



Hazen and Sawyer
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CITY OF HALLANDALE BEACH
FY 2018-2019-012 Continuing Professional Architectural and Engineering Services and
Other Services
Discipline: Water Resources/Stormwater/Wastewater

HAZEN AND SAWYER
WORK AUTHORIZATION No. W2021-001

RO Skid Updating
Scope of Services: May 3, 2021

In accordance with Resolution No. 2020-054, RFP #FY 2018-2019-012 Continuing Professional Architectural and Engineering Services and Other Services, the following scope of services is provided by Hazen and Sawyer (CONSULTANT) as requested by the CITY to provide Water Resources/Stormwater/Wastewater Services.

BACKGROUND

The City of Hallandale Beach (CITY) owns, operates, and maintains the water treatment plant which services approximately 40,000 people within the CITY corporate limits. The CITY has elected to continue utilizing CITY water for the longest extent possible by incorporating provisions to the existing water treatment plant that can accommodate higher salinity raw water. As a precaution to safeguard against future potential intrusion of saltwater into the CITY's wellfield, the CITY will install one reverse osmosis (RO) skid within the existing membrane treatment facility, capable of treating potentially increasing saline raw water. This skid was designed under a previous work authorization and shelved by the CITY for future bid and construction.. Recently, the CITY has elected to move forward with the installation of the new RO skid to provide additional flexibility and redundancy in operations.

The CITY has requested Hazen and Sawyer (CONSULTANT) provide professional engineering services to update these plans as/where required, complete pre-construction permitting activities, and provide bidding services for the installation of this new skid. The scope of services for this work is described below:

SCOPE OF SERVICES

Task 1: Update Design Documents

CONSULTANT shall update the previously developed 100% construction contract documents, including technical specifications and drawings that show the general character and extent of the project. This set of documents shall be used for permitting and will be submitted to the CITY for review and comment prior to preparation of final bid documents. CONSULTANT shall submit to the CITY one electronic copy of the documents in PDF format. It is anticipated that the following updates will be made:

- Update plans to reflect the 2020 Florida Building Code
- Update vertical turbine pump and general pump specifications
- Include erosion and sediment control drawings and details in plans
- Update electrical drawings to reflect recent changes from the High Service Pump Replacement project
- Update equipment specifications for major equipment if required
- Update the opinion of probable construction cost (OPCC)

Task 2: Permitting

The purpose of this task is to prepare and submit permit applications for the construction of the proposed skid and appurtenances. CONSULTANT shall prepare permit applications and backup documents as required by each entity. Backup documents may consist of description of methods, figures, calculations, drawings, specifications, etc. Conference calls and/or meetings will take place with each entity as required. A list of agencies anticipated to require permits are provided below:

- Florida Department of Environmental Protection
- Broward County Environmental Protection and Growth Management Department
- City of Hallandale Beach Building Department Dry Run Review

CONSULTANT shall meet with the CITY Building Department to review the drawings and technical specifications. All comments received in a timely manner shall be addressed by inclusion into the bid documents or by inclusion through an addendum.

All permit fees shall be paid by CITY. It is assumed that no other permits will be necessary for the completion of this work, other than those to be obtained by the Contractor in accordance with the normal engineering standard-of-care. The Engineer's technical specifications shall define the Contractor's responsibility relative to permits it is required to obtain (e.g., Stormwater Pollution Prevention Plan, dewatering).

Task 3: Bidding Services

CONSULTANT shall perform the following services during the bidding phase of the project:

- Preparation of Final Bid Documents: CONSULTANT shall make final revisions to the documents based on review comments received by permitting agencies and the CITY's Purchasing Department. CONSULTANT shall provide one (1) electronic PDF copy and three (3) hard copies of the drawings and specifications to the CITY. It is anticipated that the CITY will prepare all documentation required to support the Front End for each bid package.
- Pre-Bid Conference and Job Walk Through: CONSULTANT shall attend one pre-bid conference and job walk through prior to the advertised date.
- Respond to Bidder Questions and Prepare Addenda: CONSULTANT shall provide responses to bidder questions to the CITY's Purchasing Department for uploading to a web based system. Where required, CONSULTANT shall prepare written addenda to the Contract as needed to clarify technical requirements of the Bid Documents.
- Bid Evaluation: CONSULTANT shall evaluate the lowest responsible bidder for technical ability to perform the work and prepare recommendation of award.
- Conformed Documents: CONSULTANT shall prepare conformed documents which incorporates addenda as well as the executed contract into a final set of construction documents. CONSULTANT shall provide one (1) electronic PDF copy and three (3) hard copies of the conformed documents to the CITY.

CITY shall perform the following services:

- Distribute bid documents to contractors requesting documents;
- Maintain a list of plan holders;
- Issue addend to plan holders; and
- Provide CONSULTANT with a copy of the bid tabulation prepared by CITY.

ASSUMPTIONS

The following assumptions were made in preparation of the above scope:

1. CITY is responsible for all Front End documentation, including preparation of specific forms required for web based bid service.
2. All permit fees shall be paid by CITY.
3. This scope of services does not include time for CONSULTANT to assist CITY in the event of a bid protest.
4. This scope of services does not include services during construction.

PURSUANT TO SECTION 558.0035, FLORIDA STATUTES, A DESIGN PROFESSIONAL WHO IS AN INDIVIDUAL EMPLOYEE OR AGENT OF CONSULTANT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE OCCURRING WITHIN THE COURSE AND SCOPE OF THIS CONTRACT.

SCHEDULE OF COMPLETION

The anticipated duration for the major work tasks is summarized in the table that follows. The force main, including all closeout documentation, is anticipated to be delivered within 390 days of receipt of notice to proceed.

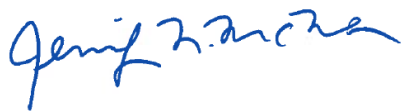
Task	Description	Approximate Duration (days)
1	Update Design Documents	90
2	Permitting	120
3	Bidding Services	180
	Total Calendar Days for Completion	390

COMPENSATION

Compensation shall be made to CONSULTANT not to exceed the total of \$96,980. CONSULTANT shall bill the CITY on a monthly percent complete by task basis as indicated in the table below.

Task	Description	Fee By Task (To be billed by Percent Complete)
1	Update Design Documents	\$49,308
2	Permitting	\$27,252
3	Bidding Services	\$20,420
	Total (not to exceed)	\$96,980

AUTHORIZATION - HAZEN AND SAWYER



May 3, 2021

Accepted: Jennifer McMahon, P.E.
Associate Vice President

Date:

CITY OF HALLANDALE BEACH
FY 2018-2019-012 Continuing Professional Architectural and Engineering Services and Other Services
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HAZEN AND SAWYER
WORK AUTHORIZATION No. W2021-001

RO Skid Updating
Fee Estimate: May 3, 2021

Task	Description	Hazen Labor									Task Totals
		Senior Engineer	Project Manager	Project Engineer	Engineer	Jr Engineer	Inspector	CADD Technician	Hours	Fee	
	Hourly Rates:	\$247.00	\$232.00	\$214.00	\$183.00	\$125.00	\$124.00	\$124.00			
Task 1: UPDATE DESIGN DOCUMENTS											
1	Update Design Documents	8	20	40	64	100	0	80	312	\$49,308	\$49,308
Task 2: PERMITTING											
2	Permitting	4	8	24	40	48	0	48	172	\$27,252	\$27,252
Task 3: BIDDING SERVICES											
3	Bidding Services	4	12	20	24	40	0	24	124	\$20,420	\$20,420
	Total Labor	16	40	84	128	188	0	152	608	\$96,980	\$96,980

CITY OF HALLANDALE BEACH
Hallandale Beach Water Treatment Plant
BP 2: Reverse Osmosis Addition - Single Skid

OPINION OF PROBABLE CONSTRUCTION COST
April 27, 2021

Item No.	Description	Total
1	Mobilization and Demobilization	\$154,900
2	Indemnification	\$25
3	Special Inspector Allowance	\$10,000
4	All Other Proposed Work in Contract Documents	\$3,098,000
Sub-Total		\$3,263,000
OH & P (12.5%)		\$387,000
Engineer's Opinion of Total Construction Cost		\$3,650,000

Notes:

1. Contractor OH&P is assumed to be 12.5% of Item 4 only.
2. Permit fees will be paid directly by City.
3. City shall establish a separate account for change orders and undefined conditions. These costs are not included as part of this opinion of probable construction cost.
4. Final costs of project will depend on competitive market conditions and actual labor and material costs which are variable. It is noted that the market is currently experiencing large price fluctuations for both materials and labor. These price fluctuations may impact overall project costs, depending on timing of the bid.