

Black & Veatch

WORK ORDER INITIATION FORM for the CITY OF CLEARWATER

Date: _____

Consultant (ENGINEER) Project Number: 403617

City Project Number: 19-0030-UT

1. PROJECT TITLE:

America's Water Infrastructure Act & Public Utilities Emergency Response Plan

2. SCOPE OF SERVICES:

BACKGROUND

In October 2018, the America's Water Infrastructure Act (AWIA or the "Act") introduced a new requirement for water systems to conduct a Risk and Resilience Assessment (RRA) and prepare an Emergency Response Plan (ERP) that incorporates the findings of the RRA. This Scope of Services is prepared to provide the CITY with an AWIA ERP to enable certification of compliance with the Act (Phase I). Although not required by the Act, the City has elected to prepare a similar ERP for the entire Public Utilities Department (Phase II).

The City of Clearwater submitted the RRA compliance on March 26, 2020, which dictates that the potable water ERP compliance is due by September 25, 2020.

Phase I – America's Water Infrastructure Act Emergency Response Plan: Based on the previously completed RRA report, ENGINEER will develop an ERP as required by the AWIA for community (drinking) water systems and submit the AWIA ERP to the United States Environmental Protection Agency (EPA) by the mandatory deadline of September 25, 2020.

Phase II – Public Utilities Emergency Response Plan: Upon completion of Phase I, the ENGINEER will develop ERPs for the other Divisions within the Public Utilities Department. The Phase II ERPs will be based upon the Department's existing ERPs, updating the format and content similar to the plan developed during Phase I - AWIA ERP. The following Divisions are included in Phase II: Industrial Pretreatment, Wastewater Collection, Water Reclamation Reclaimed Water Infrastructure Maintenance and will also include Administration and the CITY's Laboratory at the Marshall Street WRF.

I. SCOPE OF SERVICES

Task 1 – Project Management

Task 1.1 – Project Management and Administration

ENGINEER will perform general administrative duties associated with the Project, including project set-up, resource management, progress monitoring, scheduling, general correspondence, office administration, and invoicing.

ENGINEER will maintain an accurate project documentation, filing, and project cost accounting system throughout the project. ENGINEER will maintain an accurate project schedule throughout the project.

Task 1.2 Quality Assurance and Quality Control

ENGINEER will maintain continuous control over the quality of all its work efforts. This will include oversight and review by the Project Manager, Engineering Manager and Quality Control Manager.

ENGINEER will perform management of the Quality Assurance / Quality Control (QA/QC) Program for the project. A QA/QC Plan will be developed at the beginning of the project assigning appropriate QA/QC reviewers and approximate schedule for performing the QA/QC reviews. ENGINEER's Quality Control Manager will coordinate and manage the QA/QC program in accordance with the QA/QC Plan. The intent of the QA/QC program is that all project deliverables to the CITY receive an appropriate QA/QC review prior to submittal. Time for the QA/QC reviewers to perform the reviews is included in the corresponding scope tasks.

ENGINEER will create and maintain a "Comment-Response Log" in Word format. CITY will provide comments on the draft deliverables, and ENGINEER will respond to each comment using the log. Following submission of each deliverable and receipt of CITY comments, a Comment Review Meeting will be held. Prior to the meeting, ENGINEER will present the log of comments and list of questions to be discussed and clarified at the Comment Review Meetings. Rows will not be deleted from the log (even if responded to/ resolved) and the entire log workbook will be delivered to the CITY at the conclusion of the project. It is assumed that the ENGINEER's Project Manager and Engineering Manager will attend the Comment Review Meetings virtually using Microsoft Teams, unless otherwise requested by the CITY. Anticipated Comment Review Meetings with the CITY include:

- Risk Mitigation Plan
- Emergency Response Plan
- Public Utilities Emergency Response Plan

To streamline the file sharing process and facilitate collaboration, ENGINEER will provide CITY staff access to documents via ProjectWise (the document management software used by Black & Veatch). A SharePoint-based system provides an easy-to-use website interface which links to the ProjectWise database. Allowing CITY and ENGINEER to both access the document repository will enhance project collaboration and ease of file sharing.

Throughout the project, ENGINEER will maintain an organized document management filing system including all reference documents used throughout the project (e.g. assumptions, data points, reports referenced, meeting agenda, sign-in sheets, minutes, files of correspondence, etc.). At the end of the project, ENGINEER will compile the reference documents into a Project Catalog (including decision logs, comment-response logs and ProjectWise login information) and deliver it to the CITY.

Task 1 Deliverables:

- Monthly activity reports with sufficient detail to support invoices concurrent with work (PDF format)
- Project Catalog (PDF)

Task 5 – Contingency

Task 6 – AWIA Emergency Response Plan (Phase I)

ENGINEER will generally follow the EPA's template for Emergency Response Plans (issued July 2019) which requires the Emergency Response Plans to include the following key components:

- Resilient Strategies: Strategies and resources to improve the resilience of the system. Roles and responsibilities, communications, regional coordination
- Emergency Plans and Procedures: Response plans and procedures (core and incident-specific)
- Risk Mitigation Actions: Alternative source water options, interconnections, redundancy improvements, asset hardening, physical and cybersecurity countermeasures
- Detection Strategies: Intrusion detection, source water contamination, cyber intrusion, etc.

Task 6.1 - Risk Mitigation Plan

ENGINEER will provide a draft and final Risk Mitigation Plan with recommendations roadmap for system and facility improvements and define longer-term improvements, if required. ENGINEER will

incorporate comments from the CITY and update the Risk Mitigation Plan to address these comments. An electronic copy of the draft and final Risk Mitigation Plan will be provided for comments. This task is building upon the Water System RRA and focusing on the top three risk categories. It does not include the wastewater or reclaimed water systems.

Task 6.2 - AWIA Emergency Response Plan

ENGINEER will work with the CITY to update its existing potable water ERP and develop additional Incident-Specific Response Procedures for the three water treatment plants and system. Task 6.26 will include conference calls with CITY staff responsible for developing and maintaining the potable water emergency plan. The strategies and resources to improve resilience, update emergency response plans, develop/ update the Risk Mitigation Plan (City Project No. 19-0030-UT) and recommended detection strategies will be incorporated into a draft and final ERP document per the template provided by the EPA. An electronic copy of the draft ERP will be provided for review and comment. ENGINEER will incorporate comments from the CITY and update the ERP to address these comments then will submit the final version. The CITY will be responsible for filling out and submitting the ERP form on the EPA website. Furthermore, the individual who registers the CITY on the EPA website must be the same individual who certifies the ERP.

Task 6 Deliverables:

- Data request list (Email, Word or Excel)
- Draft Risk Mitigation Plan (Word)
- Final Risk Mitigation Plan (PDF and Word document with track changes)
- Draft AWIA Emergency Response Plan (Word)
- Final AWIA Emergency Response Plan (PDF and Word document with track changes)
- Comment-Response Log (Word)

Task 7 – Public Utilities Emergency Response Plan (Phase II)

ENGINEER will use the same format as the AWIA Emergency Response Plan. The Emergency Response Plan Procedures section will be divided into the City's Divisions for easy reference and access.

Task 7.1 – Public Utilities Data Collection and Review

ENGINEER will create and maintain a "Data Request Tracking Log" documenting date and item requested, date provided and by whom from CITY. ENGINEER will follow the CITY's policies on protection of sensitive information and will implement necessary processes to keep information secure throughout the project. ENGINEER will then review documentation provided by the CITY. The information request will be a live document and will be updated as additional items are identified.

Task 7.2 – Water Reclamation Facility Site Visits and Interviews

ENGINEER will conduct site visits and staff interviews as necessary to understand the needs of the Divisions to be added to ERP during Phase II of the Update. (Industrial Pretreatment, Wastewater Collection, Water Reclamation, Reclaimed Water Infrastructure Maintenance Public Utilities Administration and the CITY's Laboratory at the Marshall Street WRF).

At a minimum this will include site visits to the three water reclamation facilities (WRF) and appropriate reclaimed water infrastructure and will interview staff in preparation for formulating the various Incident-Specific Response Procedures and the Public Utilities Emergency Response Plan.

Site visits may include observation of up to 5 lift stations, but it is not necessary for ENGINEER to visit all lift stations, however, will rely on information provided in the Wastewater Collection system project documents (which will be included in the data request to CITY).

A data collection list and health & safety plan will be prepared prior to the site visits. It is assumed that all site visits for this task will occur within 2 - 4 days and will be performed by local professionals.

Task 7.3 Public Utilities Emergency Response Plan

ENGINEER will work with the CITY to update the existing Public Utilities Emergency Response Plan (Industrial Pretreatment, Wastewater Collection, Water Reclamation, Reclaimed Water Infrastructure Maintenance Public Utilities Administration and the CITY's Laboratory at the Marshall Street WRF) to develop new Incident-Specific Response Procedures as required. This task will include conference calls with CITY staff responsible for developing and maintaining emergency plans. The strategies and resources to improve resilience, update emergency response plans, and recommend detection strategies will be incorporated into an electronic draft ERP document per the template provided by the EPA. CITY will provide comments on the draft Public Utilities ERP within 3 weeks of receipt. ENGINEER will incorporate comments from the CITY and update the Public Utilities ERP to address these comments then will submit the final version.

Task 7 Deliverables:

- Data request log (Email, Word or Excel)
- Draft Public Utilities Emergency Response Plan (Word)
- Final Public Utilities Emergency Response Plan (PDF)
- Comment-Response Log (Word)

3. PROJECT GOALS:

To comply with the EPA's requirements set forth in the America's Water Infrastructure Act, the CITY, with the support of the ENGINEER, will incorporate risk and resilience management strategies (developed in City Project No. 19-0030-UT) and update the CITY's Emergency Response Plans (ERPs). The objective of this Scope of Services is to develop the following required components of an ERP:

- Strategies and resources to improve the resilience of the system

- Emergency Response Plans and procedures (for AWIA compliance and for Public Utilities)
- Risk Mitigation Actions
- Detection Strategies

4. **BUDGET:**

This price includes all labor and expenses anticipated to be incurred by ENGINEER for the completion of these tasks in accordance with Professional Services Method “A” – Hourly Rate **for a fee not to exceed one hundred forty thousand, eight hundred seventy Dollars (\$140,870.00).**

No application fees are anticipated for the Scope of Services described herein.

5. **SCHEDULE:**

ENGINEER proposes to perform the work on a continuing basis from issuance of Notice to Proceed (NTP) through the following estimated time-frame for completion. NTP is assumed to be issued no later than September 17, 2020, after the City Council Meeting that day.

This schedule assumes the City will respond with comments for draft deliverables within 3 weeks for the Public Utilities ERP deliverable.

Task	Deliverable/ Activity Description	Date or Days Past NTP
1	Monthly activity reports with sufficient detail to support invoices concurrent with work (PDF format)	Monthly
6	Draft Risk Mitigation Plan – Phase I (Word)	September 18, 2020
6	Final Risk Mitigation Plan – Phase I (PDF)	September 21, 2020
6	Draft AWIA Emergency Response Plan – Phase I (Word)	September 22, 2020
6	Final AWIA Emergency Response Plan – Phase I (PDF)	September 24, 2020
	ERP Compliance Deadline to EPA	September 25, 2020
7	Draft Public Utilities Emergency Response Plan (Word) – Phase II	November 26, 2020
7	Final Public Utilities Emergency Response Plan (PDF) – Phase II	December 31, 2020

6. **STAFF ASSIGNMENTS:**

CITY Staff:

Glenn Daniel	Project Manager
Fred Hemerick (Water Production Assistant Manager)	Public Utilities Site Representative
Jeremy J. Brown, PE	Utilities Engineering Manager

Richard G. Gardner, PE	Public Utilities Assistant Director
Jason Jennings	Water Environmental Technologies Manager
Michael Gilliam	Infrastructure Maintenance Manager
Barry Robinson	Administrative Support Manager
Hatem Elgendi	Acting Laboratory Manager

ENGINEER Staff:

ENGINEER Project Manager – Amanda Schwerman

ENGINEER Engineering Manager – Deanna Hamilton

ENGINEER Quality Control Manager – Rebecca Oliva

ENGINEER support staff - various

7. CORRESPONDENCE/REPORTING/COMMUNICATION PROCEDURES:

ENGINEER's project correspondence shall be directed to:

Amanda Schwerman - Black & Veatch Project Manager
(813) 207-7943 SchwermanA@bv.com

Deanna Hamilton - Black & Veatch Engineering Manager
(813) 282-4163 HamiltonD@bv.com

Rebecca Oliva - Black & Veatch Quality Control Manager
(813) 282-4189 OlivaR@bv.com

All CITY project correspondence shall be directed to:

Glenn Daniel - Water, Reclaim & Wastewater Collections Manager
(727) 562-4960 ext: 7249 Glenn.Daniel@myClearwater.com

with copies to the Utilities Engineering Manager and Public Utilities Assistant Director.

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

In addition to the original copies delivered as stated in the Scope of Services, all project deliverables will be submitted in electronic format 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
Att. 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: __3217321-530100-96721_____

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. Purchase Order, Project and Invoice Numbers and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Hourly Rate
- 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 Hourly Rate, 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 ENGINEER named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

Specific CITY responsibilities:

- Provide current copies of or access to relevant information and documents as requested through the data request.
- Facilitate scheduling of the meetings and coordination as to ensure the most appropriate people are in attendance as feasible.
- Review draft submittals and provide comments in Word format within three weeks of submittal, unless requested and agreed to upon submittal to meet the compliance deadline, for inclusion in the final submittal.
- Coordinate with other CITY departments and staff outside direct involvement on this project.

Specific ENGINEER responsibilities:

- (With guidance from the CITY PM) produce agendas, sign-in sheets and minutes for all meetings.
- Prepare a health and safety plan when any site work or site visits are conducted.
- Assist the CITY in identifying the appropriate attendees for each meeting.

PREPARED BY:

Rafael E. Frias, III, P.E.
Associate Vice President
Black & Veatch Corporation

Date

APPROVED BY:

Tara Kivett, 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 ENGINEER shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format. If unavailable, Land Desktop files are still acceptable, however the City of Clearwater is currently phasing out Land Desktop.

NOTE: If approved deviation from Clearwater CAD standards are used the ENGINEER 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 (including CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

America's Water Infrastructure Act (AWIA) & Public Utilities Emergency Response Plans City Project No. 19-0030-UT Black & Veatch

WORK ORDER INITIATION FORM PROJECT BUDGET

Task	Description	Subconsultant Services	Labor	Total
1.0	Project Management			
1.1	Project Management and Administration		\$15,224	\$15,224
1.2	Quality Assurance and Quality Control		\$6,272	\$6,272
				\$21,496
5.0	Contingency			
5.1	Contingency		\$11,000	\$11,000
				\$11,000
6.0	AWIA Emergency Response Plan (Phase I)			
6.1	Risk Mitigation Plan		\$12,078	\$12,078
6.2	AWIA Emergency Response Plan		\$34,852	\$34,852
				\$46,930
7.0	Public Utilities Emergency Response Plan (Phase II)			
7.1	Public Utilities Data Collection and Review		\$6,572	\$6,572
7.2	Water Reclamation Facility Site Visits and Interviews		\$19,720	\$19,720
7.3	Public Utilities Emergency Response Plan		\$34,652	\$34,652
				\$60,944
Subtotal, Labor and Subcontractors				\$140,370
Permit Review Fees				\$0
9.1	Other Direct Costs (prints, photocopies, postage, etc.) (Not applicable to lump sum Work Orders)			\$500
Grand Total				\$140,870