

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:
July 21, 2026

Agenda Item Number: M-1

Action Required:
No

Department: Capital Projects
Sponsor: Steve Suggs

Subject:
Capital Projects Report - June 2026

Summary:
Mr. Suggs will present the Capital Projects monthly report.

<u>Reviewed / Approved</u>	<u>Financial Impact</u>	<u>Attachments</u>
Operations: _____	\$	1. Monthly Report
Administration: _____	Expense	
Finance: _____	Funding Source:	
District Counsel: _____	N/A	
District Clerk: _____	Budgeted:	
Engineering: _____	N/A	

Approved By:  Date: 7-16-26
General Manager

Key Largo Wastewater Treatment District Capital Projects Report

Including updates through June 2026

Current Capital Projects

Effluent Filtration Upgrades (LPA0243)			
Original Contract Amount:	\$3,043,820.00	Funding Source:	FDEP Stewardship (LPA0243)
Current Contract (Including ODP's, CO's, Amendments):	\$3,343,823.76	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$2,882,800.16	Engineering Paid to Date:	\$502,811.25 (15.0%)
Retainage Held?	Yes, 5%	Project Completion:	88%
Balance to Complete:	\$461,023.60	On Schedule?	No
Contract Start Date:	05/18/2023	In Liquidated Damages?	Yes
Contract Substantial Completion:	06/17/2025	Days in Liquidated Damages and Rate:	399 days at \$1,000/day
Contract Final Completion:	07/17/2025	Total Liquidated Damages:	\$399,000
<u>Project Updates:</u> - Evoqua submitted their Final Inspection Report Summary on July 18th, 2025, attributing the corrosion issues to process/reuse water and stagnant conditions rather than workmanship. - The filter was delivered to the KLWTD WWTP site on March 13th, 2026 and was set in place and attached to the existing piping network. - Filter start-up was scheduled for the week of April 27th, 2026 with Evoqua on-site. Fitting spray bar nozzles, testing of control panel and disc drive occurred. During start-up, an issue was identified with the backwash pump motor, which required repair or replacement before the system can be fully tested and placed into operation. - Evoqua's startup activities were halted after the backwash pump failed, preventing completion of filter commissioning and placement into service. - Evoqua has ordered an exact stainless steel cased replacement backwash pump from Grundfos in mid-June, with a lead time of 30-weeks expected for arrival. - Due to the unresolved pump failure, incomplete commissioning, and other outstanding work and contract requirements, KLWTD and Apex issued a Notice to Cure to Reynolds Construction requiring a recovery plan to accomplish timely completion of the remaining work.			

Collection System Monitoring (LPA0424)			
Original Contract Amount:	\$7,575,677.00	Funding Source:	USACE & FDEP Stewardship (LPA0424)
Current Contract (Including ODP's, CO's, Amendments):	\$9,893,632.00	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$8,873,253.46	Engineering Paid to Date:	\$1,087,404.00 (11.0%)
Retainage Held?	Yes, 5%	Project Completion:	92%
Balance to Complete:	\$1,020,378.54	On Schedule?	Yes
Contract Start Date:	07/26/2022	In Liquidated Damages?	No
Contract Substantial Completion:	07/21/2026	Days in Liquidated Damages and Rate:	0 days at \$500/day
Contract Final Completion:	08/20/2026	Total Liquidated Damages:	N/A
<u>Project Updates:</u> • Work is completed in Basins A, B, C, D, F, G, H, I and JK. • Sensor installation is 100% complete (Note: This is only sensors and does not include other aspects of the project). Walkthroughs and final completions have been completed for all basins. • Valve rebuilds have been completed with a total of 3,000 rebuilds. • IVC and Flovac have completed installation of the vacuum monitoring system across all 2,967 vacuum pits and buffer tanks. Completion documentation was finalized in January and provided to KLWTD. • Grinder Pump/Low-Pressure monitoring installation has been completed with all 156 monitoring sensors installed for the project. • Flovac continued progress on the preparation to install the force main/high-pressure monitoring system. • Substantial completion documentation for the valve rebuilds was completed in June. • Throughout June, KLWTD and Flovac continued coordination on the monitoring device configuration. Flovac installed 4 of the 30 proposed force main pressure sensors and have been verifying that the sensors are calibrated and providing accurate readings. Additionally, discussions have been held for clarification regarding the materials used for installation to minimize potential impacts to the force main in the unlikely event of an incident. • The construction progress meeting was held on June 2nd, 2026 with KLWTD, APEX, and Flovac staff.			

Power Conditioning and Electrical Upgrades at the WWTP (LPA0426)			
Original Contract Amount:	\$2,670,450.00	Funding Source:	R&R & FDEP Stewardship (LPA0426)
Current Contract (Including ODP's, CO's, Amendments):	\$3,209,145.53	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$2,569,886.80	Engineering Paid to Date:	\$546,650.05 (17.0%)
Retainage Held?	Yes, 5%	Project Completion:	81%
Balance to Complete:	\$639,258.73	On Schedule?	Yes
Contract Start Date:	01/22/2025	In Liquidated Damages?	No, Time-Ext Pending
Contract Substantial Completion:	07/08/2026	Days in Liquidated Damages and Rate:	0 days at \$1,000/day
Contract Final Completion:	08/07/2026	Total Liquidated Damages:	N/A
<u>Project Updates:</u> - Exterior conduit installation is 100% complete, providing infrastructure for power, signal, and camera systems serving plant equipment and instrumentation throughout the facility, including the SBR/digester areas, Post EQ tank area, CCC platform, and other site infrastructure. - Electrical room modifications continued, along with coordination of voltage regulation transformer procurement, ATS and disconnect placement, and wiring. - The additional conductors pulled from the transformer have been routed through the current ATS and are ready for termination in new ATS during the planned shutdown on 6/10. - The Shutdown for the ATS connection was split into two nights to allow for the main service to be connected on the first night and the Generator connections to be made in the subsequent night shutdown. - Inspection reports continued to document open items and quality-control items, including conduit fitting adjustments at select GFCI locations and surface cleanup on walkways. - Pedro Falcon continued work on extending the lightning protection system at the west end of the wastewater treatment plant to allow for compliance with UL certifications. - The SureVolt unit is currently in production at the factory, with a tentative delivery date of Late August. - Pedro Falcon, KLWTD, and APEX staff attended construction progress meetings on June 10th and June 24th, 2026.			

Vacuum Stations Odor Control (KG004)			
Original Contract Amount:	\$4,009,141.26	Funding Source:	R&R & FDEP Stewardship (KG004)
Current Contract (Including ODP's, CO's, Amendments):	\$4,009,141.26	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$3,080,404.43	Engineering Paid to Date:	\$295,618.50 (7.4%)
Retainage Held?	Yes, 5%	Project Completion:	70%
Balance to Complete:	\$928,736.83	On Schedule?	Yes
Contract Start Date:	03/28/2025	In Liquidated Damages?	No
Contract Substantial Completion:	08/18/2026	Days in Liquidated Damages and Rate:	0 days at \$1,000/day
Contract Final Completion:	09/17/2026	Total Liquidated Damages:	N/A
<u>Project Updates:</u> - As of October 22nd, 2025, all (6) sets of Odor Control Tanks arrived at their respective vacuum station; All tanks have been delivered in acceptable condition. - Final connections have been completed at all vacuum stations. The new Odor Control systems are operational at all vacuum stations. - Vacuum Station E effluent odor line drainage has been installed. - Contractor has completed removal of existing Odor Control Systems. - Contractor is continuing to work on the swale restoration and sod installation at Vacuum Station D. - Contractor completed coating of concrete slabs at Vacuum Stations A, D, E, G, I, and J/K. Touch up coating work is in progress. - A time extension of 195 days has been granted via change order to allow for sufficient time to receive and install the new generators. Generators are expected to arrive at Vacuum Station A and D by the end of July 2026. - Inspections were completed by Apex at all vacuum stations throughout April, and an outstanding items list was provided to Belle Construction on April 28th by Apex. The list details items to be addressed by Belle Construction, such as finishing coatings, asphalt patch work, and installation of ports. All items in the outstanding items list have been addressed. - Contractor followed up with Cummins regarding the generator delivery schedule and prepared PCO's for the options associated with replacement of Vac Station E's Generator belly fuel tank, additional flanges for odor control maintenance, and I-beam supports for the new fuel tanks. - Vacuum Station A & D's generator delivery is scheduled for July 28th.			

Upcoming Capital Projects

EQ Tanks and Headworks Project (LPA0425)			
Expected Project Cost	\$13,480,320.00	Est. Design	90%
Existing State Funds	\$6,547,280.00	Est. Design Completion	August 2026
Funding Source	FDEP Resilient Florida & Stewardship (LPA0425)	Est. Construction Dates	January 2027 – January 2029

Project Status:

The EQ Tanks and Headworks Project includes two (2) new 500,000-gallon pre-equalization tanks, a new headworks screening system, and related appurtenances and improvements. The 90% design plans are currently in progress following the design revision from the original single 1.0-million-gallon pre-equalization tank to the current dual tank configuration. The team is continuing to coordinate with CROM on the revised tank drawings, including updated tank penetrations, loading criteria, and other requirements necessary to finish the tank and floor design. Coordination with equipment manufacturers also remains ongoing for key components such as odor control, aeration diffusers, headworks screens, and the screening disposal system to confirm compatibility with the updated tank design. Apex is continuing progress toward the 90% set with updates to the site layout, structural, electrical, P&ID, and development of process logic for normal operation. A geotechnical analysis of the site has been completed by Universal Engineering Services, and recommendations have been provided for the structural foundation of the proposed improvements. Other outstanding items include completion of the FDEP WWTP Operation Permit including permit modification for the dual tank design, coordination with Aqua-aerobics for integration of the SBR controls and SCADA, and ERP permit modifications for the proposed stormwater system alterations.

Critical Systems Resilience and Mitigation Upgrades			
Expected Project Cost	\$15,957,588.00	Funding Source	FDEP Resilient Florida & Stewardship
Existing State Funds	\$7,978,794.00	Est. Construction Dates	Jan 2027 – Jan 2029

Project Status:

Vacuum Tank Upgrades: This project includes replacement of existing steel vacuum tanks at all KLWTD vacuum stations with new corrosion-resistant fiberglass reinforced plastic tanks. Design work remains underway for Vacuum Station A and E tanks. The Vacuum Station E design plans are nearing the 60% completion milestone. With input from KLWTD staff, the proposed location of the Vacuum Station E replacement tank is being carefully evaluated and selected to help maintain vacuum pressure in the far reaches of the E and F service areas during the tank replacement process. *Est. Design Completion: Aug 2026.*

Ductile Iron Pipe Rehabilitation Project: This project rehabilitates ~4,200 linear ft of corroded ductile iron pipes at the Key Largo Wastewater Treatment Plant using CIPP lining for larger mains and selective HDPE open-cut replacement for smaller or severely deteriorated sections. KLWTD staff have exposed select subgrade pipes for corrosion analysis and field survey verification. Design has reached approximately 60% for the pipe rehabilitation and replacement. The project also includes asphalt work, replacement of the PVC fire main, new isolation valves and SCADA-integrated flow meters and salinity meters on NTM & STM, improving system control. *Est. Design Completion: Aug 2026.*

Floodproofing WWTP & Vacuum Stations: Project is in the conceptual design phase and was included within the Resilient Florida grant funding project request.

Power Conditioning at Vacuum Stations: Project is in the preliminary design phase and was included within the Resilient Florida grant funding project request.

Project Construction Photos



Figure 1: Pedro Falcon Connecting Main Service Conductors to New 2500 kVA ATS



**Figures 2 & 3: Finalized Conductor Connections in New 2500 kVA ATS
Project Construction Photos Cont.**

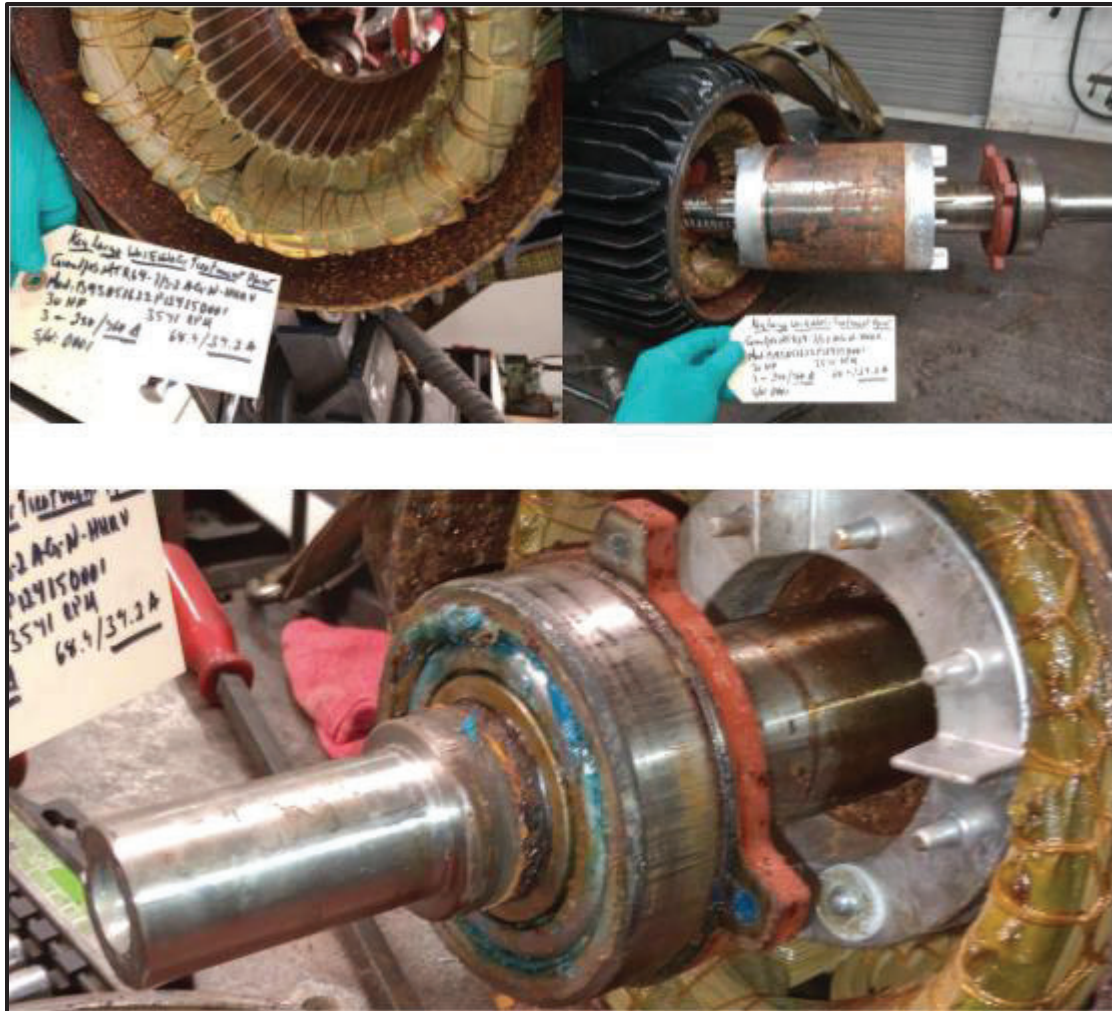
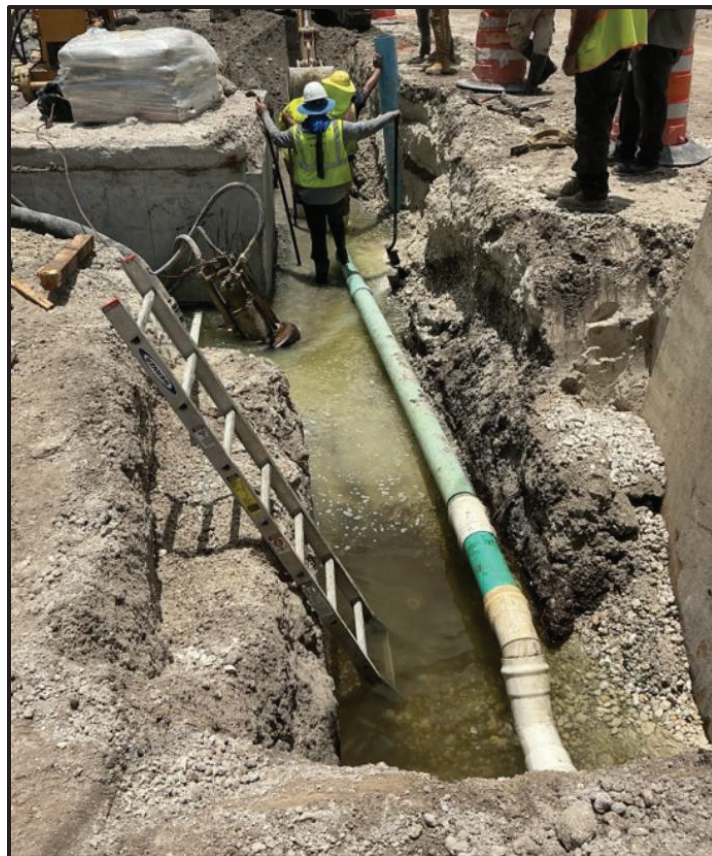


Figure 4. Interior of the Backwash Pump Motor Showing Extensive Corrosion and Motor Shaft Scoring.



Figures 5 & 6: Conflict Structure and Vacuum Main Reroute at Twin Lakes