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

Meeting Date: September 17, 2019

Agenda Item Number: L-2

Agenda Item Type: Information / Presentation

Agenda Item Scope: Review / Discussion

Recommended Action: Action: Approval

Department: Engineering

Sponsor: Ed Castle

Subject:

Weiler Engineering Work Authorization Amendments

Summary of Discussion:

The WEC Work Authorizations 19-01 (Capital Improvements) and 19-02 (WWTP Engineering Services) have exceeded the FY19 budgeted amounts. WEC is requesting amendments to these two work authorizations to increase the budgeted amount. An increase $27,627.00 is requested for WA 19-01 and an increase of $8,627.00 is requested for WA 19-02. It should be noted that there will be unspent funds in WA 19-03 (Field Ops) and WA 19-04 (Admin) that will offset the requested increases in the overall WEC budget by about $9,000.00 depending on the work in these areas for the end of September.

Reviewed / Approved

Operations: _____

Administration: _____

Finance: _____

District Counsel: _____

District Clerk: _____

Engineering: _____

Financial Impact

$ 36,254.00

Expense

Funding Source:

Grant(s)

Budgeted:

N/A

Attachments

1. Memo from WEC

Approved By: _____ **Date:** 9/12/19

General Manager

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MEMORANDUM

To: KLWTD Board

From: Ed Castle, PE

Date: September 12, 2019

Re: FY 19 Engineering Budget Amendment

The FY19 budget for Professional Engineering Services was prepared in early July 2018 and presented to the Board along with the rest of the FY19 budget in August. Due to shifts in the construction schedules for ongoing construction projects and re-allocation of Islamorada Plans Review costs, there has been budget over-runs in two WEC Work Authorizations in FY19.

The table below summarizes the KLWTD budget amount and actual expenditures through September 11, 2019 for the four WEC Work Authorizations.

WEC FY19 Work Authorization Summary

WEC Work Authorization	Department	FY19 Budget Amount	Total Billing as of 09/10/19	Amount Over/Under Budget	Requested Increase
WA # 19-01	Capitals	$186,660.00	$207,927.50	-$21,267.50	$27,627.00
WA # 19-02	WWTP	$51,838.00	$58,965.00	-$7,127.00	$8,627.00
WA # 19-03	Field Ops	$55,760.00	$52,578.75	$3,181.25	$0.00
WA # 19-04	Admin	$26,135.00	$18,667.00	$7,468.00	$0.00

As can be seen from the table, the net requested increase in the WEC FY19 budget is $35,849.50. The unused funds from WA # 19-03 and 19-04 will offset the requested increases for WA # 19-01 and 19-02. It is not anticipated that the billings for the end of September will use all of the allocated funds in work authorizations 19-03 and 19-04.

The WEC capital projects billing has exceeded the estimated budget for FY19 by $21,425.00 through September 10th, 2019. The over-run is due in part to the design effort for applying for the SWAG and Section 319 grant funds that became available

April 2019. WEC was directed to come up with a project that met the criteria for these grants. The criteria included treatment of stormwater to remove nitrogen and phosphorus prior to discharge. WEC prepared the design, the process calculation and completed the application package for adding additional parking in the existing stormwater retention area. The project would include nitrogen and phosphorus reduction in chambers under the proposed parking area.

The other factor in the actual billing exceeding the estimated budget for FY19 is due to extended project times for construction projects at the WWTP. The over-run is due largely to the Capital Upgrades project. This project included the following four tasks:

- Headworks automated bypass and screening
- Filter booster pump modifications
- Process water pumping station upgrades
- Bridge from Operations Building to SBR #3

When the FY19 budget was prepared, it was anticipated that the Capital Upgrades project would be by completed in December 2018 bases on the Critical Path Method construction schedule submitted by the Contractor. The work has progressed more slowly than anticipated. As of September 11, 2019 there is still punch list items to be completed, followed by project closeout. The over-run in time results in extra effort by WEC for CEI (Construction Engineering Inspections), construction progress meetings and project administration, since each day of work is witnessed and documented. More days worked results in additional effort by WEC.

The Photovoltaic Array Project has also exceeded the anticipated date of completion. This project was awarded in July 2018 and was just completed this month. Similar to the Capital Upgrades project, additional CEI and project administration time was incurred by WEC.

The table below provides a breakdown WEC billings for each of the capital projects. The WEC Work Authorization was a lump sum amount based on estimates for the various projects. The construction projects estimates were prepared using times provided by the contractors. Some of these projects have exceeded the estimated duration significantly, as explained above. The Parking Expansion Project was not anticipated at the time of budget preparation and was not included in the FY19 budget.

Capital Improvements Budget FY19

	WEC Billing Through 9/10/2019
Capital Upgrades Project	$44,577.50
CCC Coatings and Modifications	$38,395.00
Solar Arrays for Ops Bldg and CCCs	$24,991.25
Fire Suppression at WWTP	$9,022.50
Steel Storage Bldg at Vac E	$46,881.25
Fire Suppression at Vac Stations	$15,842.50
Vaccum Pit Monitoring Phase 1	$1,582.50
FDEP Solar Loan Project	$6,566.25
Vacuu Trailer Design	$4,546.25
Shallow Gravity Well	$5,755.00
Parking Expansion (SWAG & Section 319 Grant)	$9,767.50
TOTAL	**$207,927.50**
WEC Capital Improvements Projects Budget FY19	**$186,660.00**
Amount Over Budget as of 09/10/2019	**-$21,267.50**
Capital Projects Requested Amendment Amount for FY19 (includes anticipated billings through the end of September)	**$27,267.50**

The engineering budget for the WWTP has exceeded the WEC work authorization amount as well. The table below provides details of WEC billings by task.

WWTP Engineering Services Budget FY19

	WEC Billing Through 9/10/2019
Attend Weekly Staff Meetings	$8,817.50
Attend Board Meetings	$5,856.25
Director of Operations	$17,407.50
WWTP Trouble-shooting, Misc. Improvements, Operations, etc.	$8,326.25
Islamorada Private Plans Reviews (Moved from 03105.065)	$12,566.25
Islamorada Private Plans Reviews	$5,991.25
TOTAL	**$58,965.00**
WEC WWTP Enngineering Services Budget FY19	**$51,838.00**
Amount Over Budget as of 09/10/2019	**-$7,127.00**
WWTP Engineering Requested Amendment Amount for FY19 (includes anticipated billings through the end of September)	**$8,627.00**

As shown in the table, the Islamorada Private Plans Reviews was moved from the Admin budget into the WWTP budget. This has caused the WWTP engineering expenses to exceed the FY19 budget. However, if it had been left in the Admin engineering budget, that FY19 budget amount would have been exceeded. The level of effort needed for the Islamorada Private Plans Reviews was higher than anticipated due to submission of more plans than anticipated along with the plans sometimes containing errors, requiring corrections and follow-up reviews by WEC.