

## **SCOPE OF SERVICES**

### **Town of Highland Beach**

#### **Work Authorization No. 2**

#### **Lift Station No. 2 Rehabilitation**

Hazen and Sawyer (**CONSULTANT**) will complete the following tasks related to the design, engineering, and permitting for rehabilitation of Lift Station No. 2, located at approximately 3400 South Ocean Boulevard, which includes raising the elevation of the site including the valve vault and wet well lids top of concrete slab, the removal and reinstallation of the electrical control panel to a higher elevation, replacement of level indicators in kind, and installation of a concrete driveway.

#### **PROJECT BACKGROUND**

The Town of Highland Beach (Town) owns, maintains, and operates a total of six wastewater lift stations throughout the Town's service area. The Town intends to rehabilitate Lift Station No. 2 while reusing existing components that have been recently replaced. Lift Station No. 2 is a duplex station that is equipped with two 20 HP fixed speed pumps powered from a 480-volt, 3-phase service. The control panel was replaced in 2019, and the existing pumps are in good working condition. All other electrical and mechanical components will be replaced as needed and designed to current standards. The Town intends to raise the elevation of Lift Station No. 2 above the adjacent South Ocean Boulevard crown of the road to improve resiliency and accessibility and to ensure the site is above the 100-year flood elevation. Major items that will be elevated include the control panel, antenna, valve vault access hatch, and all other components necessary to match the proposed grade.

## **SCOPE OF SERVICES**

### **Task 1 – Meetings**

**CONSULTANT** will hold multiple meetings with the **TOWN** during the design of the described improvements. The anticipated meetings are listed below;

- Kickoff meeting to discuss the project details
- Meeting to review 60% design submittal materials
- Meeting to review 90% design submittal materials

### **Task 1 Deliverables:**

**CONSULTANT** shall provide the following for the **TOWN**:

1. Meeting Minutes: **CONSULTANT** shall submit an electronic copy of the meeting minutes for each meeting held above.

## Task 2 – Topographic Survey

**CONSULTANT** will prepare the drawings and specifications needed for construction. To the extent practicable, the **TOWN's** Standard Front-End Documents and Standard Details will be utilized in compiling the Contract Documents.

**TOWN** has indicated there are no record drawings for Lift Station No. 2. **CONSULTANT** shall obtain the services of a Florida Licensed Surveyor to prepare a topographic survey of the project site. The topographic survey will be prepared in accordance with Rule 5J-17.050 (1) of the Standards of Practice adopted by the Board of Professional Surveyors and Mappers. The topography at major ground elevation changes to depict the existing ground profile and proposed project area, which shall include the following:

- Provide and reference existing County/Town benchmarks.
- Locations of existing features within the project area also include trees, fences, signs, light poles, and above-ground existing utilities.
- Cross sections spanning South Ocean Boulevard

In addition to the topographic survey, **CONSULTANT** shall perform field investigations to obtain site conditions, identify conflicts, site photos, and constructability concerns. Field measurements will be taken to assist with detailed layout and design.

### Task 2 – Deliverables:

1. Topographic Survey – One (1) electronic version of the topographic survey will be provided.

## Task 3 - Development of Contract Documents

**CONSULTANT** will address the following design elements in the construction documents:

- Replacement of the existing power meter, main disconnect, remote telemetry unit (RTU) panel, and antenna are not included to be replaced in this scope of work. However, these components will be raised consistently with the rest of the site components. A new antenna tower and concrete support are recommended to meet wind load requirements.
- The existing pumps, which will remain, are currently controlled by level floats. The Town has requested that these floats be replaced with a pressure transducer level control system with a backup high-water level alarm float.
- Replacement of the control valves, pump connections, check valves, and ancillary components within the valve vault, as well as the pump guide rails.
- The top slabs for the control panel, valve vault, and wet well will be raised to the proposed grade. The site will be regraded to match the new wet well, valve vault slab elevations, and a concrete driveway will be included from the edge of the asphalt walking path

adjacent to South Ocean Boulevard (State Road A1A) to the wet well.

A 60% complete set of construction drawings and list of specifications will be submitted to the **TOWN** for review and comment.

Upon receipt of comments from the **TOWN**, **CONSULTANT** will prepare and submit a 90% complete set of construction drawings and specifications to the **TOWN** for review and comment.

Upon receipt of comments from the **TOWN**, **CONSULTANT** will prepare and submit the final 100% complete set of construction documents to the **TOWN** for review and comment.

**CONSULTANT** will prepare a Class 3 OPCC as defined by the AACE International in Recommended Practices 18R-97 as part of the 100% milestone delivery. An estimate of this type is normally expected to be accurate within approximately plus 20 percent to minus 15 percent of the estimated cost.

### **Task 3 Deliverables:**

**CONSULTANT** will provide the following to the **TOWN**:

1. 60% Construction Documents: PDF of the plans and List of Specifications will be provided.
2. 90% Construction Documents: PDF of the plans and a complete set of Specifications will be provided.
3. Final (100%) Construction Documents: Two (2) sets of half-size (11" x 17") sets of plans and a bound set of Specifications will be provided. PDF versions of plans and specifications will also be provided.
4. Class 3 OPCC: One (1) electronic version of the OPCC will be provided.

### **Task 4 – Permitting Services**

**CONSULTANT** will apply for and obtain applicable permits and/or exemptions required for the construction of the proposed improvements and will respond to requests for additional information submitted by the regulatory agencies.

- Florida Department of Transportation

### **Task 4 Deliverables:**

**CONSULTANT** will provide the following to the **TOWN**:

1. Permit Applications: **CONSULTANT** will submit to the **TOWN** the above permit applications for signature (as required).

## Task 5 – Bid and Award Services

It is assumed that the **TOWN** will sell and distribute bid documents, conduct the pre-bid conference and bid opening, and address any administrative questions from prospective bidders.

**CONSULTANT** will assist the **TOWN** in the following ways:

- **CONSULTANT** will attend the pre-bid conference and assist the **TOWN** with any responses to technical questions regarding the bid documents.
- **CONSULTANT** will assist the **TOWN** in preparing addenda which relate to technical questions.
- **CONSULTANT** will review bids and provide a recommendation of award.
- **CONSULTANT** will prepare Conformed Drawings based on addenda issued. **TOWN** will prepare conformed specifications.

### Task 5 Deliverables:

**CONSULTANT** will provide the following to the **TOWN**:

1. Recommendation of Award: Following evaluation of the lowest qualified bidder's proposal, **CONSULTANT** will submit to the **TOWN** the recommendation for award.
2. Bid Sets: PDF of plans and specifications will be provided.
3. Conformed Documents: Two (2) half-size (11" x 17") hard copy plans and two sets of bound specifications will be provided. One (1) electronic version of the plans will also be provided.

## TIME OF COMPLETION

The time of completion for the deliverables described above is tabulated below.

<b>Deliverable</b>	<b>Time to Completion (from NTP)</b>
Task 1 – Meeting Minutes (kickoff, 60% design, 90% design)	<b>1 week after meeting</b>
Task 2 – Topographic Survey	<b>8 weeks</b>
Task 3 – Contract Documents	<b>24 weeks</b>
Task 4 – Permitting Services	<b>26 weeks</b>
Task 5 – Bid and Award Services	<b>32 weeks</b>

## SCHEDULE OF FEES

Proposed labor costs for engineering services for Tasks 1-5 (Lump Sum or LS) are tabulated below.

<b>Task</b>	<b>Fee</b>
Task 1 – Meetings (LS)	\$7,686
Task 2 – Topographic Survey	\$9,327
Task 3 – Development of Contract Documents (LS)	\$50,043
Task 4 – Permitting Services (LS)	\$3,864
Task 5 – Bid and Award Services (LS)	\$7,833
<b>Total</b>	<b>\$78,753</b>

## ASSUMPTIONS

- **TOWN** does not have record drawings.
- **CONSULTANT** will not include structural design for connection of proposed riser section to the existing base and to the top slab. The top slab of the wet well and of the valve vault are connected by a gasketed keyway and no structural design is required.
- **CONSULTANT** assumes that all work will be performed within FDOT's right-of-way. As such, the acquisition of easements is not anticipated. If required, **TOWN** will be responsible for the preparation of any descriptions, sketches, and acquisition of easements that may be required.
- **CONTRACTOR** will be responsible for record drawings, bypass pumping, MOT, and subsurface investigation
- No owner-purchased material and/or equipment is presumed.
- **TOWN** will handle public notification and interaction on the project.
- Standard Front-End Documents will be prepared/provided by the **TOWN**.
- The drawings and specifications will be prepared assuming that the **TOWN** will competitively bid this project in a single bid package and enter into a construction contract with one general contractor to complete the work.
- Existing control panels and pumps will be reused. No change of pumping capacity is required.
- No preliminary design report is included in this scope of work.
- Permit fee will be the responsibility of the **TOWN**.
- Permits other than FDOT ROW permit are not included in this scope of work.
- **TOWN** will prepare conformed specifications and provide **CONSULTANT** with one hard copy and one electronic copy of the Conformed Front-End Documents and Technical Specifications.


# Fee Schedule

Task No.	Work	Vice President	Senr. Assoc.	Assoc.	Senr. Principal	Principal Eng.	Engineer	Princ. Designer	Designer	Word Process.	Total Hours	Labor Cost	Sub-Consultant	Expenses (5% of Labor)	Total Cost
		\$310	\$280	\$220	\$190	\$160	\$145	\$150	\$105	\$135					
1.0	Meetings	0	9	9	12	0	0	0	0	4	34	\$ 7,320	\$ -	\$ 366	\$ 7,686
2.0	Topographic Survey	0	2	0	4	0	0	0	4	0	10	\$ 1,740	\$ 7,500	\$ 87	\$ 9,327
3.0	Design	2	14	14	108	0	80	42	40	12	272	\$ 47,660	\$ -	\$ 2,383	\$ 50,043
4.0	Permitting	0	2	2	8	0	8	0	0	0	20	\$ 3,680	\$ -	\$ 184	\$ 3,864
5.0	Bidding	2	4	4	9	0	16	0	0	6	41	\$ 7,460	\$ -	\$ 373	\$ 7,833
<b>TOTAL</b>		<b>4</b>	<b>31</b>	<b>29</b>	<b>141</b>	<b>0</b>	<b>104</b>	<b>42</b>	<b>4</b>	<b>22</b>	<b>377</b>	<b>\$ 67,860</b>	<b>\$ 7,500</b>	<b>\$ 3,393</b>	<b>\$ 78,753</b>

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized officers and is made effective the day and year first above written.

**TOWN OF HIGHLAND BEACH**

**HAZEN AND SAWYER**

By:  2/26/2025  
 Kurt A. Pfeffer, PE Date  
 Associate Vice President

By: \_\_\_\_\_  
 Marshall Labadie Date  
 Town Manager