

Roseland Elevated Tank Conversion

This Amendment 1 to Work Order Number _13_ is entered into as of this ___ day of _____, 2018, pursuant to that Extension and Amendment of Continuing Contract Agreement for Professional Services entered into as of this 4th day of November, 2014 (collectively referred to as the "Agreement") and that certain Extension of Continuing Contract Agreement for Professional Services entered into as of this 24th day of October, 2017 (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").

- 1. The COUNTY has selected the Consultant to perform the professional services set forth in existing Work Order Number 13, Effective Date April 18, 2017.
2. The COUNTY and the Consultant desire to amend this Work Order as set forth on Exhibit A (Scope of Work) attached to this Amendment and made part hereof by this reference. The professional services will be performed by the Consultant for the fee schedule set forth in Exhibit A (Fee Schedule), and within the timeframe more particularly set forth in Exhibit A (Time Schedule), all in accordance with the terms and provisions set forth in the Agreement.
3. From and after the Effective Date of this Amendment, the above-referenced Work Order is amended as set forth in this Amendment. 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:

Kimley-Horn and Associates, Inc.

BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY

By:

[Handwritten signature of Kimley-Horn representative]

By:

Peter D. O'Bryan, Chairman

Title:

Senior Vice President

BCC Approved Date: _____

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

By:

Deputy Clerk

Approved:

Jason E. Brown, County Administrator

Approved as to form and legal sufficiency:

Dylan T. Reingold, County Attorney

EXHIBIT #A
Amendment #1 to
Work Order Number 13
Roseland Elevated Tank Conversion
to
Repump Station

PROJECT UNDERSTANDING

Further evaluation of the electrical power and controls design is warranted due to concerns over any potential electrical fire within the steel elevated storage tank. The evaluation should compare the costs and potential damage from an electrical fire within the elevated storage tank. An alternate route for the tank fill influent watermain is also required due to significant constraints and other utilities within the original corridor. The addition of SCADA system integration and programming scope originally not included in the scope is also desired by IRCU staff in order to provide more control and flexibility in the operation of the station.

The following scope of services consists of engineering evaluation, survey and re-design of an alternate watermain route, and SCADA system programming.

SCOPE OF SERVICES

Task 1 – Electrical Building Design

Consultant will provide an evaluation and alternate design to include a stand-alone separate pre-fabricated building to house the electrical and controls exterior to the elevated storage tank. The evaluation will consider costs of protecting from potential fire of the electrical gear within the elevated storage tank versus the costs of a separate pre-fabricated structure to house the electrical power and controls for the pump station.

Consultant will update the design drawings to include a new pre-fabricated electrical building, including electrical design drawings, electrical site plan, single line diagrams, control panel schematics, and details for a new booster pump station being powered and controlled via VFD's and PLC control system.

Consultant will prepare specifications for a pre-fabricated building, and coordinate with up to three (3) vendors that can supply the structure.

Task 2 – Survey Update and Alternate Watermain Design

Consultant will update the topographic survey to include an alternate route of approximately 700-ft of watermain from Roseland Rd to the tank site. All work will be constructed on Indian

River County owned land only up to the property line adjacent to the fire station and Riverwalk Market. Additional survey will include obtaining existing elevations, location of above ground improvements, IRCU established bench marks with vertical datum elevations referenced to NAVD 88 datum, and horizontal datum to be NAD 83/90.

The alternate route will be to the Southwest of the fire station and include a horizontal direction bore under Roseland Road (CR 505). Redesign will consist of design drawing preparation (plan & profile) IRCU staff review, coordination with the fire station department, review meetings with IRCU staff to discuss review comments and incorporate IRCU comments into plans, provide four (4) printed hard copies at each review and electronic version in Adobe.pdf, MSWord, and AUTOCadd 2014 format of final documents. Consultant will update the opinion of probable construction costs for the influent piping based on final drawings and specifications.

Task 3 – SCADA Programming

Consultant will utilize the services of Control Systems Design, Inc. for the coordination, preparation, and implementation of PLC and HMI programming of the pump station. These services will consist of:

- Submittal review for the new control panel, desktop computer, valves and VFD's.
- Develop PLC program, database and application for local (VTScada) and both remote (Wonderware) HMIs offsite.
- Implement the changes onsite to the new CMX PLC, load PLC program, install new application on local HMI, update both remote HMIs and verify communication to all three.
- Perform onsite I/O check and verify back to all three HMIs, based on two days.
- Verify onsite functionality of all 5 modes with Operations personnel, based on one day per mode for optimal run time testing, based on two separate trips.
- Provide additional enhancements as required or necessary.
- Provide warranty service for one year after startup

Final PLC and HMI programming documentation will be provided to IRCU IT staff.

TIME SCHEDULE

Consultant will complete these tasks in a timely and mutually agreed upon schedule. It is anticipated that the following task schedule will be provided:

TASK 1 – ELECTRICAL EVALUATION & BUILDING	45 days from NTP
TASK 2 – ALTERNATE WM DESIGN	45 days after survey
TASK 3 – SCADA PROGRAMMING	Concurrent with Construction

FEE SCHEDULE

We will provide these services in accordance with our Continuing Services Contract Agreement for Professional Services dated November 4th, 2014, extended to October 24, 2017 with Indian River County.

The Consultant will provide professional services for Task 1 through Task 5 on a lump sum fee basis as follows:

Task No.	Task	Task Fee
Task 1	ELECTRICAL BUILDING	\$ 10,887
Task 2	WATERMAIN DESIGN UPDATE	\$ 12,403
Task 3	SCADA PROGRAMMING	\$ 39,681
	Total Amendment Lump Sum Fee	\$ 62,971

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 coordination and responses to FDEP or other agencies (ACOE, IRFWCD)
- Tank condition inspection and assessment

ASSUMPTIONS

- No property acquisition included. It is assumed the pump station will fit on Indian River County owned land.
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CONTROL SYSTEMS DESIGN, INC.		3/6/2018	
DESCRIPTION		HOURS	LABOR
Roseland Tank Modifications			
1	Review of the design documents and discussions to complete the design effort.	10	\$ 1,500.00
2	Submittal review for the new control panel, desktop computer, valves and VFD's.	20	\$ 3,000.00
3	After finalization of the submittals from all vendors, develop PLC program, database and application for local (VTScada) and both remote (Wonderware) HMIs offsite.	80	\$ 10,800.00
4	Implement the changes onsite to the new CMX PLC, load PLC program, install new application on local HMI, update both remote HMIs and verify communication to all three.	36	\$ 4,860.00
5	Onsite perform I/O check and verify back to all three HMIs, based on two days.	26	\$ 3,510.00
6	Onsite verify functionality of all 5 modes with Operations personnel, based on one day per mode for optimal run time testing, based on two separate trips.	62	\$ 8,370.00
7	Additional enhancements as required or necessary.	20	\$ 2,700.00
8	Provide warranty service for one year after startup	20	\$ 2,700.00
TOTAL		274	\$ 37,440.00