

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

**MIAMI-DADE COUNTY, FLORIDA
NOTICE TO PROFESSIONAL CONSULTANTS
MIAMI-DADE WATER AND SEWER DEPARTMENT
OWNER'S REPRESENTATIVE FOR PROFESSIONAL ENGINEERING SERVICES
RELATING TO THE STATE OF FLORIDA'S
OCEAN OUTFALL LEGISLATION AND
MIAMI-DADE COUNTY'S WASTEWATER SYSTEM
PROJECT NO. E13-WASD-11**

The County Mayor, Miami-Dade County, pursuant to Chapter 287.055, Florida Statutes, Sections 2-8.1 and 2-10.4 of the Miami-Dade County Code, Implementing Order 3-34, and Administrative Order 3-39, announces that the Miami-Dade Water and Sewer Department (WASD) will require one (1) qualified Consultant to provide professional engineering services relating to the State of Florida's Ocean Outfall Legislation (OOL) and Miami-Dade County's ("County") wastewater system.

The OOL requires diverting all flows from the County's outfalls by 2025, primarily impacting the Central and North District Wastewater Plants resulting in reduced plant capacity and the addition of High Level Disinfection (HLD), filtration and disinfection to all of the North and Central District non-peak flows. In addition, the OOL requires reuse of sixty percent (60%) of these flows resulting in the need to construct a new plant to be located in the central-western area of the County; as well as, all other related alterations to the transmission and collection systems.

The OOL required submission of an implementation plan to the Florida Department of Environmental Protection (FDEP) by July 1, 2013. On June 28, 2013, WASD submitted to FDEP an implementation plan titled "Water and Sewer Department Ocean Outfall Legislation Compliance Plan," ("Plan") which describes the recommended \$3.32 billion Plan. The total Capital Plan is \$6.2 billion, of which \$3.2 billion is directly related to OOL. It can be accessed online at www.miamidade.gov/water under "Ocean Outfall Legislation Plan". In addition to the Plan, other key provisions of the OOL include the following at a minimum:

- By July 1, 2016, submit update of Plan documenting any refinements in costs, actions and financing;
- Meet Advance Wastewater Treatment (AWT) by December 31, 2018, or reduce cumulative outfall loadings (from 2008-2025) equivalent to AWT from 2018-2025;
- By December 31, 2025, stop outfall usage (except for wet weather peak flow usage up to five percent (5%) of baseline flow) and implement sixty percent (60%) reuse;
- Considers credit for reuse at other facilities, such as the WASD/Florida Power & Light reuse project at 90 million gallons per day (MGD).

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

The scope of services to be provided by the Consultant includes, but is not limited to, the following:

- Validate the capital program for the Wastewater Treatment Plants (WWTP) and Wastewater Collection and Transmission System (WCTS) improvements to cost-effectively fulfill the requirements of the OOL and to meet future system demands forecast to the year 2035;
- Outline, identify and/or develop preliminary policies, procedures, and practices that establish the means and methods to meet the requirements of the OOL Program;
- Identify potential risks that may have an impact on the implementation of the Capital Improvement Program (CIP) and provide a mitigation plan which includes identifying and recommending mitigation options to address future climate change impacts, such as sea level rise, storm surge, wind, and flooding; consider facility impacts due to sea-level rise and other potential climate change impacts on facilities;
- Advise and provide, strategic and day-to-day oversight and direction to the OOL Outfall CIP;
- Prepare and maintain, together with WASD's staff, a Program Management Plan for use by the Program Team, which also includes the various consultants assisting WASD with the implementation of its Capital Improvement Program (CIP). This also applies to establishing proper communication protocols, design and process standards;
- Coordinate and assist WASD with Wastewater Facilities Master Planning as required to ensure comprehensive and long-term viability of the OOL Capital Improvements with other concurrent legislations (i.e.; Environmental Protection Agency Consent Decree (CD)) and South Florida Water Management Department Water Use Permit requirements) and other Master Planning efforts;
 - ◻ Establish standards and guidelines for cost-estimating. The Consultant shall work with WASD staff to ensure that all project cost estimates meet the cost estimating standards, including those in planning, preliminary engineering, and detail design. The Consultant shall review cost estimates generated for consistency with the standards and guidelines and to ensure that cost estimates performed at various stages in the design process adequately and appropriately incorporate factors to account for project risk elements;
- Develop and manage the program master schedule and task schedules, including phasing work appropriately to meet OOL requirements and future demand projections, and provide budget and cost oversight of all program elements and resources;

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

- Develop monthly progress reports that include accomplishments during the most recent reporting period, upcoming activities for the next reporting period, tracking of issues and action items identified, other related information, and contract status. Monthly reports shall be reviewed as part of monthly status meetings with the WASD Program Team. These reports may be used to prepare reports submitted to FDEP as part of the OOL requirements;
- Work with WASD to establish and implement both a physical and an electronic central OOL Program document library. All documents associated with the OOL Program, including reports, meeting agendas and minutes, transmittals, design drawings and specifications, technical memorandums, schedules, correspondence, e-mails etc., shall be managed and organized in the library. The Consultant may be requested to provide assistance to WASD in the development and management of a public website that contains information related to the execution of the OOL Program. The Consultant shall develop templates for documents and reports to ensure consistency throughout the CD Program;
- Support WASD with water and sewer infrastructure public outreach of the OOL Program which may include responding to inquiries and complaints;
- Participate in update meetings with regulatory agencies and develop required materials for each meeting;
- Support WASD in analyzing and preparing possible recommendations for modifications to the reuse provisions of the OOL as included in the reporting requirements of the OOL;
- Assist WASD in the preparation of all reports that are required by the OOL Program to be submitted to FDEP or any other regulatory authority;
- Perform value engineering. This includes establishing when value engineering shall occur, the format and schedule for value engineering efforts, and establishing a standard value engineering report format and templates;
- Provide assistance to WASD, as-needed, with permits, regulatory and environmental review. The Consultant shall review permit and environmental work to ensure consistency with the overall OOL Program;
- Assist WASD in the review of design documents including constructability reviews and assist WASD and/or design consultant(s) with bid phase services, including but not limited to, drafting specifications, as needed;
- Oversee and support the design and construction administration phases of the capital program as needed and as required by WASD;
- Provide construction managers, construction coordinators, construction engineers,

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

start-up specialists, inspectors, safety officers and administrative personnel for the successful execution of the OOL Program and associated WWTP and WCTS capital program;

- Perform daily inspections, prepare daily logs, detailed review of contractors' updated and revised schedules, prepare recommendations for approval, review schedules of values, contract interpretations and clarifications, process and authorize progress payments including allowance account and change orders, review operation and maintenance manuals, respond to requests for information;
- Aid in the integration of consultant staff with WASD staff;
- Provide financial and economic review and oversight during the course of the program;
- Evaluate and reconcile scope and other technical aspects and/or conflicts with the CD requirements;
- Prepare Basis of Design Reports (BODRs) as directed by WASD for specific projects as required by the program;
- Advise WASD and recommend the best construction delivery method for the various projects identified in the Plan; including alternative delivery methods (e.g. Design-Build, Construction-Management-At-Risk, Progressive Design-Build, Private/Public Partnership, etc.);
- Assist WASD in achieving LEED Certification as mandated by the County for sustainable development for all of the qualifying projects to be executed under the Program.

Minimum Experience and Qualifications

The Prime Consultant shall be an engineering firm experienced in all phases of wastewater engineering, including design, permitting, construction, operation and maintenance of wastewater treatment, collection, transmission and disposal systems.

The Prime Consultant shall also be able to demonstrate successful experience with Programs and Construction Management Services related to the above listed activities, as well as planning, implementing and managing similar programs of a similar size within the last ten (10) years from the date of the solicitation. The Prime Consultant must have been a Program Manager on a Wastewater Capital Program with a major utility within the last ten (10) years from the date of the solicitation. The Prime Consultant shall also be able to demonstrate successful experience in all phases of wastewater engineering related services including, but not limited to: master planning, value engineering, design, permitting, construction management, operation and maintenance for major upgrades of wastewater treatment plants and, wastewater collection and transmission systems. Prime Consultants (whether responding alone or as a joint venture) shall be able to

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

provide at least one (1) example where they provided a comprehensive construction management team for the upgrade of similar wastewater treatment facilities with a minimum combined capital program of nine hundred million dollars (\$900,000,000.00), which could be for more than one project or more than one firm and the upgrade of a wastewater collection and transmission system and reclaimed water systems, including deep injection wells and pump stations with a minimum combined capital program of four hundred million dollars (\$400,000,000.00), combined between several projects and/or Prime team members.

The Prime Consultant should also demonstrate their successful experience with design and commissioning of wastewater treatment plant upgrades of similar scope and complexity within the last ten (10) years from the date of this solicitation. The Prime Consultant shall provide a list of members of the proposed Design Team, identifying the overall Design Manager(s), and the team leaders for key design specialties (process, civil, structural, mechanical, electrical, and instrumentation) and the specific role each one of them will perform.

The Prime Consultant shall provide descriptions of at least one (1) successfully designed, constructed and operating major (instead of "major" describe size, cost, or other factor to use as comparable) new or upgraded wastewater treatment plant in which the Prime Consultant has served as the designer within the past ten (10) years from the date of this solicitation. For projects which the Prime Consultant has served as the design consultant, the Prime Consultant shall provide the name and contact information for a Utility Executive with the Utility they served as the design consultant who can confirm their role. The descriptions shall include the client (i.e., municipality or agency), key project staff, the project name, a summary of the work performed, the contract amount, the schedule (to include start and completion dates), the specific role of the prime firm, the achievements (e.g., projects delivered on schedule, dollars saved, innovative designs implemented, new technology utilized), and a client reference and contact information.

The Subconsultants shall provide a description of at least one (1) program or project that is relevant to this Scope of Work within the past ten (10) years from the date of this solicitation specific to their proposed responsibilities. The descriptions shall include the client (i.e., municipality or agency), key project staff, a summary of the work performed, the contract amount, the schedule (to include start and completion dates), the specific role of the subconsultant firm, the project's achievements, and client reference as well as contact information.

Project Approach and Team Integration

WASD along with a Program and Construction Management Consultant, acting on behalf of WASD, will oversee the design and provide construction management services for the capital improvement OOL projects in the wastewater treatment plants. The Respondent shall outline how the proposed team would approach the design services scope of work. This shall include, but not be limited to the following:

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

- A. Describe how your team will complete the responsibilities and tasks outlined in the scope of work;
- B. Include a clear description of the work tasks and methods to be utilized;
- C. Identify any significant risks based on previous experience involved in successfully completing the scope of work and describe the steps/strategies they will take to manage these risks;
- D. Provide specific ideas and recommendations to properly address future climate change impacts such as sea level rise, storm surge, wind and flooding;
- E. Articulate how coordination between federal, state and local regulations, including, but not limited to, permits and the CD can be properly coordinated; and
- F. Include recommendations or suggestions of areas that should be included that may not have been listed herein.

WASD intends to retain one (1) qualified Consultant under a Non-exclusive Professional Services Agreement (PSA) with a six (6) year term with one (1) six (6) year option-to-renew at the County's sole discretion will be awarded under this solicitation. The total not to exceed estimated amount of compensation is for the full twelve (12) year term of one hundred forty million dollars (\$140,000,000.00). No minimum amount of work or compensation will be assured to the retained Consultant. The County reserves the right to re-use the work products of the retained Consultant and to retain other consultants to provide the same or similar services at its sole discretion.

A/E TECHNICAL CERTIFICATION REQUIREMENTS

Prime

- 6.01 Water Distribution and Sanitary Sewage Collection and Transmission Systems
- 6.02 Major Water and Sanitary Sewage Pumping Facilities
- 6.03 Water and Sanitary Sewage Treatment Plants
- 17.00 Engineering Construction Management

Prime and/or Sub-consultants

- 9.01 Drilling, Subsurface Investigations and Seismographic Services
- 9.02 Geotechnical and Materials Engineering Services
- 9.04 Non-Destructive Testing and Inspections
- 10.05 Contamination Assessment and Monitoring
- 11.00 General Structural Engineering
- 12.00 General Mechanical Engineering
- 13.00 General Electrical Engineering
- 14.00 Architecture
- 15.01 Land Surveying
- 16.00 General Civil Engineering
- 18.00 Architectural Construction Management
- 19.06 Water & Sanitary Systems (under Value Analysis)

This document is a draft of a future solicitation and is subject to change without notice. This is not an advertisement.

BREAKDOWN LIST

Technical Categories	Description	Percent	CBE %
6.01 Prime	Water and Sanitary Sewer Systems	10	1
6.02 Prime	Major Water Sanitary & Sanitary Sewage Pumping Facilities	10	1
6.03 Prime	Water and Sanitary Sewage Treatment Plants	24	2
17.00 Prime	Engineering Construction Management	5	2
9.01	Drilling, Subsurface Investigations and Seismographic Services	1	1
9.02	Geotechnical and Materials Engineering Services	1	1
9.04	Non-Destructive Testing and Inspections	1	1
10.05	Contamination Assessment and Monitoring	1	1
11.00	General Structural Engineering	12	2
12.00	General Mechanical Engineering	12	2
13.00	General Electrical Engineering	10	2
14.00	Architecture	6	2
15.01	Land Surveying	1	1
16.00	General Civil Engineering	4	1
18.00	Architectural Construction Management	1	1
19.06	Value Analysis and Life-Cycle Costing - Water & Sanitary Systems	1	1
	TOTAL	100%	22%