

CONSULTANT WORK ORDER

Date:	01/08/2025
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1. PROJECT INFORMATION:

Project Title:	Marshall St WRF Clarifier Improvements		
City Project Number:	24-0066-UT		
City Plan Set Number:	2024037		
Consultant Project Number:			

2. SCOPE OF SERVICES:

City of Clearwater (CITY) owns and operates the Marshall Street Water Reclamation Facility (WRF). The Marshall St WRF has four 100-foot in diameter secondary clarifiers. During high flows, clarifier blanket rises and solids are washed out over the clarifier effluent weirs, blinding the filters downstream. To improve clarifier efficiency, CITY plans to install density current baffles (Stamford Baffles) on all four secondary clarifiers. It is anticipated that one clarifier at a time will be taken out of service to perform the work. The CITY also expressed their concern that the effluent weirs of the secondary clarifiers might not be level. AECOM will include in the design for the Contractor to check the elevations of the effluent weirs for all four clarifiers and adjust them, if necessary. The project scope provides for the design, bidding services, and construction services for the secondary clarifiers improvements.

It is anticipated that the CITY will provide to AECOM the record drawings CADD files from the Clarifier Rehabilitation Project completed in 2010. AECOM will use these CADD files as base files for preparing the construction drawings for the design of the density current baffles. AECOM will provide:

1. Kick-Off Meeting/Data Collection Activities;
2. Development of 60%, 90% and Final Plans and Technical Specifications for the work identified above;
3. Bidding Services;
4. Limited Engineering Services during Construction;
5. Resident Project Representative (RPR) Services during Construction.

No permitting services, survey work, geotechnical work, or utility locating work are included in this WO. The CITY indicated that no computational fluid dynamics (CFD) modeling is needed for this project to determine effectiveness of density current baffles. The type of density current baffles for the project will be selected based on the manufacturer's recommendation. The design plans shall be compiled using the City of Clearwater CAD standards, as attached.

I. PRE-DESIGN PHASE:

Task 1.1: Kick-Off Meeting

AECOM will convene a Kick-Off Meeting with the CITY within one (1) week after the Notice to Proceed. AECOM will develop the agenda for the Kick-Off Meeting with input from the CITY. The Kick-Off Meeting will discuss and document the points of contacts within the CITY and AECOM, communication protocol, data requirements, the scope of work, project schedule, milestones and submittals, and other miscellaneous issues.

AECOM will prepare minutes of the Kick-Off Meeting and will distribute them to the meeting attendees.

Task 1.2: Data Collection

CITY will provide to AECOM all Record Drawings associated with the project. AECOM will conduct up to two site visits at the NE WRF.

II. FINAL DESIGN PHASE:

Task 2.1: 60% Plans and Technical Specifications

AECOM will utilize the record drawings CADD files from the Clarifier Rehabilitation Project provided by the City to develop the 60 percent completion level plans and technical specifications. The 60 percent plans will contain: a cover sheet, general notes and index, secondary clarifiers plan view and section views, and typical details. The 60 percent technical specifications will include those specialty sections required for the project that are not within the CITY's standard specification sections. Also, the 60 percent submittal will include a preliminary bid form, measurement and payment section, and opinion of probable construction cost.

CITY standard specifications will be used to the fullest extent possible. These may include an Advertisement of Bids and Notice to Contractors (Section I), Instructions to Bidders (Section II), General Conditions (Section III), Technical Specifications (Section IV), and Contract Documents (Section V). Any required sections not covered by standard CITY specifications will be prepared by AECOM. AECOM technical specifications will be prepared in CSI Master Format -2004 (Divisions 1-16).

AECOM will electronically submit the 60 percent design to the CITY for review and comment. AECOM will convene a 60 percent review meeting with the CITY to

receive review comments approximately two (2) weeks after the submission of the 60 percent documents to the CITY. AECOM will prepare and distribute minutes (comments and responses) of the 60 percent review meeting to the attendees.

Task 2.2: 90% Plans and Technical Specifications

From the review of the 60 percent plans, technical specifications and opinion of probable construction cost, AECOM will develop the 90 percent completion level plans and technical specifications. Also, the 90 percent submittal will include the bid form, measurement and payment section, and opinion of probable construction cost.

AECOM will electronically submit the 90 percent design to the CITY for review and comment. AECOM will convene a 90 percent review meeting with the CITY to receive review comments approximately two (2) weeks after the submission of the 90 percent documents to the CITY. AECOM will prepare and distribute minutes (comments and responses) of the 90 percent review meeting to the attendees.

Task 2.3: 100% Plans and Technical Specifications

From the review of the 90 percent plans, technical specifications and opinion of probable construction cost, AECOM will develop the 100 percent completion level plans and technical specifications. Also, the 100 percent submittal will include the bid form, measurement and payment section, and opinion of probable construction cost.

AECOM will electronically submit the 100 percent design to the CITY for review and comment. AECOM will convene a 100 percent review meeting with the CITY to receive review comments approximately two (2) weeks after the submission of the 100 percent documents to the CITY. AECOM will prepare and distribute minutes (comments and responses) of the 100 percent review meeting to the attendees.

Task 2.4: Final Plans and Technical Specifications

From the review of the 100 percent plans, technical specifications and opinion of probable construction cost, AECOM will develop the final plans and technical specifications.

AECOM will submit the final plans and specifications in electronic form (AutoCAD for the final plans and Word for the final specifications). It is anticipated that the final plans and specifications will be used by the CITY for bidding the project.

III. BIDDING PHASE SERVICES:

Task 3.1: Attendance at Pre-Bid Conference

AECOM will attend the pre-bid conference. The purpose of AECOM attendance is to answer technical questions with respect to the design. AECOM will not be responsible for questions or providing information involving the contract between the CITY and the contractor.

Task 3.2: Preparation of Addenda

AECOM will assist the CITY in preparing up to two (2) addenda during the bid phase to formally answer bidder's technical questions, clarify issues or adjust the bid documents prior to the bid opening.

Task 3.3: Recommendation of Award

Following bid advertisement by the CITY, AECOM will review the bids submitted by the contractors and provide recommendation of award to the CITY.

Task 3.4: Preparation of Conformed Plans and Technical Specifications

From the final plans and technical specifications, AECOM will prepare a Conformed Set of plans and technical specifications.

IV. CONSTRUCTION PHASE SERVICES:

Task 4.1: Attendance of Pre-Construction Conference

AECOM will attend the pre-construction conference. The purpose of AECOM attendance is to answer technical questions with respect to the design. AECOM will not be responsible for questions or providing information involving the contract between the CITY and the Contractor.

Task 4.2: Review and Approval of Shop Drawings

AECOM will review and approve up to seven (7) of the Contractor submitted shop drawings for the project. AECOM will review the Contractor submitted shop drawings up to two (2) times each.

Task 4.3: Progress Meetings

AECOM will attend up to six (6) progress meetings during construction. The purpose of AECOM attendance is to answer technical questions with respect to the design.

AECOM will have no more than two (2) staff participating in monthly progress/coordination meetings unless approved in writing by the City Project Manager.

After the meeting, AECOM will prepare meeting notes to summarize the decisions made and action items discussed at the meeting.

Task 4.4: Response to Requests for Information (RFIs)

During construction AECOM will review and respond to up to six (6) CONTRACTOR or CITY generated RFIs. All responses will be in writing and will be submitted to the CITY for its transmittal to the CONTRACTOR.

Task 4.5: Final Inspection

It is anticipated that one clarifier at a time will be taken out of service to perform the work. AECOM will attend a final inspection for each of the four secondary clarifiers and generate a punch list.

Task 4.6: Record Drawings

Prepare record drawings, incorporating changes made to original design during construction based on record information furnished by the Contractor and provide one (1) flash drive with an electronic version of the record documents to the City in PDF-format and CADD format.

Task 4.7: RPR On-Site Services

AECOM will provide a part time (15 hours per week) staff RPR for 12 weeks (180 hours) during the construction of the project.

The staff RPR will provide on-site observation services to confirm that the CONTRACTOR is constructing the projects in conformance to the Contract Documents. The staff RPR will maintain a daily log documenting CONTRACTOR's activities. With the assistance of the CITY, the staff RPR will obtain from the CONTRACTOR on a monthly basis updated red lines and review them for accuracy. The staff RPR will review with the CONTRACTOR the monthly quantities for the various pay items prior to the CITY approving the CONTRACTOR's monthly pay request. The RPR may also attend monthly progress meetings as required.

Task 4.8: Project Closeout

AECOM will perform the following Project Closeout services:

- After final completion of construction, AECOM with the help of the CITY, will prepare a Project Catalog for the project. The Project Catalog 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 execution of the construction contract. Drawings, progress reports, shop drawing and progress submittals, and other project-related documents. AECOM will supply for the Project Catalog only the documents that were generated or reviewed and approved by AECOM (e.g. important correspondence between AECOM and CITY or AECOM and the CONTRACTOR; approved shop drawings;

responses to RFIs; etc.). All other documents will be supplied by the CITY so AECOM can include them in the Project Catalog. A Draft Project Catalog will be submitted in electronic format to the CITY for review and approval. From the review of the Draft Project Catalog, AECOM will prepare the Final Project Catalog and submit it to the CITY in electronic format. It is anticipated that there will be only one round of CITY review and comments.

V. OTHER DIRECT COSTS:

Other Direct Costs (travel outside of Tampa area, photocopies, postage,) are included in the grand total project fee.

VI. CONTINGENCY (10%):

A 10% contingency up to \$10,627 is included in the grand total project fee and will only be billed with prior written authorization from the City Project Manager.

3. PROJECT GOALS:

The project goal is to install density current baffles at the four secondary clarifiers at the Marshall St WRF. The project will develop bidding documents that will include detailed construction plans and technical specifications. Submittals will be made in electronic form and will include 60%, 90%, and Final plans and technical specifications. AECOM will conduct a comments review meeting for each submittal, except the final submittal and will prepare meeting minutes. AECOM will attend the pre-bid conference, the pre-construction conference, and up to six (6) construction progress meetings. As a part of the RPR services, AECOM will prepare daily construction logs. At the end of the project, with assistance from the CITY, AECOM will prepare the Project Catalog.

4. FEES:

See Attachment "A"

This price includes all labor and expenses anticipated to be incurred by AECOM for the completion of these tasks in accordance with Professional Services Method "A" – Hourly Rate, for a fee not to exceed one hundred and eighteen thousand, eight hundred and ninety-two Dollars (\$ 118,892). A detailed breakdown of the fee is provided in Attachment A.

5. SCHEDULE:

The design portion of the project is to be completed 150 days from issuance of notice-to-proceed or from the date all information (record drawings, etc.) that is to be provided by the CITY is received by AECOM. The schedule is based upon the assumption of the CITY reviews of the project work products will be completed in two (2) weeks from the date of submission. The project deliverables are to be phased as follows:

60% Construction Plans:	60 calendar days
60% Submittal Comments Review Meeting:	74 calendar days
90% Construction Plans:	90 calendar days
90% Submittal Comments Review Meeting:	104 calendar days
100% Construction Plans:	118 calendar days
100% Submittal Comments Review Meeting:	132 calendar days
Final Construction Documents:	140 calendar days
Bidding Services:	TBD
Construction Services:	TBD

6. STAFF ASSIGNMENT:

The City Consultant's staff assignments include:

David Wilcox, P.E.:	Officer-in-Charge
Bozhidar V. Handjiev, P.E.:	Senior Project Manager
Stephen Bazor, P.E.:	Senior Engineer
Justin Zendzion:	Engineer III
Marvin Sanchez:	Senior Inspector
Terrence Sonnenberg:	Senior Designer
Barbara Larente:	Admin Assistant

The City's Staff assignments include:

Richard Gardner, P.E.	Public Utilities Director
Michael Flanigan	Public Utilities Assistant Director
Kaylynn Price	Utilities Engineering Manager
Christina Goodrich	Wastewater Env't'l Tech (WET) Manager
Travis Teuber	Wastewater Env't'l Tech (WET) Assistant Manager
Ryan Alexander	Chief Plant Operator
Daniel Trueblood	Infrastructure Maintenance Manager
Wayne LaFleur	Infrastructure Maintenance Assistant Manager

7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to:

Bozhidar V. Handjiev, P.E. (Consultant Project Manager), with copies to David Wilcox, P.E. (Consultant Officer-in-Charge)

All City project correspondence shall be directed to:

Rama Pandkar (City Project Manager), with copies to the Utilities Engineering Manager, Public Utilities Director, and Public Utilities Assistant Director.

A health and safety plan will be prepared by Consultant and submitted to the City Project Manager upon request prior to mobilizing to the site.

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

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

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code: 3277327-530100-M1905

For work performed, invoices shall be submitted monthly to:

CITY OF CLEARWATER, PUBLIC UTILITIES DEPARTMENT

ATTENTION: PU Engineering

1650 N ARCTURAS AVE BLDG-C

CLEARWATER, FLORIDA 33765-1945

Email: PUEngineering@MyClearwater.com

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 – Lump Sum or Hourly Rate.
5. 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).
6. 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).
7. 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.

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- 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. SIGNATURES:

PREPARED BY:



David Wilcox, P.E.
Officer-In-Charge
AECOM

Date

1/8/2025

APPROVED BY:

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

Date

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

Marshall St WRF Clarifier Improvements

AECOM

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CONSULTANT WORK ORDER

PROJECT FEES TABLE

Task	Description	Subconsultant Services	Labor	Total
1.0	Pre-Design			
1.1	Kick-Off Meeting	\$0	\$1,050	\$1,050
1.2	Data Collection	\$0	\$2,580	\$2,580
Pre-Design Total:				\$3,630
2.0	Final Design			
2.1	60% Plans and Technical Specifications	\$0	\$13,590	\$13,590
2.2	90% Plans and Technical Specifications	\$0	\$9,010	\$9,010
2.3	100% Plans and Technical Specifications	\$0	\$6,970	\$6,970
2.4	Final Plans and Technical Specifications	\$0	\$4,930	\$4,930
Final Design Total:				\$34,500
3.0	Bidding Phase Services			
3.1	Attendance at Pre-Bid Conference	\$0	\$770	\$770
3.2	Preparation of Addenda	\$0	\$3,680	\$3,680
3.3	Recommendation of Award	\$0	\$1,040	\$1,040
3.4	Preparation of Conformed Plans and Technical Specifications	\$0	\$3,680	\$3,680
Bidding Phase Services Total:				\$9,170
4.0	Construction Phase Services			
4.1	Attendance of Pre-Construction Conference	\$0	\$770	\$770
4.2	Review and Approval of Shop Drawings	\$0	\$7,420	\$7,420
4.3	Progress Meetings	\$0	\$6,240	\$6,240
4.4	Response to RFIs	\$0	\$3,470	\$3,470
4.5	Final Inspection	\$0	\$5,320	\$5,320
4.6	Record Drawings	\$0	\$8,250	\$8,250
4.7	RPR On-Site Services	\$0	\$24,300	\$24,300
4.8	Project Closeout	\$0	\$3,195	\$3,195
Construction Phase Services Total:				\$58,965
SUBTOTAL, LABOR AND SUB-CONTRACTORS:				\$106,265
5.0	Other Direct Costs (prints, photocopies, postage, etc.) (Not applicable to lump sum Work Orders)			\$2,000
6.0	Permit Fees			\$0
7.0	Contingency (10% of Subtotal):			\$10,627
GRAND TOTAL:				\$118,892

ATTACHMENT "B"

CONSULTANT WORK ORDER – CITY DELIVERABLES
Marshall St WRF Clarifier Improvements

AECOM

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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 is 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 software. All block references and other references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Thomas Mahony, at (727) 562-4762 or email address Thomas.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.