

**Indian River County, Florida
Department of Utility Services
Board Memorandum**

Date: June 23, 2020

To: Jason E. Brown, County Administrator

From: Vincent Burke, PE, Director of Utility Services

Prepared By: Arjuna Weragoda, Capital Projects Manager

Subject: Work Order No. 34 with Kimley-Horn and Associates for Design, Procurement and Construction Administration to Replace Aging Controls for the Reclaimed Water Pumps with Variable Frequency Drives at South Regional Wastewater Treatment Plant

Descriptions and Conditions:

Indian River County Department of Utility Services (IRCDUS) operates the South Regional Wastewater Treatment Plant (SRWTP) located at 2500 SW 6th Avenue.

IRCDUS has assessed that the existing controls are aging and in need of replacement. The control panel is antiquated and rests on a concrete pad that had differential settlement, resulting in an undermined concrete slab and leaning control panel. Further failure of this slab may result in failure of the control panel and should be addressed immediately. Furthermore, the existing motor starters are inadequate for the reuse system and a more modernized approach to controlling pump operation should be explored to mitigate the frequent instances of water hammer experienced at the station.

Analysis:

In May 2020, staff requested Kimley-Horn and Associates (KHA) submit a proposal for professional engineering services to upgrade the Reclaimed Water Pump Variable Frequency Drives at the SRWTP.

Per the Continuing Consulting Engineering Services Agreement for professional engineering services dated April 17, 2018, KHA submitted a proposal for design, bidding assistance and construction management services. They have submitted Work Order No. 34, which includes providing professional services for design, specifications/bid documents, and construction observation to replace aging controls for the reclaimed water pumps with variable frequency drives and ultrasonic level controls to increase operational efficiency at the SRWTP. The total negotiated cost for the professional services is a lump sum amount of \$74,000.00. The negotiated cost has been broken into different tasks, as follows:

Task No.	Task	Task Fee
Task 1	Design Phase Services	\$ 38,775
Task 2	Bid Phase Services	\$ 6,900
Task 3	Construction Phase Services	\$ 28,325
	TOTAL LUMP SUM FEE	\$ 74,000

Funding:

Funds for this project are derived from the capital budget in the operating fund. Operating capital funds are generated from water and sewer revenues.

Description	Account Number	Amount
SWWTF Reuse Control Panels	471-169000-20531	\$74,000.00

Recommendation:

Staff recommends that the Board of County Commissioners approve Work Order No. 34 with Kimley-Horn and Associates, in the amount of \$74,000.00, for Professional Services that include design, specifications/bid documents, and construction observation services to replace aging controls for the reclaimed water pumps with variable frequency drives and ultrasonic level controls at the South Regional Wastewater Treatment Facility, and authorize the Chairman to execute said work order on their behalf.

Attachment(s):

1. Work Order No. 34: Reclaimed Water Pump Variable Frequency Drives (5 Pages)