

CONSULTANT WORK ORDER

Supplement 1

Date:	6/3/2024
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1. PROJECT INFORMATION:

Project Title:	Reclaimed Water Master Plan		
City Project Number:	21-0018-UT Supplemental 1		
City Plan Set Number:	NA		
Consultant Project Number:	77134		

2. SCOPE OF SERVICES:

This work order will focus on the City of Clearwater's (City) reclaimed water (RCW) distribution system and development of a Master Plan. CHA Consulting, Inc. (CHA), formerly known as Reiss Engineering, Inc., previously developed the RCW hydraulic model in 2011 in InfoWater utilizing data from 2009 (City Project 11-0005-UT, PO ST 107298). The original hydraulic model evaluated the expansion of future neighborhoods and other various improvements. Furthermore, in 2013 CHA developed an RCW distribution system operating protocol which proposed various short and long term improvements for improving pumping and operation. The City has since completed the planned expansions outlined in the 2011 hydraulic modeling (which were originally planned to be completed by 2013) and some of the various operational improvements which were originally evaluated as part of the hydraulic model development and operational protocol. There are still many areas within the City's service area where RCW could be expanded to and added. The City would like to update the previous version of the RCW model and develop a master plan to evaluate the existing system and evaluate potential upgrades.

CHA has updated the hydraulic model and completed initial evaluations. The City has requested additional services from CHA. This supplemental 1 will focus on the additional requested services including additional hydraulic modeling scenarios and evaluations, existing irrigation water well review, industrial parcel review and incorporation of this additional services into the Master Plan report.

The specific scope of services to be provided by CHA is set forth below.

7 ADDITIONAL HYDRAULIC MODELING AND REVIEW

Task 7.1 – Reclaimed Water Scenarios. Model scenarios define the set of conditions under which hydraulic model runs are executed. CHA will update the existing scenarios and six new model scenarios created in Task 4 of the original work order, that represent future possible conversion projects. Additional scenarios were requested by the City to be created and simulated. This task includes the additional scenarios as follows:

- Create and simulate all expansion phases with 30" main on McMullen Booth Road offline.
- Create and simulate all expansion phases with interconnects to Dunedin, Safety Harbor, Pinellas County and Top of the World.
- Create and simulate the conversion of potable water elevated tanks to RCW tanks.

Model input and logic controls will be modified as needed in the hydraulic model to address the new or revised scenarios.

Task 7.2 – Parcel Review. CHA will review existing production wells located in existing and future neighborhoods/parcels to determine additional RCW conversions. CHA will review industrial zoned parcels in future neighborhoods to determine additional RCW conversions.

Task 7.3 – Report Preparation. CHA will incorporate the above tasks into the ongoing Master Plan including an Executive Summary and the capital improvement plan (CIP).

3. PROJECT GOALS:

Update and calibrate existing reclaimed water model, determine options to eliminate surface water discharge, create a reclaimed water mater plan with CIP.

4. FEES:

See Attachment "A"

This price includes all labor and expenses anticipated to be incurred by CHA Consulting, Inc., for the completion of these tasks in accordance with Professional Services Method "A" – Hourly Rate, for a fee not to exceed forty-two thousand nine hundred ninety-eight dollars (\$42,998.00).

5. SCHEDULE:

The project is to be completed in **3 months** from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Task 7

3 months

6. STAFF ASSIGNMENT:

CHA Engineering, Inc.:

- Weston Haggen, P.E. – Program Manager
- Barton Jones, Program Facilitator/City Liaison
- Allen Dethloff, P.E. – Principal in Charge
- Edward Talton, P.E. – Senior Engineer
- Parsa Pezeshk, Ph.D., P.E. – Project Engineer
- Hannah Kapalo, E.I. – Project Engineer
- Emily Williamson, P.E. – Project Engineer
- Ian Grabo, E.I. – Project Engineer
- Leif Krapas, E.I. – Project Engineer

City of Clearwater

- Stephen Nelson – Project Manager
- Todd Kuhnelt – Public Utilities Assistant Manager
- Fred Hemerick – Public Utilities Manager
- Ike George – Water Distribution Supervisor
- Mike Vacca – Public Utilities Manager
- Richard G. Gardner, P.E. – Public Utilities Director
- Michael Flanigan – Public Utilities Assistant Director
- Kaylynn Price – Utilities Engineering Manager

7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to:

Weston Haggen, P.E.

All City project correspondence shall be directed to:

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

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code:

For work performed, invoices shall be submitted monthly to:

City of Clearwater, Public Utilities Department

Attention: PU Accounting

1650 No Arcturas Ave Bldg-C

Clearwater, Florida 33765-1945.

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

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:

1. Purchase Order, Project and Invoice Numbers and Contract Amount.
2. The time period (begin and end date) covered by the invoice.
3. A short narrative summary of activities completed in the time period.
4. Contract billing method – Hourly Rate.
5. If Hourly Rate, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, the percent completion, 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).
6. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. CONSIDERATIONS:

Consultant acknowledges the following:

1. The Consultant named above is required to comply with Section 119.0701, Florida Statutes, where applicable.
2. All City directives shall be provided by the City Project Manager.
3. “Alternate equals” shall not be approved until City Project Manager agrees.
4. All submittals must be accompanied by evidence each has been internally checked for QA/QC before providing to City.
5. Consultants/Contractors are not permitted to use City-owned equipment (i.e. sampling equipment, etc.).
6. Documents posted on City website must ADA accessible.

11. ADDITIONAL CONSIDERATIONS:

All work orders should include considerations for the following:

1. Sea Level Rise and Flood Resilience, as applicable.
2. Submittal of a Critical Path Method (CPM) Schedule(s).
3. Submittal of a Project Catalog with the following items, as appropriate:
 - a. Data requests, assumptions, critical correspondence, meeting agenda, sign-in sheets, meeting minutes, document comment-response log(s), technical memorandum/reports, addenda, progress reports, regulatory correspondence, and other project-related documents.
 - b. If construction project, also include design plans, conformed plans, change orders, field orders, RFIs, work change directives, addenda, progress reports, shop drawing and progress submittals, as-builts, record

drawings, and other project-related documents such as O&M manuals and warranty information.

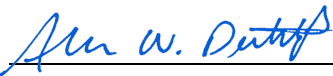
- c. At the conclusion of the project, ENGINEER will combine this information into a Project Catalog and submit to the City for review and comment.
- 4. Arc Flash labeling requirements:
 - a. All electrical designs and construction shall adhere to NFPA 70 E "Standard for Electrical Safety in the Workplace".
 - b. Updated calculations of Fault and Arc Flash, and provisions for new or updated Arc Flash equipment labeling shall be included in the contract documents.

12. SPECIAL CONSIDERATIONS:

NA

13. SIGNATURES:

PREPARED BY:



Allen Dethloff, P.E.
Central Florida Team Leader
CHA Consulting, Inc.

06/04/2024

Date

APPROVED BY:

Richard Gardner, P.E.
Director, Public Utilities
City of Clearwater

Date

ATTACHMENT "A"**CONSULTANT WORK ORDER – PROJECT FEES TABLE**

RCW Master Plan

CHA Consulting, Inc.

21-00189-UT Supplemental 1

City of Clearwater

CONSULTANT WORK ORDER

PROJECT FEES TABLE

Task	Description	Subconsultant Services	Labor	Total
7.0	Additional Hydraulic Modeling and Review			
7.1	Reclaimed Water Scenarios	\$0	\$20,064	\$20,064
7.2	Parcel Review	\$0	\$8,310	\$8,310
7.3	Report Preparation	\$0	\$14,624	\$14,624
Additional Hydraulic Modeling and Review				\$42,998
SUBTOTAL, LABOR AND SUB-CONTRACTORS:				\$42,998
Contingency				\$0
GRAND TOTAL:				\$42,998

ATTACHMENT "B"

CONSULTANT WORK ORDER – CITY DELIVERABLES RCW Master Plan

CHA Consulting, Inc.

21-0018-UT Supplemental 1

City of Clearwater

CONSULTANT WORK ORDER 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.

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