

**AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER
RESOURCES ENGINEERING SERVICES RFQ2019070
WORK ORDER _____**

**Indian River County Department of Utility Services
Oslo Road Water Treatment Plant Sand Strainer Replacement**

This Work Order Number ___ is entered into as of this ___ day of _____, 202_, pursuant to that certain AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER RESOURCES ENGINEERING SERVICES RFQ2019070 entered into as of this 5th day of November, 2019 (collectively referred to as the "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 fee schedule set forth in Exhibit B (Fee Schedule), attached to this Work Order and made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit C (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:

**BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY**

By: _____

By: _____

, Chairman

Print Name: Jason Lee

Title: Vice President

BCC Approved Date: _____

Attest: Jeffrey R. Smith, Clerk of Court and Comptroller

By: _____

, Deputy Clerk

Approved: _____

, County Administrator

Approved as to form and legal sufficiency: _____

, County Attorney

EXHIBIT #A

Indian River County Department of Utility Services Oslo Road Water Treatment Plant Sand Separator Replacement

PROJECT UNDERSTANDING

Indian River County Department of Utility Services (IRCDUS) owns and operates the Oslo Road Water Treatment Plant (WTP), an 8.57 MGD facility that employs nanofiltration (NF) and raw water blending. Pre-treatment of the Upper Floridan Aquifer (UFA) groundwater consists of sand separator, 5-micron cartridge filtration and chemical injection. The sand separator is an Automatic Self-Cleaning Inline Filter designed to remove suspended debris and fine sand from the raw water supply entering the plant.

The existing sand separator is approximately twenty years old; maintenance has been troublesome and spare parts are difficult to acquire. IRCDUS desires to replace the existing sand separator with new make and model and has requested that Consultant prepare design documents, permitting associated with the replacement. Additionally, IRCDUS has requested the proposed sand separator replacement design documents be incorporated into the ongoing Oslo Road WTP Improvements project, adding the sand separator replacement as a change order to TLC Diversified's existing contract.

The following scope of services details the professional engineering services for design, permitting and construction phase services associated with the sand separator replacement:

SCOPE OF SERVICES

Task 1 – Design

Consultant will visit each well site and perform Silt-Density-Index (SDI) sampling. Consultant will evaluate the SDI results and other water quality data and coordinate with sand separator manufacturers. Consultant will visit WTP site to collect information regarding existing sand separator, piping, electrical equipment, etc.

Consultant will coordinate with equipment manufacturers to perform equipment selection. Consultant will design proposed sand strainer replacement. Consultant will design proposed backwash waste stream to discharge in same location as existing.

Consultant will prepare design drawings for the proposed sand separator replacement. The design drawings will consist of the following sheets:

- Overall site plan
- Demolition plan and section
- Proposed plan and section
- Construction details

- Electrical drawings (4 sheets estimated)

Consultant will prepare technical specifications for the proposed sand separator. The technical specifications will be limited to the sand separator, associated electrical components and any appurtenances not otherwise included in the existing Oslo Road WTP Improvements technical specifications.

Consultant will utilize C&W Engineering for electrical engineering professional services related to the design of the sand separator replacement. Refer to C&W proposal included within this scope of services.

Consultant will utilize the services of Control Systems Design for professional services related to programming. CSD will assist with design document preparation. Refer to CSD proposal included within this scope of services.

Consultant will prepare preliminary set of deliverables for IRCUDS review. Consultant will attend one (1) review meeting via teleconference. Consultant will assimilate comments from IRCUDS and incorporate into final. Consultant will finalize design documents for permitting (Task 2) and for TLC to construct (Task 3).

Task 2 – Permitting

Consultant will prepare Application for Specific Permit to Construct PWS Components, FDEP form 62-555.900(1). Permit application will be for Minor Modifications to system that results in no change in treatment or system capacity. Consultant will pay permit application fee of \$1,000 in accordance with 62-4.050.

Consultant will respond to reasonable number of questions from FDEP regarding the proposed replacement. Consultant assumes two (2) rounds of Requests for Additional Information will be submitted by FDEP.

Consultant will utilize C&W Engineering for electrical engineering professional services related to the permitting of the sand separator replacement. Refer to C&W proposal included within this scope of services.

Task 3 – Construction Phase Services

Consultant will coordinate with TLC Diversified to include the proposed work as a change order to the WTP Improvements project. Consultant will evaluate for completeness and make recommendation for change order to Owner once complete.

Consultant will review up to four (4) additional shop drawings for the proposed work. Consultant assumes two (2) shop drawings will be required for the system and assumes re-submittal review will be required for each.

Consultant will observe construction of the proposed sand strainer, piping, valves and appurtenances. Consultant assumes (3) site visits will be required as part of this additional work. Consultant will prepare field reports that summarize the ongoing work and actions to date.

Consultant will coordinate with Contractor to perform startup of the proposed sand strainer. Consultant assumes startup will be one (1) day in duration.

Consultant will coordinate with TLC to perform pressure testing and bacteriological sampling for the FDEP permit conditions. Consultant will prepare Request for Clearance to place the system into operation and submit to FDEP along with all necessary backup as part of the clearance conditions.

Consultant will utilize C&W Engineering for electrical engineering professional services related to the construction of the sand separator replacement. Refer to C&W proposal included within this scope of services.

Consultant will utilize the services of Control Systems Design to perform programming associated with the sand strainer replacement. Refer to CSD proposal included within this scope of services.

Consultant will utilize Contractor red-lined as-builts to prepare record drawings. Consultant will provide Owner with record drawings in .pdf and .dwg format.

SCHEDULE

Consultant will complete these tasks in a timely manner and mutually agreed upon schedule.

FEE SCHEDULE

We will provide these services in accordance with our Agreement for Professional Services for Water Plant and Water Resources Engineering Services – RFQ 2019070, dated November 5, 2019, 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 Task 1 on a lump sum fee basis as follows:

TASK 1	DESIGN	\$ 27,136
TASK 2	PERMITTING	\$ 5,642
TASK 3	CONSTRUCTION PHASE SERVICES	\$ 19,649
	TOTAL:	\$ 52,427

ADDITIONAL SERVICES

The following services can be provided as additional services under separate future task order:

- Bid phase services
- Additional design documents
- Front end document preparation
- Separate bid package – this proposal assumes the work will be included under TLC's contract
- Additional construction phase services

ESTIMATE FOR ENGINEERING SERVICES

PROJECT: Oslo WTP Sand Strainer Replacement	SHEET 1 OF 1
CLIENT: Indian River County Department of Utility Services	FILE NO.
ESTIMATOR: NB	DATE: 4/11/2023

DESCRIPTION: OSLO SAND STRAINER REPLACEMENT		DIRECT LABOR (MAN-HOURS)							Dir Exp 4.6%	LINE TOTAL
		PRINC	SEN PROF	REG PROF	PROF2	PROF1	DIR EXP	SUB		
NO.	TASK									
1	DESIGN									
	Well SDI Testing			6		10			\$123	\$2,803
	Site Visit & Dimensioning			3		5			\$62	\$1,402
	Equip. Selection			4		8			\$91	\$2,071
	Plans (x4-5 sheets)			12		30			\$313	\$7,123
	Tech Specs			3		6			\$68	\$1,553
	OPCC			2		4			\$46	\$1,036
	C&W			1				\$5,500	\$9	\$5,714
	CSD			1				1500	\$9	\$1,714
	Teleconf. Review Meeting			1		2			\$23	\$518
	Finalize & Submit			4		8			\$91	\$2,071
	QA/QC	4							\$50	\$1,130
									\$0	\$0
2	PERMITTING									
	Permit App			6		12	1500		\$1,637	\$4,607
	RAI Responses			2		4			\$46	\$1,036
									\$0	\$0
3	CONSTRUCTION PHASE SERVICES									
	TLC Coordination			3					\$28	\$643
	Change Order Review & Paperwork			2		4			\$46	\$1,036
	Oversight (x3)			10		6			\$134	\$3,054
	Shop Drawings (x4)			6		8			\$110	\$2,500
	Startup			8		8			\$129	\$2,929
	Permit Clearance Package			2		2			\$32	\$732
	C&W			2				3500	\$19	\$3,929
	CSD			2				1500	\$19	\$1,929
	Record Drawings			4		6			\$78	\$1,768
	QA/QC	4							\$50	\$1,130
	TOTAL HOURS	8	0	84	0	123	1500	12000	\$3,212	\$52,427
	LABOR (\$/HOUR)	270	240	205	160	145			\$0	\$0
	SUBTOTAL	2160	0	17220	0	17835	0	12000	\$49,215	\$0

C & W engineering Inc.

Consulting Engineers – Electrical • HVAC • Plumbing

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

April 5, 2023

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

Subject: IRC Oslo WTP Sand Strainer Filter Equipment Replacement
Electrical Design and Construction Engineering Services Proposal
C&W Ref. 236610

Dear Nick:

I am pleased to submit this proposal to provide design through construction of the replacement of the existing sand strainer filter equipment; this would include replacing the existing strainer equipment along with related pumps, and field instruments, and control panel with similar capacity equipment at the Oslo WTP. We would include 90% and 100% design documents, including specs and drawings, and opinion of construction costs. We will also include construction services that would provide review of equipment shop drawings, attend a pre-construction meeting, and attend a monthly meeting, and provide a visit during equipment startup and prepare a punch list.

It is our understanding that this project would be provided as part of a change order to TLC under the current water plant improvements, instead of normal bidding phase. Our design drawings would include a new control panel and field equipment, along with status signal connections to the nearest existing PLC panel.

Coordination with Kimley Horn Engineers, Owner and Vendors.

DESIGN PHASE SERVICES

Coordination
Kimley Horn and Associates, Inc.
Owner
Vendors
Engineering

CW REF 236610

Design power, grounding, and controls related raceways

Voltage drop calcs, equipment fault current calcs.

Control schematics based on relay float logic and similar to existing controls

Drawings

Electrical Demolition site plan

Electrical Installation site plan including electrical equipment

One Line Power Riser Diagram

Controls riser diagram including field instruments

Electrical Details as may be required

Typical Specifications

Provide documents for Permitting, and review.

CONSTRUCTION PHASE SERVICES

Attend a Pre-Construction Meeting

Review equipment shop drawings

Respond to RFI (1 RFI expected)

Attend one monthly meeting

Provide field visit towards substantial completion, and witness of the startup,

Provide Punch List required.

FEE SUMMARY:

Electrical Design Phase:	\$5,500 Lump Sum
Construction & Permit Phase:	\$3,500 Lump Sum
Total Engineering Services:	\$9,000 Lump Sum

CW REF 236610

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/File

	DESCRIPTION	HOURS	LABOR
Oslo WTP Sand Separator Project			
1	Review of anticipated vendor info to guide that vendor toward PLC hardware used and the intended plant scada interface desired.	10	\$ 1,500.00
2	Assistance with the creation of design documents relative to the outcome of the above and final control and interface with the plant scada systems.	10	\$ 1,500.00
TOTAL		20	\$ 3,000.00