

April 19, 2022

Shannon LaRocque, P.E. Village of Wellington 12300 Forest Hill Boulevard Wellington, FL 33414

Ref. No.:

WE016.00

Subject:

Wastewater Lift Station No. 65 Rehabilitation and Generator SCADA Upgrades

Design and Bid Phase Services

Dear Shannon:

We are submitting the attached *Proposal to Provide Services for the Wastewater Lift Station No.* 65 Rehabilitation and Generator SCADA Upgrades – Design and Bid Phase Services. Please review the attached documents and provide us with a signed authorization to proceed with the Scope of Services outlined in the proposal.

We will provide the Scope of Services on a lump sum basis for \$69,320.00.

If you have any questions, please contact me at 683-3113, extension 216. Thank you for using Mock•Roos on this project. We look forward to working with you.

Sincerely,

MOCKAROOS & ASSOCIATES, INC.

Thomas A. Biggs, P.E. Executive Vice President

TAB:tsm Enclosure

Copies:

Bookkeeping



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Proposal To Provide Design and Bid Phase Engineering Services for the Wastewater Lift Station No. 65 Rehabilitation and Generator SCADA Upgrades

Services to be provided by: Mock•Roos

Services provided to ("Wellington"): Village of Wellington

Proposal Date: April 19, 2022

Proposal Terms

A. Scope of Services:

Wellington has identified Lift Station No. 65 as power critical and in need of rehabilitation. Wellington has also requested that Generator SCADA upgrades be designed to allow Wellington's SCADA to communicate with the generators at Lift Station Nos. 5, 10, 48, 76, 79, 80, 85, 92, and 105.

Lift Station No. 65 is located on the north side of Andover Coach Lane approximately one third of a mile south-west of the intersection of Lake Worth Road and State Road 7 in the Wycliffe Development. The pump station consists of a below grade wetwell and valve vault with a gravel site and above grade electrical panel and antenna. The station has 6-foot fencing with screening vegetation on all four (4) sides and a 12-foot-wide gate for access to the station from the asphalt driveway connection to Andover Coach Lane. The concrete wetwell has a round lower section and a top slab that has a two (2) diamond plated single leaf access hatches, one for each pump in the wetwell. The wetwell contains two (2) 47 HP electric submersible pumps. The below grade concrete valve vault has a drain to the wetwell and a concrete top slab with a diamond plated double leaf hatch. The valve vault contains two (2) discharge pipes each with a check valve and gate valve that discharge into a common header after leaving the vault. Additionally, these discharge pipes are inter-connected with a tee and valve. The option for emergency by-pass pumping is provided by a below grade pump out located within the fenced area.

The duplex pump station accepts gravity flow from a service area whose major contributors include the Wycliffe Country Club (Andover Coach Lane, Andover Coach Circle, Barclay Fair Way) and its Satellite Pump Stations Nos. 066 and 068 which serve the Wycliffe Development South of Lake Worth Road.

The wastewater flows are collected from the major contributors through two main gravity sewer systems that feed into a common manhole upstream of the pump station and then discharge through an 8" ductile iron pipe (DIP) into the south side of the wetwell. Collected wastewater is then pumped from the pump station into an 8" DIP to an 8" PVC forcemain that is ultimately routed west along the north side of Lake Worth Road through a series of increasing forcemains to the Village's Water Reclamation Facility.

The general design configuration will be per Wellington's current lift station standards. Detailed below is the initial concept of the work that is to be designed for the rehabilitation Lift Station No. 65:

Site Improvement

- Install New Fence Around Station
- Install Concrete Pad
- Install 1.5" Water Service (outside of slab)
- Construct Access Drive
- Trim or Remove Landscaping as Needed
- Clean and Replace Corrosion Barrier for Terminal Manhole
- Install Isolation Valves within Fenced Area

Wet Well

- Replace Top Slab and Hatch, Include Fall Protection in New Hatch
- Clean and Coat Wet Well
- Replace Cable Rack
- Replace Pump Controls with Radar Sensor and High-Water Float

Pumps

- Replace Pumps (In-Kind)
- Replace Pump Rails
- Replace Base Elbow, Discharge Pipe, 90° Bend
- Replace Pipe to the Exterior of the Valve Vault with HDPE Pipe

Valve Vault and Discharge Piping

- Replace Valve Vault (if needed)
- Grout/Slope Bottom of Valve Vault to Drain Efficiency
- Coat Walls and Bottom of Vault with Corrosion Resistant Surfacing Material
- Replace Discharge Pipe from Wetwell to 3-Ft Beyond the Limits of the Concrete Pad
- Replace Isolation Valves
- Replace Check Valves
- Install Emergency By-Pass (add check valves for forcemain connection)
- Install Tap and Conduit for Pressure Gauge and Pressure Instrument Installation

Controls and Electrical Service

- Replace Control Panel
- Replace Controls and Motor Starter, Electrical Components, Alarms, and Lights
- Replace RTU, Pole, and Antenna

- New Service Meter and PIT
- New Disconnect and Conductor
- New Emergency Power Generator and Automatic Transfer Switch
- Prepare specifications Generator SCADA connections/ integration

Mock•Roos will perform the following scope of services:

B. Scope of Services:

Task 1 – Design Phase Services

- Review existing record drawings for the lift station site as provided by Wellington.
- Coordinate with Wellington lift station staff to confirm existing conditions have not changed since the Condition Assessment Report's site visit and to obtain additional information from Wellington's Operations and Maintenance staff pertaining to current issues, concerns, and limitations.
- Call in a Sunshine State One Call Design Ticket and coordinate with the utility companies that
 are identified on the ticket to have infrastructure located near the site. Incorporate available
 record data and contact information into the construction documents as appropriate.
- 4. Limited topographic survey of the site (approximately 25 feet beyond the lift station) with sufficient detail of visible fixed improvements to provide the data for the design services will be provided by the Wellington. Mock•Roos will develop the provided survey into a basemap for the project.
- 5. Prepare and submit a 30-percent contract document progress set for Wellington review. The 30-percent submittal will include drawings depicting the overall scope of work for the lift station and a Preliminary Engineer's Opinion of Probable Construction Cost. At Wellington's request, attend one comment review meeting with Wellington staff.
- 6. Prepare and submit a 60-percent contract document progress set for Wellington review. The 60-percent submittal will include Construction Drawings and updated Engineer's Opinion of Construction Cost. At Wellington's request, attend one (1) comment review meeting with Wellington staff.
- 7. Prepare and submit a 95-percent contract document progress set for review by Wellington. The 95-percent submittal will include Construction Drawings, Specifications, an updated Engineer's Opinion of Probable Construction Cost, and Bid Form. At Wellington's request, attend one comment review meeting with Wellington staff. Address comments as appropriate prepare a digitally signed and sealed set of construction drawings for permitting coordination. Coordinate with Palm Beach County Health Department (PBCHD) to confirm that the project is exempt from permitting due to the proposed improvements generally being replacement of in-kind facilities.

- 8. Prepare and submit 100-percent contract documents to Wellington staff for use in bidding the project. The 100-percent submittal will include Final Construction Drawings, Specifications, Bid Form, Other Special Conditions, Scope of Work, and a recommendation for time of completion and liquidated damages. Provide Wellington with two signed and sealed hard copies of the Contract Documents and an electronic copy of Contract Documents for Wellington's use bidding the project.
- 9. Provide the design phase services of an electrical engineer to assist with the above tasks.

Task 2 – Limited Bid Phase Services

- 1. Assist Wellington in responding to RFIs pertaining to the Contract Documents.
- 2. Assist with the review and evaluation of bid submittals for the project and provide Wellington with Letter of Recommendation of Award for the project.
- 3. Provide Wellington with a digitally signed and sealed set and up to two (2) sets of Contract Documents for use during construction. Provide the Project AutoCAD files in the current version of AutoCAD for the contractor's use to prepare Record Drawings for the project.

Assumptions

- 1. Wellington will pay all permit application fees.
- 2. A Health Department permit is not anticipated, the project is anticipated to be exempt.
- 3. No title searches, easement exhibits, sketch and legal descriptions, or easement coordination is anticipated.
- 4. The Wellington will provide survey and utility locates for the lift station site and adjacent area for tie-ins which will have sufficient detail for Mock•Roos to use as a basis for the design.

C. Additional Services:

- 1. Any services not included in the Scope of Services will be considered Additional Services.
- 2. Construction Administration can be negotiated after receipt of bids.
- 3. Additional Services can be provided upon Mock•Roos receiving a revised scope of services and approved purchase order from Wellington.

D. Fees and Rates:

1. The total fee to provide the Scope of Services on a lump sum basis for \$69,320.00.

2. Mock•Roos can provide Additional Services at the Mock•Roos hourly rates in effect at that time, plus any reimbursable expenses, or for an agreed upon lump sum fee.

E. Conditions:

1. In case of discrepancies, the terms of this proposal supersede those of previous agreements.

F. Acceptance and Authorization to Proceed:

1. This proposal is acceptable and Mock•Roos has authorization to proceed with the Scope of Services when Wellington issues a Purchase Order for this project.

Village of Wellington Wastewater Lift Station No. 65 Rehabilitation and Generator SCADA Upgrades

		Labor Classification									The state of
Task Description		Senior Project Manager	Project Manager	Senior Professional Engineer	Project Engineer I	Senior Administrative Assistant	Subtotal		Subconsultant	Total	
Labor Hourly Billing Rate		\$200.00	\$165.00	\$185.00	\$115.00	\$70.00					
Total Hours		22	54	86	156	38					
1	Design Phase Services										
1.1	Review Existing Record Drawings/Assessment Analysis	2	2	2	4	2	\$	1,700		\$	1,700
1.2	Site Visits/Discuss Issues	2		4	4	2	\$	1,740		\$	1,740
1.3	Coordinate with Utilities		2	2	8		\$	1,620		\$	1,620
1.4	Review Survey and Develop Basemap	2	4	4	16	2	\$	3,780		\$	3,780
1.5	30-Percent Contract Documents and Review Meeting	2	8	20	60		\$	12,320		\$	12,320
1.6	60-Percent Contract Documents and Review Meeting	2	4	10	40	8	\$	8,070		\$	8,070
1.7	95-Percent Contract Documents/Permitting and Review Meeting	4	10	40	20	8	\$	12,710		\$	12,710
1.8	100-Percent Contract Documents	2	2	4	4	8	\$	2,490		\$	2,490
1.9	Electrical Subconsultant						\$	=	\$ 19,500	\$	19,500
	Design Phase Services Sul									\$	63,930
2	Limited Bid Phase Services										
2.1	Assist Village with Responding to RFIs	2	8			4	\$	2,000		\$	2,000
2.2	Evaluate Bid Submittals and Letter of Recommendation	2	8			2	\$	1,860		\$	1,860
2.3	Contract Documents	2	6			2	\$	1,530		\$	1,530
Limited Bid Phase Services Subtotal: \$											5,390
	Subtotal	\$ 4,400	\$ 8,910	\$ 15,910	\$ 17,940	\$ 2,660	\$	49,820	\$ 19,500	\$	69,320
Total Mock*Roos Labor \$ 49,820 Subconsultant \$ 19,500 Project Total \$ 69,320											

The spreadsheet is a fee cost estimate based on specific labor classifications as noted.

April 19, 2022

Mr. John Cairnes, P.E. Mock, Roos & Associates, Inc. 5720 Corporate Way West Palm Beach, FL 33407

Re: Village of Wellington Lift Station No. 65 Improvements & Lift Station Generator SCADA Connections Electrical Engineering Services Proposal

Dear John:

Smith Engineering Consultants, Inc. (SEC) is pleased to provide this proposal for the above referenced project. We propose to provide the following scope of services:

- 1. Initial site visit and review of preliminary project plans and specifications.
- 2. Electrical design for improvements to existing Lift Station No. 65 in accordance with Village of Wellington standard details, the National Electrical Code, and applicable local codes. The existing control panel will be replaced and the electrical service and other electrical equipment will be replaced as necessary. The electrical design will include the installation of a permanent, standby power system including an outdoor rated diesel engine-generator with sub-base fuel tank and weatherproof enclosure, and an automatic transfer switch (ATS).
- 3. Electrical design for the SCADA connections of nine (9) existing lift stations (#5, 10, 48, 76, 79, 80, 85, 92, 105) in accordance with our recent evaluations.

SEC will prepare contract documents, suitable for bidding, permit, and construction, including plans and specifications at the 90%, and 100% (final) completion levels. We propose to furnish drawings in AutoCAD format using base plan drawings and Village standard details provided by Mock, Roos. We will assist in preparing addendums and respond to questions during the bid process. Our lump sum fee to provide the services described above is \$19,500.

Thank you for using Smith Engineering Consultants as the source for these engineering services. We look forward to working with you on this project.

Sincerely

Larry M. Smith, P.E.

President