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

Meeting Date:
November 17, 2026

Agenda Item Number: O-1

Action Required:
No

Department:
Capital Projects

Sponsor:
Robert Mather

Subject:
Capital Projects Report - October 2026

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

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

Approved By: _____ **Date:** 11-12-26
General Manager

Key Largo Wastewater Treatment District Capital Projects Report

Including updates through October 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:**	$511,931.46 (15.3%)
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:**	**518 days** at **$1,000/day**
Contract Final Completion:	07/17/2025	**Total Liquidated Damages:**	**$518,000**

Project Updates:

- 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.
- 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.
- Reynolds and Benson Electric completed the installation of both the cast iron backwash pump and the soft starter during the attempted startup on October 27th.
- Startup of the effluent disc filter was attempted on October 27, 2026, but was unsuccessful due to bowing of the filter vessel walls, resulting in interference with the rotating disc cartridges. Additional issues with the filter gaskets were also identified and replacement gaskets have been delivered to the site.
- Evoqua proposed installing external steel angle reinforcement to straighten and support the affected vessel walls. The proposed repair was reviewed and approved as noted by Apex on October 30, 2026. Coordination is ongoing to establish a repair schedule and revised startup date.

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):	**$9,464,730.86**	**Estimated Engineering and Other Costs Percentage:**	15%
Construction Paid to Date:	$9,082,691.75	**Engineering Paid to Date:**	$1,150,715.75 (12.2%)
Retainage Held?	Yes, 5%	**Project Completion:**	96%
Balance to Complete:	$382,039.11	**On Schedule?**	Yes
Contract Start Date:	07/26/2022	**In Liquidated Damages?**	No
Contract Substantial Completion:	08/31/2026	**Days in Liquidated Damages and Rate:**	0 days at $500/day
Contract Final Completion:	09/30/2026	**Total Liquidated Damages:**	N/A

Project Updates:

- 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.
- Substantial completion documentation for the valve rebuilds was completed in June.
- Coordination continued through September to review, approve, and procure the necessary materials. A portion of the required materials was delivered on August 27, with the remaining items delivered on September 14th.
- In mid-September, Flovac installed an additional gateway and concrete pole in Basin B (498 Sound Dr) to remedy connection issues with some modules in this Basin.
- The install continued through late October with 30/30 force main pressure monitoring modules being installed. Site restoration is the only remaining item that needs to be completed before the walkthrough can be scheduled.
- A final reconciliating order has been prepared and is under review. Flovac is scheduling the substantial completion walkthroughs with Apex, KLWTD, and their subcontractor.

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):	**$3,221,662.94**	**Estimated Engineering and Other Costs Percentage:**	15%
Construction Paid to Date:	$2,664,168.28	**Engineering Paid to Date:**	$566,683.30 (17.6%)
Retainage Held?	Yes, 5%	**Project Completion:**	83%
Balance to Complete:	$557,494.66	**On Schedule?**	Yes
Contract Start Date:	01/22/2025	**In Liquidated Damages?**	No
Contract Substantial Completion:	11/30/2026	**Days in Liquidated Damages and Rate:**	0 days at $1,000/day
Contract Final Completion:	12/30/2026	**Total Liquidated Damages:**	N/A

Project Updates:

- 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.
- Pedro Falcon completed the required lightning protection mast extension in mid-September. The system has officially been certified with the modifications made to allow for the coverage of the high mast on the headworks.
- The Voltage Regulation Transformer (SureVolt) was delivered in a two-part shipment, with a pallet of additional parts and spares with the device on a separate shipment. The pallet of additional parts and spares arrived on Wednesday, August 26th. The device was delivered on Monday, September 28th and has been placed in the ATS room awaiting final positioning.
- The Contractor coordinated a meeting with Larson Electric to review the identified deficiencies and obtain formal responses regarding equipment configuration, required clearances, maintenance accessibility, and proposed corrective measures. Apex is reviewing the manufacturer's responses to determine whether the equipment can be safely installed and maintained within the available electrical room space.
- Discussions with Larson focused on discrepancies between the previously confirmed equipment access requirements and the delivered configuration, particularly regarding the need for rear access to operate, inspect, reset, and maintain internal components, including the ACB and STS.
- Pedro Falcon, KLWTD, and APEX staff attended construction progress meetings on October 14th and 28th.

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):	**$4,176,452.89**	**Estimated Engineering and Other Costs Percentage:**	15%
Construction Paid to Date:	$3,878,745.60	**Engineering Paid to Date:**	$366,100.75 (8.8%)
Retainage Held?	Yes, 5%	**Project Completion:**	93%
Balance to Complete:	$297,707.29	**On Schedule?**	Yes
Contract Start Date:	03/28/2025	**In Liquidated Damages?**	No
Contract Substantial Completion:	01/20/2027	**Days in Liquidated Damages and Rate:**	0 days at $1,000/day
Contract Final Completion:	02/19/2027	**Total Liquidated Damages:**	N/A

Project Updates:

- 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.
- CO #3 was approved by the Board on July 21, 2026.
- Vacuum Station A & D's generators were delivered on July 28th. Both generators have been fastened in place and their belly tanks filled with fuel. Load testing and startup have been completed at both Vacuum Station A and D.
- Contractor has completed installation of additional maintenance flanges at each Vacuum Station.
- Contractor has begun ordering materials for the Vacuum Station E belly tank replacement; Apex has reviewed the provided fabrication shop drawings and is coordinating with the Contractor to address remaining items.
- Apex is awaiting pricing from the Contractor to re-route odor control line at Vacuum Station E to the odor control tanks above grade to prevent identified ground water intrusion.
- The Contractor is addressing outstanding closeout items to complete the base bid scope of work.
- Belle Construction, KLWTD, and Apex staff attended a construction progress meeting on October 22nd, 2026.

Upcoming Capital Projects

EQ Tanks and Headworks Project (LPA0425)			
Expected Project Cost	$15,440,000	**Est. Design**	90%
Existing State Funds	$6,547,280	**Est. Design Completion**	Dec 2026
Funding Sources	FDEP Resilient Florida, Stewardship (LPA0425)	**Est. Construction Dates**	March 2027 – March 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. Coordination with CROM remains ongoing, and updated tank drawings reflecting the dual-tank configuration are expected soon for integration into the overall plan set. Coordination with equipment manufacturers and vendors, such as TSC Jacobs and Heyward, remains ongoing to finalize equipment selection for key components. Recent discussions among KLWTD, the Village of Islamorada, and Apex have focused on the proposed influent screening configuration. The original design included three influent screens, with one dedicated to Islamorada flows and two dedicated to KLWTD flows. An alternative is now being evaluated that would combine the Islamorada and KLWTD influent flows into a single force main feeding two influent channels. The design team is evaluating the cost and O&M impacts of this alternative. Additional coordination with the headworks screening manufacturer will be required to revise the configuration and finalize the proposed equipment. Evaluation of the existing electrical system remains ongoing, along with coordination of the electrical improvements necessary to support the proposed equipment and facility upgrades. Process and instrumentation design are continuing to progress. A response to FDEP's Request for Additional Information (RAI) for the ERP application has been submitted. Additionally, the final FDEP wastewater operating permit, which includes the permit modification for this project, has been issued and received by Apex and KLWTD.

Critical Systems Resilience and Mitigation Upgrades			
Expected Project Cost	$15,957,588	**Funding Sources**	FDEP Resilient Florida, Stewardship/ACOE
Existing State Funds	$7,978,794	**Est. Construction Dates**	Apr 2027 – Jun 2030

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 ongoing for Vacuum Station A and E. Resilient Florida Grant Staff have stated that the replacement of the tanks is eligible for grant funding. Grant work plans are being prepared.

Ductile Iron Pipe Rehabilitation Project: This project replaces ~4,200 linear ft of corroded ductile iron pipes at the Key Largo Wastewater Treatment Plant using corrosion resistant HDPE open-cut replacement. Resilient Florida Grant Staff have stated that the replacement of the ductile iron pipe is eligible for grant funding. Grant work plans are being prepared.

Floodproofing WWTP & Vacuum Stations: Project is in the conceptual design phase. Resilient Florida Grant Staff have stated that floodproofing is eligible for grant funding.

Power Conditioning at Vacuum Stations: Project is in the preliminary design phase. Resilient Florida Grant Staff have stated that the power conditioning at vacuum stations is eligible for grant funding.

Project Construction Photos





Figures 1 & 2: Disk Filter Cap Rubbing on the Internal Weld due to Deformed Metal





Figures 3 & 4: New SS FM tap on PVC & Testing of Pressure Sensor for Calibration



Figures 5 & 6: Voltage Regulation Transformer placed in ATS room awaiting final positioning