

August 12, 2025

Dave Watson, PE
Utilities Director
Charlotte County Utilities
25550 Harbor View Road, Suite 1
Port Charlotte, Florida 33980

RE: Contract Amendment No. 3 – Finalize 60% -12 MGD Headworks Design;
Eastport WRF 9.0-MGD Expansion, AWT, and Construction
Charlotte County Utilities (CCU) Contract No. 2019000156; PO No. 2020000293
Jones Edmunds Project No. 03405-012-09

Dear Mr. Watson:

The following Scope of Services provides background, justification, and a scope of work and fee for completing the 60% design, bidding, and construction engineering services for the new 12-MGD headworks at the East Port WRF under our existing Contract.

BACKGROUND

The 6.0-MGD East Port WRF was constructed and placed into operation in 1995, which included the current headworks for preliminary treatment (influent screening and grit removal). In 2008, equipment for the parallel channel treatment train were installed including a second mechanical bar screen, grit chamber, grit classifier, and third grit pump to increase treatment capacity, provide mechanical reliability, and allow maintenance and repair of units. In addition, the structural concrete at the head end of the structure influent channels and mechanical screens had severe corrosion, loss of concrete, and exposed repair. A headworks bypass was undertaken; concrete restoration and corrosion-resistant coatings were applied to the channels; this restoration and additional equipment were completed in 2010.

The Preliminary Engineering Report (PER) for the 9.0-MGD East Port WRF Expansion identified that the required design peak hourly flow (PHF) flow for the 9.0-MGD expansion is 29.3 MGD. The hydraulic capacity of the two existing Parkson mechanical bar screens is 11.5 MGD/each for a combined capacity of 23 MGD. Therefore, for PHF flows exceeds the mechanical bar screen capacity. Operations staff need to open the isolation slide gate to allow influent to flow through the manual bypass screen. The existing Smith & Loveless Pista Grit units have a capacity of 12.0 MGD/each, and two units provide 24-MGD capacity. The units will pass the PHF of 29.3 MGD but will have reduced grit removal efficiency.

In February 2025, Operations and Maintenance staff discovered severe concrete corrosion and exposed rebar at the rear end of the headworks, downstream of the mechanical bar screens, at

the entrance to the two grit chambers. Upon inspection by Jones Edmunds Construction Engineering staff and Wekiva Structural Engineers, it was determined that the useful life of this structure is 1 to 5 years.

RECOMMENDATION

The two options to correct this issue and avoid a headworks structure failure are:

- Option 1 - Headworks bypass and concrete remediation.
- Option 2 - A new headworks sized for 12 MGD future flows and loads, with new equipment that connects directly to the new headworks splitter box under construction at part of the 9.0-MGD expansion project.

Option 2 is recommended as outlined herein. Under the current Eastport WRF 9.0-MGD Expansion and AWT – Design and Construction Project, one of our design tasks included 60% design drawings for civil, mechanical, electrical, and I&C for a new headworks facility designed for 12.0-MGD AADF with a PHF of 39.0 MGD. This new headworks facility is designed to be connected directly to the new headworks splitter box under construction for the 9-MGD expansion that provides the flow split to the new EQ basin and four biological nutrient removal treatment trains.

For Option 2, the new 12.0-MGD headworks provides mechanical reliability and resiliency with the following features:

- Three mechanical fine screen channels, designed for three HydroDyne 6-mm Band Screens and screenings washer and compactor units, each with a capacity of 15 MGD, and a total capacity of 45 MGD PHF, to meet the future 12-MGD PHF capacity of 39.0 MGD. Only two screens would need to be installed for the 9-MGD expansion, the third channel would have a third mechanical bar screen added when plant capacity is re-rated to 12 MGD.
- A separate bypass channel with manual bar rack. The bypass channel allows the mechanical screens and grit removal units to be bypassed for ease of inspection, maintenance, and repairs and to avoid the need to perform a complex and expensive pumped bypass.
- Two vortex grit removal chambers, each sized for 23 MGD, and a total capacity of 45 MGD to settle and remove grit. One grit chamber can be easily taken out of service for maintenance and repair.
- Two screenings washer and dewatering units and associated grit pumping systems designed for the 12-MGD build-out are proposed.
- A biofilter odor/corrosion control system with fiberglass ventilation fan and piping connecting to the headworks channels and process equipment areas to provide 12 air exchanges per hour in the air space under the headworks channels to remove corrosive hydrogen sulfide gases and odorous air and treat with the biofilter.
- Corrosion coatings on all concrete channels (floors and walls) throughout the structure.

SCOPE OF WORK

Charlotte County Utilities requested that Jones Edmunds update 60% design drawings and specifications (Civil, Structural, Mechanical, Electrical, and I&C) for the 12.0-MGD Headworks

Structure and prepare bid documents for advertisement, bidding, and award to a contractor with the following tasks that match our existing Contract.

TASK 3.0 – 60% DESIGN EQUIPMENT CONFIRMATION AND DESIGN UPDATES

- Conduct review meetings with plant operations and maintenance staff to provide an overview and discussion based on design and equipment used for layout for the 12-MGD Headworks Structure and obtain input on alternative equipment that Operations and Maintenance staff wants to consider for the following:

Mechanical Band Screens/Washer Compactor System (Quantity = 2).

Vortex Grit Removal System/Grit Classifier and Washers (Quantity = 2).

Grit Pumps (Quantity = 3).

Biofilter Odor Control System (Quantity = 1).

- Review alternate equipment and layout configurations with plant Operations and Maintenance staff and develop selection criteria with staff to use to make final equipment selection and headworks structure layout. Based on an agreed-on approach with CCU staff, make requested design updates and equipment layouts for 12-MGD Headworks Structure and submit it to CCU for final review and approval.

TASK 4.0 – PRODUCE 100% BID DOCUMENTS

Based on the agreed-on approach with CCU staff and the updated 60% drawings, Jones Edmunds will produce 100% Signed and Sealed Drawings and Specifications for the new Headworks Structure including civil, structural, process mechanical, electrical, and I&C. Provide 100% Drawings, Final Division 1 through 16 Technical Specifications, Bid Form and Bid Item Descriptions to Charlotte County Purchasing for preparation of the Front End Documents.

TASK 5.0 – BIDDING, AWARD AND CONFORMED DOCUMENT SERVICES

Jones Edmunds will provide the following bid-phase services:

- Attend the pre-bid meeting and draft pre-bid meeting minutes and submit them to the County for distribution. The County Purchasing Project Manager will prepare the meeting agenda, develop final meeting minutes, and contact list with Jones Edmunds' assistance and distribute to the attendees.
- Respond to requests for information (RFIs) from bidders and issue addenda. The last addendum will be issued 7 calendar days before bid opening.
- Tabulate and evaluate bids and provide evaluation of lowest responsive bidder to the County for award.
- Incorporate addenda comments into the specifications and drawings and produce and distribute conformed documents for County and one for Contractor.

Deliverables: Five hard copies and one electronic (.pdf) copy of the bid documents. Agenda and meeting minutes for one pre-bid meeting. Responses of addenda submitted electronically to CCU. Print five D-Size Sets and one electronic (.pdf) of Conformed Drawings and Bid Specifications and distribute.

TASK 6.0 – CONSTRUCTION ENGINEERING SERVICES

Jones Edmunds will provide construction engineering services, which includes oversight and support to coordinate construction activities, assist with potential schedule/construction conflicts, and track and manage the project documentation required by the construction contract on an hourly, time and materials basis:

- Prepare for and lead a pre-construction conference with the Contractor and the County after contract award. We will prepare an agenda, provide a sign-in sheet, and produce and distribute meeting minutes to the Contractor and the County. We expect this meeting will review the Contractor's work schedule, submittal schedule, shop drawings, material submittals, progress payments, and work hours and will discuss general contract requirements and procedures including lines of communication.
- Prepare for and lead monthly construction progress meetings including preparing agendas and generating and distributing meeting minutes.
- Review submittals, shop drawings, material samples, results of tests and inspections, and other data that the Contractor is required to submit.
- Receive and review O&M instruction manuals, schedules, guarantees, bonds, and certificates of insurance, which are to be assembled by the Contractor in accordance with the Contract Documents.
- Receive draft pay applications from the Contractor, review with the County PM, submit requested changes to Contractor, and make recommendation for payment to the Contractor. Document that all deliverables required of the Contractor for the monthly pay application are submitted.
- Review and respond to Contractor RFIs. Track and review RFIs with the County PM. RFI responses will be coordinated with the County before distribution to the Contractor.
- Prepare and submit RFPs to the Contractor. Review, analyze, and make recommendations to the County on the Contractor's proposals. Prepare interim field change agreements (IFCAs) as required and assist during negotiations of Contractor cost proposals. Assist the County with the review, preparation, and execution of Contract change orders.
- Evaluate the Contractor's compliance with the obtained permits' requirements. Notify the County of compliance-related concerns and coordinate potential actions with the Contractor and the County.
- The Jones Edmunds Construction Project Coordinator will maintain project files throughout the project, including but not limited to correspondence, meeting minutes, Contract Documents, change orders, field orders, RFIs, work change directives, addenda, pay applications, shop drawings and submittals, O&M manuals, warranties, and regulatory correspondence.

TASK 7.0 – CONSTRUCTION OBSERVATION SERVICES

Jones Edmunds will coordinate with County observation staff to assist with on-site observation of the Contractor's construction activities and methods to verify compliance with the Contract Documents, while providing records of the Contractor's progress by completing Daily Construction Reports with construction photographs of work being performed. The County will provide a Resident Observer to verify the level of staffing and equipment that the Contractor has on site, witness and document testing, take photographs, provide a daily observation record,

verify that materials delivered to the site are consistent with submitted materials. Jones Edmunds will assist CCU resident observers with the following:

- Providing assistance to daily onsite observation to verify compliance with the Contract Documents and inform County of progress and any observed deficiencies.
- Preparing and logging Daily Field Reports documenting construction activities.
- Reviewing the Contractor's red-line as-builts on site monthly.
- Providing daily coordination with the Contractor's superintendent regarding planned on-site construction activities and coordination of activities with County Project Manager (PM).
- Coordinating with County Project Manager when testing that requires the presence of County Staff is necessary.
- Observing and making recommendations to the County whether the Contractor has met all requirements of the Phasing Plan established in the contract documents.
- Coordinating and attending start-ups with the contractor, EOR and appropriate County staff.
- The Contractor is responsible for their safety while onsite. Jones Edmunds will follow the contractor's site safety and health plan whenever our representatives are onsite.

TASK 8.3 – UPDATE WRF O&M MANUAL

Jones Edmunds will amend and update the existing WRF O&M Manual to incorporate the new mechanical process equipment, electrical, instrumentation and controls for the 12 MGD Headworks. Based on the final submitted and approved equipment O&M manuals, the updated O&M manual will be provided in electronic PDF format and searchable. Jones Edmunds will prepare a draft of the Plant Operations Manual and submit it to CCU for review and comment. Jones Edmunds will meet with CCU to receive comments and based on the comments received at the meeting Jones Edmunds will finalize the updated Plant Operations Manual and provide final electronic submission for CCU East Port WRF plant operations and maintenance staff.

TASK 10.0 - SUPPLEMENTAL SERVICES (AS NEEDED)

Jones Edmunds understands that during the execution of the project, CCU may request that we perform additional engineering analysis, additional computer runs, development of alternatives, minor design and preparation of construction documents, engineering evaluations, and other related engineering required to produce an efficient and modern plant expansion, meeting current standards and the needs of the project Scope. Supplemental Services are included, but we must receive prior authorization in writing from the County before proceeding. This authorization shall fully set forth the proposed work and all compensation in an approved scope and fee.

SCHEDULE

Jones Edmunds can complete this work on the following schedule. The schedule is set up with the estimated number of workdays required to complete each task outlined below. Workdays are not consecutive, so several tasks can occur over the same period if feasible.

Project Schedule – Headworks Final Design and Construction

Tasks	Calendar Days
Task 3.0 – 60% Design Equipment Confirmation and Design Updates	60
Task 4.0 – Produce 100% Bid Documents	45
Task 5.0 – Bidding, Award and Conformed Document Services	120
Task 6.0 – Construction-Engineering Services	270
Task 7.0 – Construction Observation Services	360
Task 8.3 – Update WRF O&M Manual	60
Task 10.0 – Supplemental Services (As Needed)	–

FEE

The table below summarizes the requested Task Fee Modifications to our existing CCU Contract No. 2019000156; PO No. 2020000293. Jones Edmunds proposes to complete the Scope of Services outlined above for a not-to-exceed cost of \$1,014,095.

The Final Design Engineering Services, Bid Documents for Selected Headworks Improvements, and Bidding and Award Services will be billed monthly on a lump-sum basis based on percent complete for the task, for an amount of \$548,190 as outlined in Tasks 3.0, 4.0, and 5.0.

The Construction Engineering Services and Construction Observation Services will be billed monthly on a time-and-labor-rate basis for a fee of \$465,905 as outlined in Tasks 6.0, 7.0. and 8.3.

Task 10.0 is for unallocated Supplemental Services for a fee \$80,000. This work will be completed only on request and authorization from the County Project Manager. The type of work, fee, and billing method will be negotiated with and approved by the County.

Jones Edmunds will invoice the County monthly as outline above based on the major task headings outlined in Exhibit B CCU Contract No. 2019000156.

Project Fee – Headworks Final Design

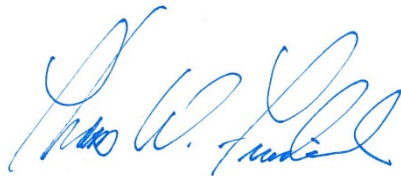
Tasks	Fee
Lump-Sum Tasks	
Task 3.0 – 60% Design Equipment Confirmation and Design Updates	\$206,465
Task 4.0 – Produce 100% Bid Documents	\$286,875
Task 5.0 – Bidding, Award and Conformed Document Services	\$54,850
Time-and-Labor Tasks	
Task 6.0 – Construction-Engineering Services	\$191,700
Task 7.0 - Construction Observation Services	\$183,645
Task 8.3 – Update WRF O&M Manual	\$10,560
As-Needed Task	
Task 10.0 – Supplemental Services	\$80,000
Total Not to Exceed Cost	\$1,014,095

ASSUMPTIONS AND EXCLUSIONS

- FDEP Substantial Modification Permit is excluded since the Headworks structure is a repair and replacement project and a substantial permit modification should not be required. Jones Edmunds will contract FDEP to confirm if a Minor Modification will be acceptable.
- Additional topographic survey, environmental assessments, and archaeological surveys of areas outside the existing active plant area are not required for this Scope of Services and can be completed as needed under Supplemental Services as outlined herein if desired.
- Wetland mitigation design and permitting services are not provided in this Scope of Services.
- Florida Fish and Wildlife Conservation Commission (FWC) gopher tortoise permit application fee and capture/relocation of the tortoises are not included in this Scope and fee.
- CCU and County Purchasing will prepare front-end documents for the Bid Package. The Jones Edmunds Team will assist CCU in preparing the Bid Form and Advertisement and prepare the Technical Specifications and Drawings for the Bid Package.

We appreciate the opportunity to work with CCU on this important project and look forward to the successful completion and startup of the 12-MGD Headworks, AWT improvements, and expansion of the WRF. Let me know if you have any questions or comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Thomas W. Friedrich".

Thomas Friedrich, PE, BCEE
VP/ Senior Consultant – Utilities

cc: Ken Stecher, PE – Charlotte County
Jeremy Frost - Charlotte County
Bruce Bullert, PE – Charlotte County
Jon Meyer - Charlotte County
Denise Caruthers - Charlotte County
Brian Icerman, PE- Executive Director – Jones Edmunds
Alan Foley, PE, Utilities Managing Director – Jones Edmunds
Jim McLellan, PE, Chief Engineer – Jones Edmunds