



**SUPPLEMENTAL WORK ORDER #1
for the CITY OF CLEARWATER**

Date: July 25, 2018
Consultant Project Number: 009920232
City Project Number: 16-0033-UT

1. PROJECT TITLE:

Marshall Street WRF MCC No. 9 Electrical Systems Upgrades

2. SCOPE OF SERVICES:

Provide additional Design and Construction Management, Inspection and Observation Services for the Marshall Street MCC No.9 Electrical Systems Upgrades.

DESIGN PHASE

Task 4.0 Additional Design Services:

- A. Additional design services to meet the new City safety requirements regarding Electrical Arc Flash; "All electrical designs and construction shall adhere to NFPA 70 E, Standard for Electrical Safety in the Workplace. Perform calculations for Fault and Arcflash, and provide provisions for new or updated Arcflash equipment labeling."
- B. Additional design review, site visits and meetings due to the introduction of new City Staff.
- C. Design change for the integration of a Smart MCC to account for future SCADA additions and the limited I/O of the existing PLC.
- D. Additional design and review for a 200A service for the Reactor Building as requested by City.
- E. Additional design and review for replacement of existing conduit and supports in the fermentation, and 1 & 2 anoxic basins for hurricane hardening, per City request.
- F. Additional project management for invoicing, project comment tracking, and general oversight for the above additional services.

CONSTRUCTION PHASE

Task 6.0 - Construction Phase Services:

- A. General Project Management - Additional construction management required for additional Quality Assurance/Quality Control and Observation Services (see Task 7.0).
- B. Prepare a Project Dossier for the Construction Phase of the project. The Project Dossier will be an electronic compilation of folders for project correspondence, meeting minutes,

contract documents, change orders, field orders, RFIs, work change directives, addenda, additional drawings or drawing revisions issued subsequent to the conformed drawings, progress reports, shop drawings, regulatory correspondence, and other project-related documents. These documents will encompass only those generated and/or approved by the City or McKim & Creed. This document will be submitted to the City in electronic format and will be done first as a draft for City approval, and then submitted in final form by CD/DVD ROM.

- C. A health and safety plan will be prepared, submitted, and approved by the City Project Manager prior to mobilizing to site.

Task 7.0 - Construction Observation Services:

Construction Site Visits/Progress Meetings: Effectively increase the observation to 6hrs/wk for 24 weeks. This reflects the increased project duration due to the revised project scope (see 2. Scope of Services, Design Phase (above) and the implementation of the Bid's Additive Alternate.

Change from:

"4 hours per week for the 16 week remaining active construction"

To:

"6 hours average per week for the 24 week remaining active construction"

3. PROJECT GOALS:

Project Dossier

4. BUDGET:

See Attachment "B".

This price includes all labor and expenses anticipated to be incurred by McKim & Creed for the completion of these tasks in accordance with Professional Services Method "A" – Cost Times Multiplier Basis, **for a fee not to exceed** Nineteen Thousand Nine Hundred Ninety-Two Dollars – (\$19,992.00).

5. SCHEDULE:

No Change

6. STAFF ASSIGNMENT (Consultant):

Consultant:

Project/Construction Manager Aubrey Haudricourt

Project Engineer Laurel Smith

Construction Observations Diane Achinelli

Quality Assurance/ Control Mitch Chiavaroli

City's Staff:

Jeffery Walker	Project Manager
Jeremy J. Brown, PE	Utilities Engineering Manager
Richard G. Gardner, PE	Public Utilities Assistant Director
Michael Gilliam	Infrastructure Maintenance Manager
Ryan Alexander	Site Representative, Marshall ST. WRF Chief Operator
Kervin St.Aimie	Maintenance Coordinator
Craig Mattila	Supervisor II Electrical & Instrumentation

7. CORRESPONDENCE/REPORTING/COMMUNICATION PROCEDURES:

ENGINEER's project correspondence shall be directed to Jeffery Walker.

All City project correspondence shall be directed to the Project Manager, with copies to the Utilities Engineering Manager and Public Utilities Assistant Director, and to the City Staff Assignment on this project.

ENGINEER shall provide a minimum of forty-eight (48) hours' notice prior to conducting fieldwork/site visits. ENGINEER shall provide a minimum of seven (7) days notification for site visits requiring the assistance of City Operations and Maintenance personnel.

ENGINEER acknowledges that all City directives shall be provided by the City Project Manager.

A health and safety plan must be submitted and approved by the Project Manager prior to conducting any fieldwork/site visits.

In addition to the original copies delivered as stated in the scope of work, all project deliverables will be submitted in electronic format on CD or other City approved device prior to approval of final invoice.

8. INVOICING/FUNDING PROCEDURES:

For work performed, invoices shall be submitted monthly to the:

**City of Clearwater, Engineering Department
Attn. Veronica Josef, Senior Staff Assistant
PO Box 4748
Clearwater, Florida 33758-4748.**

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

City Invoicing Code: **3217321-561300-96213**

9. INVOICING PROCEDURES

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. City Project Number, Purchase Order Number and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Cost Times Multiplier
- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. SPECIAL CONSIDERATIONS:

The consultant named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

PREPARED BY:

A.Haudricourt
Senior Project Engineer
McKim & Creed, Inc.

Date

APPROVED BY:

D. Scott Rice, P.E.
City Engineer
City of Clearwater

Date



CITY OF CLEARWATER ENGINEERING DEPARTMENT

WORK ORDER INITIATION FORM CITY DELIVERABLES

1. **FORMAT**

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. **DELIVERABLES**

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format. If not available Land Desktop files are still acceptable, however the City or Clearwater is currently phasing out Land Desktop.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard release of Autodesk, Inc. software. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562 4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

Marshall Street WRF MCC No.9 Electrical Systems Upgrades



SUPPLEMENTAL WORK ORDER PROJECT BUDGET

Change Order/Task	Description	Sub-Consultant Services	Labor	Total
Task 4.0	Design Services		\$6,660.00	\$6,660.00
Task 5.0	Bidding Services		\$1,300.00	\$1,300.00
Task 6.0	Construction Phase Services		\$3,072.00	\$3,072.00
Task 7.0	Construction Observation Services:		\$8,960.00	\$8,960.00
				\$19,992.00