

**Date:** October 11, 2022

**To:** Gary T. Hartfield, Division Director  
Internal Services Department  
Small Business Development Division

**From:** Jesus Salinas  
Construction Contract Specialist - Construction Contracts Division  
Miami Dade Water & Sewer

**Subject:** Alex Orr Wells 1 to 10 Transformer Upgrades (RPQ P16141)

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Miami-Dade Water and Sewer Department (WASD) respectfully requests that you review the attached recommendation to allow this project to be bid using the CICC7360 Program.

The Alexander Orr Water Treatment Plant (WTP) is located in Miami-Dade County, 6800 SW 87th Avenue in Miami, Florida and is a groundwater softening water treatment facility with a permitted capacity of 214.7 MGD. The plant has 10 wells located within the plant footprint (wells no. 1 to no. 10). These wells were constructed between 1959 and 1963 and most of their electrical equipment is from the original construction. These 10 wells are the closest raw water supply to the plant. These wells are powered by electrical feeders from 13.2 kV transformers T6 and T10, located inside the plant. The electrical feeders are old and exceeded their useful life.

Primary Trades for this project are Electrical Contractor.

### **Summary of Work**

- Assess the conditions of the Duc Bank specially between wells # 8 and # 9, where is clearly visible a crack on the earth that might affect the integrity of it.
- Assess the conditions of the existing manholes for possible replacement by others with better accessibility.
- Replacement of Service Cables going from FP&L Automatic Transfer Switch to Transformers T1 and T2.
- Replacement of Feeders from transformers T-1 and T-2 to breakers “A” and “B” on Switchgear Building.
- Replacement of Feeders from Generators building to breakers 1A and 1B on Switchgear building.

- Replacement of Feeders No. 1 to even wells and No. 2 to Odd wells from Switchgear Building to Wells as shown on the One Line Diagram.
- Replacement of feeders from transformer T6 going through breaker “K” and feeding all Wells.
- Installation of a new 2400 Volts switch on each well in order to allow isolation of the wells without affecting the operation of the rest.
- Replacement of all ten transformers feeding the wells.

Note: We have the ten Switches needed for this job, they were recently tested and re-certified for use.

If you require any additional information, please contact:

Jesus Salinas – Construction Contracts Specialist  
Construction Contracts Division  
Miami-Dade Water & Sewer Department  
3071 SW 38 Ave, Suite 107-14, Miami, FL 33146  
(786) 552-8055 (Phone) (786) 552-8885 (Fax).

Cc: Paul Adams

**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.:** **P16141**

\*Reference corresponding project number when submitting a work order

**Contract/Project Title:**    **Alex Orr Wells 1 to 10 Transformer Upgrades**

**Description/Scope of Work:**    **See Attached**

**Estimated Cost:** **\$3,850,641,30**      **Funding Source:** **General funds**

**Location of Project** (street address or beginning and ending points) i.e. 12345 NE 23<sup>rd</sup> Ct or Starts at 135 St. ends at 145 St.  
**Alex Orr Water Treatment Plant, 6800 SW 87 Ave., Miami, 33173**

**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:

**PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE)**    See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
<b>Construction</b>	\$	%	<b>N/A</b>
<b>G &amp; S</b>	\$	%	<b>N/A</b>
	\$	0%	

**RECOMMENDATION**

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

**Basis for Recommendation:** **Specialized Trade**

**Date submitted to DBD:** **10/11/2022**

**Contact Person:** **Jesus Salinas**

**Telephone No.:** **(786)552-8055**

**DEPARTMENTAL INPUT  
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

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

From: Jesus Salinas – Construction Contracts Specialist  
Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: Alex Orr Wells 1 to 10 Transformer Upgrades

Contract No.: P16141

Estimate \$3,850,641.30 (Construction \$3,500,583.00 + Contingency \$350,058.30)

Funding Source: EW 101

<b>Small Business Enterprise – Construction - NO MEASURE Analysis for Recommendation (Attached)</b>
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Department Head or Authorized Agent

**DESCRIPTION OF PROJECT:**

- Assess the conditions of the Duc Bank specially between wells # 8 and # 9, where is clearly visible a crack on the earth that might affect the integrity of it.
- Assess the conditions of the existing manholes for possible replacement by others with better accessibility.
- Replacement of Service Cables going from FP&L Automatic Transfer Switch to Transformers T1 and T2.
- Replacement of Feeders from transformers T-1 and T-2 to breakers “A” and “B” on Switchgear Building.
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- Replacement of feeders from transformer T6 going through breaker “K” and feeding all Wells.

- Installation of a new 2400 Volts switch on each well in order to allow isolation of the wells without affecting the operation of the rest.
- Replacement of all ten transformers feeding the wells.

Note: We have the ten Switches needed for this job, they were recently tested and re-certified for use.

It is the intent of the Department to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

**LICENSES REQUIRED:**

Electrical Contractor

**Project Name: Wells 1 to 10 Upgrade Transformers and Replacements**  
**Location: Alexander Orr WTP**  
**Owner: Miami-Dade Water and Sewer Department (WASD)**

The Alexander Orr Water Treatment Plant (WTP) is located in Miami-Dade County, 6800 SW 87th Avenue in Miami, Florida and is a groundwater softening water treatment facility with a permitted capacity of 214.7 MGD. The plant has 10 wells located within the plant footprint (wells no. 1 to no. 10) as shown in Figure 1. These wells were constructed between 1959 and 1963 and most of their electrical equipment is from the original construction. These 10 wells are the closest raw water supply to the plant. These wells are powered by electrical feeders from 13.2 kV transformers T6 and T10, located inside the plant. The electrical feeders are old and exceeded their useful life.



Figure 1: Location of Wells 1 to 10 at AOWTP Site

To improve the operational reliability of these wells, electrical improvements were designed, that include:

- Restore both existing electrical feeders without affecting operations by building a new ductbank
- Install new electrical manholes at each well house (except well houses no. 8 & no. 10) to facilitate the pulling of cables
- Replace the transformer at each wellhouse with a new pad mounted dry type transformers of the same capacity
- Install owner furnished pad mounted re-certified switches outside each well house
- Replace the exposed conduit and cable from each well house transformer secondary to associated well house 480V motor starters

The continuous raw water supply to the AOWTP is critical to provide reliable and constant water service to the customers. Since this project includes the careful coordination of well rehabilitation, work with medium voltage equipment, a crossing to railroad rails, and installation of specific electrical equipment, HDR is recommending bidding this project through MCC 7360 to allow experienced Contractors (with more than 5 years of experience handling similar projects) to participate in this bid. This will mitigate the risk of having a raw water shortage at the plant that could disturb the water service to the customers.

**DEPARTMENTAL INPUT  
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

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

From: Jesus Salinas – Construction Contracts Specialist  
Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: Alex Orr Wells 1 to 10 Transformer Upgrades

Contract No.: P16141

Estimate \$3,850,641.30 (Construction \$3,500,583.00 + Contingency \$350,058.30)

Funding Source: EW 221

<b>Small Business Enterprise – Goods &amp; Services - NO MEASURE Analysis for Recommendation (Attached)</b>
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Department Head or Authorized Agent

**DESCRIPTION OF PROJECT:**

- A. The project consists of furnishing all materials, labor, and equipment necessary to complete the following work as shown in the Drawings and Specifications:
- Assess the conditions of the Duc Bank specially between wells # 8 and # 9, where is clearly visible a crack on the earth that might affect the integrity of it.
  - Assess the conditions of the existing manholes for possible replacement by others with better accessibility.
  - Replacement of Service Cables going from FP&L Automatic Transfer Switch to Transformers T1 and T2.
  - Replacement of Feeders from transformers T-1 and T-2 to breakers “A” and “B” on Switchgear Building.
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  - Replacement of Feeders No. 1 to even wells and No. 2 to Odd wells from Switchgear Building to Wells as shown on the One Line Diagram.

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Note: We have the ten Switches needed for this job, they were recently tested and re-certified for use.

It is the intent of the Department to obtain a complete and working installation under this Project and any items of labor, equipment or materials which may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the Plans or stated herein.

**CONSIDERATIONS FOR ANALYSIS:**

<b>Analysis for Small Business Enterprise – Goods and Services Recommendation</b>				
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability
1.	<b>GOODS &amp; SERVICES</b> Sub-contractor goal 4.00%		X	
2.				