# WORK ORDER NUMBER 16

# **Van Antwerp Property Water Supply Restoration**

van Antwerp Prope	ity water supply hestoration
Extension and Amendment of Continuing Cont this 4 <sup>th</sup> day of November, 2014, (collectively red Continuing Contract Agreement for Professional	of this day of, 2017, pursuant to that certain ract Agreement for Professional Services entered into as of ferred to as the "Agreement") and that certain Extension of al Services entered into as of this 24 <sup>th</sup> day of October, 2017 and between INDIAN RIVER COUNTY, a political subdivision forn and Associates, Inc. ("Consultant").
(Scope of Work), attached to this Work Order services will be performed by the Consultant attached to this Work Order and made a part professional services within the timeframe more to this Work Order and made a part hereof by the set forth in the Agreement. Pursuant to parage Order shall conflict with the terms of the Agree incorporated in each individual Work Order as it	and made part hereof by this reference. The professional for the fee schedule set forth in Exhibit B (Fee Schedule), hereof by this reference. The Consultant will perform the particularly set forth in Exhibit A (Time Schedule), attached his reference all in accordance with the terms and provisions raph 1.4 of the Agreement, nothing contained in any Work ment and the terms of the Agreement shall be deemed to be fully set forth herein.
above.  CONSULTANT:  Kimley-Horn and Associates, Inc.	BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY
Brian Good, P.E.  Title: Senior V.P.  Ap	By:, Chairman BCC
Att	test: Jeffrey R. Smith, Clerk of Court and Comptroller  By:  Deputy Clerk
Ар	proved:  Jason E. Brown, County Administrator

Approved as to form and legal sufficiency:

Dylan T. Reingold, County Attorney

#### Exhibit A

# Indian River County Department of Utility Services Van Antwerp Property (Countryside Citrus) Water Supply Restoration and Well Addition

## PROJECT UNDERSTANDING

Indian River County Utilities (IRCU) is in the process of mitigating water withdrawal impacts to the Van Antwerps (VA) existing groundwater wells from the Hobart wellfield. The following scope consists of meetings and discussions, preparation of documents, coordination, and implementation of the construction of one new supply well, wellpump, and retrofitting one of Van Antwerps (VA) irrigation supply wells #1 with submersible pumps & motors. The intent is to restore, improve and preserve capacity of these wells from future impacts from the Hobart wellfield.

# **SCOPE OF WORK**

Below is the anticipated scope of work for VA Farm (Countryside) raw water supply and well addition.

#### TASK 1 - MEETINGS AND DISCUSSIONS

Consultant will attend meetings, participate in conference calls, and be available for discussions with Indian River County Utilities (IRCU) staff, St Johns River Water Management District (SJRWMD), the Van Antwerps, and others. Consultant will prepare for these meetings, including preparation of documents, participate in premeeting discussions, and provide follow up to the meetings and discussions.

Consultant will attend and participate in conference calls during design and implementation of the work described herein. It is assumed that weekly conference calls will be attended initially, with call frequency reducing to twice monthly during implementation of the work.

## TASK 2 - PREPARE DOCUMENTS FOR NEW SUPPLY WELL

Consultant will prepare design documents and technical specifications for one new permanent 6-inch Floridan aquifer supply well #6 for the VAW property, and installation of a new submersible well pump in the existing VAW well (#1).

Consultant will prepare 90% review documents and submit electronic copies to IRCU staff for review. Consultant will revise the documents to include IRCU comments and prepare final documents to be used for bidding or procurement of a contractor to construct and implement the work.

Consultant will prepare mechanical, civil, well and wellhead details, and electrical drawings for the scope of work assuming up to six (6) to eight (8) drawings.

Consultant will select pump and motor sizes, and assist with pump system startup and testing of well and pump assembly during startup.

Electronic copies of final drawings and technical specifications will be provided to IRCU for bidding, including up to 6 copies of drawings (11x17) and specifications booklet (8-1/2 x 11).

#### TASK 3 - COORDINATION

Consultant will provide coordination with FPL, Indian River County, and VAW in the siting of the well and final sizing of the service.

Consultant will coordinate with pump and electrical equipment suppliers, local drillers, and contractors.

Consultant will coordinate replacement of the existing end-suction well pump at VAW well #1 and electrical upgrades which may be necessary.

#### TASK 4 - CONSTRUCTION PHASE, FINAL IMPLEMENTATION

Consultant will provide construction phase services consisting of bid and/or procurement phase, review of bids/price proposals, on-site observation of well drilling and mechanical installation activities, review of submittals, and operational testing of designed system.

The Consultant shall have no responsibility for any contractor's means, methods, techniques, equipment choice and usage, sequence, schedule, safety programs, or safety practices.

Consultant will provide construction phase services including hydrogeological services, performance testing of well, and preparation of a brief well completion report for well. Consultant will utilize subconsultant services of JLA Geosciences, Inc. for the Hydrogeologic Consulting Services (JLA).

Consultant will provide hydrogeological support and observation services during construction of the new 6-inch well. Consultant will provide up to <u>64</u> hours of onsite hydrogeological services (JLA) for the new well. Consultant will review drilling, geologic and geophysical data and provide recommendations for casing setting depths and completion intervals. Consultant will review pump test results and provide recommendations for permanent pump setting depth. Consultant will coordinate water quality testing.

Consultant will provide limited contract document interpretation, shop drawing and pay request review and change order requests. Shop drawing submittal will be reviewed for conformance with the intent of the contract documents.

JLA will prepare a brief well completion report, including a summary of the lithologic logs, field logs, hydrologic and water quality data, and preparation of figures, data, lithogic logs, and appropriate attachments. Four (4) final copies of the report will be furnished to Owner.

The installation of the well pump, column piping, and electrical service for operation of the well will be observed, including startup and operational testing. Contractor to provide coordination of startup. Consultant will attend up to two (2) progress meetings, review construction related issues, and provide coordination where needed.

#### ITEMS FURNISHED BY OWNER

The following items will be furnished by the Owner and are necessary for completion of the tasks described herein.

- Access to site
- Preparations of front-end bid documents

# **SCHEDULE**

Consultant will provide these services as expeditiously as practical and mutually agreed upon schedule. Consultant will strive to accommodate the following schedule:

1.	Prepare Documents	4 - 6 weeks
2.	Bidding/Procurement	4 <b>-</b> 6 weeks
3.	Award/Contractor Mobilize	4 <b>-</b> 6 weeks
4.	Drill well	4 - 6 weeks

5. Well pump/electrical 4 weeks
 6. Operational testing 4 weeks
 TOTAL ANTICIPATED 24 - 32 weeks (6 - 8 months)

#### **FEE SCHEDULE**

We will provide these services in accordance with our Continuing Services Contract Agreement for Professional Services dated November 4<sup>th</sup>, 2014, and extension of Continuing Contract Agreement for Professional Services entered into as of the 24<sup>th</sup> day of October, 2017 with Indian River County. The Consultant will provide professional services on a lump sum fee basis as follows:

Task No.	Task	Task Fee
TASK 1	MEETINGS AND DISCUSSIONS	\$13,310
TASK 2	PREPARE DOCUMENTS FOR NEW	\$12,513
	SUPPLY WELL	
TASK 3	COORDINATION	\$ 3,300
TASK 4	CONSTRUCTION PHASE	\$15,485
	TOTAL	\$ 44,608

#### 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:

- Water use permitting & coordination with SJRWMD
- Groundwater modeling

# **EXHIBIT B** ESTIMATE FOR ENGINEERING SERVICES

PROJECT: Van Antwerp Property Water Supply Restoration
CLIENT: Indian River County Utilities
ESTIMATOR: MDM

DES	SCRIPTION:	DIRECT LABOR (MAN-HOURS)							
	Meetings, Discussions, Preparation of Documents, Construction & Implementation	PRINC	SEN PROF/ PM MDM	Reg Prof PE FH	P3 TECH NB/VH	CLK	EXP SUB	Dir Exp	LINE TOTAL
NO.	TASK								
1	MEETINGS AND DISCUSSIONS								
	Conference calls		10						\$2,250
	Meetings		16				\$200		\$3,800
	JLA						\$7,260		\$7,260
2	PREPARE DOCUMENTS								
<u> </u>	Prepare drawings (6-8)		6		38				\$5,340
	Specs		2		4				\$870
	Elec (C&W)		2				\$3,500		\$3,950
	JLA						\$2,353		\$2,353
3	COORDINATION								
	Pump, FPL, & vendors		6		6				\$1,980
	JLA						\$1,320		\$1,320
4	CONSTRUCTION								
	Bidding/procurement		4			4			\$1,200
	onsite observations		4		2				\$1,110
	submittals		2		6				\$1,080
	contractor coordination		6		2				\$1,560
	JLA						\$10,535		\$10,535
	TOTAL HOURS	0	58	0	58	4	25168	\$0	\$44,608
	LABOR (\$/HOUR)	235	225	150	105	75		\$0	\$0
	SUBTOTAL	0	13050	0	6090	300	25168	\$44,608	\$0