



COMMITMENT & INTEGRITY
DRIVE RESULTS

Water Conserv II
P.O. Box 783125
Winter Garden, FL 34778-3125

Telephone: 407-656-2332
Fax: 407-877-0868
www.waterconservii.com

June 30, 2016

Mr. Vic Godlewski, P. E.
Wastewater Division Manager
City of Orlando
5100 L.B. McLeod Road
Orlando, FL 32811

Mr. Larry G. Tunnell, P. E., P.G.
Manager, Water Reclamation Division
Orange County Utilities
9150 Curry Ford Road
Orlando, FL 32825

Gentlemen:

Woodard & Curran, Inc. is submitting the FY 2017 Final Budget Package for the Operation and Maintenance of WATER CONSERV II for approval by the City of Orlando and Orange County. Included in the attached package are the FY 2017 Final Budget, FY 2016 Final Budget Summary C, FY 2017 Final Budget Line Item Explanation, FY 2017 Final Budget Expense Codes and PB's Scope of Services for FY 2017. Following approval by your respective governing bodies, please sign below and return the original for our files. As always, please feel free to contact me if you have any questions or need additional information.

Yours truly,

WOODARD & CURRAN, INC.
Phil Cross
Senior Project Manager

Attachments

cc: Paul Deuel, City of Orlando
Mark Ikeler, P.E., Orange County Utilities
Steve Niro, Woodard & Curran, Inc.
Paul Roux, Woodard & Curran, Inc.
Steve Schwab, Woodard & Curran, Inc.
Bob Sinatra, Woodard & Curran, Inc.
Sandy Lauture, Woodard & Curran, Inc.

I approve _____ do not approve _____ the attached FY 2017 Water Conserv II Budget.

City of Orlando

Date

Orange County

Date

**WATER CONSERV II
FY 2017 BUDGET
OCTOBER 1, 2016 - SEPTEMBER 30, 2017**

ITEM	FY 2017 BUDGET
LABOR	
Direct Labor	\$ 899,300
Overhead @ 90%	\$ 809,375
Overtime Premium	\$ 20,000
Subtotal	\$ 1,728,675
Utilities	
Telephone	\$ 9,000
Other Utilities	\$ 7,200
Subtotal	\$ 16,200
Chemicals	
Sodium Hypochlorite	\$ 50
Other Chemicals	\$ 7,075
Subtotal	\$ 7,125
Repair & Maintenance	
Mechanical	\$ 31,050
Electrical	\$ 43,050
Instrumentation	\$ 87,100
Building & Grounds	\$ 22,500
Small Equipment & Tools	\$ 6,000
Vehicle Repair	\$ 20,000
Lubricants	\$ 4,500
Equipment Rental	\$ 17,200
Maintenance Agreements	\$ 25,400
Other Repair & Maintenance	\$ 38,850
Subtotal	\$ 295,650
Supplies & Equipment	
Data Collection	\$ 6,050
Office	\$ 4,000
Other Supplies & Equipment	\$ 3,250
Subtotal	\$ 13,300
Operating Expenses	
Dues & Subscriptions	\$ 2,600
Training & Certifications	\$ 3,800
Travel	\$ 850
On-Site Administrative	\$ 12,650
Health & Safety	\$ 12,550
Other Operating Expenses	\$ 32,775
Subtotal	\$ 65,225

**WATER CONSERV II
FY 2017 BUDGET
OCTOBER 1, 2016 - SEPTEMBER 30, 2017**

ITEM	FY 2017 BUDGET
Outside Services	
Groundtek of Central Florida, Inc.	\$ 334,950
Outside Painting Services	\$ 75,000
Contract Locate Service	\$ 72,000
WSP PB	\$ 447,250
Outside Services for WC II Operations Database Maintenance & Support	\$ 20,000
Casual Labor	\$ 31,800
Other Outside Services	\$ 53,100
Subtotal	\$ 1,034,100
Total O&M Costs	\$ 3,160,275
5% Fixed Fee	\$ 158,025
Subtotal of Costs	\$ 3,318,300
Renewal & Replacement Program	\$ 476,075
R&R Program 5% Fixed Fee	\$ 23,800
Capital Program	\$ 4,255,475
Capital Program 5% Fixed Fee	\$ 212,775
Subtotal of Costs	\$ 8,286,425
Contingency For OOS Projects/Services	\$ 238,100
Contingency 5% Fixed Fee	\$ 11,900
Total Budget	\$ 8,536,425

WATER CONSERV II
FY 2017 PROPOSED BUDGET
OCTOBER 1, 2016 - SEPTEMBER 30, 2017

Item	FY 2014 Final	FY 2015 Final	FY 2016 Budget	FY 2016 as of 5/31/2016	FY 2016 % Spent as of 5/31/16 (66.67 %)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$
LABOR									
Direct Labor	\$ 753,864	\$ 787,937	\$ 878,125	\$ 528,198	60.2%	\$ 860,000	\$ 899,300	2.4%	\$ 21,175
Overhead @ 90%	\$ 678,478	\$ 709,143	\$ 790,325	\$ 475,378	60.1%	\$ 774,000	\$ 809,375	2.4%	\$ 19,050
Overtime Premium	\$ 20,909	\$ 22,285	\$ 20,000	\$ 13,376	66.9%	\$ 19,500	\$ 20,000	0.0%	\$ -
Subtotal	\$ 1,453,251	\$ 1,519,365	\$ 1,688,450	\$ 1,016,953	60.2%	\$ 1,653,500	\$ 1,728,675	2.4%	\$ 40,225
Utilities									
Telephone	\$ 5,425	\$ 6,224	\$ 8,100	\$ 5,222	64.5%	\$ 8,100	\$ 9,000	11.1%	\$ 900
Other Utilities	\$ 5,651	\$ 6,417	\$ 6,350	\$ 4,851	76.4%	\$ 6,350	\$ 7,200	13.4%	\$ 850
Subtotal	\$ 11,075	\$ 12,641	\$ 14,450	\$ 10,072	69.7%	\$ 14,450	\$ 16,200	12.1%	\$ 1,750
Chemicals									
Sodium Hypochlorite	\$ 17	\$ 26	\$ 50	\$ 13	26.7%	\$ 45	\$ 50	0.0%	\$ -
Other Chemicals	\$ 299	\$ 65	\$ 3,575	\$ -	0.0%	\$ 3,500	\$ 7,075	97.9%	\$ 3,500
Subtotal	\$ 317	\$ 91	\$ 3,625	\$ 13	0.4%	\$ 3,545	\$ 7,125	96.6%	\$ 3,500
Repair & Maintenance									
Mechanical	\$ 47,705	\$ 34,337	\$ 31,050	\$ 25,102	80.8%	\$ 30,500	\$ 31,050	0.0%	\$ -
Electrical	\$ 51,059	\$ 48,827	\$ 43,050	\$ 12,928	30.0%	\$ 42,775	\$ 43,050	0.0%	\$ -
Instrumentation	\$ 63,024	\$ 79,616	\$ 77,325	\$ 24,044	31.1%	\$ 76,000	\$ 87,100	12.6%	\$ 9,775
Building & Grounds	\$ 16,419	\$ 29,167	\$ 22,500	\$ 11,037	49.1%	\$ 22,000	\$ 22,500	0.0%	\$ -
Small Equipment & Tools	\$ 7,730	\$ 5,210	\$ 6,000	\$ 5,392	89.9%	\$ 6,000	\$ 6,000	0.0%	\$ -
Vehicle Repair	\$ 20,998	\$ 16,581	\$ 20,000	\$ 20,716	103.6%	\$ 19,500	\$ 20,000	0.0%	\$ -
Lubricants	\$ 4,248	\$ 1,011	\$ 4,500	\$ 2,610	58.0%	\$ 4,000	\$ 4,500	0.0%	\$ -
Equipment Rental	\$ 18,966	\$ 18,119	\$ 17,475	\$ 2,403	13.7%	\$ 16,900	\$ 17,200	-1.6%	\$ (275)
Maintenance Agreements	\$ 23,181	\$ 27,106	\$ 25,375	\$ 9,712	38.3%	\$ 24,750	\$ 25,400	0.1%	\$ 25
Other Repair & Maintenance	\$ 25,373	\$ 41,753	\$ 37,000	\$ 12,219	33.0%	\$ 37,000	\$ 38,850	5.0%	\$ 1,850
Subtotal	\$ 278,701	\$ 301,728	\$ 284,275	\$ 126,164	44.4%	\$ 279,425	\$ 295,650	4.0%	\$ 11,375

WATER CONSERV II
FY 2017 PROPOSED BUDGET
OCTOBER 1, 2016 - SEPTEMBER 30, 2017

Item	FY 2014 Final	FY 2015 Final	FY 2016 Budget	FY 2016 as of 5/31/2016	FY 2016 % Spent as of 5/31/16 (66.67 %)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$
Supplies & Equipment									
Data Collection	\$ 4,595	\$ 6,170	\$ 5,500	\$ 4,503	81.9%	\$ 5,000	\$ 6,050	10.0%	\$ 550
Office	\$ 2,091	\$ 4,016	\$ 4,000	\$ 1,544	38.6%	\$ 3,750	\$ 4,000	0.0%	\$ -
Other Supplies & Equipment	\$ 3,314	\$ 2,075	\$ 3,250	\$ 1,196	36.8%	\$ 3,000	\$ 3,250	0.0%	\$ -
Subtotal	\$ 10,000	\$ 12,261	\$ 12,750	\$ 7,244	56.8%	\$ 11,750	\$ 13,300	4.3%	\$ 550
Operating Expenses									
Dues & Subscriptions	\$ 1,550	\$ 1,650	\$ 1,875	\$ 1,380	73.6%	\$ 1,700	\$ 2,600	38.7%	\$ 725
Training & Certifications	\$ 3,908	\$ 4,422	\$ 5,675	\$ 4,431	78.1%	\$ 5,500	\$ 3,800	-33.0%	\$ (1,875)
Travel	\$ 175	\$ 225	\$ 825	\$ 775	93.9%	\$ -	\$ 850	3.0%	\$ 25
On-Site Administrative	\$ 9,886	\$ 9,876	\$ 11,900	\$ 9,909	83.3%	\$ 14,000	\$ 12,650	6.3%	\$ 750
Health & Safety	\$ 11,819	\$ 7,886	\$ 12,625	\$ 3,710	29.4%	\$ 12,000	\$ 12,550	-0.6%	\$ (75)
Other Operating Expenses	\$ 31,681	\$ 27,749	\$ 32,775	\$ 12,270	37.4%	\$ 31,900	\$ 32,775	0.0%	\$ -
Subtotal	\$ 59,019	\$ 51,807	\$ 65,675	\$ 32,476	49.4%	\$ 65,850	\$ 65,225	-0.7%	\$ (450)
Outside Services									
Groundtek of Central Florida, Inc.	\$ 321,752	\$ 296,372	\$ 329,450	\$ 131,519	39.9%	\$ 327,500	\$ 334,950	1.7%	\$ 5,500
Outside Painting Services	\$ 74,201	\$ 81,564	\$ 75,000	\$ 16,200	21.6%	\$ 75,000	\$ 75,000	0.0%	\$ -
Contract Locate Service	\$ -	\$ -	\$ 72,000	\$ 19,502	27.1%	\$ -	\$ 72,000	N/A	\$ -
WSP PB	\$ -	\$ -	\$ -	\$ -	N/A	\$ -	\$ 447,250	N/A	\$ 447,250
Outside Services for WC II Operations Database Maintenance & Support	\$ 18,375	\$ 9,537	\$ 20,000	\$ 5,882	29.4%	\$ 20,000	\$ 20,000	0.0%	\$ -
Casual Labor	\$ 33,607	\$ 25,318	\$ 31,800	\$ 17,509	55.1%	\$ 30,000	\$ 31,800	0.0%	\$ -
Other Outside Services	\$ 49,575	\$ 49,075	\$ 51,100	\$ 17,677	34.6%	\$ 49,750	\$ 53,100	3.9%	\$ 2,000
Subtotal	\$ 497,510	\$ 461,866	\$ 579,350	\$ 208,288	36.0%	\$ 562,250	\$ 1,034,100	78.5%	\$ 454,750

WATER CONSERV II
FY 2017 PROPOSED BUDGET
OCTOBER 1, 2016 - SEPTEMBER 30, 2017

Item	FY 2014 Final	FY 2015 Final	FY 2016 Budget	FY 2016 as of 5/31/2016	FY 2016 % Spent as of 5/31/16 (66.67 %)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$
Total O&M Costs	\$ 2,309,873	\$ 2,359,759	\$ 2,648,575	\$ 1,401,210	52.9%	\$ 2,590,770	\$ 3,160,275	19.3%	\$ 511,700
O&M 5% Fixed Fee	\$ 120,900	\$ 123,125	\$ 132,425	\$ 88,283	66.7%	\$ 132,425	\$ 158,025	19.3%	\$ 25,600
Subtotal of Expenses	\$ 2,430,773	\$ 2,482,884	\$ 2,781,000	\$ 1,489,494	53.6%	\$ 2,723,195	\$ 3,318,300	19.3%	\$ 537,300
Renewal & Replacement Program	\$ 246,335	\$ 276,653	\$ 472,700	\$ 107,213	22.7%	\$ 470,000	\$ 476,075	0.7%	\$ 3,375
R&R Program 5% Fixed Fee	\$ 12,317	\$ 13,833	\$ 23,650	\$ 5,361	22.7%	\$ 23,500	\$ 23,800	0.6%	\$ 150
Capital Program	\$ 2,063,433	\$ 1,871,648	\$ 1,830,825	\$ 585,640	32.0%	\$ 1,800,000	\$ 4,255,475	132.4%	\$ 2,424,650
Capital Program 5% Fixed Fee	\$ 103,172	\$ 93,582	\$ 91,550	\$ 29,285	32.0%	\$ 90,000	\$ 212,775	132.4%	\$ 121,225
Subtotal of Costs	\$ 4,856,030	\$ 4,738,600	\$ 5,199,725	\$ 2,216,993	42.6%	\$ 5,106,695	\$ 8,286,425	59.4%	\$ 3,086,700
Contingency For OOS Projects/Svcs.	\$ 142,555	\$ 112,392	\$ 238,100	\$ 231,977	97.4%	\$ 238,000	\$ 238,100	0.0%	\$ -
Contingency 5% Fixed Fee	\$ 7,128	\$ 5,620	\$ 11,900	\$ 11,599	97.5%	\$ 11,900	\$ 11,900	0.0%	\$ -
Credit	\$ -	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	N/A	N/A
Total Budget	\$ 5,005,714	\$ 4,856,612	\$ 5,449,725	\$ 2,460,568	45.2%	\$ 5,356,595	\$ 8,536,425	56.6%	\$ 3,086,700

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Budget Summary Table

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Labor	\$ 1,519,365	\$ 1,688,450	\$ 1,016,953	60.2%	\$ 1,653,500	\$ 1,728,675	2.4%	\$ 40,225	Includes a proposed 3.5% increase for project staff and 1,248 hours of time for Phil Cross to go to part-time once a selection has been made for the new Project Manager.
Utilities	\$ 12,641	\$ 14,450	\$ 10,072	69.7%	\$ 14,450	\$ 16,200	12.1%	\$ 1,750	Increase in costs for garbage and recycled materials collection services.
Chemicals	\$ 91	\$ 3,625	\$ 13	0.4%	\$ 3,545	\$ 7,125	96.6%	\$ 3,500	Increase in purchase of herbicide for the Cogongrass control/elimination program.
Repair & Maintenance	\$ 301,728	\$ 284,275	\$ 126,164	44.4%	\$ 279,425	\$ 295,650	4.0%	\$ 11,375	Project staff expects to expend the entire amount in this line item and will need an additional \$11,375.00 in FY 2017 to cover increased costs in the Instrumentation, Maintenance Agreements and Other Repair & Maintenance Line Items.
Supplies & Equipment	\$ 12,261	\$ 12,750	\$ 7,244	56.8%	\$ 11,750	\$ 13,300	4.3%	\$ 550	Project staff expects to expend the entire amount in this line item and will need an additional \$550.00 to cover increasing costs for Data Collection.
Operating Expenses	\$ 51,807	\$ 65,675	\$ 32,476	49.4%	\$ 65,850	\$ 65,225	-0.7%	\$ (450)	Decrease in costs for the Training & Certifications Line Items.
Outside Services	\$ 461,866	\$ 579,350	\$ 208,288	36.0%	\$ 60,000	\$ 1,034,100	78.5%	\$ 454,750	Project staff expects to expend the entire amount in this line item and will need an additional \$7,500.00 in FY 2017 to cover the increased costs in grounds maintenance activities and other outside services. Also, a total of \$447,250.00 is needed to fund the O&M services of WSP PB for FY 2017.
Total O&M Costs	\$ 2,359,759	\$ 2,648,575	\$ 1,401,210	52.9%	\$ 2,590,770	\$ 3,160,275	19.3%	\$ 511,700	Proposed increases as outlined above.
Fixed Fee (5%)	\$ 123,125	\$ 132,425	\$ 88,283	66.7%	\$ 132,425	\$ 158,025	19.3%	\$ 25,600	Proposed increases as outlined above.
Subtotal of Expenses	\$ 2,482,884	\$ 2,781,000	\$ 1,489,494	53.6%	\$ 2,723,195	\$ 3,318,300	19.3%	\$ 537,300	Proposed increases as outlined above.
Renewal & Replacement	\$ 276,653	\$ 472,700	\$ 107,213	22.7%	\$ 470,000	\$ 476,075	0.7%	\$ 3,375	The Renewal & Replacement Line Item changes each budget year depending on the items proposed for approval. Details of the proposed items and their related costs are listed in the Renewal & Replacement section of this document.
R&R Fixed Fee	\$ 13,833	\$ 23,650	\$ 5,361	22.7%	\$ 23,500	\$ 23,800	0.6%	\$ 150	See the Renewal & Replacement Line Item above.
Capital Program	\$ 1,871,648	\$ 1,830,825	\$ 585,640	32.0%	\$ 1,800,000	\$ 4,255,475	132.4%	\$ 2,424,650	The Capital Program Line Item changes each budget year depending on the items proposed for approval. Details of the proposed items and their related costs are listed in the Capital Program section of this document..
Capital Program Fixed Fee	\$ 93,582	\$ 91,550	\$ 29,285	32.0%	\$ 90,000	\$ 212,775	132.4%	\$ 121,225	See the Capital Line Item above.
Subtotal of Expenses	\$ 4,738,600	\$ 5,199,725	\$ 2,216,993	42.6%	\$ 5,106,695	\$ 8,286,425	59.4%	\$ 3,086,700	Proposed increases as outlined above.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Contingency For OOS Projects/Services	\$ 112,392	\$ 238,100	\$ 231,977	97.4%	\$ 238,000	\$ 238,100	0.0%	\$ -	The Contingency for OOS Projects/Services Line Item for FY 2017 will remain the same as it was for FY 2016.
Contingency 5% Fixed Fee	\$ 5,620	\$ 11,900	\$ 11,599	97.5%	\$ 11,900	\$ 11,900	0.0%	\$ -	See the Contingency for OOS Projects/Services Line Item above.
Total Budget	\$ 4,856,612	\$ 5,449,725	\$ 2,460,568	45.2%	\$ 5,356,595	\$ 8,536,425	56.6%	\$ 3,086,700	Proposed increases as outlined above.

Labor

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Direct Labor	\$ 787,937	\$ 878,125	\$ 528,198	60.2%	\$ 860,000	\$ 899,300	2.4%	\$ 21,175	Labor charges for all on-site employees. Includes the straight-time portion of the overtime hours. Includes a proposed 3.5% increase for project staff and 1,248 hours of time for Phil Cross to go to part-time once a selection has been made for the new Project Manager.
Overhead (90%)	\$ 709,143	\$ 790,325	\$ 475,378	60.1%	\$ 774,000	\$ 809,375	2.4%	\$ 19,050	Includes all federal government allowable general and administrative expenses incurred that are not specifically identifiable project related costs. The overhead rate is defined as a percentage of total labor costs, excluding overtime premium. Includes a proposed 3.5% increase for project staff and 1,248 hours of time for Phil Cross to go to part-time once a selection has been made for the new Project Manager.
Overtime	\$ 22,285	\$ 20,000	\$ 13,376	66.9%	\$ 19,500	\$ 20,000	0.0%	\$ -	Labor charges for the premium time portion of the overtime hours. Project staff will need the same amount in FY 2017.
Total Labor	\$ 1,519,365	\$ 1,688,450	\$ 1,016,953	60.2%	\$ 1,653,500	\$ 1,728,675	2.4%	\$ 40,225	Includes a proposed 3.5% increase for project staff and 1,248 hours of time for Phil Cross to go to part-time once a selection has been made for the new Project Manager.

Utilities

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 2/29/16	% Spent as of 2/29/16 (41.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Telephone	\$ 6,224	\$ 8,100	\$ 5,222	64.5%	\$ 8,100	\$ 9,000	11.1%	\$ 900	Charges for monthly telephone and Internet service. Project staff will need the same amount in FY 2016.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Other Utilities	\$ 6,417	\$ 6,350	\$ 4,851	76.4%	\$ 6,350	\$ 7,200	13.4%	\$ 850	Charges for monthly garbage collection services. A \$200.00 increase in this line item is expected.
Total Utilities	\$ 12,641	\$ 14,450	\$ 10,072	69.7%	\$ 14,450	\$ 16,200	12.1%	\$ 1,750	Increase in costs for monthly garbage and recycled materials collection service.

Chemicals

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Sodium Hypochlorite	\$ 26	\$ 50	\$ 13	26.7%	\$ 45	\$ 50	0.0%	\$ -	Sodium Hypochlorite is the disinfectant for the potable water system at the Distribution Center. Project staff expects to expend a maximum of \$50.00 in this line item in FY 2017.
Other Chemicals	\$ 65	\$ 3,575	\$ -	0.0%	\$ 3,500	\$ 7,075	97.9%	\$ 3,500	Purchases of herbicide for weed control on all areas of the project, bait for fire ant control, and pesticides for turnouts, manholes and transformers. Project staff expects to expend the entire amount in this line item and will need an additional \$3,500.00 in FY 2017 for purchase of herbicide for the Cogongrass control/elimination program.
Total Chemicals	\$ 91	\$ 3,625	\$ 13	0.4%	\$ 3,545	\$ 7,125	96.6%	\$ 3,500	Project staff will need an additional \$3,500.00 in FY 2017 for purchase of herbicide for the Cogongrass control/elimination program.

Repair and Maintenance

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Mechanical	\$ 34,337	\$ 31,050	\$ 25,102	80.8%	\$ 30,500	\$ 31,050	0.0%	\$ -	Parts, equipment, services and supplies purchased to repair, maintain or modify mechanical systems. Includes acetylene and oxygen supplies. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Electrical	\$ 48,827	\$ 43,050	\$ 12,928	30.0%	\$ 42,775	\$ 43,050	0.0%	\$ -	Parts, equipment, services and supplies purchased to repair, maintain or modify electrical systems. Includes annual vibration analysis for all electric pump motors. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 2/29/16	% Spent as of 2/29/16 (41.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Instrumentation	\$ 79,616	\$ 77,325	\$ 24,044	31.1%	\$ 76,000	\$ 87,100	12.6%	\$ 9,775	Parts, equipment, services and supplies purchased to repair, maintain or modify instrumentation systems. Includes SCADA system and PC maintenance and supplies, cell phone and gas detector maintenance, SCADA system and PLC maintenance programming, database on-site tech support, project server and network tech support and maintenance, and data collection, electrical and instrumentation equipment repair and calibration. Project staff expects to expend the entire amount in this line item and will need the additional \$9,775.00 in FY 2017 for the updating of the SCADA System Screens.
Buildings & Grounds	\$ 29,167	\$ 22,500	\$ 11,037	49.1%	\$ 22,000	\$ 22,500	0.0%	\$ -	Parts, equipment, services and supplies purchased to repair, maintain or modify buildings and grounds. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Small Equip. & Tools	\$ 5,210	\$ 6,000	\$ 5,392	89.9%	\$ 6,000	\$ 6,000	0.0%	\$ -	Equipment, tools, instruments and devices needed to operate, maintain and test project components. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Vehicle Repair	\$ 16,581	\$ 20,000	\$ 20,716	103.6%	\$ 19,500	\$ 20,000	0.0%	\$ -	Parts for and repair services performed on project trucks and SUVs. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Lubricants	\$ 1,011	\$ 4,500	\$ 2,610	58.0%	\$ 4,000	\$ 4,500	0.0%	\$ -	Oils and greases consumed in the operation, maintenance and lubrication of project equipment. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Equipment Rental	\$ 18,119	\$ 17,475	\$ 2,403	13.7%	\$ 16,900	\$ 17,200	-1.6%	\$ (275)	Lease or rental of equipment and tools necessary to operate and maintain the project. Includes the copier and postage machine. Project staff expects to expend the entire amount in this line item and will need \$275.00 less in FY 2017 due to a slight decrease in costs for the copier.
Maintenance Agreements	\$ 27,106	\$ 25,375	\$ 9,712	38.3%	\$ 24,750	\$ 25,400	0.1%	\$ 25	Continuing service agreements for project equipment and computer programs. Project staff expects to expend the entire amount in this line item and will need an additional \$25.00 in FY 2017 to meet the planned costs for the maintenance agreements.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Other Repair & Maintenance	\$ 41,753	\$ 37,000	\$ 12,219	33.0%	\$ 37,000	\$ 38,850	5.0%	\$ 1,850	Parts for, repairs to, and maintenance of grounds maintenance equipment, tractors and implements, and heavy equipment. Project staff expects to expend the entire amount in this line item and will need an additional \$1,850.00 in FY 2017 to cover expected repair costs. Several pieces of equipment under this line item are 10 years old or older.
Total Repair & Maintenance	\$ 301,728	\$ 284,275	\$ 126,164	44.4%	\$ 279,425	\$ 295,650	4.0%	\$ 11,375	Project staff expects to expend the entire amount in this line item and will need an additional \$11,375.00 in FY 2017 to cover increased costs in the Instrumentation, Maintenance Agreements and Other Repair & Maintenance Line Items.

Supplies and Equipment

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Data Collection	\$ 6,170	\$ 5,500	\$ 4,503	81.9%	\$ 5,000	\$ 6,050	10.0%	\$ 550	Supplies, equipment, and services purchased to perform data collection and monitoring functions of reclaimed water, surface water and groundwater. Project staff expects to expend the entire amount in this line item and will need an additional \$550.00 in FY 2017 to cover expected increase in costs for supplies and equipment for this line item.
Office	\$ 4,016	\$ 4,000	\$ 1,544	38.6%	\$ 3,750	\$ 4,000	0.0%	\$ -	Supplies consumed or equipment purchased in administration of record keeping and office work. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Other Supplies & Equipment	\$ 2,075	\$ 3,250	\$ 1,196	36.8%	\$ 3,000	\$ 3,250	0.0%	\$ -	Purchases of supplies and equipment not covered above. Includes janitorial items. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Total Supplies & Equipment	\$ 12,261	\$ 12,750	\$ 7,244	56.8%	\$ 11,750	\$ 13,300	4.3%	\$ 550	Project staff expects to expend the entire amount in this line item and will need an additional \$550.00 to cover increasing costs for Data Collection.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Operating Expenses

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Dues & Subscriptions	\$ 1,650	\$ 1,875	\$ 1,380	73.6%	\$ 1,700	\$ 2,600	38.7%	\$ 725	Fees for membership dues and subscriptions for project staff and the project. Project staff expects to expend the entire amount in this line item and will need an additional \$725.00 in FY 2017 to cover the expected costs for dues and subscriptions. The amount in this line item can increase or decrease each year in direct relationship to the need for the various dues and subscriptions.
Training & Certifications	\$ 4,422	\$ 5,675	\$ 4,431	78.1%	\$ 5,500	\$ 3,800	-33.0%	\$ (1,875)	Fees for training and certifications for project staff. Project staff expects to expend the entire amount in this line item and will need \$1,875.00 less in FY 2017 to cover the costs for the required training and certifications. The amount in this line item can increase or decrease each year in a direct relationship to the need for required training and certifications.
Travel	\$ 225	\$ 825	\$ 775	93.9%	\$ 750	\$ 850	3.0%	\$ 25	Fees for travel expenses for project staff for training and project-related work. Project staff expects to expend the entire amount in this line item and will need an additional \$25.00 in FY 2017 to cover the costs for the required travel. The amount in this line item can increase or decrease each year in a direct relationship to the need for required travel.
On-Site Administrative	\$ 9,876	\$ 11,900	\$ 9,909	83.3%	\$ 14,000	\$ 12,650	6.3%	\$ 750	E-Pass, postage, Sunshine One-Call, shipping (UPS, Airborne or Federal Express), printing, post office box rental, and bank service charges. Project staff expects to expend the entire amount in this line item and will need an additional \$750.00 in FY 2017 to cover the expected increase in the Sunshine One-Call Program costs.
Health & Safety	\$ 7,886	\$ 12,625	\$ 3,710	29.4%	\$ 12,000	\$ 12,550	-0.6%	\$ (75)	Supplies, equipment and services to operate and maintain the health and safety program at the project. Project staff expects to expend the entire amount in this line item and will need \$75.00 less in FY 2017 to cover the costs for this line item
Other Operating Expenses	\$ 27,749	\$ 32,775	\$ 12,270	37.4%	\$ 31,900	\$ 32,775	0.0%	\$ -	Permits, bonds, insurance, meeting expenses, overtime meal expenses, public relations materials, and other expenses not covered above. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Total Operating Expenses	\$ 51,807	\$ 65,675	\$ 32,476	49.4%	\$ 65,850	\$ 65,225	-0.7%	\$ (450)	Decrease in costs for the Training & Certifications line item.

Outside Services

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Groundtek of Central Florida, Inc.	\$ 296,372	\$ 329,450	\$ 131,519	39.9%	\$ 327,500	\$ 334,950	1.7%	\$ 5,500	Professional services for all land management and grounds maintenance activities that include, but are not limited to: cultivating RIB bottoms; mowing well routes and fence lines; the annual mowing of all project properties; herbiciding fence lines, RIB bottoms and RIB tops; Transmission Main and Distribution Network ROW maintenance and structure maintenance; and grounds and landscape maintenance at the Distribution Center, RIB Site 6 Control Building and designated ROWs. Project staff expects to expend the entire amount in this line item in FY 2015 and will need an additional \$5,500 in FY 2017 to cover the planned increase in the herbicide program for the elimination/control of the invasive Cogongrass.
Outside Painting Services	\$ 81,564	\$ 75,000	\$ 16,200	21.6%	\$ 75,000	\$ 75,000	0.0%	\$ -	Professional services for the painting of all project buildings, above-ground and in-ground structures and exposed piping. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Contract Locate Service	\$ -	\$ 72,000	\$ 19,502	27.1%	\$ 60,000	\$ 72,000	0.0%	\$ -	Professional services of a contractor to perform all locate-related services for the project. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
WSP PB	\$ -	\$ -	\$ -	N/A	\$ -	\$ 447,250	N/A	\$ 447,250	Professional services of the project's water resources consultant for O&M-related tasks. This line item is new for FY 2017. From FY 2012 through FY 2016, these services were provided through Orange County's WRP contract with PB. The City and County have elected to return these services to Woodard & Curran's budget in the O&M section. Please refer to PB's attached proposed scope of services for details.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	FY 2015 Actual Expenses	FY 2016 Budget	FY 2016 Expenses as of 5/31/16	% Spent as of 5/31/16 (66.67%)	FY 2016 Projected Expenses	FY 2017 Proposed Budget	Change %	Change \$	Comments
Outside Services for WC II Operations Database Maintenance & Support	\$ 9,537	\$ 20,000	\$ 5,882	N/A	\$ 20,000	\$ 20,000	0.0%	\$ -	Professional services for the WC II Operations Database software development, modification, maintenance, upgrade and programming. Professional services for the development, modification and maintenance of required reports for the reclaimed water and groundwater programs that are generated from the Operations Database. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Casual Labor	\$ 25,318	\$ 31,800	\$ 17,509	N/A	\$ 30,000	\$ 31,800	0.0%	\$ -	Expenses for casual labor services for labor as needed for (1) land management and grounds and structure maintenance activities at the Distribution Center, RIB Site 6 Control Building, RIB and expansion sites, and the Distribution Network and Transmission Main and (2) assistance with mechanical, electrical and instrumentation PM's and CM's throughout the Distribution Network and Transmission Main. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Other Outside Services	\$ 49,075	\$ 51,100	\$ 17,677	N/A	\$ 49,750	\$ 53,100	3.9%	\$ 2,000	Uniform purchases, cellular telephone services, annual audit, Lake/Orange County "Weather Watch" program services, Meteorlogix Weather Service package, contract locate services, Water Conserv II web site hosting fees, building pest control services, and courier services for the delivery of samples to the OCU Lab. Also, costs associated with backhoe and front-end loader services that cannot be handled by the project's backhoe and front-end loader. Project staff expects to expend the entire amount in this line item and will need an additional \$2,000.00 in FY 2017 to cover increased costs for cell phone service.
Total Outside Services	\$ 461,866	\$ 579,350	\$ 208,288	N/A	\$ 562,250	\$ 1,034,100	78.5%	\$ 454,750	Project staff will need an additional \$454,750.00 in FY 2017 to cover the increased costs in grounds maintenance activities and cell phone service, and the addition of WSP/IPB to this line item.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Renewal & Replacement Program

Electrical:

Item	Amount	Reason
2 - 480-Volt Circuit Breakers for Supplemental Wells	\$ 4,075	Project staff is recommending the purchase of two (2) 480-volt circuit breakers for the project's supplemental wells. This particular circuit breaker is no longer manufactured and supplies are becoming harder to locate. New replacement circuit breakers are available, but are more costly and the electrical panel has to be modified to allow their use.
2 - Replacement Batteries for Project Solar Systems	\$ 1,400	During FY 2016, project staff begun the installation of solar systems at selected turnouts and RIBs. The batteries for these units are expensive and take several weeks to secure. Project staff proposes to purchase two batteries during FY 2017 for spares for replacement of the original batteries in the case of failure.
5 - Soft-Start Units for Supplemental Wells (Phase 4 of 5)	\$ 40,000	The project's 25 supplemental wells are equipped with soft-start units. The current units are nearing the end of their life expectancy. This particular unit is no longer made and repair parts are becoming harder to find and more costly. Project staff originally recommended this replacement program be completed in 5 phases. FY 2014 was Phase 1, FY 2015 was Phase 2, FY 2016 was Phase 3 and FY 2017 will be Phase 4.
Total Electrical	\$ 45,475	

Instrumentation:

Item	Amount	Reason
6 - Analog Input Boards for MTUs	\$ 16,225	Some of the original MTU analog input boards are reaching the end of their life expectancy. Project staff expects to use these boards during FY 2017 in the replacement of failed boards.
5 - Rosemount Pressure Transmitters (Model 2088)	\$ 8,075	Some of Omega pressure transmitters are reaching the end of their life expectancy. Project staff expects to use these new units during FY 2017 in the replacement of the Omega units.
1,000 Feet of .5" LDF4-50A Foam Cable	\$ 3,150	This cable is used on all MTU and RTU sites to connect the radio to the antenna. The cable at these locations has to be replaced periodically due to weathering. Current supplies are getting low and additional cable needs to be ordered.
3 -12" Mag Meters	\$ 17,425	Some of original Water Specialties propeller flow meter assemblies are reaching the end of their life expectancy. Project staff expects to use these new units during FY 2017 in the replacement of the original units. Mag meters are more accurate than propeller meters and require a long-lead time when ordering.
1 - 14" Mag Meter	\$ 7,225	Some of original Water Specialties propeller flow meter assemblies are reaching the end of their life expectancy. Project staff expects to use this new unit during FY 2017 in the replacement of the original units. Mag meters are more accurate than propeller meters and require a long-lead time when ordering.
Total Instrumentation	\$ 52,100	

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Building & Grounds:

Item	Amount	Reason
Sign & Structure Maintenance = Project Advisory Signage, Transmission Main, Distribution Network, Distribution Center, RIB Site Structure & Roadway, and Distribution Center and RIB Site 6 Control Building Parking Lot Maintenance	\$ 207,250	Replacement of the deteriorated, damaged or missing reclaimed water advisory signs is on-going in order to remain in compliance with FDEP rules. "No Trespassing" signs are replaced in order to remain in compliance with Florida's No Trespass law. Transmission Main, Distribution Network, Distribution Center, RIB Site Structure & Roadway & Parking Lot Maintenance is an on-going item. The majority of this work is done by outside contractors. Project staff expects to expend the entire amount in this line item (\$197,375) during FY 2016 and is proposing a five percent (5%) increase in FY 2017 due to the aging of project structures and equipment and the rising costs of repair.
Annual Transmission Main Test Station Potential Survey	\$ 7,900	Southern Cathodic Protection has recommended that the Water Conserv II Transmission Main be monitored annually to ensure that the piping remains in excellent condition. The annual survey will pinpoint spots in the piping that are beginning to show signs of degradation so that corrective measures can be taken long before a catastrophic failure of the piping.
Maintenance of RIB Tops & Bottoms (Relocating/Leveling of Wind-Blown Sand)	\$ 150,000	Sand blowing out of the RIB bottoms continues to be a problem. Large amounts of sand have been blown out of the RIB bottoms. These funds will pay for the sand that has been blown upon the liners and out of the bottoms and onto the tops to be removed and placed back in the bottom. The bottoms will then be leveled. This work will be done on an hourly basis, which is the most cost-effective method to get the job done. The work will begin in RIB Site 3, then RIB Site 4, then RIB Site 5, and then RIB Site 2. Project staff is not exactly sure how far the work will progress with the budget of \$150,000. The work will go as far as the money will take it. Additional funding to continue to do the work will be requested in FY 2018.
Total Buildings & Grounds	\$ 365,150	

Data Collection:

Item	Amount	Reason
Replacement of Equipment Used in Data Collection Activities	\$ 13,350	Replacement of worn-out or damaged laboratory and groundwater sampling equipment such as pH meters, pH probes, conductivity probes, DO probes, monitor well pumps and pump tubing, water level measuring units, water level measuring tapes and probes, various meters, and automatic rain gauges. Also annual replacement of the project's DI water system mixed bed material. Project staff expects to expend the entire amount in this line item and will need the same amount in FY 2017.
Total Data Collection	\$ 13,350	

FY 2017 R&R Program Sub Total	\$ 476,075
Woodard & Curran 5% Fixed Fee	\$ 23,800
FY 2017 R&R Program Total Costs	\$ 499,875

Note: The 5% Fixed Fee for the Renewal & Replacement Program line item is included in the total amount. The Fixed Fee is received when purchases are made from this line item. Billing for costs in this line item will be billed to the City and County on a 50/50 basis.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Capital Program

Mechanical:

Item	Amount	Reason
Replacement of Failed Auma Units with Flow Control Valves	\$ 50,000	Project staff began replacing failed Auma units at RIB Flow Control Structures with Flow Control Valves in FY 2014. Auma units work best in an enclosed/indoor atmosphere. In the RIB sites, the units are exposed to all of the elements and experience increase maintenance costs (failed electrical components). Flow Control Valves work well indoors or outdoors, the only electrical component is a solenoid, and maintenance costs are very low. To be able to continue the replacement program, project staff proposes to continue to purchase Flow Control Valves that are no longer available from stock or turnouts that are no longer in service.
Components for Emergency Repair of the 42-Inch Portions of the WC II TM	\$ 103,175	Components for an emergency repair of the 42-inch sections of the WC II TM are all long-lead items, some taking as long as 16 weeks to acquire. The project does not have any repair components on hand. Project staff recommends acquiring the necessary components and having them on hand should there ever be a need to make an emergency repair of any portion of the 42-inch sections. The project does have on hand the necessary components for an emergency repair of the 54-inch section of the WC II TM.
Replacement of 5 Backflow Preventer Assemblies at Supplemental Wells (Phase 1 of 5)	\$ 50,875	The backflow preventer assemblies at the supplemental wells are 30 years old and repair parts are becoming nearly impossible to locate. Project staff proposes a 5-phase program to replace the 25 backflow preventer assemblies at the supplemental wells. FY 2017 will be phase one of this 5-phase project.
Total Mechanical	\$ 204,050	

Electrical:

Item	Amount	Reason
RIB Site 2 Conversion to Solar Power	\$ 14,800	Project staff recommends the conversion of this RIB site to solar power. Currently when there is a power outage, the site becomes inoperable and flow information is lost. Converting this site to solar power will ensure almost 100% uptime and eliminate the maintenance and replacement of electric cables.
RIB Site 4 Conversion to Solar Power	\$ 8,150	Project staff recommends the conversion of this RIB site to solar power. Currently when there is a power outage, the site becomes inoperable and flow information is lost. Converting this site to solar power will ensure almost 100% uptime and eliminate the maintenance and replacement of electric cables.
RIB Site 5 Conversion to Solar Power	\$ 8,150	Project staff recommends the conversion of this RIB site to solar power. Currently when there is a power outage, the site becomes inoperable and flow information is lost. Converting this site to solar power will ensure almost 100% uptime and eliminate the maintenance and replacement of electric cables.
RIB Site 7 Conversion to Solar Power	\$ 42,400	Project staff recommends the conversion of this RIB site to solar power. Currently when there is a power outage, the site becomes inoperable and flow information is lost. Converting this site to solar power will ensure almost 100% uptime and eliminate the maintenance and replacement of electric cables.
Turnout 3T-01 Conversion to Solar Power	\$ 4,900	Project staff recommends the conversion of this site to solar power. This site is a revenue site for reclaimed water service to Horizons West. Converting this site to solar power will eliminate the loss of revenue when there is a power outage; it also eliminates maintenance and replacement of existing electric cables.
Turnout 8T-06/8T-10 Conversion to Solar Power	\$ 6,650	Project staff recommends the conversion of this site to solar power. This site is a revenue site for reclaimed water service to Horizons West. Converting this site to solar power will eliminate the loss of revenue when there is a power outage; it also eliminates maintenance and replacement of existing electric cables.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Item	Amount	Reason
Turnout 9T-01/9T-04 Conversion to Solar Power	\$ 6,650	Project staff recommends the conversion of this site to solar power. This site is a revenue site for reclaimed water service to Horizons West. Converting this site to solar power will eliminate the loss of revenue when there is a power outage; it also eliminates maintenance and replacement of existing electric cables.
Turnout 9T-02 Conversion to Solar Power	\$ 8,150	Project staff recommends the conversion of this site to solar power. This site is a revenue site for reclaimed water service to Horizons West. Converting this site to solar power will eliminate the loss of revenue when there is a power outage; it also eliminates maintenance and replacement of existing electric cables.
Turnout 9T-03 Conversion to Solar Power	\$ 4,900	Project staff recommends the conversion of this site to solar power. This site is a revenue site for reclaimed water service to Horizons West. Converting this site to solar power will eliminate the loss of revenue when there is a power outage; it also eliminates maintenance and replacement of existing electric cables.
Replace 4 Siemens VFD Units	\$ 379,425	Pumps 5 through 8 at the DC have Siemens' VFDs that are nearing the end of their life cycle. Siemens has advised that qualified technicians for these units are hard to find and parts are no longer made. Project staff recommends the replacement of these 480-volt Siemens VFDs with 480-volt Toshiba VFDs. The new drives are more energy efficient and reduce operating costs.
Total Electrical	\$ 484,175	

Instrumentation:

Item	Amount	Reason
Supplemental Well Pump Controller Upgrade to PLCs - Phase 2 of 2 Phases	\$ 150,000	The current electro-mechanical relays and timers are 30 years old and nearing the end of their life expectancy. They are also a challenge to troubleshoot and repair. PLCs are state-of-the-art, more reliable, easier to troubleshoot and less costly than the relays and timers. Project staff is completing Phase 1 of this work during FY 2016 and proposes to complete this project with Phase 2 during FY 2017.
Upgrade of DC Front Gate Surveillance System	\$ 3,200	The current surveillance system at the front gate monitors the general area. The system is not capable of identifying the driver or occupants of vehicles requesting permission to enter the DC. Project staff recommend the installation of a second camera that will identify the occupants in the vehicle. The installation of the second camera will allow the duty operator monitor approaching vehicles and identify the occupants in those vehicles.
Upgrade Antenna Mast at MTU-4, MTU-5, MTU-6, MTU-7 and MTU-9 to 40-Foot Hurricane-Rated Mast	\$ 19,800	The original antenna masts at these locations range in height from 15 feet to 25 feet. Over the years, trees in the area and in the line of sight to the DC have grown taller. The trees are now beginning to cause communications problems between the DC and the respective MTUs. Project propose the installation of a 40-foot mast to eliminate the communications problems.
Installation of Surveillance System for South Side of DC Service Building	\$ 3,150	Currently, there is no surveillance system that monitors the area on the south side of the service building at the DC. All land management equipment is parked in this area. The installation of a surveillance system for this area will allow the duty operator to monitor this area from the control room and not have to exit the building.
Total Instrumentation	\$ 176,150	

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Buildings & Grounds:

Item	Amount	Reason
Upgrade Lighting at the WC II Distribution Center to LED	\$ 59,900	The DC interior and exterior lighting systems' components are nearing the end of their expected life cycle. Project staff recommends the replacement of these components with LED retrofit kits. LED lighting is approximately 55% more cost-effective to operate than current lighting. Air-conditioning costs are reduced with LED lighting because of reduced heat generation. The life expectancy of LED bulbs is 55,000 to 60,000 hours; the life expectancy of current lighting bulbs is 15,000 to 25,000 hours. Maintenance costs are reduced with LED lighting versus current lighting.
Resurface Water Conserv II Distribution Center Parking Lot	\$ 70,450	The parking lot was installed in 1986. Periodic preventive maintenance has been performed on the parking lot. Recently, the parking lot has developed a number of cracks and some areas are starting to spoil (top layer of asphalt is peeling off). The parking lot pavement is nearing the end of its life cycle. Project staff recommends resurfacing of the parking lot.
Total Buildings & Grounds	\$ 130,350	

Vehicles & Equipment:

Item	Amount	Reason
Replace 2007 Ford Explorer	\$ 34,650	The project's 2007 Ford Explorer will be 10 years old during FY 2017 and currently has in excess of 101,700 miles on it. The mileage is estimated to exceed 115,000 miles during FY 2017. A lot of the operation of this vehicle is in deep sand and 4-wheel drive. While the vehicle is currently in good operating condition, it is starting to exhibit signs of fatigue related to the motor, transmission and 4-wheel drive unit. Project staff proposes the replacement of the 2007 Ford Explorer with a 2017 Ford Explorer.
Total Vehicles & Equipment	\$ 34,650	

Outside Services – WSP|PB:

Item	Amount	Reason
11.1.4.1 - Logging of Floridan Monitor Wells at WCII	\$ 75,000	Please refer to PB's attached proposed scope of services for details.
11.1.4.2 - WCII TM Interconnection for BPS	\$ 45,000	Please refer to PB's attached proposed scope of services for details.
11.1.4.3 - Remediation of Former Irrigation Wells in Site 1	\$ 210,000	Please refer to PB's attached proposed scope of services for details.
11.1.4.4 - Installation of Concrete Protective Slab Over TM (South Side of SLR)	\$ 10,500	Please refer to PB's attached proposed scope of services for details.
11.1.4.5 - Repair of WC II Transmission Main on Turnpike Near Mile Marker 263.2	\$ 38,500	Please refer to PB's attached proposed scope of services for details.
1.4.6 - Water Conserv II Reclaimed Water Master Plan Update	\$ 100,000	Please refer to PB's attached proposed scope of services for details.
Total Outside Services – WSP PB	\$ 479,000	

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Outside Services – Costs Paid For By Woodard & Curran:

Item	Amount	Reason
WCII TM Interconnection for BPS - Inspection Services (CPWC)	\$ 22,500	Please refer to PB's attached proposed scope of services for details. Costs for construction inspection will be handled through W&C.
WCII TM Interconnection for BPS - Construction Services	\$ 750,000	Please refer to PB's attached proposed scope of services for details. Costs for construction services will be handled through W&C.
Installation of Concrete Protective Slab Over TM (South Side of SLR) - Inspection Services (CPWC)	\$ 7,000	Please refer to PB's attached proposed scope of services for details. Costs for construction inspection will be handled through W&C.
Installation of Concrete Protective Slab Over TM (South Side of SLR) - Construction Services	\$ 109,300	Please refer to PB's attached proposed scope of services for details. Costs for construction services will be handled through W&C.
Repair of WC II Transmission Main on Tunpike Near Mile Marker 263.2 - Inspection Services (CPWC)	\$ 60,000	Please refer to PB's attached proposed scope of services for details. Costs for construction inspection will be handled through W&C.
Repair of WC II Transmission Main on Tunpike Near Mile Marker 263.2 - Construction Services	\$ 1,798,300	Please refer to PB's attached proposed scope of services for details. Costs for construction services will be handled through W&C.
Total Outside Services – Costs Paid For By Woodard & Curran	\$ 2,747,100	

FY 2017 Capital Program Sub Total	\$ 4,255,475
Woodard & Curran 5% Fixed Fee	\$ 212,775
FY 2017 Capital Program Total Costs	\$ 4,468,250

Note: The 5% Fixed Fee for the Capital Program line item is included in the total amount. The Fixed Fee is received when purchases are made from this line item. Billing for costs in this line item will be billed to the City and County on a 50/50 basis.

Woodard Curran, Inc.
Water Conserv II
FY 2017 Budget Line Item Explanation

Contingency for OOS Projects/Services

Funds for projects and services that have not been included elsewhere in the annual budget. Monies identified in this line item will be spent by project staff only with the written approval of the clients. The 5% Fixed Fee for all Contingency expenses has been included as a part of the budget line item. Woodard & Curran, Inc. will receive the Fixed Fee for this line item as expenses are incurred and billed to the City and County. Billing for approved projects/services in this line item will be billed to the City and County on a 50/50 basis

Item	Amount	Reason
Contingency For OOS Projects/ Services	\$ 238,100	Funds for projects and services that have not been included elsewhere in the annual budget. Monies identified in this line item will be spent by project staff only with the written approval of the clients . The 5% Fixed Fee for all Contingency expenses has been included as a part of the budget line item. Woodard & Curran, Inc. will receive the Fixed Fee for this line item as expenses are incurred and billed to the City and County. Billing for approved projects/services in this line item will be billed to the City and County on a 50/50 basis.
FY 2016 Contingency Sub Total	\$ 238,100	
Woodard & Curran 5% Fixed Fee	\$ 11,900	
FY 2016 Contingency Total Costs	\$ 250,000	

WOODARD & CURRAN, INC.
WATER CONSERV II
Expense Codes
FY 2017 (10/1/16 – 9/30/17)

ITEM	DESCRIPTION
Labor	
Direct Labor	Labor charges for all on-site full-time employees. Includes the straight-time portion of the overtime hours.
Overhead	Includes all federal government allowable general and administrative expenses incurred that are not specifically identifiable project related costs. The overhead rate is defined as 90% of total labor costs, excluding overtime premium.
Overtime	Labor charges for the premium time portion of the overtime hours.
Utilities	
5204.05 – Telephone	Charges for monthly telephone and Internet service.
5204.08 – Other Utilities	Charges for monthly garbage and recycled materials collection services.
Chemicals	
5204.14 – Sodium Hypochlorite	Purchases of sodium hypochlorite for the Distribution Center potable water system.
5204.26 – Other Chemicals	Purchases of herbicide for weed control on all areas of the project, bait for fire ant control, and pesticides for turnouts and manholes.
Repair & Maintenance	
5204.40 – Mechanical	Parts, equipment, services and supplies purchased to repair, maintain or modify mechanical systems. Includes acetylene and oxygen supplies.
5204.30 – Electrical	Parts, equipment, services and supplies purchased to repair, maintain or modify electrical systems. Includes annual vibration analysis for 8 Distribution Center and 25 supplemental well electric motors and pumps and infra-red analysis for 8 Distribution Center and 25 supplemental well electric motors and all transformers.
5204.36 – Instrumentation	Parts, equipment, services and supplies purchased to repair, maintain or modify instrumentation systems. Includes SCADA system and PC maintenance and supplies, cell phone and gas detector maintenance, SCADA system and PLC maintenance programming, database on-site tech support, project server and network tech support and maintenance, and data collection, electrical and instrumentation equipment repair and calibration.
5204.29 – Buildings and Grounds	Parts, equipment, services and supplies purchased to repair, maintain or modify buildings and grounds; the on-site painting program; and mulch for landscaped areas.
5204.34 – Small Equipment & Tools	Equipment, tools, instruments and devices needed to operate, maintain and test project components.
5204.43 – Vehicle Repair	Parts for and repair services performed on project trucks and SUVs.
5204.39 – Lubricants	Oils and greases consumed in the operation, maintenance and lubrication of project equipment.
5204.32 – Equipment Rental	Lease or rental of equipment and tools necessary to operate and maintain the project. Includes the copier and postage machine.
5204.87 – Maintenance Agreements	Continuing service agreements for project equipment and computer programs.
5204.31 – Other Repair & Maintenance	Parts for, repairs to, and maintenance of grounds maintenance equipment, tractors and implements, and heavy equipment.
Supplies & Equipment	
5204.53 – Data Collection Supplies & Equipment	Supplies, equipment, and services purchased to perform data collection and monitoring functions of reclaimed water, surface water and groundwater.

WOODARD & CURRAN, INC.
WATER CONSERV II
Expense Codes
FY 2017 (10/1/16 – 9/30/17)

ITEM	DESCRIPTION
5204.56 – Office Supplies & Equipment	Supplies consumed or equipment purchased in administration of record keeping and office work.
5204.59 – Other Supplies & Equipment	Purchases of supplies and equipment not covered above. Includes janitorial items.
Operating Expenses	
5204.61 – Dues & Subscriptions	Fees for membership dues and subscriptions for project staff and the project.
5204.68 – Training & Certifications	Fees for courses, materials, examinations and certifications for project staff.
5204.69 – Travel	Travel expenses for project staff for project-related work.
5204.76 – On-Site Administrative	E-Pass, postage, Sunshine One-Call, shipping (UPS, Airborne or Federal Express), printing, post office box rental, and bank service charges.
5204.62 – Health & Safety	Supplies, equipment and services to operate and maintain the health and safety program at the project.
5204.71 A – Other Operating Expenses	Permits, bonds, insurance, meeting expenses, emergency event expenses, public relations materials, and other expenses not covered above.
Outside Services	
5204.71 G – Groundtek of Central Florida, Inc. (MBE)	Professional services for all land management and grounds maintenance activities that include, but are not limited to, cultivating RIB bottoms; mowing well routes and fence lines; the annual mowing of all project properties; herbiciding fence lines, RIB bottoms and RIB tops; Transmission Main ROW maintenance; Transmission Main and Distribution Network structure maintenance; and grounds and landscape maintenance at the Distribution Center, RIB Site 6 Control Building and designated ROWs.
5204.71 O – Outside Painting Services	Professional services for the painting of all project buildings, above-ground and in-ground structures and exposed piping.
5204.71 L – Contract Locate Services	Professional services for the processing of all locate requests and performing all locates (pipe and electric cables) for Water Conserv II.
5304.03 – WSP PB	Professional services provided by Water Conserv II Water Resources Consultant.
5304.04 – Outside Services for WC II Operations Database Maintenance & Support	Professional services for the Water Conserv II Operations Database software development, modification, maintenance, upgrade and programming. Professional services for the development, modification and maintenance of required reports for the reclaimed water and groundwater programs that are generated from the Operations Database.
5204.95 – Casual Labor (Ace Staffing – MBE)	Expenses for casual labor services for labor as needed for (1) land management and grounds and structure maintenance activities at the Distribution Center, RIB Site 6 Control Building, RIB and expansion sites, and the Distribution Network and Transmission Main and (2) assistance with mechanical, electrical and instrumentation PM's and CM's throughout the Distribution Network and Transmission Main.
5204.71 B – Other Outside Services	Uniform purchases, cellular telephone services, annual audit, Lake/Orange County "Weather Watch" program services, Meteorlogix Weather Service package, Water Conserv II web site hosting fees, building pest control services, and courier services for the delivery of samples to the OCU Lab. Also, costs associated with backhoe and front-end loader services that cannot be handled by the project's backhoe and front-end loader.

WOODARD & CURRAN, INC.
WATER CONSERV II
Expense Codes
FY 2017 (10/1/16 – 9/30/17)

ITEM	DESCRIPTION
Fixed Fee	The Fixed Fee rate is 5% and is added to the Total O&M Costs. Woodard & Curran, Inc. receives the Fixed Fee in equal installments through the monthly bill to the City and County, based on prorated flow from the City and County WRFs.
5204.44 – Renewal & Replacement Program	Costs associated with the upgrade or replacement of current project components or systems. Individual items are tracked through the project's inventory program in accordance with Section 2.1.11 of the Contract for Operation, Maintenance and Engineering Services for the Water Conserv II Reclaimed Water System Joint Facilities; components are not. Individual items costing more than \$1,000 are tracked through the project's inventory program in accordance with Orange County Property Accounting Department Guidelines; components are not. The 5% Fixed Fee for all Renewal & Replacement expenses has been included as a part of the budget line item. Woodard & Curran, Inc. will receive the Fixed Fee for this line item as expenses are incurred and billed to the City and County. Billing for approved projects/services in this line item will be billed to the City and County on a 50/50 basis.
5204.89 – Capital Program	New Items and services and the upgrade or replacement of current project components or systems, which are purchased for the improvement of the project. Individual items are tracked through the project's inventory program in accordance with Section 2.1.11 of the Contract for Operation, Maintenance and Engineering Services for the Water Conserv II Reclaimed Water System Joint Facilities; components are not. Individual items costing more than \$1,000 are tracked through the project's inventory program in accordance with Orange County Property Accounting Department Guidelines; components are not. The 5% Fixed Fee for all Capital expenses has been included as a part of the budget line item. Woodard & Curran, Inc. will receive the Fixed Fee for this line item as expenses are incurred and billed to the City and County. Billing for approved projects/services in this line item will be billed to the City and County on a 50/50 basis.
5204.83 – Contingency For OOS Projects/Services	Funds for projects and services that have not been included elsewhere in the annual budget. Monies identified in this line item will be spent by project staff only with the written approval of the clients . The 5% Fixed Fee for all Contingency expenses has been included as a part of the budget line item. Woodard & Curran, Inc. will receive the Fixed Fee for this line item as expenses are incurred and billed to the City and County. Billing for approved projects/services in this line item will be billed to the City and County on a 50/50 basis.

**PB Proposed Scope of Services
to
Woodard & Curran, Inc.
for
Water Conserv II Project Year 31**

June 29, 2016

SCOPE OF SERVICES

1. AS-NEEDED SERVICES

Task 1.1. Internal and External Project-Related Coordination

Coordination with City, County and Operator

As directed by City, County or W&C staff on a case by case basis, PB will assist the City, County and W&C by providing routine project-related coordination services, including, but not be limited to:

- Preparation of Sections III and IV of the Monthly Status Reports and submittal to W&C;
- Providing routine system operating advice and weekly RIB loading plan review, if requested;
- Attending up to 12 monthly coordination meetings, up to 3 hours each, with W&C;
- Attending up to four quarterly project planning meetings, up to 4 hours each, with W&C, City and County staff;
- Attending miscellaneous coordination meetings, with City and County staff, as requested;
- Attending meetings with stakeholders (growers/homeowners), as requested;
- Attending meetings with regulatory agencies, as requested;
- Providing assistance during facility tours, if requested.

The Principal-in-Charge and/or the Project Manager and/or other appropriate PB personnel at the PM's discretion will attend meetings, unless otherwise agreed to by City and County.

Under this task, PB will also provide, from time to time, other as-needed services to City, County and W&C. Such services will be only at the request of City, County and W&C, and not otherwise provided for in this WCII Project Year 31 Scope of Services.

The services described under this task will be assigned and performed within the limits of the allocated budget.

Coordination with IFAS/Lake County/WMD/Horizon West

As directed by City, County or W&C staff on a case by case basis, PB will respond to inquiries by IFAS, Lake County, the Water Management Districts (WMDs), Horizon West and/or these entity's representatives.

If requested, PB will attend coordination meetings with IFAS, Lake County or the WMDs. The Principal-in-Charge and/or the Project Manager and/or other appropriate PB personnel at the PM's discretion will attend meetings, unless otherwise agreed to by City and County.

If requested, PB will assist in coordinating with Horizon West regarding impacts to the WCII Distribution Network Piping (DNP) System. PB's services will consist of the following:

- Attend meetings with W&C/City/County, as requested;
- Attend meetings with Horizon West representatives, as requested; and
- Prepare preliminary drawings, renderings and cost estimates of facility impacts.

The services described under this task will be assigned and performed within the limits of the allocated budget.

TM/DNP Development Plan Review

As directed by City, County or W&C staff on a case by case basis, PB will assist with review of and recommendations to development plans for proposed and on-going construction works near and around the WCII Transmission Main (TM) and Distribution Network Piping (DNP). The services provided will consist of engineering review of plans provided by others; attendance at meetings, where necessary and requested; communications with other engineering firms and/or agencies; and preparation of formal responses to inquiries, if appropriate and requested by City, County and W&C.

The services described under this task will be assigned and performed within the limits of the allocated budget.

Coordination with FTE, CFX and/or FDOT

As directed by City, County or W&C staff on a case by case basis, PB will coordinate with Florida's Turnpike Enterprise (FTE), the Central Florida Expressway Authority (CFX) and/or FDOT (collectively Agency) regarding any proposed roadway projects under Agency jurisdiction that may impact the WCII facilities. PB's services consist of the following:

- Respond to inquiries by Agency and/or their consultant(s), as requested;
- Attend meetings with Agency and/or their consultant(s), as requested;
- Attend meetings with City, County and W&C, as requested; and
- Prepare preliminary drawings, renderings and cost estimates of facility impacts.

The services described under this task will be assigned and performed within the limits of the allocated budget.

Task 1.2. Coordination Associated with Independence Way Planning and Preliminary Design

As directed by City, County or W&C staff, PB will coordinate with the Independence Way (formerly Wellness Way) development team, including the developer or his consultants, Orange County Public Works and/or CFX (collectively Agency) regarding this proposed roadway project's impact on the WCII facilities. PB's services consist of the following:

- Respond to inquiries by developer and/or Agency and/or their consultant(s), as requested;
- Attend meetings with developer and/or Agency and/or their consultant(s), as requested;
- Attend meetings with City, County and W&C, as requested; and
- Prepare preliminary drawings, renderings and cost estimates of facility impacts.

The services described under this task will be assigned and performed within the limits of the allocated budget.

2. MONITORING SERVICES

Task 2.1. Groundwater Quality Monitoring

PB will review and analyze reclaimed water and groundwater quality data associated with the WCII project's permit sampling requirements and provide reporting as follows:

- Review quarterly sampling events and analytical results;
- Prepare quarterly groundwater contour map sets for each of the RIB sites;
- Prepare quarterly memoranda summarizing water quality and key issues; and
- Prepare an annual report summarizing historical trends in water quality.

Task 2.2. Monthly Water Surface Survey of 10 Lakes

PB will continue the monthly survey of water levels at the following 10 lakes: Johns, Avalon, Black, Crescent, Hancock, Hartley, Hickorynut, Huckleberry, Needham, and Speer.

Each of these 10 lakes will be surveyed on a recurring monthly basis. The field data will be reduced and water surface elevations will be entered into the Project database. These data will also be provided to Orange County Public Works.

3. GOPHER TORTOISE CONSERVATION AREA SUPPORT SERVICES

Task 3.1. Monitoring and Documentation of Gopher Tortoise Conservation Area

PB will continue to systematically survey areas of RIB Site 6 within and outside the conservation easement to document occurrences of native vegetation including any state or federally listed species of plant or animal. Surveys will be conducted quarterly in accordance with flowering seasons for targeted plant species. An annual summary report will be prepared; and, the Native Flora and Fauna Posters will be updated as appropriate. PB will coordinate with W&C for on-site meetings/activities and preparation of the reports.

PB will assist City, County and W&C with on-going land management maintenance and monitoring of the RIB Site 6 gopher tortoise conservation area (CA) for compliance with the approved habitat management plan (HMP). Coordination efforts will include assistance in long-range scheduling, continued surveys for Florida *bonamia* and gopher tortoises, post clearing and/or post prescribed burn vegetation surveys, and documentation of tasks conducted under the HMP.

Task 3.2. Sand Skink Habitat Conservation Plan

PB will continue to coordinate with County, W&C and the US Fish and Wildlife Service (FWS) regarding completion of the application for a sand skink habitat conservation plan (HCP) for the RIB Site 6 CA. The purpose of the HCP is to use the RIB Site 6 CA and HMP as mitigation for future projects on RIB Site 6 with potential sand skink impacts.

The services described under this task will be performed within the limits of the allocated budget.

4. CAPITAL IMPROVEMENT SERVICES

Task 4.1. Logging of Floridan Monitor Wells at WCII

PB will provide hydrogeologic services to log 14 (fourteen) existing Floridan monitor wells at WCII. The specific wells proposed to be logged are 1SW03, 2SW05, 4SW04, MW5F1B, MW6F1, MW6IW, MW7F2, MW8F1, MW9F1, MWHA1F, MWHA4F, MWHA5F, MWHA7F and MW2W1. The services described herein include well drilling subcontractor costs to prepare and log the wells, and preparation of a summary memorandum.

Any existing WCII water quality sampling pumps will be pulled and stored during logging, to be re-installed at the conclusion of the logging. All wells will be air purge developed to clear any sediment and debris that may have accumulated in the bottom of the well, and then developed using a 25 GPM pump until the discharge water is clear and ready for video logging and geophysical logging.

PB will coordinate video and geophysical logging services of the wells. The wells will be video logged from top to bottom to ascertain their condition and to locate any possible obstructions. After the video logging, the wells will be logged using the following geophysical tools:

- caliper;
- natural gamma ray;
- resistivity (16- and 64-inch);
- spontaneous potential;
- fluid resistivity (static and pumping);
- temperature (static and pumping); and
- flow (static and pumping).

The wells will be pumped at a sufficient flow rate to analyze the pumping flow log data.

PB will prepare a summary technical memorandum describing the findings of the video logging, and geophysical logging of the well. The memorandum will contain information regarding the condition of the well and observations made during the testing such as debris or obstructions in the well. PB will prepare an electronic version (PDF) of the summary memorandum for submission to the City, County and W&C. After the draft memorandum has been reviewed, PB will finalize the memorandum and submit an electronic version (PDF) and up to three (3) hard copies to the City, County and W&C for their records.

The budget includes the costs for contractor services for pumping, as well as video and geophysical logging of the wells.

Task 4.2. WCII TM Interconnection for the Booster Pump Station

In 2014 as part of the WCII TM Booster Pump Station Improvements Phase 1 – Preliminary Engineering Services Project under Orange County Contract Y12-820-PH, the H&S/PB Team evaluated and prepared a conceptual plan for the TM interconnection for the booster pump station (BPS). Based upon recommendations by W&C and PB addressing the importance and sensitivity of this critical component of the overall BPS construction, the City and County opted to design and construct the TM interconnection to the BPS as a separate project from the BPS itself.

PB will design, prepare plans and specifications, conduct bidding, and provide construction phase services for the WCII TM interconnection for the BPS. PB will prepare the design for the TM interconnection for the BPS, to include the following elements:

- Interconnection configuration;
- Interconnection component details;
- Demolition of selected existing facilities to be abandoned;
- Tie-ins to existing facilities to remain, and
- Preparation of construction plans and specifications.

PB will subcontract for the services of survey, and these costs are included in this Task Order. Due to their proven specific capabilities and success in performing prior realignments and tie-ins of the WCII TM's PCCP pipe, it is expected that Garney Construction will be hired for the civil/mechanical construction. PB will provide services during the construction phase of this project consisting of the following:

- Conducting construction progress meetings;
- Shop drawing review and RFI responses;
- Providing periodic review and clarification/direction during construction;
- Survey and as-built coordination; and,
- Assisting with substantial/final inspection and acceptance.

The construction work includes but is not limited to the following:

1. Draining the section of the existing TM to be demolished;
2. Removing pieces of PCCP pipe to be replaced;
3. Installing new below-ground piping including the suction and discharge stub-out connections for the BPS;
4. Installing new below-ground isolation valves;
5. Installing new above-ground CARVs; and,
6. As-built survey.

The shutdown of the TM and completion of the tie-in construction work will be done in no more than a 12-hour overnight time period, to ensure minimal disruption to the operation of the TM and the discharges from the WRFs.

The costs for the construction are not included in this Task Order, but are estimated to be \$750,000. The costs for the materials testing and construction field inspection are not included in this Task Order, but are estimated to be \$22,500.

Task 4.3. Rehabilitation of the Site 1 Former Irrigation Wells

During March 2010 PB conducted hydrogeologic investigations to assess the condition of two existing wells previously used for irrigation on Site 1, one located on the west side of the site and one located on the north side of the site. The primary purpose of this work, conducted under Task Order Number 23 (TO #23), was to determine the condition of the wells and subsequently the feasibility of converting the wells into Floridan aquifer piezometers, rather than plugging and abandoning them. Those investigations were summarized in a May 2010 Technical Memorandum and the recommendation made to convert the west well to an Upper Floridan aquifer (UFA) piezometer and convert the north well to a tri-zone UFA piezometer. During 2014, further evaluation was performed to determine the feasibility of extending the existing wells to the Lower Floridan aquifer (LFA). PB subsequently made the recommendation to convert the wells for use by WCII and the County as nested UFA/LFA piezometers.

PB will modify the construction of the existing Site 1 irrigation wells (Site 1 West Well and Site 1 North Well) for use by WCII and/or the County. At City and County's discretion and direction, the existing wells can be plugged and abandoned; converted to UFA piezometers and/or monitor wells; or converted to nested UFA/LFA piezometers and/or monitor wells. PB will provide hydrogeological and well drilling services in support of the rehabilitation of the existing irrigation wells. The services consist of:

- Prepare specifications and assist with contractor bidding;
- Hire a drilling contractor to perform the rehabilitation;
- Assist selected contractor with obtaining the well construction modification permits;
- Observe the well construction modifications;
- Test completed wells to meet acceptance standards;
- Survey top of casing (TOC) elevations;
- Prepare well completion reports; and
- Submit documentation to the City/County, FDEP and SJRWMD concerning final well construction.

The costs for the drilling contractor and the surveyor are included in this task.

Task 4.4. Installation of Concrete Protective Slab over the TM on Sand Lake Road

The FDOT is performing a widening re-construction of Sand Lake Road, from Turkey Lake Road to nearly John Young Parkway. Installation of stormwater trunk lines will be in proximity vertically to the TM on the south side of Sand Lake Road where the TM leaves the County's SWRF. City and County wish to have a concrete protective slab installed over the portion of the 42-inch PCCP not within steel casing. Doing so will provide a protective barrier between the new stormwater trunk lines and the existing direct-buried TM, for a length of approximately 25 feet from the end of the steel casing to beyond the south ROW.

Utilizing the WCII standard detail, PB will assist with the design, coordination, and construction phase services for installation of the concrete protective slab over the TM. PB will subcontract for the services of survey, and these costs are included in this Task Order. PB will provide services during the construction phase of this project consisting of the following:

- Coordinating with the roadway contractor and WCII construction contractor;
- Conducting construction progress meetings;
- Shop drawing review and RFI responses;
- Providing periodic review and clarification/direction during construction;
- Survey and as-built coordination; and,
- Assisting with substantial/final inspection and acceptance.

The construction work includes but is not limited to the following:

1. Coordinating with the FDOT and their roadway contractor;
2. Permitting;
3. Dewatering;
4. MOT;
5. Shoring and excavation;
6. Installing the concrete slab; and,
7. As-built survey.

The costs for the construction are not included in this Task Order, but are estimated to be \$109,300. The costs for the materials testing and construction field inspection are not included in this Task Order, but are estimated to be \$7,000.

Task 4.5. Protection of the TM at MM 263 of the Turnpike

Under Task Order Number 46 (TO #46), PB conducted an alternatives screening effort to identify options for sinkhole remediation/stabilization and/or the realignment of or in-place protection of the TM. The options were separated into three general categories: Sinkhole/Subsurface Remediation, Protection of the Existing TM, and Replacement of the At-Risk Section of the TM. A multi-criterion decision analysis (MCDA) process was used to select one or more clear-cut recommendations. PB prepared a technical memorandum, with the recommended option of a replacement along the same alignment using a bridge to support the new section of TM. City and County subsequently authorized PB to proceed with the design, preparation of plans and specifications, and bidding for this option, to be conducted under Year 30 (FY16) capital services.

Using the contractor previously selected, PB will provide construction phase services for the realignment and protection of the WCII TM at MM 263 of the Turnpike. PB will subcontract for the services of survey, and these costs are included in this Task Order. PB will provide services during the construction phase of this project consisting of the following:

- Conducting construction progress meetings;
- Shop drawing review and RFI responses;
- Providing periodic review and clarification/direction during construction;
- Survey and as-built coordination; and,
- Assisting with substantial/final inspection and acceptance.

The construction work includes but is not limited to the following:

1. Installation of sheet-pile barrier wall(s) to protect existing infrastructure;
2. Installation of deep piling to provide foundations for up to three bridge piers;
3. Installation of pile caps and bridge beams to support the new section of TM;
4. Installation of restrained-joint 54-inch ductile iron pipe;
5. Draining the section of the existing TM to be replaced;
6. Tie-in of the new section of TM to the existing TM;
7. Abandoning in place or removing the PCCP pipeline that was replaced; and,
8. As-built survey.

The shutdown of the TM and completion of the tie-in construction work will be done in no more than a 12-hour overnight time period, to ensure minimal disruption to the operation of the TM and the discharges from the WRFs.

The costs for the construction are not included in this Task Order, but are estimated to be \$1,798,300. Materials testing and construction field inspection are not included in this Task Order, but are estimated to be \$60,000.

Task 4.6. Reclaimed Water Plan Update

The primary objective of this scope of services is to complete an updated analysis of existing and projected reclaimed water supply, demand, and facilities for the Water Conserv II system. The output from this project will include projections regarding anticipated excess reclaimed water availability (for potential customer-base expansion, such as to the City of Clermont and Lake County), potential supplemental supply or storage requirements, and wet weather management facility surpluses or deficits. This will be a conceptual planning-level study, including a commensurate level of detail and analysis. This effort may, but is not intended to, include specific capital improvement plan recommendations or design services.

4.6.1 Data Collection

City of Orlando

PB will obtain available historical daily data records from the City of Orlando (City) for its Water Conserv II (WCII) Water Reclamation Facility (WRF) on McLeod Road. The City will provide these data in mutually agreed electronic format, and they will include the following components:

- Total available reclaimed water (i.e., metered plant effluent)
- Local service area reclaimed water reuse demands, subdivided by type (e.g., residential irrigation)

- In-plant reclaimed water demands (if applicable)
- Reclaimed water flow sent to Water Conserv II
- Other distributions of reclaimed water flow (if applicable)
- Rainfall

PB will obtain future annual average flow projection data from the City for the years 2020, 2025, 2030, 2035, and 2040 for the following components of flow from the WCII WRF. For any of the 5-year increments where projected values are not available, PB will use linear interpolation/extrapolation or another basic analytical method to estimate the required projections:

- Total available reclaimed water
- Local service area reclaimed water reuse demands, subdivided by type
- Reclaimed water flow sent to Water Conserv II
- Reclaimed water flow sent to the Apopka-Ocoee-Winter Garden region for Project Renew
- Other distributions of reclaimed water flow (if applicable)

Orange County Utilities

PB will obtain available historical daily data records from Orange County Utilities (County) for its South WRF on Sand Lake Road and its Northwest WRF on McCormick Road. The County will provide these data in mutually agreed electronic format. PB may already have many of these data records through compilation efforts under separate contract with the County. The required data will include:

- Total available reclaimed water
- Local service area reclaimed water reuse demands by type (South, West and Southwest Service Areas)
- In-plant reclaimed water demands (if applicable)
- Reclaimed water flow sent to WCII
- Reclaimed water flow sent to rapid infiltration basins (RIBs), ponds, wetlands, lake augmentation systems, or other wet weather management systems
- Other distributions of reclaimed water flow (if applicable)
- Rainfall

PB will obtain future annual average flow projection data from the County for the years 2020, 2025, 2030, 2035, and 2040 for the following components of flow from the South WRF, Northwest WRF, and proposed future Southwest WRF. For any of the 5-year increments where projected values are not available, PB will use linear interpolation/extrapolation or another basic analytical method to estimate the required projections. PB may have many of these data compiled or estimated on behalf of the County as a result of separate contract work efforts (i.e., the WRP contract):

- Total available reclaimed water
- Local service area reclaimed water reuse demands by type (South, West and Southwest Service Areas)
- Reclaimed water flow sent to WCII
- Other distributions of reclaimed water flow (if applicable)

WCII

PB will extract available historical daily data records from the WCII operational database as needed to support the reclaimed water plan update, including but not limited to:

- Total reclaimed water influent to the Distribution Center (DC)
- Total reclaimed water distributed by the DC
- Reclaimed water demands (by type), including flow to growers, golf courses, Ocoee, Winter Garden, the County's Southwest Service Area, etc.
- Reclaimed water flows sent to RIBs, spray fields, and alternate application sites for wet weather management
- Other distributions of reclaimed water flow (if applicable)
- Rainfall

PB will obtain future annual average flow projection data from the City, County, and/or W&C for the years 2020, 2025, 2030, 2035, and 2040 for the following components of flow from the WCII reclaimed water system. For any of the 5-year increments where projected values are not available, PB will use linear interpolation/extrapolation or another basic analytical method to estimate the required projections:

- Reclaimed water demands (by type), including flow to growers, golf courses, Ocoee, Winter Garden, the County's Southwest Service Area, etc.
- Other distributions of reclaimed water flow (if applicable)

PB will review, compile in digital format, and quality check the above data for subsequent use in completion of the tasks listed below.

4.6.2 Supply and Demand Analysis

PB will complete an assessment of projected future reclaimed water supply and demand variability for the Water Conserv II system. This analysis will be performed and results presented based on future year 2020, 2025, 2030, 2035, and 2040 projected conditions. The assessment will focus on the effects that flow and demand variability, resulting from long-term variable rainfall conditions, may have on future Water Conserv II system facility needs. The inclusion of variability in the flow and demand amounts for each alternative is intended to provide the City and County with expectations about anticipated deficits or surpluses and to allow for flexible planning under multiple feasible scenarios.

Flow Model Development

PB will develop a flow balance model for the comparative analysis of the predicted variability of supply and demand for each studied alternative. A spreadsheet-based, continuous simulation flow balance model is currently envisioned, with either a monthly or daily time step. The historical flow and demand data compiled in Task 1.1 above will be used in part to create the model. In addition to a comparison of the annual average supply and demand projections under normal climatic conditions, the supply and demand analysis will consider temporal variability of flows under short-term periods (e.g., seasonal, monthly, and potentially daily variability) in order to assess overall system reliability under varying climatic and flow conditions.

System Reliability Goals

The supply and demand analysis will require some input from City and County staff regarding desired levels of service or system reliability. PB will conduct discussions with City, County, and W&C staff to identify preferences regarding system reliability goals.

Assessment of Alternatives

Analyzed for each of the 2020, 2025, 2030, 2035, and 2040 planning horizons, PB will apply the flow balance model to up to three (3) alternative combinations of supply and demand. The alternatives selected for analysis will be confirmed in discussions or workshops between PB and the City, County, and W&C. These alternatives may include the following supply, demand and storage input combinations, analyzed for each of the planning years (a total of up to 15 model simulations):

1. **Baseline:** Supply = WCII WRF, South WRF, Southwest WRF, supplemental wells
 Demand = Currently served (or agreed to be served), including:
 Growers, County Southwest Service Area (a.k.a. Horizon West), Ocoee, Winter Garden [e.g., Stoneybrook], OCNCGC, West Orange Country Club, and Mid-Florida Citrus Foundation
 Storage = 20 MG ground storage tanks (GSTs) at WCII Distribution Center
2. **Alternative 1:** Supply = Same as Baseline
 Demand = Same as Baseline
 Storage = Same as Baseline, plus 1 BG surface water reservoir
3. **Alternative 2:** Additional option, as defined by the City and County

Results and Recommendations

The modeled supply and demand alternatives will be used in order to make feasibility assessments for the following:

- Predicted system reliability
- Frequency and magnitude of annual, seasonal, monthly and/or daily available excess flows
- Frequency and magnitude of supplemental supply requirements
- Frequency and magnitude of wet weather management facility surpluses or deficits

- Frequency and magnitude of seasonal storage alternatives

The results of the supply and demand analysis will be incorporated into the final project report (see below). If the supply and demand analysis indicates future deficits in supplemental supply availability or wet weather management facility capacity, PB will coordinate with the City and County to develop planning-level recommendations for system improvement options to overcome the projected shortfalls. PB also will develop planning-level opinions of the capital costs associated with the recommended alternatives. These recommended improvements will be outlined at a conceptual planning level only; details of specific capital improvement project recommendations are not included in this scope of work.

4.6.3 Hydraulic Network Analysis (NOT IN SCOPE)

PB previously developed and currently maintains a node-link type hydraulic network model of the Water Conserv II reclaimed water distribution system. The model has historically been compiled in various software environments, the most current one being *H2ONET* software. If desired by the City and County (as additional services), PB can review and update the existing Water Conserv II distribution system hydraulic model so that it is generally representative of current Water Conserv II infrastructure, then use the model to analyze the potential hydraulic impact or conveyance requirements associated with selected project distribution system expansion alternatives.

4.6.4 Reporting

PB will prepare a *Water Conserv II Reclaimed Water Plan Update* report detailing the efforts described in the above tasks. The report will summarize the historical and projected data, supply and demand analysis, hydraulic modeling, and project conclusions and recommendations. A draft version of the report will be submitted to the City and County for review and comment. A digital version and up to ten (10) paper copies of the draft report will be provided by PB. Following a review period by the City and County, PB will incorporate any comments received into an updated final version of the project report. A digital version (i.e., PDF format) and up to ten (10) paper copies of the final report will be delivered to the City and County for distribution.

In addition, if requested by the City and County, PB will prepare a PowerPoint presentation summarizing the results of the reclaimed water plan update.

4.6.5 Coordination and Meetings

PB will prepare for and attend up to five (5) meetings with the City, County, W&C, or other entities to facilitate completion of this project. The purpose of these meetings may include the following:

- Work plan review
- Project status
- Discussion of potential supply and demand options and consensus development regarding alternatives to be analyzed
- Presentation and discussion of results
- Report review

At client request, PB will prepare and distribute written summaries of each meeting. Meeting summaries will be concise and focused on key points of agreement and action items. Meeting summaries will be distributed to the City, County, and W&C in agreed digital format (e.g., PDF).

SCHEDULE

PB will perform the professional services described herein within a mutually-agreed timeframe based on input from City, County and W&C. The services described in this Task Order will be performed during the timeframe of October 1, 2016 until September 30, 2017.

ESTIMATED BUDGET

The hourly/unit rate plus direct expenses method of compensation for the services described herein will not exceed the total budget of \$926,250 without prior approval from the City and County. The estimates of labor and directs are shown in the following table.

Task	Task Description	Labor Cost (\$)	Direct Cost (\$)	Sub Cost (\$)	Total Cost (\$)
1. AS-NEEDED SERVICES					
1.1.1	Internal and External Project-Related Coordination	302,974	1,026	-	304,000
1.1.2	Coordination Associated with Wellness Way Planning and Preliminary Design	14,802	198	-	15,000
2. MONITORING SERVICES					
1.2.1	Groundwater Quality Monitoring	89,800	200	-	90,000
1.2.2	Monthly Water Surface Survey of 10 Lakes	4,162	38	13,800	18,000
3. GOPHER TORTOISE CONSERVATION AREA SUPPORT SERVICES					
1.3.1	Monitoring and Documentation of Gopher Tortoise Conservation Area	4,253	179	11,568	16,000
1.3.2	Sand Skink Habitat Conservation Plan	2,371	126	1,753	4,250
4. CAPITAL IMPROVEMENT SERVICES					
1.4.1	Logging of Floridan Monitor Wells at WCII	22,611	339	52,050	75,000
1.4.2	WCII TM Interconnection for BPS	42,559	441	2,000	45,000
1.4.3	Rehabilitation of the Site 1 Former Irrigation Wells	33,379	306	176,315	210,000
1.4.4	Installation of Concrete Protective Slab over the TM on Sand Lake Road	7,913	187	2,400	10,500
1.4.5	Protection of the TM at MM 263 of the Turnpike	36,240	260	2,000	38,500
1.4.6	Reclaimed Water Plan Update	98,101	1,899	-	100,000
Totals		659,165	5,199	261,886	926,250

The individual budgeted amounts for labor, direct and sub expenses presented in the table are only estimated maximums used to develop the total budget. The individual estimated expenditures by category may exceed their estimated budget; however, the total expenditures shall not exceed the total budget without authorization. Should the subcontractor costs or schedule received from the bidding process for the tasks within the Capital Improvement Services result in the exceedance of the estimated budget shown here, a modification will be issued to the Task Order increasing the budget.

PB will perform the services up to the amount budgeted in this Task Order. PB is not obligated to incur any costs beyond the total budget, nor is W&C obligated to pay PB beyond the total budget amount.

Subconsultant Participation

For this Task Order, PB proposes using four non-M/WBE subconsultants. The subconsultants that have been identified at this time are Design Surveys, P.A. and E Sciences, Incorporated. In order to complete the services described above, from time to time PB may recommend the use of additional subconsultants to City, County and W&C. The use of additional subconsultants will be only with the approval of City, County and/or W&C.