# AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER RESOURCES ENGINEERING SERVICES RFQ2019070 WORK ORDER #8 Amendment #1

# Indian River County Department of Utility Services South Oslo WTP Floridan Well S-1 Replacement Amendment

This Work Order Number <u>8 Amendment #1</u> is entered into as of this <u>day of</u>, 202\_, pursuant to that certain AGREEMENT FOR PROFESSIONAL SERVICES FOR WATER PLANT AND WATER RESOURCES ENGINEERING SERVICES RFQ2019070 entered into as of this 5<sup>th</sup> 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 <u>Kimley-Horn and Associates, Inc.</u>, ("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:

1,	OF INDIAN RIVER COUNTY
By:	Ву:
Print Name: Jason Lee	
Title:	BCC Approved Date:

Ву:	
	, Chairman
BCC Approved Date:	
Attest:	, Clerk of Court and Comptroller
Ву:	
	, Deputy Clerk
Approved:	
	, County Administrator

BOARD OF COUNTY COMMISSIONERS

Approved as to form and legal sufficiency:

, County Attorney

# <u>EXHIBIT #A</u> South Oslo Rd Water Treatment Plant Floridan Well S-1 Replacement Work Order No. 8 Amendment #1

## **PROJECT UNDERSTANDING**

Kimley-Horn and Associates, Inc. ("CONSULTANT") was authorized under Work Order #8 to provide design, permitting, bid and construction phase services on February 15, 2022 for the South Oslo Road Water Treatment Plant Floridan Aquifer well S-1 Replacement. The project was originally scoped to be completed by a single contractor who would drill the well, construct the wellhead and raw watermain to the WTP. This scope included services for providing bid phase and construction phase services under a single project. Per discussions with Indian River County Department of Utility Services (IRCDUS), the decision was made to have a standalone contractor drill the well and have a separate contractor construct the wellhead and raw watermain, with the intent of improving the final product for IRCDUS. The project design for the well was completed in September 2022 and the wellhead/raw watermain was completed in February 2023.

IRCDUS advertised the well project in summer 2023 and ultimately decided not to award the project due to bids coming in over budget. IRCDUS re-advertised the project and awarded it in January 2024. The well and wellhead project have not yet been advertised for public bidding. This scope includes bid phase services for the wellhead and raw watermain contract. Additional construction phase services associated with administering two (2) separate contracts are also included in this scope of services and delineate the additional work requested by IRCDUS.

The well drilling work required clearing that would impact on-site vegetation. Since the area was known to be inhabited by gopher tortoises, a survey was performed to identify any potential tortoises that would need relocation as part of the proposed work. Since gopher tortoise surveys are satisfactory for only 90 days, this work needed to be performed close to the contractor mobilization date. Consultant proceeded forward with the survey and found one (1) gopher tortoise burrow on-site. To keep the project on schedule, Consultant prepared an application with Florida Fish and Wildlife to have the tortoise relocated. The permit was issued and Consultant is going to have the tortoise relocated. IRCDUS agreed this work needed done to keep the Contractor on schedule, so Consultant proceeded accordingly.

Additionally, the well driller, Florida Design Drilling, has requested IRCDUS to work 24 hours per day, five days per week. This requires the hydrogeologist be present for key aspects of well construction including pilot hole drilling, geophysical logging, casing installation and grouting activities. The efforts require an amendment as the original scope of services assumed operations be limited to 12 hours per day.

As such, the following amendment is provided.

### **SCOPE OF SERVICES**

# TASK 1 – PREPARATION OF DESIGN DOCUMENTS – WELL (NO CHANGES)

# TASK 2 – RAW WATERMAIN – PREPARE DESIGN DRAWINGS AND SPECIFICATIONS (NO CHAGNES)

K:WPB\_Civil/General/Black/Florida/IRCU/Well SIR/Amendment/20240611 - Amendment SIR.doc Indian River County Utilities Department

# TASK 3 – PERMITTING (NO CHANGES)

# TASK 4 – BIDDING PHASE (AMENDED)

These additional services are provided for the bid of the wellhead and raw watermain as a standalone contract. Consultant will complete the following items for the second bid:

Consultant will prepare electronic copy of bid documents, including drawings and specifications for IRCDUS purchasing department to be utilized for bidding purposes. Consultant will assist IRCDUS with front-end bid document preparation. IRCDUS purchasing department will advertise and administer the procurement of the bidding and respond to potential bidder questions.

Consultant will attend a mandatory pre-bid meeting, respond to contractor questions and prepare addendum(s), if required, which will be distributed to all the contract document holders by IRCDUS purchasing department. Consultant will respond to up to two (2) addenda during bid process.

Consultant will review bids, provide a summary of comments, and a letter that identifies the most responsive and responsible bidder.

# TASK 5 – CONSTRUCTION PHASE SERVICES (AMENDED)

Consultant will provide construction administration services for the additional contract (wellhead and raw watermain). These services will include contract document interpretation, shop drawing and change order requests. Shop drawing submittal will be reviewed for conformance with the intent of the contract documents.

Consultant's original proposal did not include payment application review. Based on two separate construction contracts, Consultant anticipates up to eight (8) applications for payment for the well drilling contract and up to twelve (12) applications for payment as part of the raw watermain and wellhead contract. Based on its observations and on review of applications for payment and accompanying supporting documentation, Consultant will review the amounts that the Consultant recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Consultant's representation to Client, based on such observations and review, that, to the best of Consultant's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents.

Consultant's original proposal assumed 12 hours per day of drilling activities. Due to FDD's request and IRCDUS approval for 24/5 work, there are additional services needed to staff the project through key elements of construction. Consultant will utilize the services of JLA Geosciences for construction oversight. JLA will provide hydrogeologic observation services, hydrogeologic direction and well design/construction implementation during 24/5 construction of Well S-1R. A JLA hydrogeologist will be present on site during 24/5 construction activities of critical phases of the production well construction including: pilot hole drilling, geophysical logging, casing installation and cement grouting. Other aspects of well construction oversight including completion interval drilling, well development, pump testing and water quality testing

K:\WPB\_Civil\General\Black\Florida\IRCU\Well SIR\Amendment\20240611 - Amendment SIR.doc Indian River County Utilities Department will be scheduled to occur during normal work hours and do not require additional oversight. JLA's scope of services is included in this proposal for reference.

Consultant's original proposal included review of the record drawings and notation of substantial deviations. IRCDUS has requested the Consultant provide record drawings to in AutoCAD (.dwg) format. Consultant will update original design files based on Contractor prepared redlined drawings and site observations. Consultant will electronically transmit record drawings to Owner upon completion of record drawing set.

Consultant will prepare IRCDUS requested "Asset Change List," or "ACL". The ACL will outline the major components or assets installed or removed as part of the work including new process equipment. The list will be prepared and submitted to IRCDUS to be used for updates to the IRCDUS's Computerized Maintenance Management System (CMMS) and Financial Information System (FIS). Assets will be identified at the lowest practical level for maintenance where work orders (WO) are assigned to carryout various maintenance tasks. The ACL will also include spare parts that are provided by the project and must be identified as such. Other key requirements for the ACL are as follows:

- 1. An electronic database deliverable provided at completion of the project. There is no specific requirement for the software, application, or tool used to prepare the ACL; however, the final data must be submitted in a common tabular format such as .csv or .xls.
- 2. Each row or record in the database shall represent a single (discrete) asset and its applicable data and attributes.
- 3. The Consultant will coordinate and manage the completion of the ACL which is carried through to the construction phase for further updates and eventual completion.
- 4. New assets added will include data and notable attributes for each asset to include but may not be limited to:
  - a. Basic Asset Type pump, tank, control valve, MCC, analyzer, PLC, etc.
  - b. General Data manufacturer/vendor, model, serial no.
  - c. Physical Data voltage, TDH, capacity, diameter, material, etc.
  - d. Service Data date installed/in-service, warranty period/start date, expected useful life
  - e. Financial Data estimated installed cost (allocation of OPCC to the assets)

# TASK 6 – ENVIRONMENTAL SUPPORT SERVICES (AMENDED, NEW TASK)

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 to assure no new burrows have been created within the project footprint. If an additional gopher tortoise survey is needed, it can be provided as an additional fee.

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 will be provided in a separate task. The following scope of services addresses permitting of the relocation of the on-site gopher tortoise burrows. Actual relocation will be provided as an additional service.

Kimley-Horn shall prepare a gopher tortoise relocation permit application for the above referenced site. This task will include an online submittal of the application to FWC, including a map of the gopher tortoise burrows identified during a previous Task, as well as follow up and coordination to obtain the permit prior to construction commencement. This task includes one (1) site visit with FWC after application submittal to review the location of the burrows. All permit fees shall be paid by the Client.

After receiving a permit from FWC, Kimley-Horn shall meet the contractor onsite during installation of BMPs for the proposed project. It is understood that if BMPs such as silt fence are not in place at the time of relocation, there is the potential for gopher tortoises from surrounding property to migrate into the construction area and require additional site visits to relocate. The excavation of the tortoises will be conducted by flat blade backhoe and a competent operator, both of which shall be arranged by Kimley Horn and is addressed in Task 6. This task assumes the tortoise relocation can be conducted within one day. Tortoises will be relocated on-site and an after-action report will be filled out and submitted to FWC.

This scope assumes that all tortoises will be relocated through backhoe excavation of gopher tortoise burrows. If on-site conditions require the addition of relocation through bucket trapping of gopher tortoise burrows, this service can be provided for an additional fee.

Kimley-Horn will subcontract for a backhoe operator trained in removal of gopher tortoises, pricing for the operator will be \$2,500 per day, with an estimate provided of one days. If additional days are needed, the client will be charged an additional \$2,500 per day needed.

#### TIME SCHEDULE

Consultant's original proposal anticipated construction duration of ten (10) months would be required. This amendment is provided to account for second contract being administered for an additional ten (10) months of project administration.

#### 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 on a lump sum fee basis as follows:

Task #	Task Description	WO #8		Amendment #1		Revised Total	
1	PREPARE DESIGN DOCS - NO CHANGES	\$	42,141	\$	• -	\$	42,141
2	PREPARE DESIGN DOCS - RWM - NO CHANGES	\$	48,922	\$	-	\$	48,922
3	PERMITTING - NO CHANGES	\$	8,388	\$	-	\$	8,388
4	BIDDING - AMENDED	\$	8,543	\$	4,791	\$	13,334
5	CONSTRUCTION PHASE - AMENDED	\$	114,517	\$	79,286	\$	193,803
6	ENVIRONMENTAL SUPPORT (AMENDED)	\$		\$	14,872	\$	14,872
	TOTAL	\$	222,511	\$	98,949	\$	321,460

# **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:

- Additional gopher tortoise relocation & permitting
- Scrub jay monitoring
- Additional coordination with FWC
- Additional construction phase services beyond what is described herein
- Re-design or integration beyond what is described herein
- Construction observation beyond the time described herein

ROJECT: IRCU Floridan Well S-1R Replacement - AMENDMENT						SHEET 1	OF 1		
LIENT: Indian River County Utilities						FILE NO.			
STIMA TOR: NPOB						DATE: 8/5/20	)24		
								1	
ESCRIPTION:		DIRE	CT LABO	DR (MA	N-HOURS	3)			
Floridan Well S-IR Replacement Design, permitting, construction phase	MDM/TJ	NB	ВК				Dir Exp	WO#8	Amendment I
Design, permitting, construction phase	WIDWN 13	SEN	REG	PROF2		EXP	(4.6%)	TOTAL	TOTAL
	PRINC	PROF	PROF	TROF2	CLK	SUB	(4.070)	IOIAL	TOTAL
IO. TASK	TRINC	TROF	TROP		CLK	300			
	1	100000	0.032.0		1		-	10 A.A. (2015)	
		4	-	2	2		\$60	1,362	
Review Well #S-1 & siting Prepare drawings & specs		4	20	88	6		\$631	1,362	
100% review set		4	8	12	6		\$181	4,317	
Zentz Survey		2	4	12	0	\$1,500	\$48	2,598	
C&W		2	4			\$12,000	\$48	13,098	
JLA		2	4		2	\$5,120	\$57	6,419	
2 PREPARE DESIGN DOCS - RWM - NO CHAN	GES		1.2.3.1		1		- 10 M 1		
Evaluate proposed RWM, hydraulic analysis		2	8		12		\$129	2,931	
Prepare exhibit of RWM pipe route		4	5		8		\$77	1,745	
Prepare drawiangs for 90% submittal		4	8	90	12		\$584	13,286	
90% Design meeting (1-meeting, planned)		2	4				\$48	1,098	
Detail sheets (3)/Cover/Key Map/Notes		4	4	20	4		\$183	4,167	
Prepare final drawings		4	4	52	12		\$373	8,485	
Final Review Meeting (1- meeting planned)		4	6	8			\$121	2,761	
Opinion of probable construction cost		2		12	4		\$96	2,190	
Technical Specification Preparation		2	6		24		\$168	3,822	
SOFTDIGS (10.a) \$250/sample)			8	8	12	\$2,500	\$147	5,839	
SURVEY (wellsite & RWM)		2	4			\$1,500	\$48	2,598	
3 PERMITTING - NO CHANGES		1.125.5		1200		12. 3 . J		1915-1927	X - 2 - 5 - 5 - 5
SJRWMD		4			4		\$188	1,472	
FDEP permit app & RAI		8		10	12		\$184	4,186	
JLA						\$2,730		2,730	
4 BIDDING - AMENDED				Q. 1.3	63/11	1200	2000		and the second
Coordination with contractor		2	10		8		\$125	2,843	
Review change order		2	8		6		\$88	2,314	
JLA						\$1,886		1,886	
C&W						\$1,500		1,500	
Additional: Well & RWM							0.57		
Additional: Pre-bid Meeting			4	6		-	\$57 \$66		1
Additional: Addenda Additional: Bid Recommendation Letter			4	8			\$66		1
Additional: QA/QC	2		-4	0			\$22		
								100000000000000000000000000000000000000	
5 CONSTRUCTION PHASE - AMENDED		10		100	20	g 4 103	0770	01.701	
Coordination/Observation - well		18		100 80	20 20	\$4,493	\$758 \$599	21,721	
Coordination/Observation - RWM Shop Dwgs		12		30	12		\$301	13,619 6,853	
Meetings 8		10		24	24		\$301	6,853	
JLA onsite Drill #S-1		4		4	4	\$40,358	\$346	42,140	
JLA Well Completion Report				-1	- 1	\$5,430	\$66	5,496	
Startup & Operational testing (wellhead, FO)		10	4	8	30		\$302	6,872	
C&W					20	\$6,000		6,000	
Final FDEP Release		6	4		20		\$76	3,946	
		4	8		2		\$105		2
Additional: Asset List		12	24		4		\$307		6
Additional: Admin Time (second contract)			20		4		\$218		4
Additional: Admin Time (second contract) Additional: Record Drawings	-	6					0710		11.
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total)	-	20	40		8		\$518		
Additional: Admin Time (second contract) Additional: Record Drawings					8	\$52,217	\$518		53,
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total)		20			8	\$52,217			53
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage		20			8	\$52,217			53
Additional: Admin Time (second contract)   Additional: Record Drawings   Additional: Pay App Review (x7 & x12, 19 total)   Additional: 24/5 Coverage   5   ENVIRONMENTAL SUPPORT (AMENDED)		20	40		8	\$52,217	\$41		
Additional: Admin Time (second contract)   Additional: Record Drawings   Additional: Pay App Review (x7 & x12, 19 total)   Additional: 24/5 Coverage   ENVIRONMENTAL SUPPORT (AMENDED)   Additional: Tortoise Survey		20	40	20	8	\$52,217	\$41 \$166		3
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage 5 ENVIRONMENTAL SUPPORT (AMENDED) Additional: Tortoise Survey Additional: GT Relo Permit		20	40 10 10	20	8	\$52,217	\$41 \$166 \$166		3.3.3.
Additional: Admin Time (second contract)   Additional: Record Drawings   Additional: Pay App Review (x7 & x12, 19 total)   Additional: 24/5 Coverage   5   ENVIRONMENTAL SUPPORT (AMENDED)   Additional: Tortoise Survey   Additional: Site Visit w FWC		20	40 10 10 2		8		\$41 \$166 \$166 \$33		333
Additional: Admin Time (second contract)   Additional: Record Drawings   Additional: Pay App Review (x7 & x12, 19 total)   Additional: 24/5 Coverage   6   ENVIRONM ENTAL SUPPORT (AMENDED)   Additional: Tortoise Survey   Additional: GT Relo Permit   Additional: Set Visit w/ FWC   Additional: Permit Fee		20	40 10 10 2 2	20 4	8	\$52,217 \$52,217 \$240	\$41 \$166 \$166 \$33 \$14		33
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage ENVIRONMENTAL SUPPORT (AMENDED) Additional: Tortoise Survey Additional: Tortoise Survey Additional: GT Relo Permit Additional: Site Visit wf FWC Additional: Site Visit wf FWC Additional: Tortoise Relocation		20	40 10 10 2 2 10	20	8	\$240	\$41 \$166 \$166 \$33 \$14 \$137		3333
Additional: Admin Time (second contract)   Additional: Record Drawings   Additional: Pay App Review (x7 & x12, 19 total)   Additional: 24/5 Coverage   5   ENVIRONMENTAL SUPPORT (AMENDED)   Additional: Tortoise Survey   Additional: GT Relo Permit   Additional: Set Visit w/ FWC   Additional: Permit Fee		20	40 10 10 2 2	20 4	8		\$41 \$166 \$166 \$33 \$14		3
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage ENVIRONMENTAL SUPPORT (AMENDED) Additional: Tortoise Survey Additional: Tortoise Survey Additional: GT Relo Permit Additional: Site Visit wf FWC Additional: Site Visit wf FWC Additional: Tortoise Relocation		20	40 10 10 2 2 10	20 4	8	\$240	\$41 \$166 \$166 \$33 \$14 \$137		3333
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage Senviron Mentral Support (AMENDED) Additional: Tortoise Survey Additional: GT Relo Permit Additional: GT Relo Permit Additional: Site Visit w/ FWC Additional: Permit Fee Additional: Backhoe Operator			40 10 10 2 2 10 4	20 4 14		\$240 \$2,300	\$41 \$166 \$166 \$33 \$14 \$137 \$28		3 3 3 2
Additional: Admin Time (second contract) Additional: Record Drawings Additional: Pay App Review (x7 & x12, 19 total) Additional: 24/5 Coverage ENVIRONMENTAL SUPPORT (AMENDED) Additional: Tortoise Survey Additional: Tortoise Survey Additional: GT Relo Permit Additional: Site Visit wf FWC Additional: Site Visit wf FWC Additional: Tortoise Relocation	2	20	40 10 10 2 2 10	20 4	8 	\$240	\$41 \$166 \$166 \$33 \$14 \$137	222,511	3333

# EXHIBIT B

K:\WPB\_Civil\General\Black\Florida\IRCU\Well SIR\Amendment\20240611 - Amendment SIR.doc Indian River County Utilities Department

Page 6 of 6

1907 Commerce Lane, Suite 104 Jupiter, Florida 33458 (561) 746-0228 fax (561) 746-0119

July 29, 2024

Via Electronic Mail

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

# RE: Proposal for Indian River County Utilities Upper Floridan Aquifer South Well 1R, Well Design, Bidding, Construction & Testing Services- 24 Hour Drilling Services Additional Time

Dear Nick,

JLA Geosciences, Inc., (JLA) is pleased to have the opportunity to provide Hydrogeologic Consulting Services to Kimley Horn and Associates (KHA) and their client, Indian River County Utilities (IRCU) for the above referenced project. Our proposed scope of work includes 24 hour site coverage for key parts of well construction based on Florida Design Drilling (FDD) modified work schedule of continuous 24 hours per day, 5 days per week work (24/5) for Upper Florida Aquifer Replacement Well (Well S-1R). Based on FDD's most recent schedule submitted on 7/26/24 JLA has generated this scope amendment to facilitate 24/5 coverage during key aspects of well construction including pilot hole drilling, geophysical logging, casing installation and grouting activities.

The following tasks identify our proposed scope of work with the associated costs for your consideration.

1.0 Upper Floridan Aquifer Well Construction Supplemental Coverage – Provide hydrogeologic observation services, hydrogeologic direction and well design/construction implementation during 24/5 construction of Well S-1R. A JLA hydrogeologist will be present on site during 24/5 construction activities of critical phases of the production well construction including: pilot hole drilling, geophysical logging, casing installation and cement grouting. Other aspects of well construction oversight including completion interval drilling, well development, pump testing and water quality testing will be scheduled to occur during normal work hours and do not require additional oversight. The estimate of additional labor hours necessary to cover 24/5 construction activities is based on the attached summary.

**Professional and support services** 

### TOTAL COST ESTIMATE

This proposal was prepared based on the information provided to date and our understanding of the project. If you feel that we have omitted anything or have not clearly defined the anticipated scope of work, we will gladly review additional information, and modify the scope and associated costs accordingly.

\$52,217.00

\$52,217.00

Proposal to Nick Black, P.E., KHA July 29, 2024 Page 2 of 2

Thank you for the opportunity and we look forward to working with you. If you have any questions, please call me.

Sincerely, JLA Geosciences, Inc.

James L. Andersen, P.G Principal Hydrogeologist

JLA:rks Encls.: *Hydrogeologic Services Est UFA S1R 24 hr ConstructionTesting\_rev.xlsx* 

jlageosciences.com

#### Hydrogeologic Services Estimate

PROJECT: Upper Floridan Aquifer Well S-1R, Well Design, Bidding, Construction & Testing - 24 Hr Drilling Update SHEET 1 OF 1 CLIENT: Kimley-Horn/Indian River County FILE NO. ESTIMATOR: Jon Friedrichs, P.G., JLA Geosciences DATE: 07/29/24 DESCRIPTION: MAN HOURS/EXPENSES Provide hydrogeologic services for the well design, construction phase services, and well completion reporting Proj Equipment Costs/ Prin Sr. Sr. Hydro Hydro Tech. ODC / for one (1) Upper Floridan Aquifer Production Well (S-4). LINE TOTAL TASK TOTAL Manager Hydro Hydro III Hydro IE Admin Subcontr. Pres Mileage NO. TASK 4.0 Upper Floridan Aquifer Well Construction \$52,217 Drill pilot hole to penetrate Floridan aquifer; geophysical logging pilot borehole \$12,857.70 (6 Days) 42 42 \$332 Caliper Log, Install and grout PVC well casing (7 Days) 57 57 \$199 \$17,386.02 Reverse air drill to total depth, water quality sampling, flow testing, geophysical logging pilot borehole (9 Days) \$21,973.70 70 70 \$332 TOTAL HOURS 19 169 169 862 52217 LABOR (\$/HOUR) 249 328 214 162 139 128 92 TOTALS \$52,217 23491 21632 \$862.42 \$52,217 6232