

JonesEdmunds

Jones Edmunds & Associates, Inc.

City of Clearwater

CONSULTANT SUPPLEMENTAL WORK ORDER

Date:	6/27/2024

1. PROJECT INFORMATION:

Project	East WRF Screw Pump Station		
Title:	Replacement-Engineering Services		
	During Construction		

City Project Number:	<u>22-0028-UT</u>
City Plan Set Number:	2022018
Consultant Project Number:	95308-113-24

2. SCOPE OF SERVICES:

Jones Edmunds & Associates, Inc. is pleased to provide the City of Clearwater with this proposal for the Engineering Services during Construction for improvements the East WRF Screw Pump Station.

The existing Screw Pump Station consists of three Archimedes screw pumps with 18-MGD capacity each, with 100 horsepower motors (36 MGD Firm Capacity) and one submersible, constant-speed pump with 4 MGD capacity inclined over a concrete channel, providing internal recycle for the facility. The influent channel receives flow from the facility's anoxic basins and the screw pump station effluent channel feeds the facility oxidation reactor.

Due to age, condition, and risk/consequences of failure, the City requested that the screw pumps be replaced. Associated equipment supporting or connecting the screw pumps to the structure is also outdated, no longer has spare part availability, and is suspected to be in poor condition needing replacement. The screw pump station is currently the only means to convey influent, internal recycle flow and return activated sludge flow from the anoxic basins to the oxidation reactor and is a critical pump station for plant reliability. These components need to be improved so that they can continue to reliably serve the City.

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Due to the concerns and condition of the screw pump station, Jones Edmunds previously designed, permitted, and assisted the City with bid phase services for the improvements to the screw pump station improvements. The City is currently moving forward with procuring a Contractor to complete the construction of the screw pump station improvements. This project is for Jones Edmunds to continue our service to the City by providing Engineering Services during Construction of the screw pump station improvements.

Under this Consultant Work Order, Jones Edmunds will provide the City with Construction Contract Administration, periodic Construction Resident Observation services including site visits by the Engineer's of Record on the project, and project closeout including FDEP Permit required Certification of Construction Completion.

I. PRE-DESIGN PHASE:

Task 1.1: PREVIOUSLY COMPLETED UNDER 20-0013-UT

II. DESIGN PHASE (if applicable):

Task 2.1: PREVIOUSLY COMPLETED UNDER 20-0013-UT AND NOT REQUIRED

Task 2.2: Progress Meeting and Project Catalog-PREVIOUSLY COMPLETED UNDER 20-0013-UT

III. FINAL DESIGN PHASE (if applicable):

Task 3.1: 60% Design Submittal- PREVIOUSLY COMPLETED UNDER 22-0028-UT

Task 3.2: 90% Design Submittal- PREVIOUSLY COMPLETED UNDER 22-0028-UT

Task 3.3: 100% Design Submittal- PREVIOUSLY COMPLETED UNDER 22-0028-UT

Task 3.4: Bid Documents Submittal- PREVIOUSLY COMPLETED UNDER 22-0028-UT

IV. PERMITTING:

Task 4.1: WRF Permitting Assistance- PREVIOUSLY COMPLETED UNDER 22-0028-UT

Task 4.2: City Building Permit- PREVIOUSLY COMPLETED UNDER 22-0028-UT

V. BIDDING PHASE:

Task 5.1: Bid Phase Services- PREVIOUSLY COMPLETED UNDER 22-0028-UT

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VI. CONSTRUCTION PHASE:

Task 6.1: Construction Contract Administration

Construction Contract Administration services are based on a 13 month to substantial completion construction schedule. Jones Edmunds will provide the following Construction Contract Administration services:

- a. Submittals: Jones Edmunds will receive, log, review, and issue comments on project construction submittals. Project submittals will include administrative submittals (i.e., construction schedules and work plans), shop drawings and product data for the materials to be incorporated into the project, warranties, samples, and operations and maintenance manuals. Jones Edmunds estimates approximately 45 submittals for this project. This Scope of Services includes an initial review and one re-submittal review for each submittal. Submittals will be immediately returned to the Contractor if all deviations are not listed as requested on the project forms.
- b. Requests for Information (RFIs): Jones Edmunds will review and respond to up to 15 RFIs submitted by the Contractor. RFIs are submitted by the Contractor when questions regarding the Construction Documents arise that need clarification from the Engineer.
- c. Change Orders: Jones Edmunds will notify the City immediately when an issue arises that may affect the cost or time of the project and will process up to four minor Change Orders.
- d. Construction Field Orders (CFOs): Jones Edmunds will prepare up to six CFOs. CFOs are used for minor adjustments to the Contract Documents that can be completed in the field and have no effect on the project cost or time.
- e. Proposed Contract Modifications (PCMs): Jones Edmunds will review up to four PCMs for conformance with the Contract Documents and process the PCMs as requested by the City. PCMs will be sent to the City for approval before sending to the Contractor. PCMs may be submitted by the Contractor when deviations to the Contract Drawings or Specifications occur that they believe affect the cost of the project.
- f. Notices of Non-Compliance: Jones Edmunds will assist with up to two Notices of Non-Compliance as coordinated with the City. Jones Edmunds will prepare, log, and issue the Notices of Non-Compliance.
- g. Pay Applications: Jones Edmunds will process up to 14 Pay Applications. We will receive the Pay Applications from the Contractor, log and review them with the Resident Observer (RO) and the City's representative and make payment recommendations to the City.

Task 6.2: Meetings and Site Visits

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The following meetings will be led by the Jones Edmunds Contract Administrator either onsite or at a location of the City's designation. Site visits by the discipline specific Engineers of Record for the project to observe that construction is proceeding in general conformance with the design criteria are included in this task.

- a. Jones Edmunds will conduct one pre-construction conference at a location selected by the City. At the pre-construction conference, the fully executed Contract Documents will be distributed and the Notice to Proceed date will be agreed upon by all stakeholders on the project.
 - The City representatives, FDEP, and the Contractor will be invited to the preconstruction conference.
- b. Jones Edmunds will hold up to 13 progress meetings (approximately one meeting per month) during the project. The progress meetings are to review the construction progress up to that point, review the monthly pay application, and discuss any issues that have occurred on the project. Meeting minutes will be prepared by the Engineer.
- c. Site visits by the Structural, Mechanical, and Electrical Engineers of Record to observe construction progress and to assist with any onsite issues discovered during construction are included in this task.

Task 6.3: Construction Resident Observation

Jones Edmunds will provide Construction Field Resident Observers to observe and document that the construction proceeds in general conformance with the Contract Documents. For this project we estimate that the Jones Edmunds Resident Observer will be onsite one day per week for the 13-month contract time.

The Jones Edmunds' Resident Observer will coordinate with the Contractor and the City's designated representative to determine the appropriate times to be onsite each week. Additionally, we assume that over the course of the project the time needed onsite for observation will average around one-day per week, some weeks no observation may be needed, and some weeks more than one day may be required. We have included 416 hours (8 hours per week for 52 weeks) of Construction Observation time for this project.

Joens Edmunds' Resident Observers will:

- a. Review construction progress and installation for conformance with the Contract Documents.
- b. Take photographs.
- c. Create Daily Observation Reports.
- d. Review Pay Applications for concurrence with construction work progress.
- e. Track and monitor construction issues.

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- f. Check that materials delivered to the site are consistent with submitted materials.
- g. Participate in completion reviews and punch-list walkthroughs.
- h. Coordinate with the Construction Administrator throughout the project regarding project documentation, installation issues, and FDEP Certification of Construction Completion permitting requirements.

Task 6.4: Project Closeout

The Project Closeout phase includes substantial completion walkthroughs; startup of the new screw pumps; review of Record Drawings; and preparation of FDEP construction completion certification forms.

- a. Substantial and Final Completion Walkdowns: Jones Edmunds will conduct one Substantial Completion and one Final Completion walkdown with the Contractor and City. These walkdowns will be performed by project team members such as the Project Manager, the Engineer of Record, the Contract Administrator, and the Field Representative to observe that the Substantial and Final Completion products are in in general conformance with the Drawings, Technical Specifications, and permit requirements.
- b. We will prepare a punch list of items to complete during the Substantial Completion walkdown and verify that everything is complete at the Final Completion walkdown.
- c. We will observe the Performance Acceptance Testing of the improvements to the screw pump station and work with the Contractor to verify that components are functioning properly before turning the new facility over to the City.
- d. The Contractor will prepare the As-Builts for the project and Jones Edmunds will review the drawings and provide comments. Deficient as-built drawings will be returned to the Contractor for correction. The final Record Drawings will be prepared by Jones Edmunds based on the Contractor's As-Builts. The final record drawings will be digitally marked with the record drawing stamp that states who the Contractor and Engineer of Record are for the project.
- e. Jones Edmunds will prepare and submit to FDEP the appropriate Certification of Construction Completion forms along with Contractor-provided as-built drawings referenced above, once approved by Jones Edmunds.

3. PROJECT GOALS:

The project goal is to observe and document that the upgrades to the screw pump station at the East WRF are constructed in general conformance with the Contract Documents. The existing screw pump station components are outdated and in poor

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condition and these improvements will reduce the potential for an on-site unauthorized discharge and provide reliable operation during storm surge events. The overall outcome and benefit of the project is to provide the City with an improved screw pump station that can continue to provide reliable service and production of reclaimed water for unrestricted public access reuse, while being more cost effective to operate and maintain, lowering the City's power and maintenance costs.

4. FEES:

See Attachment "A". This price includes all labor and expenses anticipated to be incurred by Jones Edmunds & Associates, Inc. for the completion of these tasks in accordance with Professional Services Method "A" – Hourly Rate by Task, for a fee not to exceed **Two Hundred Thirteen Thousand Two Hundred Thirty-Nine Dollars (\$213,239)** which includes a 10% contingency.

5. SCHEDULE:

The project is to be completed in 13 months in accordance with the Construction Contract mandated construction time frames. The schedule and exact completion times for tasks included in the scope of work are all determinant on the date of the notice to proceed from the City to the selected Contractor.

6. STAFF ASSIGNMENT:

The firm's staff assignments to this project include:

Sean Menard, P.E. Project Manager and Engineer of Record

Zach Splayt, E.I. Engineer Intern

Ron Meadows Senior CAD Designer

Christopher Seufert Construction Administrator

Gregg Fruecht Construction Administrator / QAQC

Terry Ann LeDuc Construction Project Coordinator

The City's staff assignments to this project include:

Christina Goodrich Project Manager

Kaylynn Price, P.E. Engineering Manager, Utilities

Travis Teuber Assistant Manager, Utilities (WRF's)

Wayne LaFleur Assistant Manager, Utilities (Infrastructure)

Daniel Trueblood Infrastructure Maintenance Manager

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Steve Heppler East WRF Chief Operator

Michael Flanigan Public Utilities Assistant Director

Richard G. Gardner, P.E. Public Utilities Director

7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to:

Construction Administrators and Construction Project Coordinators with copies to Project Manager.

All City project correspondence shall be directed to:

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

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code: 3277327-M1907

For work performed, invoices shall be submitted monthly to:

ATTN PU ACCOUNTING
CITY OF CLEARWATER, PUBLIC UTILITIES DEPARTMENT
1650 North Arcturas Ave., Bldg-C
CLEARWATER, FLORIDA 33765-1945

Email Invoices to: 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).

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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 will be considered, as applicable, for this project in conjunction with the WRF Master Plan (17-0007-UT).
- 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.

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12. SPECIAL CONSIDERATIONS (NOT APPLICABLE)

13. SIGNATURES: PREPARED BY:	APPROVED BY:		
Stanley F. Ferreira, Jr. Stanley F. Ferreira, Jr. (Jul 16, 2024 15:09 EDT)			
Stanley F. Ferreira, Jr., PE	Richard G. Gardner, P.E.		
President / Chief Executive Officer	Director, Public Utilities		
Jones Edmunds & Associates, Inc.	City of Clearwater		
Jul 16, 2024			
Date	Date		

Jamie Sortevik Bell

Revised: 10/27/2021

ATTACHMENT "A"

CONSULTANT SUPPLENTAL WORK ORDER – PROJECT FEES TABLE Clearwater East WRF Screw Pump Replacement

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CONSULTANT WORK ORDER

PROJECT FEES TABLE

Task	Description	Subconsultant Services	Labor	Total
6				
6.1	Construction Contract Administration	\$12,237	\$55,800	\$68,037
6.2	Meetings and Site Visits	\$11,467	\$36,460	\$47,927
6.3	Construction Resident Observation	\$0	\$59,080	\$59,080
6.4	Project Closeout	\$2,160	\$16,650	\$18,810
	Engineering Services During Construction Total:			
SUBTOTAL, LABOR AND SUB-CONTRACTORS:				\$193,854
7	Contingency (10%)			\$19,385
	\$213,239			

ATTACHMENT "B" (Include if applicable)

CONSULTANT SUPPLEMENTAL WORK ORDER - CITY DELIVERABLES

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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, $24" \times 36"$ 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.

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