.12	CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, stormwater system, etc.)	\$568,342	0.40%	0.38%
49	CD 2.13	CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, stormwater system, etc.)	\$568,342	0.40%	0.38%
50	CD 2.16	CDWWTP	Site Civil (including underground piping with tie-ins, grading, roadway subgrade and base, milling, paving, curbing, gutter, continuous surveying, sodding, etc.)	\$568,342	0.40%	0.38%
51	CD 2.12	CDWWTP	Thickening/Dewatering Building	\$5,896,546	4.15%	1.31%
52	CD 2.13	CDWWTP	Thickening/Dewatering Building	\$5,896,546	4.15%	1.31%
53	CD 2.16	CDWWTP	Thickening/Dewatering Building	\$5,896,546	4.15%	1.31%

	Total Estimated Construction Cost	\$142,085,441	100%	9.43%
	Contingency Allowance (5%)	\$7,104,272		
	Permitting Fees (3% of Construction)	\$4,262,563		
	Environmental Investigations	\$1,000,000		
	Utility Relocations	\$800,000		
	Changes in Soil Conditions	\$500,000		
	Permit Prep & Utility Coordination (1% of Engineering Cost)	\$149,190		
	Total Estimated Construction Cost including Dedicated Allowance, Contingency and Permitting Fees	\$155,901,466		

**DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION**

Contract/Project Title: Design-Build Services for the Construction of South District Wastewater Treatment Plant and Central District Wastewater Treatment Plant Sludge Thickening and Dewatering Buildings

Contract/Project No. DB18-WASD-02

Description: Design-Build Services for the Construction of South District Wastewater Treatment Plant and Central District Wastewater Treatment Plant Sludge Thickening and Dewatering Buildings

Department: Miami-Dade Water and Sewer Department

Contact: Patty Palomo

Phone: (786) 552-8040

Estimated Cost: \$14,918,971, excluding contingency **Funding Source:** WASD Revenue Bonds Sold, WASD Revenue Bonds Sold, Wastewater Renewal Fund

Commodity/Service No. _____

SIC: _____

Trade/Commodity/Service Opportunities

Contract/Project History of Previous Purchases for Previous Three (3) Years
Check Here if this is a New Contract/Purchase with no Previous History

	<u>Existing</u>	<u>2nd Year</u>	<u>1st Year</u>
Contractor _____	_____	_____	_____
Ethnicity/Race _____	_____	_____	_____
Gender _____	_____	_____	_____
Contract Value _____	_____	_____	_____

COMMENTS: _____

SBE GOAL

14 % A/E

2 % G/S

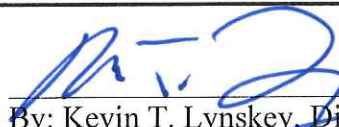
BID PREFERENCE

NO MEASURE

Analysis for Goal Recommendation

<u>Sub-Trade</u>	<u>Est. Cost</u>	<u>% of Item to Base Bid</u>	<u>Availability</u>
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
Total:	\$ _____	_____	_____

Basis for Recommendation: WASD proposes that the goal can be achieved with SBE firms assisting with 9.02-3%; 9.03-1%; 12.00 – 3%; 13:00 – 2%; 14:00 – 5%;


By: Kevin T. Lynskey, Director Date _____
Water and Sewer Department

Small Business Development Department Date _____

SCOPE OF SERVICES

Design-Build Services for the Construction of South District Wastewater Treatment Plant and Central District Wastewater Treatment Plant Sludge Thickening and Dewatering Buildings Project No. DB18-WASD-02

Miami-Dade County has entered into a Consent Decree (United States District Court for the Southern District of Florida, Case No. 1:12-cv-24400-FAM, hereinafter referred to as "Consent Decree") with the United States, Environmental Protection Agency, the State of Florida, and Florida Department of Environmental Protection (FDEP) (collectively "Regulatory Agencies"), to remediate its aging wastewater infrastructure. This Project is intended to satisfy the requirements identified in the Consent Decree (CD) as CD Projects 1.06, 1.08, 2.12, 2.13, 2.16, and 2.18(2).

The DESIGN-BUILDER shall perform its services such that the design of the capital improvements are technically, economically, and functionally consistent and are implemented in a manner that meets the specific deadlines and milestones of the Project Schedule, the Consent Decree and the requirements of the Clean Water Act, WASD's National Pollutant Discharge Elimination System Permits, Florida Department Environmental Protection regulations, and any additional applicable regulatory requirements. The DESIGN-BUILDER shall be familiar and acknowledges that it will comply with the Consent Decree that is on WASD's website at <http://www.miamidade.gov/water/wastewater-improvement-projects.asp>. The DESIGN-BUILDER recognizes and acknowledges that the COUNTY has engaged a Program and Construction Management Consultant (PM/CM) to supervise the implementation of the COUNTY'S compliance with the Consent Decree.

SCOPE OF SERVICES – 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. The Project shall consist of the following main elements:

1. A combined Sludge Thickening and Dewatering Building to house the sludge thickening system, the digested sludge dewatering system and other engineering features to support the thickening and dewatering process. Support systems to include dry polymer feed and storage (for both thickening and dewatering sludge), polymer dosage optimization system, dewatered cake pumping and storage, cake conveyance, Thickened Waste Activated Sludge (TWAS) pumping, thickening and dewatering centrate pumping, mono-rails, bridge crane, truck load-out facilities for dewatered cake, provisions for future cake transfer to proposed biosolids management facilities (provided by others), plant service water and

- sewer systems, other ancillaries required for a completely functional facility.
2. The building shall be in precast concrete with cast-in-place concrete columns and shall be designed to meet all local and State building code requirements. The building shall be two (2) stories high, the finished floor elevation shall comply with WASD "Design Guide for Hardening Wastewater Treatment Facilities against Flooding from Surge, Sea Level Rise and Extreme Rainfall", and the footprint shall be approximately 150 ft. by 140 ft. Features shall include an operations and control room, break room, locker rooms and bathrooms, industrial facility freight elevator, electrical room, mechanical room, loading and unloading areas, chemical storage and feeding areas, storage areas, and operator parking area. The building exterior shall be insulated and exterior should include architectural features and theme similar to adjacent facilities onsite.
 3. Thickening system consisting of six (6) centrifuges (4 operational, 2 standby). Centrifuges should be suitable for unmanned operations.
 4. Digested sludge dewatering system consisting of four (4) centrifuges (2 operational, 2 standby). Centrifuges should be suitable for unmanned operations.
 5. Controls and instrumentation equipment, including programming, reliability demonstration, performance testing.
 6. Connection to onsite power supply.
 7. Electrical room to include transformers, feed conduits, and duct banks, to serve the proposed Sludge Thickening and Dewatering Building, is to be an external room attached to the building's south wall. The DESIGN-BUILDER is required to coordinate electrical duct bank routing and connections design with WASD Operation and Maintenance and adhere to CD design standards, including generation of duct bank plan and profile drawings.
 8. Associated electrical equipment, including but not limited to, arc-flash switchgear, Motor Control Centers (MCCs), electrical accessories, conduits and feeders and duct banks.
 9. Odor control system for the facility using bio-filters. This system shall be designed to treat the air produced by the process, equipment, thickened sludge and centrate wet-wells, as well as the cake transfer bin and cake storage silos.
 10. Ferric sulfate chemical storage and feed system for struvite control.
 11. Dry polymer system for the thickening process.
 12. Dry polymer system for the dewatering process.
 13. Sludge holding bin, to include light bottom storage silo with at least two (2) discharge points.
 14. Climate control and ventilation system appropriate for the facility.
 15. Piping and connections associated with:
 - a. Centrate
 - b. Potable water
 - c. Non-potable / flushing water
 - d. Sewer service
 16. Sludge conveyance of:
 - a. Waste Activated Sludge (WAS) to the proposed Thickening and Dewatering Building.
 - b. TWAS from the proposed Thickening and Dewatering Building to the acid phase digesters or secondary digesters
 - c. Digested sludge from the existing digester system to the Thickening and Dewatering Building.
 17. Access roads and parking areas for operations, maintenance, and sludge hauling.
 18. Demolition of existing dewatering facility at a separate location within the SDWWTP and ancillary components to an elevation of five (5) feet below ground level. This includes the capping/sealing of abandoned pipes and survey locations.
 19. Demolition of existing pavement and drainage at proposed site location.
 20. Design-Builder shall provide system O&M manuals for compliance with FDEP.
 21. The Design-Builder shall develop a design and construct a storm water collection system such as all storm water generated from the thickening/dewatering facilities is collected and disposed of into the plant sanitary sewer system.

SCOPE OF SERVICES – 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. The Project shall consist of the following main elements:

1. A combined thickening and dewatering building to house the sludge thickening system, the digested sludge dewatering system and other engineering features to support the thickening and dewatering process. Support systems to include dry polymer feed and storage (for both thickening and dewatering sludge), polymer dosage optimization system, dewatered cake pumping and storage, cake conveyance, Thickened Waste Activated Sludge (TWAS) pumping, thickening and dewatering centrate/filtrate, monorails, bridge crane, truck load-out facilities for dewatered cake, plant service water and sewer systems, other ancillaries required for a completely functional facility.
2. The building shall be in precast concrete with cast-in-place concrete columns and shall be designed to meet all local and State building code requirements. The building shall be two (2) stories high, the finished floor elevation shall comply with WASD "Design Guide for Hardening Wastewater Treatment Facilities against Flooding from Surge, Sea Level Rise and Extreme Rainfall", and the footprint shall be approximately 200 ft. by 200 ft. Features shall include an operations and control room, break room, locker rooms and bathrooms, industrial facility freight elevator, electrical room, mechanical room, loading and unloading areas, chemical storage and feeding areas, storage areas and operator parking area. The building exterior shall be insulated and exterior should include architectural features and theme similar to adjacent facilities onsite.
3. Thickening system consisting of approximately eight (8) mechanical thickening units (6 operational, 2 standby). Mechanical thickening units should be suitable for unmanned operations.
4. Digested sludge dewatering system consisting of four (4) dewatering centrifuges units (2 operational, 2 standby). Dewatering units shall be suitable for unmanned operations.
5. Controls and instrumentation equipment, including programming, reliability demonstration, performance testing.
6. Dedicated electrical substation building to include transformers, feed conduits, and duct banks, to serve the proposed Sludge Thickening and Dewatering Building as shown in the preliminary contract drawings. The Design-Builder is required to coordinate electrical duct bank routing and connections design with WASD operation and maintenance, and adhere to CD design standards, including generation of duct bank plan and profile drawings.
7. Associated electrical equipment, including but not limited to, arc-flash switchgear, Motor Control Centers (MCCs), electrical accessories/conduits and feeders, and duct banks.
8. Dedicated biological odor control system for the facility using bio-filters. This includes mechanical thickening units, dewatered cake storage and unloading operation, thickened sludge and centrate/filtrate wetwells and WAS feed/blending tanks.
9. Ferric sulfate chemical storage and feed system for struvite control.

10. Dry polymer system for the thickening process, including approximately 5,000 gallon water tank.
11. Dry polymer system for the dewatering process, including approximately 5,000 gallon water tank.
12. Three (3) sludge holding bins to include light bottom storage silo with at least four (4) discharge points per silo.
13. Two (2) sludge blending tanks of approximately 105,000 gallons each.
14. Climate control and ventilation system appropriate for the facility.
15. Sludge conveyance of:
 - a. Sludge received from the North District Wastewater Treatment Plant from existing pipelines entering the site to the proposed Sludge Thickening and Dewatering System.
 - b. Waste Activated Sludge (WAS) from the existing return activated sludge pipelines at the CDWWTP facilities to the proposed Sludge Thickening and Dewatering System.
 - c. TWAS from the proposed Sludge Thickening and Dewatering Building to the existing digesters system.
 - d. Digested sludge from the existing digesters system to the proposed Thickening/Dewatering facilities.
16. A storm water collection system designed to collect and transport all runoff from the proposed site and direct it to the plant 2 Headworks. This system shall include a pump station facility with underground wet well with submersible pumps operating in lead lag standby configuration, inclusive of power supply and electrical ancillary equipment. Design-Builder is required to coordinate electrical duct bank routing and connections design with WASH O&M, and adhere to CD design standards, including generation of duct bank plan and profile drawings. Design criteria for the collection system and pump station is included in the Civil section of the BODR.
17. Load cells for each silo.
18. Grading, paving and drainage of the thickening and dewatering building and adjacent areas.
19. Demolition of existing pavement, drainage and re-grading at proposed site location and ancillary components to an elevation of five (5) feet below ground level.
20. Design-Builder shall provide system O&M manuals for compliance with FDEP.
21. Integrated sludge screening facility to include containerized screens, dumpster room, booster water tanks, and booster water pumps for providing utility water to wash screening, inclusive of instrumentations, controls, power supply and ancillary equipment.

LIQUIDATED DAMAGES

This Project is mandated by a Consent Decree and has construction schedule milestones that are critical for completion of this construction contract. These milestones have either "Contract Liquidated Damages", "Consent Decree Liquidated Damages", or both associated with them.

Contract Liquidated Damages

The parties to the Contract agree that time, in the completion of the Work, is of the essence. The COUNTY and the DESIGN-BUILDER recognize and agree that the precise amount of actual damages for delay in the performance and completion of the Work is impossible to determine as of the date of execution of the Contract and that proof of the precise amount will be difficult. Therefore, the DESIGN-BUILDER shall be assessed Liquidated Damages on a daily basis for each Day that individual milestones, as specified below, are not timely achieved or that Contract Time is exceeded due to a non-excusable delay. These Liquidated Damages shall be assessed, not as a penalty, but as compensation to the COUNTY for expenses which are difficult to quantify with any certainty and which were incurred by the COUNTY due to the delay. The amount of Liquidated Damages assessed shall be an amount, as stipulated below,

per day for each calendar day that individual milestones as specified in the Contract are not timely achieved or that the Project is delayed due to a non-excusable delay.

In the event the DESIGN-BUILDER fails to perform any other covenant or condition (other than time-related) of this Contract relating to the Work, the DESIGN-BUILDER shall become liable to the COUNTY for any actual damages which the owner may sustain on the part of the DESIGN-BUILDER. The COUNTY reserves the right to retain these amounts from monies due the Contractor.

Nothing in this article shall be construed as limiting the right of the COUNTY to terminate the Contract and/or to require the Surety to complete said Project and/or to claim damages for the failure of the DESIGN-BUILDER to abide by each and every one of the terms of this Contract as set forth and provided herein.

CD 1.06, 1.08 SDWWTP Milestone No.	Milestone Type/Name	Calendar Days from Issuance of Notice to Proceed from COUNTY	Liquidated Damages
1	Substantial Completion	819	\$5,100/day
1A	Final Completion	879	\$2,500/day

NOTE: The above Liquidated Damages are specifically related to Contract Time. Additional Liquidated Damages, in addition to the amount listed above, may also be incurred and assessed as noted elsewhere in this contract.

CD 2.12,2.13, 2.16, 2.18(2) CDWWTP Milestone No.	Milestone Type/Name	Calendar Days from Issuance of Notice to Proceed from COUNTY	CD Stipulated Penalties/Liquidated Damages
2	Substantial Completion	876	\$6,700/day
2A	Final Completion	938	\$2,500/day

NOTE: The above Liquidated Damages are specifically related to Contract Time. Additional Liquidated Damages, in addition to the amount listed above, may also be incurred and assessed as noted elsewhere in this contract.

Consent Decree Liquidated Damages

The Consent Decree provides that the Regulatory Agencies may impose stipulated penalties against Miami-Dade County for failure to meet certain deadlines and for certain Sanitary Sewer Overflows (SSOs). In the event the Regulatory Agencies impose such penalties against Miami-Dade County, and such penalties are a result of the DESIGN- BUILDER’S lack of performance, failure to meet Compliance Dates or a SSO that occurs during construction, the DESIGN-BUILDER shall be liable to the COUNTY for such amounts as additional Liquidated Damages (“Consent Decree Liquidated Damages”) (“CDLD”). Please note these CDLD are in addition to the Contract Liquidated Damages as specified previously, and may be assessed separately and/or in combination.

(a) Failure to complete Milestones 1 and 2 by the below Compliance Date shall result in CDLD as listed below, at the violation amount level assessed on the COUNTY, based on the non-compliance period starting at the dates listed below. The DESIGN-BUILDER shall not be responsible for payment of penalties incurred by the COUNTY prior to the Milestones 1 and 2 deadlines.

CD Project	Compliance Date
1.06	January 06, 2023
1.08	January 06, 2023
2.12	January 13, 2023
2.13	January 13, 2023
2.16	January 13, 2023
2.18	January 13, 2023

Note: Compliance Dates are defined as substantial completion for Milestones 1 and 2 including an installed, tested and operable system, in compliance with codes and regulations.

Period of Noncompliance per Violation per Day

One (1) to fourteen (14) days	\$1,00
Fifteen (15) to thirty days (30) days	\$2,00
Thirty one (31) to sixty (60) days	\$3,00
Sixty one (61) to one hundred eighty (180) days	\$4,00
More than one hundred eighty (180) days	\$5,00

(b) CDLD for each SSO reaching waters of the United States due to a release of wastewater caused by Design- Builder may be assessed as:

Description	Before 4/09/2019	After 4/09/2019
1 to 10,000 gallons	\$1,000	\$1,000
10,000 to 250,000 gallons	\$2,000	\$4,000
250,000 to 1,000,000 gallons	\$5,000	\$10,000
Greater than 1,000,0000 gallons	\$10,000	\$20,000

(c) CDLD for each SSO NOT reaching waters of the United States due to a release caused by Design-Builder may be assessed as:

Description	Before 4/09/2019	After 4/09/2019
1 to 10,000 gallons	\$500	\$500
10,000 to 250,000 gallons	\$1,000	\$2,000
250,000 to 1,000,000 gallons	\$2,500	\$5,000
Greater than 1,000,0000 gallons	\$5,000	\$10,000

Design-Build Services for the Construction of South District Wastewater Treatment Plant and Central District Wastewater Treatment Plant Sludge Thickening and Dewatering Buildings-
Project No. DB18-WASD-02

MINIMUM EXPERIENCE AND QUALIFICATIONS

The Design-Builder should demonstrate its Project team experience by presenting the qualifications and capabilities of each Design-Build Team member firm, for projects completed within the last ten (10) years from the Step 1 Submittal Deadline, including projects that may be at least fifty percent (50%) complete prior to the required submission date of this Request Design-Build Services Step one (1) Deadline. The following project experience is highly preferred and will be scored accordingly.

Qualifications and Experience of the Design-Builder, Lead Constructor, and Lead Designer

- 1) The Design-Builder should demonstrate that it has performed and/or managed as a Prime contractor or Design-Builder for the construction of at least two (2) wastewater process projects in wastewater treatment plants with rated capacity of not less than fifty (50) million gallons per day (MGD), of comparable scope and complexity, with at least one (1) project consisting of the thickening and/or dewatering process.
- 2) The Lead Constructor should have constructed at least two (2) process facilities of similar size, scope and complexity in wastewater treatment plants.
- 3) The Lead Designer should have designed at least one (1) wastewater process projects with rated capacity of not less than fifty (50) MGD of comparable scope and complexity, and one (1) project consisting on the thickening and/or dewatering process.
- 4) The Subconsultant(s) to the Designer-Builder or Lead Designer providing services should demonstrate to have project experience at least one (1) project that was completed involving the main project element for which the Subconsultant(s) is being proposed.
- 5) Additional Preferred Project Experience and Past Performance: Design-Build Team should receive higher qualification scores from the Competitive Selection Committee (CSC) if their submitted project experience and past performance can demonstrate the following:
 - a) Listed projects are of similar or greater size and level of complexity.
 - b) Any listed projects of the proposed Design-Builder entity were designed and constructed through design-build project delivery.
 - c) Listed projects demonstrate experience in thickening and dewatering technologies.
 - d) Listed projects demonstrate experience in construction within active operational sites without interruption of services.
 - e) Key Personnel, most significantly the proposed Project Manager, Design Manager and Construction Manager, have served on the Projects listed and their client reference can validate that performance.
- 6) Industry Experience of Design-Build Team Key Personnel: The qualifications and industry experience referenced in this section should be met by qualified individual(s) of the Design-Build Team and its Subconsultants. The experience should be demonstrated by direct or substantial involvement of the individual(s) in a capacity that is equivalent to or exceeds the stated minimum requirement. The determination of the individual(s) qualifications and compliance with the experience and qualifications should be at the sole discretion of the County and the CSC. The CSC may negatively evaluate proposals from firms they determine have failed to meet the required experience and qualification(s):

- 1) Minimum fifteen (15) years total industry experience of which five (5) years are in a similarly responsible position for each of the following Key Personnel listed below:
 - Design-Build Project Manager
 - Lead Designer- Design Manager
 - Lead Mechanical Engineer
 - Lead Electrical Engineer
 - Lead Constructor- Construction Manager
 - Construction Superintendent
 - Lead Structural Engineer
 - Lead Geotechnical Engineer
 - Permitting/Compliance Manager
 - Design-Builder Quality Assurance/Quality Control (QA/QC) Manager
 - Design-Builder Safety Manager
 - Project Lead Estimator
- 2) Key Personnel should demonstrate experience with the type work to be performed.
- 3) Proposers should identify, in their Statement of Qualifications those State of Florida registered Professional Engineers who will sign and seal construction plans and specifications.
- 4) Key Personnel resumes should indicate the individuals' current firm association, their professional qualifications, a minimum of one client reference with contact information, and their role and duration on each project for which they are being credited the related experience.
- 7) Additional Preferred Experience and Past Performance:
 - 1) Experience in significant role on a design-build project, especially in a similar role as proposed for this Project.
 - 2) Superior references with regard to meeting cost, schedule, and quality objectives on previous projects, and maintaining a positive client relationship.
- 8) Design-Builder Safety Record - Past Performance:

Past performance as reflected by a three (3) year average for the last three (3) previous full years of the Experience Modification Rate (EMR) for the Design-Builder should not exceed 1.10 for each firm.

The Design-Builder should provide EMR data for the previous three (3) full calendar years (2015, 2016, and 2017) on a firm-wide basis and should be documented by a signed letter with contact information from the firm's insurance carrier, or the insurance carrier's agency representative. Higher qualifications score should be provided by the CSC for a Design-Builder demonstrating an average EMR lower than other competing Design-Builder firms.

Design-Builder should also provide their OSHA forms 300 and 300A for the last three (3) full calendar years indicating OSHA submitted accident data for evaluation by the CSC as to their frequency and severity.
- 9) Ability of Design-Builder and Team to interface with the County:
 - 1) Design-Builder Proposer will provide a narrative of not more than three (3) single side 8-½" X 11" pages, in not less than Arial 11-pt font and ¾-inch margins, that explains how the Design-Builder and Team members can efficiently interface with the County

and the Water and Sewer Department in a timely and effective manner with respect to items such as regular and emergency communications, submittals, meeting attendance, commercial issues and other project related activities.

The expertise must be met by a qualified individual(s) of the Design-Builder Team. The experience must be demonstrated by direct or substantial involvement of the individual(s) in a supervisory capacity at the Project Manager level or above. The determination of the individual's qualifications and compliance with the experience and qualifications should be at the sole discretion of the County. The CSC may negatively evaluate proposals from firms they determine have failed to meet the above experience and qualification(s).