#### TASK ORDER 1-16 SWR AMENDMENT 1

#### ENGINEERING DESIGN, PERMITTING, BID PHASE, and CONSTRUCTION PHASE SERVICES FOR WASTEWATER PUMP STATIONS "H and B" REHABILITATION, AND REPLACEMENT OF PUMP STATION "A" BACKUP GENERATOR

This TASK ORDER 1-16 SWR AMENDMENT 1 is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL Engineers, Inc. ("ENGINEER") executed on November 19, 2012, which is incorporated herein by this reference.

#### A. <u>SCOPE OF SERVICES</u>

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 1-16 SWR AMENDMENT 1, "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Task order.

This Task Order, when executed, shall be incorporated in and shall become an integral part of the November 19, 2012, Master Agreement.

#### B. <u>TIME OF COMPLETION</u>

Work under this Task order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff.

#### C. <u>COMPENSATION</u>

Compensation for the labor portions of TASK ORDER 1-16 SWR AMENDMENT 1, Task A, and B will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for the labor portions of Tasks C, and D and all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 1-16 SWR AMENDMENT 1 COMPENSATION.

#### D. <u>ACCEPTANCE</u>

By signature, the parties each accept the provisions of this TASK ORDER 1-16 SWR AMENDMENT 1, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL Engineers, Inc.

For CITY OF KEY WEST

By:		By:
-	William D. Beddow, P.E.	Jim Scholl
	Vice President	City Manager
		Dated the day of, 20
	Sean McCoy, P.E.	
	Key West Project Manager	ATTEST:

## TASK ORDER 1-16 SWR AMENDMENT 1 REPLACEMENT OF PUMP STATION "A" BACKUP GENERATOR

## SCOPE OF SERVICES

# **Project Description**

The City of Key West owns and operates twenty-five (25) Wastewater Area Pump Stations which are responsible for conveying wastewater flows to the Richard A. Heyman Environmental Protection Facility. In 2015, CH2M HILL was contracted to inspect these lift stations and provide a condition assessment report. This report identified pump station components which need rehabilitation or replacement, provided budget level cost estimates, and prioritized pump stations requiring rehabilitation. This report was used by the City to plan and budget for Capital Improvement Plan efforts to rehabilitate the City's wastewater pump stations.

To ensure continued service the CITY proposes to retain the ENGINEER to provide design and bid phase services for the rehabilitation of the top ranked pump stations identified in the Preliminary Condition Report.

Wastewater Pump Station A was one of the City's first pump stations to receive a backup generator, constructed in 1986. It was subsequently relocated to its current location in 2001. The generator is over 30 years old, and has served past its 20 year design life. The generator, transfer switch, and disconnect at PS A were identified for replacement in the condition assessment report mentioned above. Amendment 1 proposes to add the Design, Permitting, Bid Phase, and Construction Phase Services for the generator replacement at Pump Station A, to the Pump Station H & B Rehabilitation project currently under design. Adding this additional design and construction element to an already open project with similar scope will save the city costs associated with an additional Bid Phase, and separate construction contract.

# Purpose

The CITY has requested that the ENGINEER provide engineering services for the Design, Permitting, Bid Phase, and Construction Phase Services for the replacement of the City's Backup Generator at Wastewater Pump Station "A".

This Task Order describes the ENGINEER's Scope of Services. Specific activities to be performed under this Task Order include:

- Provide detailed preliminary and final design with submissions of 60% and 90% documents for review. Following acceptance of the 90% documents, bid ready documents will be prepared, combined with the Pump Station H and B Rehabilitation Project, and submitted as a single construction contract for bidding.
- Permitting
- Bid Phase Services: Combined with Pump Station H and B Rehabilitation Project
- Construction Phase Services: Combined with Pump Station H and B Rehabilitation Project.

## **Scope of Services**

### Task A – Design

This task includes activities related to the design of the Backup Generator, automatic transfer switch (ATS) and disconnect. This task is divided into two subtasks that would correspond to logical review milestones for the CITY.

### Subtask A.1 - Preliminary Design (60%)

The ENGINEER will perform the work necessary to develop the design for Pump Station A Generator Replacement, based on the preliminary condition report, current VFD Upgrades project, and existing pump station layout. The objectives of this task is to design Pump Station A generator replacement and associated components, and to communicate the design tasks to the CITY. The ENGINEER will conduct a design review meeting with the CITY prior to the conclusion of this task.

Specific work activities in this task are identified below:

- Site Visit to inspect the generator, Automatic Transfer Switch and disconnect.
- Develop generator, ATS and disconnect replacement sheet(s) and associated details for Pump Station A.
- Raise the finished floor elevation of the generator and associated platform to the same elevation as the finished floor of the electrical building.
- Develop Specification Table of Contents
- Identify any potential constructability issues.
- Prepare Class 4 budget-level cost estimate.
- 60% Design Review Meeting.

#### Deliverables

Deliverables associated with Amendment 1 shall be incorporated into the currently ongoing Pump Station H and B rehabilitation design milestones and corresponding review package.

- Four (4) hard copies of the preliminary design, which includes preliminary drawings, design data, catalog cut sheets and 60% complete review documents, and an outline of the technical specifications (two (2) of these copies are for OMI).
- 60% construction cost estimate. (submitted digitally)
- 60% review meeting minutes. (submitted digitally)

#### Subtask A.2 – Final Design (90%)

During this subtask, the ENGINEER will complete the technical design based on the outcome of the 60% Design Review. At the end of this subtask the design documents will be considered complete and ready for bidding.

Specific work activities in this task are identified below:

- Prepare 90% contract documents, which include legal and technical specifications and drawings.
- Conduct 90% review meeting
- Incorporate review comments from CITY into the design documents,
- Based on the 90% documents prepare updated final construction cost estimate
- Based on the 90% documents prepare bid documents.
- Submit bid documents to the CITY.

#### Deliverables

Deliverables associated with Amendment 1 shall be incorporated into the currently ongoing Pump Station H and B rehabilitation design milestones and corresponding review package.

- Two (2) copies of final construction cost estimate
- Two (2) copies of 90% review meeting minutes
- Four (4) copies of 90 % review documents: 11 x 17 drawings and specifications (two (2) of these copies are for OMI)
- Four (4) copies of final bid documents, including drawings and specifications (two (2) of these copies are for OMI)
- One (1) CD of the final bid documents for upload to DemandStar

### Task B – Permitting

ENGINEER will prepare a letter for FDEP stating the proposed improvements to Pump Station A and request confirmation that a permit is not required. The ENGINEER will submit a draft of the proposed letter to the CITY for review and comments.

#### Deliverables

- Two (2) copies of the final FDEP letter.

### Task C – Bid Phase Services

Bidding services are based on a Bid Period of 30 days. The ENGINEER will add the following services under Amendment 1 to the original Task Order, to assist in the bidding process:

- All direct communications with bidders on matters related to the technical aspects of the design will be handled directly by the ENGINEER.
- Issue up to two (2) ADDENDA, if required.
- After award, the ENGINEER will distribute to the successful contractor three sets of contract documents for execution. The contractor will be directed to return the documents to the ENGINEER for compliance review of the bidding requirements. After the ENGINEER reviews the contract documents, these three sets of documents will be sent to the CITY for final review and signatures.

• Prepare conformed contract documents for use by CITY, ENGINEER, and Contractor during construction. Including three (3) signed and sealed sets of documents for submission by contractor to City of Key West Building Department.

Bid services will be considered complete upon the ENGINEER's review and forwarding of the Contractors executed documents to the CITY, and submittal of conformed documents to the CITY.

#### Deliverables

- Two (2) copies of Pre-bid meeting minutes
- Two (2) copies of recommendation of award letter
- Three (3) copies of Contract Documents for execution
- Six (6) copies of Conformed Contract Documents (two (2) of these copies are for OMI), one (1) full size set of drawings and one (1) CD containing specifications and drawings in PDF format.
- Three (3) Signed and Sealed copies of conformed documents for contractor to submit for the anticipated City of Key West Building Permit (half size drawings).

### Task D - Construction Phase Services

The ENGINEER will perform limited construction phase services listed in this Task Order for a construction period that is estimated to be 8 months. The CITY will be responsible for full-time resident observation.

The ENGINEER will add the following activities under this amendment to the original Task Order.

- At the request of the CITY, review up to forty (10) shop drawings and other construction related submittals pertaining to the Generator replacement
- At the request of the CITY, the ENGINEER will provide up to 10 hours to assist in the technical interpretations of the drawings, specifications, and contract documents, and evaluate requested deviations from the approved design or specifications.
- At the request of the CITY, perform a substantial completion inspection of the project and assist in the preparation of a punch-list.
- At the request of the CITY, perform a final completion inspection of the project.
- At the request of the CITY, provide on-site start-up assistance, a one (1) one-day site visit by two ENGINEER personnel assumed. *PM & electrical*
- Prepare record drawings based on mark-ups from the CONTRACTOR.

#### Deliverables

- Two (2) copies each reviewed shop drawings
- Two (2) copies each Request for Information
- One (1) electronic copy of punch list(s)

- One (1) full size copy, two (2) 11" x 17" copies, and one (1) electronic copy of record drawings in PDF and AutoCAD format

## Assumptions

The following assumptions were used in the development of this Task order

- Work under this Task Order will be completed in calendar year 2017.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- The design documents will be prepared for a single construction contract. Rehabilitation documents for Pump Station H and B. and generator replacement documents will be produced. The bid form will include Rehabilitation of Pump Stations H and B, and Generator Replacement of Pump Station A.
- The ENGINEER's master specifications will be used as the basis for all technical sections in Divisions 1 through 49. The ENGINEER's master specifications incorporating CITY requirements will be used for General Conditions, Supplemental Conditions, and other front end documents.
- Legal, easement, or plat surveys are not included in the scope of work. If additional property is required it shall be the responsibility of the City to obtain.
- Existing pump station Record Drawings will be used when available for pump station layout.
- Surveying is not included in the scope of work.
- Geotechnical is not included in the scope of work.
- This Amendment assumes that no FDEP permit is required.
- This Task Order does not include any Building Department permit applications.
- The contract will be awarded after the first bidding process. Re-bidding will be considered as an "Additional Services".

# **Obligations of the CITY**

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- Prompt review and comment on all deliverables (within 10 working days of receipt).
- Facilitate access to any required facilities
- Attendance of key personnel at meeting as requested

# **Additional Services**

The ENGINEER will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY. Additional services may include, but are not limited to, the following:

- Detailed Design of additional rehabilitation to the wastewater pump stations not already identified above.
- Re-bidding any, or all, portions of this project.
- Review of Contractor pay applications.
- Application for a Building Permit (if necessary).
- Permitting for the Florida Department of Environmental Protection if required

# Compensation

The estimated compensation for TASK ORDER 1-16 SWR AMENDMENT 1, is shown on attachment A entitled TASK ORDER 1-16 SWR AMENDMENT 1, COMPENSATION.

# **Completion Dates**

Delivery will be coordinated with the current Pump Station H & B Rehabilitation project, so that they may be combined and Bid together as a single construction contract.

### Attachment A

Compensation

			AM	AMENDMENT 1	NT 1					
Staff	ST/SPM	PM/ES	ЪЕ	T5	T4	Spec Pr	SPA			
Hourly Rate	\$170.00	\$157.00	\$135.00	\$113.00	\$101.00	\$89.00	\$67.00			
Task A Design								<b>Total Hours</b>	Repro /	Travel
A.1.Preliminary Design									Shipping	
Site Investigation	9	8						14		\$1,200
60% Design	10	24	9	28	4		4	72	\$ 50.00	
60% review meeting/responses	Ð	-		~			4	7	\$ 100.00	
	21	33	9	29	4	0	8	93		
	\$ 3,570.00	\$ 5,181.00	\$ 810.00	\$3,277.00	\$ 404.00	ب ج	\$ 536.00	\$ 13,778.00	\$ 150.00	\$1,200.00
A.2.Final Design										
90% Documents	14	32	5	24	4	16	4	66	\$ 50.00	
90% review meeting/responses	5	7					7	0		
Bid Documents	ო	9	-	ω		4	4	26	\$ 100.00	
	22	40	9	32	4	20	10	134		
	\$ 3,740.00	\$ 6,280.00	\$ 810.00	\$ 3,616.00	\$ 404.00	\$ 1,780.00	\$ 670.00	\$ 17,300.00	\$ 150.00	۰ ب
Task B Permitting										
FDEP Letter	2							2	\$ 50.00	
	2							2		
	\$ 340.00							\$ 340.00	\$ 50.00	۰ ج
<b>Task C Bid Phase Services</b>										
RFI/Response to bidders/addenda	3	2				1	-	7	\$50.00	
	с	2	0	0	0	1	1	7		
	\$510.00	\$314.00	\$0.00	\$0.00	\$0.00	\$89.00	\$67.00	\$980.00	\$50.00	
Task D Construction Phase Services	es									
Submittals	ю	12					8	23		
RFI/Change Orders	7	9					~	6		
Site Visits	-	8						6	\$100.00	
Record Drawings	ო	4	-	ω	7		2	20	\$300.00	
Closeout/Startup	7	9					-	6	\$100.00	\$1,200.00
	11	36	1	8	2	0	12	0/		
	\$1,870.00	\$5,652.00	\$135.00	\$904.00	\$202.00	\$0.00	\$804.00	\$9,567.00	\$500.00	\$1,200.00
							Total Hour:	306		
						Su	Subtotal Cost	\$ 41,965.00	\$ 900.00	\$2,400.00
					10 1-16	IO 1-16 AMENDMENT 1 TOTAL	T 1 TOTAL	\$ 45,265.00		