22-1072 David Blvd Apartments – Lift Station Upsizing

Statement: A private development project for a proposed multi-family development with a total of 297 units and a clubhouse located off S McCall Rd in West County.

Objective: To determine the most reasonable, cost effective and feasible option for implementing Charlotte County Utilities (CCU) goal to minimize the number of lift stations (LS) within the CCU service area.

Background:

In February 2022, CCU held a Design Review Team (DRT) meeting with the Engineer of Record for this development. At that meeting, there was a discussion to limit the number of lift stations and upsize the proposed LS to accommodate the existing LPS (low pressure sewer) area and serve additional Commercial properties surrounding the project. CCU is experiencing problems with the existing LPS system due to numerous deep bores and very long distance to existing LS#872 where the wastewater flow from the LPS system discharges. It was understood that this proposal would require a cost share agreement for the upsizing of the LS.





LOCATION MAP

• Option #1: Allow the David Blvd Apartments Development to install a LS to only meet the needs of their development.

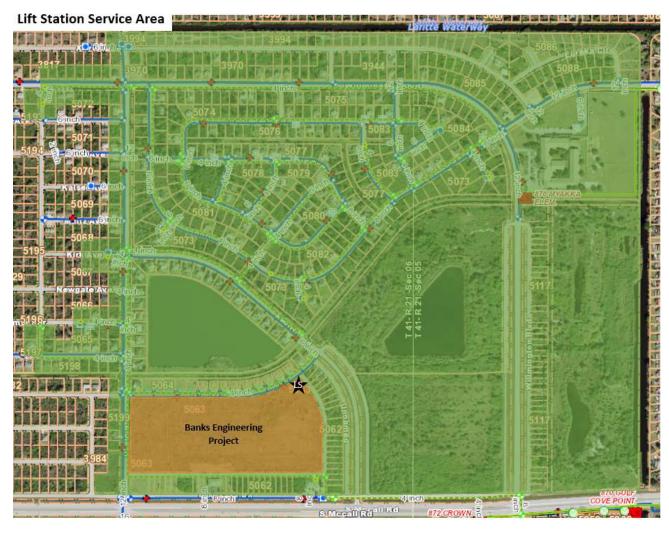
Instead of installing one LS designed to accommodate multiple parcels, the Developer would install a LS only for their development. This would mean that a number of additional lift stations would be needed to serve the surrounding parcels.

Option #1 CCU's Cost: \$0

• Option #2: Implement CCU's goal to minimize the number of lift stations within the CCU service area by upsizing the lift station.

The David Blvd Apartments upsize the LS to accommodate additional flow from the existing LPS service area, the commercial properties along S McCall Rd, and Willmington Blvd., and the Myakka Elementary School. This upsizing increased the depth of the LS from 19.5' deep to 24' deep and requires larger pumps. This option aligns with CCU's directive to minimize the number of CCU owned and maintained lift stations.

The LS service area:



Below is a detailed table of the LS upsizing costs:

Cost Share								
Location	Utility	Design Requirements	CCU Requirements	Unit	Design Cost	Base Design Cost	CCU Upsize Cost	CCU Cost Share
Lift Station	6' LS Invert -5.53' (14.03' Deep LS)	1	0	EA	\$100,000.00	\$100,000.00	\$0.00	\$0.00
	15 hp Pump and Equipment	1	0	EA	\$10,000.00	\$10,000.00	\$0.00	\$0.00
	8' LS Invert -7.30 (15.8' Deep LS)	0	1	EA	\$175,000.00	\$0.00	\$175,000.00	\$0.00
	34 hp Pump and Equipment	0	1	EA	\$35,000.00	\$0.00	\$35,000.00	\$0.00
					Total	\$110,000.00	\$210,000.00	\$100,000.00
						CCU Cost Share Total		\$100,000.00

Option #2 CCU's Cost: \$100,000.

Recommendation:

After evaluation of the above, option #2 was selected at a CCU cost of \$100,000. It is in CCU's best interest to install the necessary infrastructure now and only pay the difference in LS depth and pump sizes. The LS upsizing during the David Blvd Development construction allows CCU to reduce the number of LSs which will subsequently reduce future operation and maintenance costs.