ENGINEERING SERVICES WORK ORDER 21

This Work Order Number 21 is entered into as of this ___ day of _____ , _____, pursuant to that certain Continuing Contract Agreement, dated May 2, 2023, ("Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Kimley-Horn and Associates, Inc. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the mutually agreed upon lump sum or maximum amount not-to-exceed professional fee. Any additional costs must be approved in writing, and at a rate not to exceed the prices set forth in Exhibit B of the Agreement (Rate Schedule) for RFQ 2023015, made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit A (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONSULTANT:

By: _____
Name: Jason R. Lee, P.E.
Title: Vice President

BOARD OF COUNTY COMMISSONERS OF INDIAN RIVER COUNTY:

By: _____
Joseph E. Flescher, Chairman

BCC Approval Date: _____

By: _____
John A. Titkanich, Jr., County Administrator

Approved as to Form and Legal Sufficiency:

By: _____
Christopher A. Hicks, Asst. County Attorney

Ryan L. Butler, Clerk of Court and Comptroller

Attest: _____
Deputy Clerk

(SEAL)

Exhibit A – Scope of Work

Indian River County Department of Utility Services

Wabasso Wastewater Repump-to-Inline Conversion, Project ID 21.25.519

Preliminary Design, Design, Permitting and Bid Phase Services

September 2, 2025

PROJECT UNDERSTANDING

Indian River County Department of Utilities Services (IRCDUS) owns and operates the Wabasso Water Reclamation Facility. The treatment system has been out of commission for several years, and the site strictly operates as a re-pump facility for domestic wastewater flows. Domestic wastewater from two separate forcemains cascade into the existing surge tank (open tank structure) and is repumped via duplex submersible pump arrangement (each pump rated for 495 gpm) through a 16-inch forcemain that routes southbound on Old Dixie Highway to the Gifford Wastewater Treatment Plant. Nine (9) additional pump stations discharge into the 16-inch forcemain downstream of this station. The pumps are initiated through level control floats and Across-The-Line (ATL) starters.

Much of the existing treatment infrastructure at the Wabasso Water Reclamation Facility has deteriorated due to age and lack of use. The cascading forcemains entering the old surge tank has resulted in corrosion of nearby structures and odor issues. There is also significant grease build-up in the holding tanks that is causing operations to utilize blowers to mitigate. Furthermore, the existing site has several safety issues pertaining to the catwalks, gratings, handrailings and other walking-working surface components that need to be addressed for staff safety.

There is a proposed site to be developed adjacent to the site and IRCDUS desires to implement improvements to the existing site and convert the wastewater re-pump station to be an inline pump station in order to contain the odors.

The general scope will include construction of an inline booster pump station equipped with Variable Frequency Drives to account for wide range of flows and an allowance for additional pumps to be added in the future for elevated capacity. The station will require, per FDEP regulations, a permanent standby diesel driven generator that will provide backup power when utility power is lost. Additionally, IRCDUS desires to construct a building to house the proposed pumping units and the electrical equipment.

The following scope is provided to perform hydraulic modeling, design, permitting and bid phase professional services associated with the Wabasso Inline Booster Pump Station (WIBPS).

SCOPE OF SERVICES

Task 1 – Preliminary Engineering & Due Diligence

The Consultant shall develop an estimate of the probable cost (EPC) for the Build phase of the project, including contractor, owner direct purchase (ODP), and other direct costs (ODC). At the onset of the Design phase, the Consultant shall review the IRCDUS budget for the project and provide an opinion of its "reasonableness" relative to the scope of the project and the Consultant's understanding of the project.

Consultant will prepare a list of data to be collected by IRCDUS that is to be utilized for calibration of the hydraulic model and design of the station. It is assumed that this information will consist of three (3) months of operating data used for the analysis and design. Task schedule is contingent upon receipt of this data to execute subsequent tasks. Consultant will review and evaluate data provided. Consultant will visit each of the nine (9) sewer pump stations and perform drawdown testing to better define flow rates from each of the station when analyzing capacity of the 16-inch force main. Consultant will provide up to

three (3) days of performance testing to complete drawdown testing.

Consultant will furnish and install pressure transmitter at the existing pump station and collect discharge data for a minimum of 30 days.

Consultant will utilize the existing sewer system hydraulic model prepared by others to establish existing and future flows and hydraulics of the sewer system and determine present and future configuration and operation of the pump station for pump size selection, and the impacts to the existing two (2) forcemains upstream of the proposed WIBPS. Consultant will utilize field test data to calibrate the hydraulic model. Consultant's proposal includes coordination time with IRCDUS Integrated Water Master Plan (IWMP) Consultant to obtain record information, hydraulic model files, etc. This proposal assumes up to eight (8) hours of senior professional time and twelve (12) hours of professional time for coordination.

Consultant will evaluate impacts to the existing upstream forcemains exhibited through imposing additional back pressure through conversion of re-pump to inline boosting. Consultant will coordinate with IRCDUS for any potential testing requirements to better understand existing force main condition.

Consultant will visit the WIBPS site up to three (3) times to confirm survey, take field dimensions, document equipment condition and assemble information necessary to prepare the project design.

Soft-digs: Consultant will coordinate and provide up to six (6) subsurface investigations using soft-dig technique for anticipated U/G conflicts. Consultant will utilize the services of Inframap to perform the subsurface utility exploration.

Survey: Consultant will prepare topographic survey of the wastewater site limited to the areas of the proposed improvements. It is assumed all work will be constructed on IRCDUS owned land. Consultant will utilize William B. Zentz & Associates, Inc. for professional surveying services.

The survey scope for the plant site consists of the following items:

- Obtain existing elevations within a 100-ft radius and along existing influent forcemains
- Location of the existing above ground structures and equipment, and soft-dig locations at the plant site.
- Horizontal location of perimeter fence at 20-foot intervals and fence corners
- Building slabs at all corners near the ground surface, edge of pavement, sidewalks, inlets, swales, manholes inverts of sewer and drainage pipes, valve boxes and top of valve nuts
- Ground elevations at a 20-foot grid and within 10 feet near structures and buildings.
- The vertical datum elevations will be referenced to NAVD 88 datum.
- Horizontal datum to be NAD 83/90

Geotechnical: Consultant will utilize the services of WIRX Engineering to conduct geotechnical engineering evaluation for the planned work. The scope includes determining if the bearing capacity and other soil characteristics are suitable to construct the proposed structures. Three (3) SPT boring will be conducted near the inline booster station foundation and electrical building to a depth of 25 feet.

- Laboratory testing to determine grain size distribution of the subsoils.
- Perform a geotechnical analysis and prepare a geotechnical engineering report which will include the following:
    - Overall site map showing soil boring locations.
    - Overall site and surface conditions
    - Ground water level elevations
    - Soil boring profiles showing soil identifications, depth, groundwater, and standard penetration "N values", and soil description.
    - Soil classification per USCS

- Results of soil laboratory testing
- Site Preparation recommendations
- Foundation design recommendations

Consultant will prepare a draft preliminary design report document for IRCDUS review. Consultant will attend one (1) review meeting and finalize and submit the document based on IRCDUS feedback and review comments.

Task 1 Deliverables:

- Estimate of Probable Cost and Review of IRCDUS budget
- Preliminary Design Report
- Final Design Report

Task 2 – Inline Booster Pump Station Design Documents

Consultant will design yard piping improvements to route the existing forcemains to the new pump station and connect to the 16-inch main downstream of the existing station. Consultant will coordinate with IRCDUS for testing of the existing forcemains as part of the condition assessment.

Consultant will prepare structural design for the proposed pump station building. The 2023 version of the Florida Building Code (FBC) has been adopted and was effective December 31, 2023. It is assumed that these improvements listed herein will be affected and need to be designed in accordance with the current code. Consultant will design the proposed electrical and generator building. Consultant will design hoist system for pump removal and installation.

Consultant will prepare mechanical design package for indoor generator, exhaust system ventilation, louver and duty fan selection. Consultant will design fuel system for proposed emergency generator.

Consultant will perform hydraulic design calculations to select the new wastewater pumps and size the process piping and valves. Consultant will utilize the selected equipment and prepare the mechanical process design. Consultant will coordinate with vendors for equipment selection and sizing.

Consultant will prepare mechanical design calculations for the HVAC system for the electrical equipment and VFD cooling needs in the electrical room.

Consultant's will prepare project contract deliverables for submittal to IRCDUS. Deliverables will include Opinion of Probable Construction Cost (OPCC), plans and technical specifications. It is estimated that approximately 35 drawings will be prepared. The following sheets are anticipated:

- Cover Sheet
- General Notes and Abbreviations
- Existing Site Plan
- Proposed Site Plan
- Horizontal and Vertical Control
- Yard Piping Improvements Plan
- Yard Piping Improvement Details
- Structural Foundation Plan
- Structural Building Plans and Schedules
- Structural Building Sections and Details
- Structural Typical Section and Details
- Structural Building Elevations
- Hoist Beam Plan and Details
- Fuel Tank Pad Plan and Details
- Site Piping Plan

- Mechanical Floor Plan
- Mechanical Pump and Piping Sections and Details 1
- Mechanical Pump and Piping Sections and Details 2
- Process Details (x2 Sheets)
- Pipe Support Details
- Utility Details
- Process and Instrumentation Diagram Legend
- Process and Instrumentation Diagram – WIBPS
- Electrical Plans (x14 sheets)

Consultant will prepare the OPCC, control narrative, plans and specifications at the 75% and 100% design intervals.

Consultant will prepare an electronic Project Asset Record (PAR) database of all discrete assets for the Project. Assets shall be identified at the lowest level in the system hierarchy. This is at the Maintenance Managed Item (MMI) level, where work orders (WO) are assigned to perform preventive maintenance or future decisions are made regarding repairs, rehabilitation, or replacement. The scope of the PAR shall be a complete listing of all such assets that are added or removed by the project. Major equipment assemblies (e.g., pump, aerator, etc.) shall be broken down into their components, such as motor, mixer, etc.

Task 2 Deliverables:

- Preliminary Design Plans, Specifications, OPCC and Control Narrative
- Final Design Plans, Specifications, OPCC and Control Narrative
    - Project Asset Record included with Final Design Deliverables

Task 3 –Permitting

It is anticipated that the proposed improvements will result in a building structure no larger than 1,500 square feet, for which is the threshold for requiring only a Minor Site Plan Approval.

An application for Administrative Approval will be submitted to the Community Development Department (CDD) for the proposed improvements. This approval is necessary for a contractor to apply for a building permit. This Administrate Approval Application submittal will include the application, signed and sealed plans, FDEP permit, and backup information on proposed equipment/structures.

Consultant will prepare and submit one (1) FDEP permit application 62-604.300(8)(a) *Notification/Application For Constructing A Domestic Wastewater Collection/Transmission System*The scope consists of preparation of permit application and supporting documents and response to one (1) reasonable request for additional information.

All application fees will be paid for directly by IRCDUS.

Task 3 Deliverables:

- CDD Administrative Approval Application
- FDEP Permit Application Package
- Requests for Additional Information Responses

Task 4 – Bid Phase Services

Consultant will assemble the bid documents, consisting of drawings, bid form, and technical specifications needed to advertise the construction bid package. Consultant will review front end documentation prepared by Client. Consultant will provide coordination with IRCDUS purchasing department for bidding the proposed improvements.

The Consultant will develop an estimate of time to complete (ETC) the construction or implementation phase of the project. The estimate will be based on preparation of the dependent tasks and activities using the CPM (critical path method) technique to estimate the potential shortest duration. The schedule shall identify dependencies with external projects as required.

The CPM schedule will be included in the solicitation package. The solicitation package shall include specific instructions for Respondents to submit a proposed schedule that may elaborate the Consultant's ETC. The Consultant bid review services shall include reviews of the proposed schedules. Upon award, the Consultant's Construction phase services shall include schedule negotiation with the awardee to reach agreement and set the *Contract Time*.

Client will advertise all bidding documents and addendums and pay all associated costs.
Consultant will attend one (1) pre-bid meeting with the Client and potential Bidders/Contractors to perform a site walk and discuss the project.

Consultant will respond to a reasonable number of questions from Contractor's during the bid process. This scope of services assumes that up to three (3) addenda will be issued during the bid phase.

Consultant will review bids for accuracy and completeness. Consultant will prepare a bid review summary that tallies the bids and identifies the lowest price and most responsive bidder.

Task 4 Deliverables:

- Draft bid solicitation documents for IRCDUS and Purchasing
- Final bid solicitation documents for IRCDUS and Purchasing
- Project Estimate of Time to Complete (ETC)
- Addendum Responses, up to three (3) included
- Bid review letter

Task 5 – Project Management and Meetings

Consultant will provide coordination for the duration of the project design, including plan review and design review meeting attendance, design progress meetings, and status meetings during the progress of the project. It is anticipated that approximately six (6) meetings will be held and attended by Consultant. Consultant will prepare minutes from each meeting and distribute to the project team. The following meetings are anticipated:

- Design kickoff meeting
- Draft Basis of Design Report Review Meeting
- 75% Design Review Meeting (Preliminary)
- 100% Design Review Meeting
- Risk Management Plan Meeting
- Bid document review meeting with IRCDUS and Purchasing Department

Consultant will also provide project management for the project, consisting of coordination, planning and scheduling of project tasks and deliverables, meeting attendance, coordination of staffing on project, coordination with subconsultants, administrative work including filing of all documentation, meeting minutes, letters, etc. The Consultant will provide a status report with each invoice for each period covered by the invoice. The report will provide accomplishments for each task in the SOW and status of the schedule including plan versus actual. A forecast to complete date will be provided. It is estimated that approximately forty (40) hours of administration time and thirty (30) hours of professional time will be required for this task.

The Consultant will establish a cloud-based platform for the project team members, both Consultant and designated IRCDUS staff. The portal will be utilized throughout the project to store, share, and manage

project artifacts efficiently and securely.

The Consultant shall develop a project risk register (PRR) early upon commencing the project. The early PRR may be based on key assumptions made by the Consultant during the scoping (reference List of Assumptions below) and is used to identify risk that will not carry forward into the Build phase. At this stage, the early risk identification will determine if additional engineering is required. To finalize the PRR, a risk management planning workshop will be held with IRC staff.

Task 5 Deliverables:

- Meeting Agendas and Minutes (x6)
- Cloud-based sharefile for project file sharing
- Pre-design PRR
- Preliminary Design Report PRR
- 75% Design PRR
- Final PRR

TASK 6 – ENVIRONMENTAL SUPPORT SERVICES

In accordance with the Florida Fish and Wildlife Conservation Commissions (FWC) guidelines, one (1) 100% gopher tortoise survey will be performed to locate potentially occupied and abandoned gopher tortoise burrows within the project area and the adjacent areas. Burrows will be located with GPS and activity status will be noted. The results of the survey will be summarized in a graphic depicting the burrows identified during the field survey.

Per the guidelines, the 100% survey is only valid for 90 days. If gopher tortoises are found and more than 90-days elapses between the 100% survey and project construction, another 100% survey will be required. If no gopher tortoise burrows are found, another survey is recommended after the installation of silt fence by the contractor to assure no new burrows have been created within the project footprint.

If any potentially occupied or active burrows identified during the 100% survey will be impacted by the proposed development, a gopher tortoise relocation permit from the FWC and gopher tortoise relocation will be required. Permitting and relocation can be provided as an additional service.

Task 6 Deliverable:

- Gopher Tortoise Survey Graphic

FEE SCHEDULE

We will provide these services in accordance with the Continuing Contract Agreement for Consulting Engineering Services #2023015 dated May 2nd, 2023, by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Kimley-Horn and Associates, Inc., ("Consultant").

The Consultant will provide professional services for a lump sum fee as follows:

Task No.	Description	Fee
1	Preliminary Engineering & Due Diligence	$ 104,029.58
2	Inline BPS Design Documents	$ 280,278.21
3	Permitting	$ 15,746.52
4	Bid Phase Services	$ 20,972.36
5	Project Management and Meetings	$ 38,660.16
6	Environmental Support Services	$ 4,937.12
	TOTAL	**$ 464,623.95**

ADDITIONAL SERVICES

The following services are not included in the Scope of Services for this project, but may be required depending on circumstances that may arise during the execution of this project. Additional services include, but may not be limited to the following:

- Construction phase services (Phase 2)
- Additional permitting
- Permit application processing fees
- FWC permitting, tortoise relocation
- Off-site improvements

INFORMATION PROVIDED BY CLIENT

- Access to site
- Record drawings
- Pump performance curves
- Meeting attendance
- Workshop attendance and design input
- Review of deliverables
- Permit application processing fees
- Minimum three (3) months data of the following:
    - North pump station wetwell level
    - North pump station flow data
    - North pump station discharge pressure data
    - Manifolded pump station runtime data

RESOURCE PLAN

The following key staff, subconsultants and subject matter experts will be utilized to execute the scope of services outlined herein:

- Project Manager – Nick Black, P.E. (Mechanical, Civil and Process)
- Deputy Project Manager – Bert King, P.E.
- Project Engineer – Casey Long, P.E. (Structural)
- Project Engineer – Mike Guida, P.E. (Electrical)
- Project Engineer – Jose Reyes (Electrical)
- Project Analyst – Chris Sullivan, E.I.
- Project Analyst – Sarah Bolles, E.I.
- CAD Designer – Juan Rodas
- Senior QA/QC and Subject Matter Expert – Jason Lee, P.E.

Exhibit B - Proposed Schedule

Task #	Subtask	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Model Calibration, Field Testing												
	Field Investigations												
	Subs - Survey, soft-digs, geotech												
	Draft PDR Submittal												
	Final PDR Submittal												
2	Design yard piping												
	Design structural package												
	Design mechanical package												
	Design HVAC package												
	Design Electrical												
	Preliminary Design Deliverables												
	Final Design Deliverables												
3	Administrative Site Plan - CDD												
	FDEP Permit App												
4	ETC												
	Draft Bid Docs												
	Final Bid Docs												
	Advertisement and Award												
5	Project Management												
6	GT Survey and Graphic												

Notes:

Task 1 shall begin after all operating data has been received from IRCDUS and is independent from the contractual NTP. This information is critical path for the project

Consultant does not control bid advertisement schedule or duration it takes for contract award

All scheduled items are assuming prompt deliverable review by IRCDUS. Delays in deliverable review beyond 2 weeks extend schedule accordingly

This schedule proposes times to submit permit applications and makes reasonable assumptions regarding review time. The consultant makes no guarantees regarding permit application review timeframes.

Exhibit C - Fee Details

PROJECT: IRCDUS - Wabasso Inline Boost Pump Station							SHEET	1	OF	1
CLIENT: Indian River County Department of Utility Services							FILE NO.			
ESTIMATOR: NB							DATE:	9/2/2025		

DESCRIPTION:	DIRECT LABOR (MAN-HOURS)								
IRCDUS - Wabasso Repump-to-Inline Conversion	PRINC	SEN PROF	REG PROF	DES/ P2	CLK P1	SUPP STAFF	EXP SUB	Dir Exp 4.6%	LINE TOTAL
NO. TASK									
1 Preliminary Engineering & Due Diligence									
Estimate of Probable Cost		3	6		12			$172.50	$3,922.50
Prepare list of data for collection		4						$49.68	$1,129.68
Pump Station Visits and Testing (x2 days)		6	24		24			$460.92	$10,480.92
Vet Model		3	6		8			$146.74	$3,336.74
Run Alternative Scenarios		4	16		40			$461.84	$10,501.84
Run Buildout w/ Development		4	3		12			$155.94	$3,545.94
Review and Evaluate Testing and Historical Operating Data		2	4		8			$115.00	$2,615.00
Evaluate Impacts to existing onsite piping system		1	4		8			$102.58	$2,332.58
Coordination w/ HDR		8	12					$215.28	$4,895.28
Site Visits (x3)		6	18		20			$377.20	$8,577.20
Soft Digs (x6)		2					$10,000	$24.84	$10,564.84
Survey fee		1					$10,000	$12.42	$10,282.42
Geotech fee		1					$5,000	$12.42	$5,282.42
C&W fee (Electrical)		3					$4,000	$37.26	$4,847.26
Trend pressure and flow data		1	4		8			$102.58	$2,332.58
Preliminary Design Report Draft		8	24		40			$588.80	$13,388.80
Finalize PDR		3	6		9			$153.18	$3,483.18
QA/QC	8							$110.40	$2,510.40
								$0.00	$0.00
2 Inline BPS Design Documents									
Yard Piping Improvements		4	12	20				$312.80	$7,112.80
Structural Design Package - Building		4	20		40			$500.48	$11,380.48
Hydraulic & Mechanical Design		8	20	40				$586.96	$13,346.96
Equipment Vendor Coordination		6	12					$190.44	$4,330.44
C&W Fee - HVAC Design		2					$14,500	$24.84	$15,064.84
Drawings									
Cover Sheet			0.5		1			$11.27	$256.27
General notes		1	2		4			$57.50	$1,307.50
Existing Site Plan		2	5	10	16			$249.78	$5,679.78
Proposed Site Plan		2	5	10	16			$249.78	$5,679.78
Horizontal and Vert. Control		2	5	10	16			$249.78	$5,679.78
Yard Piping Improvements		2	5	10	16			$249.78	$5,679.78
Yard Piping Details		2	5	10	16			$249.78	$5,679.78
Structural Foundation Plan		2	5	10	16			$249.78	$5,679.78
Structural Building Plans and Schedules		2	5	10	16			$249.78	$5,679.78
Structural Typical Building Section and Details		2	5	10	16			$249.78	$5,679.78
Structural Building Elevations		2	5	10	16			$249.78	$5,679.78
Hoist Beam Plan & Details		2	5	10	16			$249.78	$5,679.78
Fuel System Details		2	5	10	16			$249.78	$5,679.78
Site Piping		2	5	10	16			$249.78	$5,679.78
Mechanical Floor Plan		2	5	10	16			$249.78	$5,679.78
Mechanical Pump and Piping Details 1		2	5	10	16			$249.78	$5,679.78
Mechanical Pump and Piping Details 2		2	5	10	16			$249.78	$5,679.78
Process Details x2		4	10	20	32			$499.56	$11,359.56
Utility Details		2	5	10	16			$249.78	$5,679.78
Pipe Support Details		2	5	10	16			$249.78	$5,679.78
PID Legend		2	5	10	16			$249.78	$5,679.78
PID Legend		2	5	10	16			$249.78	$5,679.78
Electrical Plansheets		2	5	10	16			$249.78	$5,679.78
OPCC	1	4	8	12	24			$383.64	$8,723.64
Tech Specs	1	12	20	40	60			$1,036.84	$23,576.84
Control Narrative	2	4	6	8	24			$348.68	$7,928.68
75% Deliverables QA/QC	12					3		$179.40	$4,079.40
100% Deliverables QA/QC	6					3		$96.60	$2,196.60
C&W fee (Electrical)		6					$46,500	$74.52	$48,194.52
Project Asset Record		4	8	12	20			$344.08	$7,824.08
								$0.00	$0.00
3 Permitting									
Admin Approval App		6	12	18				$322.92	$7,342.92
FDEP Permit Application		3	6	10				$168.82	$3,838.82
RAIs		1	4	8				$109.94	$2,499.94
C&W		2					$1,500	$24.84	$2,064.84
4 Bid Phase Services									
Coordination w/ Purchasing		2	6	12				$171.12	$3,891.12
Estimate of Time to Complete		4	8	12				$215.28	$4,895.28
pre-bid meeting		3	3	5				$103.04	$2,343.04
Addenda & RAIs		4	8	12				$215.28	$4,895.28
Bid Review Letter		1	4	6				$95.22	$2,165.22
C&W fee (Electrical)		1					$2,500	$12.42	$2,782.42
5 Project Management and Meetings									
Kickoff Meeting and Minutes		3	5	8				$144.44	$3,284.44
PDR Review Meeting and Minutes		3	5	8				$144.44	$3,284.44
75% Review Meeting and Minutes		3	5	8				$144.44	$3,284.44
100% Review Meeting and Minutes		3	5	8				$144.44	$3,284.44
IRCDUS Bid Document Review w/ Purchasing		3	5	8				$144.44	$3,284.44
Risk Management Plan Meeting		3	5	8				$144.44	$3,284.44
Project Administration		30				40		$556.60	$12,656.60
Cloud Portal for Project Deliverables		2				8		$61.64	$1,401.64
Project Risk Register		4	8	12				$215.28	$4,895.28
6 Environmental Support Services									
GT Investigation		4		8				$108.56	$2,468.56
GT Survey Document		4		8				$108.56	$2,468.56
								$0.00	$0.00
								$0.00	$0.00
TOTAL HOURS	30	248	434.5	511	714	54	$94,000	$16,298.95	**$464,623.95**
LABOR ($/HOUR)	300	270	210	160	140	100		$0	$0
SUBTOTAL	9000	66960	91245	81760	99960	5400	94000	$448,325.00	$0

C & W engineering Inc.

Consulting Engineers – Electrical • HVAC • Plumbing

6903 Vista Parkway North, #10
West Palm Beach, FL 33411
(561) 642-5333

August 27, 2025

Nick Black, P.E.
Kimley Horn & Associates, Inc.
1920 Wekiva Way, Suite 200
West Palm Beach, FL 33411

Subject: Wabasso Water Reclamation Facility Master Inline Pump Station
Mechanical HVAC and Electrical Engineering Proposal
C&W Ref. 256619

Dear Nick:

I am pleased to submit this proposal for your consideration to provide a Preliminary Design Report or PDR, and design services to include Electrical, Instrumentation and Controls Engineering, and Mechanical HVAC Design services for the above referenced project. The work will include:

1. Provide site investigation phase where a Preliminary Design Report (PDR) is provided based on the assessment of the current conditions and planned improvements, including details on the equipment improvements and an opinion of construction costs. Include new 480v electrical service with new main disconnect, ATS switch, and outdoor generator.

2. A New 480V distribution panel and VFD equipment for the proposed triplex 60HP in-line booster pumps. Third pump is a future pump. Control panel with VFDs and PLC controls will be designed.

3. Equipment will be housed in a new equipment building (approximately 1500 SQ FT with HVAC. The HVAC design will include energy calculations, duct work design and mechanical details as required for permit and construction.

4. New control panel with PLC located in the new building to collect all VFD and local equipment signals including the new inline booster pump station field instruments such as pressure and flow.

5. Include new building grounding, lightning protection, exterior and interior lighting, and receptacles, HVAC for the new building equipment room(s).

6. Design for new pump VFD controls schematics to interface with field instruments and PLC controls.

7. The Generator will be sized based on the new pump station motor loads, building, and a 100A feeder to the existing building so the Owner may use the building facilities during power outages.

8. Coordination with the Electrical Utility if needed, depending on size of overall service needed.

9. Include instrumentation and control equipment for the pump operation including field instruments per PID, as designed by Kimley Horn. We will add instrumentation mounting details and other signal termination details as needed to match the requirements of the installation.

10. Provide new radio telemetry from new equipment room to provide all PLC I/O via radio telemetry back to plant SCADA system..

11. PLC panel we will include a flat panel HMI SCADA screen to display status of pumps, process, and instruments along with historical information.

12. Submit documents for review and comment at the 60%, 90%, and final bid document completion levels. The Submittal will include drawings, specifications, and an opinion of costs.

13. We will attend submittal review meetings at 60% and 90% and implement the Owner recommendations/comments into the design documents.

14. Include services for permitting.

15. Include services during the bid cycle.

16. Services during construction are EXCLUDED.

ENGINEERING DESIGN SERVICES

Coordination

Kimley Horn
Owner

C&W#256619

Vendors

Field Investigations

We will visit the site at least twice during the PDF and design phase.

Engineering

Verifying Power Source and major equipment locations
Observe Existing Conditions
Size Generator for new and existing loads
Size of Electrical service and Electrical equipment based on new
Loads and existing loads.
Fault current calculations
Voltage drop calculations
Provide energy calculations for HVAC areas
HVAC equipment design and details
HVAC Ducts, and HVAC controls

Drawings

Electrical Site Plans
Site plan may include site lighting (photometrics - if required)
Electrical Building Plan
Grounding and Lightning Protection Plan
Lighting and receptacle plans
Electrical room plan
Equipment room plan
HVAC Mechanical plan(s)
HVAC Mechanical details
Pump Station Electrical Equipment Plan
One Line Power Diagram
Instrumentation Diagrams
Electrical Details as may be required
Instrumentation Details as may be required

Typical Mechanical Specifications
Typical Electrical Specifications

Provide documents for Permitting and for Bidding.

Provide assistance during bidding phase,
Attend a Pre-Bid meeting
Respond to Bidder questions
Provide Addendum(s) (if needed)
Provide review and recommendations of Bids

C&W#256619

ENGINEERING DESIGN FEE:

Elec.& Mech. PDR	$ 4,000.00
Electrical Design:	$ 46,500.00
HVAC Design:	$ 14,500.00
Permitting:	$ 1,500.00
Bidding:	$ 2,500.00
Total Design Fee:	**$ 68,000.00**

CONSTRUCTION SERVICES: EXCLUDED

I trust the above scope is in agreement with your needs and expectations. If you have questions or comments regarding the above, please call.

Very truly yours,

C & W Engineering, Inc.

_____
Michael Guida, P.E.

JLR/nl