

DEPARTMENTAL INPUT
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To: Jack Osterholt, Deputy Mayor and Director
Sustainability, Planning and Economic Enhancement Department (SPEED)

From: Leo Vargas, OCI Supervisor
Procurement Section.

Department: Miami-Dade Water and Sewer Department

Contract Title: RPQ P0120 Alex Orr Plant New Switchgear Building

Contract No.: MCC 7360 Program

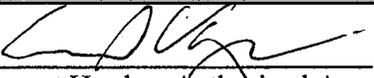
Estimate Amount: \$1,482,580.00 [\$1,347,800+ \$134,780 Contingency Allowances]

Account Funds: ER W016216, Future WASD Revenue Bonds

RECOMMENDATION
CSBE Goal – 16.9%

Analysis for Recommendation

Item	Description	Estimated Cost	% of Item to Base Bid	CSBE Availability
1.	MOBILIZATION	\$64,200	4.3%	
2.	SITWORK – CIVIL (Top soil removal, excavation, paving, site prep & fill)	\$59,500	4.0%	CSBE
3.	STRUCTURAL (Reinforced Concrete, tie beams, footings & Accessories)	\$246,000	16.6%	
6.	ARCHITECTURAL	\$70,600	4.8%	CSBE
7.	MECHANICAL (HVAC System)	\$21,100	1.4%	CSBE
8.	ELECTRICAL (Motor Control Center, Electrical Transformer, Generator Switchgear)	\$787,000	53.1%	
7.	ELECTRICAL-CSBE (Interior lighting, electrical wiring & fire alarm system)	\$99,400	6.7%	CSBE
8.	SUB-TOTAL	\$1,347,800		
9.	CONTINGENCY ALLOWANCE	\$134,780	9.1%	
	TOTAL	\$ 1,482,580	100%	



Department Head or Authorized Agent

RPO# P0120 Alex Orr Plant New Switchgear Building

This project consists of the construction of a switchgear building within the Alexander Orr Jr. Water Treatment Plant to house the WASD furnished switchgear units now at the Medley Storage Facility (delivered 6 months ago, cost of two switchgears 2.1 million).

1. An approved rigging company to load, transport, and unload switchgear equipment and transformers. Switchgear equipment will be picked up at WASD's Medley storage facility and delivered to the job site. Switchgear comes in 4 shipping groups. This equipment has to be installed, make all internal connections of internal bus and tie all structures to each other. The prime Contractor has to be large enough to have responsibility to transport, unload and place at the final location the 2. Million Dollar WASD furnished switchgear units.
2. The penetration and stubout for the switchgear need to be stubbed out within a 1/8-inch tolerance to retain the arc flash rating.
3. Equipment has to be anchored to slab. Slab has to be cast with precision because all underground conduits have to align with opening in equipment. In addition, installation has to be made in coordination with Siemens Contractor and Integration Engineers.
4. Switchgear has to be installed with ARC resistant seals per attached detail.
5. Contractor shall follow 70 page + manual instructions in the placement of switchgear.
6. Installation of three 10 MPV transformers and ground resistors. This requires cranes and again the alignment of all conduits, bolts, fasteners with the slab and ductbanks and manholes, and requires experience in handling and care of these larger 10 MPA transformers.
7. Switchgear has to be leveled with each other so bus and other conduit connections align.
8. This equipment is very sophisticated and needs to be moved with care, only persons with experience in handling these larger switchgear and transformers should do the job.
9. **Worse Case Scenario: The work will be performed in a critical area of the plant. An inexperienced Contractor could easily damage a duct bank or other underground utility shutting down water to the southern half of Miami-Dade County.**

Operational Requirements:

This is the site of the main water treatment plant for Miami-Dade County. The prime Contractor needs to have capability and experience to construct the clear the site, construct the building, place equipment and have everything in place for final installation by WASD forces. An contractor that is inexperienced with work inside treatment plants would result in a strain on treatment plant operations. Staff at the treatment plant are already working to their capacity and having to guide and correct work from an inexperienced Contractor could lead to disruptions. Experience requirements will be included in the advertisement of the project.

Below is the Experience Requirement:

1.01 QUALITY ASSURANCE

- A. **Prime Contractor and crew are required to have a minimum of 5 years experience with construction of Water Treatment Plant facilities with the type of equipment installed on this project (i.e. 10 MVA transformers with**

resistor boxes, 5 & 15 KV switchgear, and other ancillary and associated equipment). All Contractor's personnel shall have arc-flash safety training. The successful bidder shall submit with the bid, proof that his/her firm has at least the minimum successful contract experience as required for the RPQ being bid. Such proof shall consist of certification to include the list of all projects completed prior to the bid date with the names and telephone numbers of the owners or representatives WASD personnel can call and confirm the listed experience. Should such evidence not be satisfactory to the Engineer, whose decision shall be final, the bid will be considered non-responsive, and the second low bidder will be considered for award. The qualifying proof shall be submitted in a separate sealed envelope with the bid.

1. In the event a firm is established by executives, supervisors and other field staff that would meet these minimum experience requirements with a prior firm, the Miami-Dade Water and Sewer Department reserves the right to qualify the firm based on WASD's sole determination and evaluation of the knowledge and prior experience of these employees employed by the new firm.
- B. In addition to submittal requirements stated elsewhere, to qualify for work on this RPQ the Bidder must have successfully completed a project with industrial high voltage distribution equipment installed as part of the project consisting of at least one (1) 10-MVA transformer and one (1) 15 KV switchgear or larger in the United States for bid to be acceptable.
- C. Insurance bond shall include WASD provided equipment.
- D. Contractor must work with extreme care and precaution as not to break the 108-inch and 24-inch pipes and valves which are located the near proximity of the Switchgear Building area. Protect pipes and valves with shear plates during construction of project. Coordinate with the Engineer on site to ensure protection of this pipe and other associated items in the area. If the Contractor breaks this pipe during the process of construction of this project, he shall replace it at no additional cost to Owner.
- E. The Duct Banks in the vicinity of this construction, along with the Transformers in this area make this site critical to the operation of the entire facility. All of the electrical service - both FPL and Plant Generators funnel through this equipment; it is the Heart of the facility. Any inattention or carelessness by Contractor's personnel could prove both fatal to the personnel and render the southern half of Dade County without potable water supply.
- F. Switchgear equipment, 10 MVA transformers, and other equipment included on this Project shall be moved by an industrial moving specialist (rigger) from its current location at the WASD's Medley facility to the installation site at Alexander Orr Water Treatment Plant. The Rigger shall have a minimum of 5 years of industrial rigging work and have credentials, license, and insurance acceptable to the Engineer.

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G. Subject to compliance with requirements, the industrial movers that may be incorporated in the Work include, but are not limited to, the following:

- 1. Miami Transfer, (954) 605-5700, attention Bill Bruce.**
- 2. Roundtree Transport and Rigging; or**
- 3. Approved equal.**

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.: P0120

*Reference corresponding project number when submitting a work order

Contract/Project Title: Alex Orr Plant New Switchgear Building

Description/Scope of Work: See Attached

Estimated Cost: 1482580 **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.
6800 SW 87 Ave.

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:CWP is not applicable. Project site is not within a DTA

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
0	\$	0%	
0	\$	0%	
0	\$	0%	

RECOMMENDATION

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

Basis for Recommendation:This project was bid under the MCC7040 Plan under RPO T1743, where none of the contractors met the qualifications. WASD recommends the use of MCC7360 Contract to attract a wider array of qualified bidders, as this project is critical to the operations of a large water treatment plant that supplies potable water to the southern half of Miami-Dade County.

Date submitted to DBD:5/9/2013

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