



**INDIAN RIVER COUNTY, FLORIDA
DEPARTMENT OF UTILITY SERVICES**

Date: October 1, 2018
To: Jason E. Brown, County Administrator
From: Vincent Burke, P.E., Director of Utility Services
Thru: Terry Southard, Operations Manager
 Jennifer Hyde, Purchasing Manager
Subject: Request Data Flow System Upgrade – 55 Lift Station Remote Telemetry Units (RTUs)

BACKGROUND:

In 1990, the Indian River County Department of Utilities Services (IRCDUS) solicited bids for a Supervisory Control and Data Acquisition (SCADA) system that would monitor the county’s growing sewage collection system. Data Flow Systems (DFS) of Melbourne, Florida, was awarded the bid. This system is our electronic eyes and ears for the collection and transmission of county sewage. In 1990, at the time of the bid, IRCDUS was collecting and transporting over 3.5 million gallons per day (MGD) of sewage. In 2017, that has increased to 5.0 MGD. SCADA monitors and alerts stand-by personnel of any power failures, high wet well levels and equipment malfunctions. With these alarms, it allows for quick responses and helps avoid sewer back-ups into homes and sewage overflows on the ground. At this time, DFS monitors 335 lift stations and 17 reuse sites.

In 1994, SCADA was expanded and installed on wastewater treatment facilities to monitor plant reuse water. The system monitors flow, chlorine, turbidity and pH levels. With the use of SCADA on the treatment plants, the county was able to reduce Florida Department of Environmental Protection (FDEP) permit staffing from 24 hours/day to 8 hours/day.

In 2004, SCADA was upgraded to handle the additional growth of lift stations at a cost of \$460,000, and again in 2011 for reuse sites at a cost of \$127,000.

ANALYSIS:

At this time, 55 RTUs from the original 1990 system purchase need to be upgraded to the newer Telemetry Control Unit (TCU) due to their age and the lack of parts for the old RTUs. Of the 55 upgrades, 52 units will be 250 volts and 3 units will be 480 volts. DFS will provide all materials, installation, wiring, testing, configuration and start-up service for each unit at a total cost of \$412,500.00.

FUNDING:

Funds for the items are available in the Wastewater Collection Capital account in the operating fund. Operating fund revenues are derived from water and sewer sales.

Description	Account Number	Amount
Machinery & Equipment	47126836-066400	\$412,500.00

RECOMMENDATION:

On July 18, 2018, the Board of County Commissioners (BCC) authorized the Purchasing Department to use Data Flow System (DFS) as the sole source provider for equipment, repairs and replacements for Data Flow System products. At this time, staff recommends the BCC approve the upgrade of 55 Remote Telemetry Units (RTUs) at the cost of \$412,500.00 and authorize the Purchasing Department to issue DFS a purchase order for this project.

Attachment: Data Flow Quote # 180827-01-RW