



INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

Date: September 1, 2017

To: Jason E. Brown, County Administrator

From: Vincent Burke, P.E., Director of Utility Services

Prepared By: Arjuna Weragoda, PE, Capital Projects Manager

Subject: Work Order No. 15 with Kimley-Horn and Associates for the Control System Implementation for Well No. 4 and 7 at South County RO Plant (SCRO)

DESCRIPTIONS AND CONDITIONS:

Indian River County Department of Utility Services (IRCDUS) owns and operates six (6) Floridan supply wells that are the raw water supply and source water for the SCRO water treatment facility located on Oslo Road. These wells are the lifeblood of the treatment facilities, and maintaining efficient operation of these well fields is critical to the sustainability of the water system.

On July 12, 2016, the Indian River County Board of County Commissioners (BCC) approved the award of bid to All Webbs Enterprises, Inc. for the rehabilitation of wells S3, S4, S5, and S6 to restore capacity and reliability of the raw water supply wells to the water treatment plant and to construct a new well S7. During the initial phases of rehabilitation of well S4, it became apparent that the existing PVC casing was damaged significantly from previous work to the extent of not being salvageable. Therefore, on April 4, 2017, the BCC approved Change Order No. 1 to All Webb's contract to include the construction of a new well S-4R in the same vicinity as the old. Currently, completion of well S7 is scheduled for the end of October 2017. Each of the new well designs include variable frequency drives (VFD) and fiber optic (FO) communication, which is a more robust and reliable system over the existing radio telemetry (RTU) systems currently in place at all of the existing wells. With the FO design, additional programming is necessary at both the water plant and well sites to provide direct communication with the water plant Programmable Logic Control (PLC). Integration of control and monitoring of these wells with the other wells is the last element needed to provide full operation of these two wells. Once complete, two of the seven wells at SCRO will have direct, more reliable communication with plant and wells S7 and S-4R.

ANALYSIS:

Staff requested that Kimley-Horn prepare a proposal for the integration and continuous monitoring of the two new wells for flow, water level, pump speed and control of pump operation through the existing plant PLC via Human Machine Interface (HMI) for the two new wells at the SCRO water treatment plant. The scope is more specifically described in the attached Work Order No. 15. On November 4, 2014, the BCC approved the Extension and Amendment of the Continuing Contract Agreement for Professional Services with Kimley-Horn and Associates. The total negotiated cost for the control system implementation is outlined in Work Order No. 15 for a lump sum amount of \$24,992.00.

FUNDING:

Funding for Work Order No. xx is available in the SCRO Well No. 4 and 7 Account within the Utilities Operating Fund. Operating funds are derived from water and sewer sales.

| Description | Account Number | Amount |
|---------------------------|------------------|-------------|
| SCRO New Well S-4R and S7 | 471-169000-14506 | \$24,992.00 |

RECOMMENDATION:

Staff recommends approval of the attached Work Order No. xx authorizing the above-mentioned professional services and requests the Indian River County Board of County Commissioners to authorize the Chairman to execute the attached Work Order No. 15 on their behalf for a sum amount of \$24,992.00 to Kimley-Horn and Associates.

ATTACHMENT(s):

1. Work Order No. 15 and supporting documents (6 Pages)