

## TASK ORDER

This is Task Order No. 23,  
consisting of 9 pages.

### Task Order

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In accordance with paragraph 1.01 of the Standard Form of Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated March 5, 2010 ("Agreement"), Owner and Engineer agree as follows:

#### 1. Specific Project Data

- A. **Title:** City of Rehoboth Beach Wastewater Treatment Effluent Pumping Station
- B. **Description:** Construction Management and Inspection services for Rehoboth Beach Wastewater Treatment Plant Effluent Pumping Station as defined in the Contract Documents for City of Rehoboth Beach, Delaware; WWTP Effluent Pumping Station Contract No. 2017-003 prepared by GHD Inc. dated June 2017.

#### 2. Services of Engineer

##### TASK 1: CONSTRUCTION PHASE ENGINEERING SERVICES

- A. **Contract Coordination and Project Management:** Contract coordination will involve routine communication with the OWNER, OWNER's Authorized Representative, and Contractor to discuss overall project issues, help resolve conflicts or discrepancies, make contract interpretations, and assist in resolution of certain field-related construction issues. Project management tasks include contract administration, invoicing, resource scheduling, and communications.
- B. **Construction Meetings:** Attend pre-construction meeting (1), monthly construction progress meetings (9), pre-final inspection meeting (1), and final inspection meeting (1) with the Contractor and Owner. Prepare agenda and minutes.
- C. **Preliminary Submittals:** Review the Contractor's required preliminary submittals (including the progress schedule, shop drawing schedule, and schedule of values) for conformance with Contract Documents. Request modifications, where required.
- D. **Shop Drawings and Submittals:** Review shop drawings and submittals for conformance with Contract Documents. Request modifications, where required. Submittals will be stored and tracked by ENGINEER.
- E. **Requests for Information (RFI):** Respond to Contractor's written requests for clarification in a written format. RFI's will also be stored and tracked by ENGINEER.

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- F. Operations & Maintenance (O&M) Submittals: Review operations and maintenance submittals furnished by the Contractor for conformance with Contract Documents. Request modifications, where required. Three separate stages of O&M manuals are required including Preliminary O&M manuals, Final Draft O&M manual, and Final O&M manual.
- G. Materials Testing Results: ENGINEER will review and analyze the results of field and materials testing results. The field testing requirements will be coordinated with the ENGINEER's Resident Project Representative.
- H. Proposed Change Orders and Change Orders: Review proposed change order (PCO) requests. Provide written response to the PCOs including recommendations for the OWNER to approve or reject. When the amount of PCOs reaches an agreed upon amount, ENGINEER will issue a formal change order to the OWNER for review and approval. The project price will be adjusted per the General Conditions.
- I. Applications for Payment: Review submitted applications for payment from Contractor and return written comments. Once approved by the ENGINEER, payment applications will be forwarded to the OWNER and DNREC with the ENGINEER'S recommendation for payment. Coordinate with DNREC loan funding agencies.
- J. Training: Provide one (1) day of interactive on-site training for OWNER operations staff on the operation of the new facilities.
- K. Record Drawings: Modify bid drawings at the completion of the project and produce a Record Drawing set for the OWNER's use based on red-line drawings provided by the Contractor . Three (3) sets of Record Drawings will be provided to the OWNER along with electronic AutoCAD files.
- L. Witness Factory Acceptance Test for Process Control Systems: ENGINEER will witness Factory Acceptance Testing of critical Process Control Systems at the Control System Integrator's panel fabrication facility. The Factory Acceptance Test shall be successfully completed when all of the required functions have been demonstrated to ENGINEER and ENGINEER will sign off the acceptance documents for system delivery to project site.
- M. DNREC Coordination: Coordination with DNREC for loan funding requirements.

### **TASK 2: OWNER'S AUTHORIZED REPRESENTATIVE**

- A. OWNER's Authorized Representative (Resident Project Representative): ENGINEER will provide one full time Resident Project Representative (RPR) to serve as the OWNER's Authorized Representative during construction activities for both the CIP Upgrade Phase 1 Project and the Effluent Pumping Station Project. The RPR shall work out of the ENGINEER's field trailer and shall be onsite for 40 hours per week (except for City holidays) for 41 weeks following Notice to Proceed, with 18 hours per week

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allocated to the Effluent Pumping Station Project. The RPR responsibilities shall be as outlined in Article 2 of the General Conditions of the Contract Documents for Construction and as described below:

- 1) RPR will be Engineer's employee or agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall be through or with the full knowledge and approval of Contractor. The RPR shall:
  - i. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with ENGINEER concerning acceptability.
  - ii. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and circulate copies of minutes thereof.
  - iii. Liaison:
    1. Serve as ENGINEER's liaison with Contractor, working principally through Contractor's authorized representative, assist in providing information regarding the intent of the Contract Documents.
    2. Assist ENGINEER in serving as Owner's liaison with Contractor when Contractor's operations affect OWNER's on-site operations.
    3. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.
  - iv. Interpretation of Contract Documents: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER.
  - v. Shop Drawings and Samples:
    1. Record date of receipt of Samples and approved Shop Drawings.
    2. Receive Samples which are furnished at the Site by Contractor, and notify ENGINEER of availability of Samples for examination.
  - vi. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to ENGINEER. Transmit to Contractor in writing decisions as issued by Engineer.

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### vii. Review of Work and Rejection of Defective Work:

1. Conduct on-site observations of Contractor's work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
2. Report to ENGINEER whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
3. Inspections, Tests, and System Startups:
  - a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate OWNER's personnel, and that Contractor maintains adequate records thereof.
  - b. Observe, record, and report to ENGINEER appropriate details relative to the test procedures and systems start-ups.

### viii. Records:

1. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
2. Maintain records for use in preparing Project documentation.

### ix. Reports:

1. Furnish to ENGINEER periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
2. Draft and recommend to ENGINEER proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
3. Immediately notify ENGINEER of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by

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fire or other causes, or the discovery of any Hazardous Environmental Condition.

- x. **Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.**
- xi. **Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to ENGINEER for review and forwarding to OWNER prior to payment for that part of the Work.**
- xii. **Completion:**
  - 1. **Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.**
  - 2. **Participate in a final inspection in the company of ENGINEER, OWNER, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.**
  - 3. **Observe whether all items on the final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work.**

**B. The RPR shall not:**

- 1) **Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).**
- 2) **Exceed limitations of ENGINEER's authority as set forth in the Contract Documents.**
- 3) **Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.**
- 4) **Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.**

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- 5) Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of OWNER or Contractor.
- 6) Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by ENGINEER.
- 7) Accept Shop Drawing or Sample submittals from anyone other than Contractor.
- 8) Authorize OWNER to occupy the Project in whole or in part.

### **TASK 3: MATERIALS TESTING AND SPECIAL INSPECTIONS**

- A. ENGINEER will contract a Testing and Inspection firm to complete concrete testing, soils testing, and Special Inspections as necessary to meet the requirements of the Contract Documents.
- B. Field and laboratory services performed by the Testing and Inspection firm will be billed to the OWNER at direct cost under an Allowance for this item.
- C. Final allowance will be adjusted up or down by Addendum to reflect actual final cost of field and laboratory services

### **TASK 4: PLC PROGRAMMING/PROCESS CONTROL SYSTEM DEVELOPMENT**

- A. Deliverables: ENGINEER will provide the following deliverables for the control systems:
  - 1) Complete and Annotated PLC Logic
  - 2) Local Operator Interface (OIT) Development
  - 3) Final point-to-point testing
  - 4) Startup/Commissioning
  - 5) Owner Training
- B. PLC Logic Development: ENGINEER will develop the PLC programs for the complete control system as shown on the Contract Documents. These PLC's include:
  - 1) PLC-EPS (Effluent Pumping Station PLC)
- C. The above PLCs will be programmed by ENGINEER. The logic will be based on the control system descriptions developed by the project team. PLC program will be programmed to support incorporation into the plant's future SCADA/HMI application under a future agreement.

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- D. Local Operator Interface (OIT) Configuration: ENGINEER will develop graphics to facilitate monitoring and control of the PLC program logic developed by the ENGINEER under this project. OIT functionality will include up to eight (8) screens, including a project title screen, process overview, alarm setpoints screen, control setpoints screen, alarm history screen, and three additional screens as coordinated with the Owner.
  - E. Preliminary Testing: ENGINEER will perform in-house simulation of PLC and supervisory programs to validate programs are ready for onsite deployment. Upon confirmation by the Construction Manager that all point-to-point testing required in the Contract Documents has been fully and successfully demonstrated by the Contractor, ENGINEER will commit to a startup schedule for the confirmed system(s).
  - F. Startup/Commissioning: ENGINEER will perform the field testing of the control system for the process. Site visits will include an initial site visit to witness final point-to-point testing performed by the Contractor, a second site visit to commission the PLC and OIT programs and perform Owner training, and a third site visit to address punchlist items.
  - G. Training: ENGINEER will provide the operations staff training on use of the local operator interface (OIT). Two (2) hours of training is budgeted.
3. **Owner's Responsibilities**
- A. Owner shall be responsible for issuing Notice to Proceed to Engineer.
  - B. Owner shall have those responsibilities set forth in Article 2 and in Exhibit B of the Agreement.
4. **Times for Rendering Services**
- A. This Task Order is based on a construction contract duration of 10 months from Notice to Proceed to Final Completion. The scope of services and price will have to be adjusted by Amendment if the construction contract duration varies from this assumption.
  - B. This Task Order is based on the Owner's Authorized Representative for both the CIP Upgrade Phase 1 Project and the Effluent Pumping Station Project being on site an average of 40 hours per week each (except for City holidays). Contract Documents for Construction require the Contractor to reimburse the Owner by Change Order should Contractor's working hours extend outside normal working hours including all costs for weekend, holiday, and/or overtime services of Owner's Authorized Representative. Engineering cost for providing these additional Owner's Authorized Representative services will be adjusted by Amendment.
  - C. Preparation of As-Built drawings based on red-line drawings provided by the Contractor: As-Built drawings will be provided eight (8) weeks following receipt of all red-line drawings from the Contractor.

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5. **Payments to Engineer**

A. Owner shall pay Engineer for services rendered as follows:

<i>Category of Services</i>	<i>Compensation Method</i>	<i>Estimate of Compensation for Services</i>
<i>Basic Services</i>	<i>Rate Schedule</i>	<i>\$260,494</i>

B. The terms of payment are set forth in Article 4 of the Agreement and in Exhibit C.

6. **Consultants:** Engineer will utilize the following Consultant for portions of this Task Order.

A. John D. Hynes & Associates, Inc. for Soil, Concrete and Masonry Inspections and Testing, Geotechnical Services

7. **Other Modifications to the Agreement:**

A. The limit of liability for this task order is \$2,000,000 U.S. currency.

8. **Attachments:** Not Used.

9. **Documents Incorporated By Reference:** Not Used.



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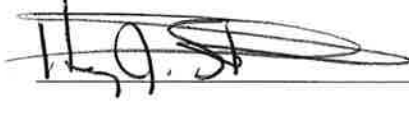
Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is August 25, 2017.

OWNER: CITY OF REHOBOTH BEACH

ENGINEER: GHD INC.

By: 

By: 

Name: SUSAN LYNN

Name: Harry J. Sturdevant

Title: City Manager

Title: Principal

Engineer License or Firm's Certificate No. 30016

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: \_\_\_\_\_

Name: Harry J. Sturdevant

Title: \_\_\_\_\_

Title: Principal

Address: \_\_\_\_\_

Address: 16701 Melford Boulevard  
Suite 330  
Bowie, MD 20715

E-Mail Address: \_\_\_\_\_

E-Mail Address: jeff.sturdevant@ghd.com

Phone: \_\_\_\_\_

Phone: 240-206-6842

Fax: \_\_\_\_\_

Fax: 240-206-6811



GHD

Date

8/21/2017

**Rehoboth Beach Effluent Pumping Station**

Construction Phase

Engineering Services Proposal

	RESPONSIBILITY	RATE	CONSTRUCTION SERVICES		
			HOURS	COST TOTAL	
<b>ENGINEERING SERVICES</b>	Project Dir/Principal Manager	235.00	18	4,230	
	Principal	220.00	46	10,120	
	Senior Project Manager	195.00	0	0	
	Senior Engineer II	180.00	30	5,400	
	Project Manager I/Senior Eng I	160.00	424	67,840	
	Project Engineer II	145.00	0	0	
	Project Engineer I	135.00	314	42,390	
	Engineer III	125.00	215	26,875	
	Engineer II	110.00	0	0	
	Engineer I	95.00	0	0	
	CAD Manager	135.00	20	2,700	
	Designer	95.00	40	3,800	
	Drafter	75.00	0	0	
	Senior Tech	112.50	0	0	
	Administrative Assistant	81.00	0	0	
	Resident Project Representative	120.00	738	88,560	
		<b>TOTAL LABOR COST</b>		1,845	\$251,915
		A. Travel			
		Mileage	0.555	3,700	2,054
		Airfare / Car Rental	LS	0	0
		Overnights	115	10	1,150
		B. Printing			
		Copy Center	\$0.05	5,000	250
		Copiers	\$0.15	0	0
		Drawings	\$1.25	100	125
	C. Postage	LS	0	0	
	D. Equipment/Misc/Travel	LS	0	0	
	F. Subcontractors				
	Inspection & Testing	Allowance	5,000	5,000	
	<b>TOTAL OTHER DIRECT COSTS</b>			\$8,579	
	<b>TOTAL COST FOR CONSTRUCTION</b>			<b>\$260,494</b>	