



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F1

9/17/2019

Subject:

Amendment I for the City of Palm Bay North Regional Water Reclamation Facility Nutrient Removal Project

Fiscal Impact:

SOIRL Trust Fund 1260, cost Center 2711110, G/L 5810000

FY 2019-20: \$0

FY 2020-21: \$2,234,900

Dept/Office:

Natural Resources Management

Requested Action:

It is requested that the Board of County Commissioners 1) authorize the Chair to execute Amendment 1 to the Cost-Share Funding Agreement with City of Palm Bay; and 2) authorize associated budget change requests.

Summary Explanation and Background:

Upgrade of the Palm Bay North Regional Water Reclamation Facility Nutrient Removal Project was included in the original 2016 Save Our Indian River Lagoon Project Plan. At that time, the best available cost estimate was a conceptual cost of \$1,400,000 to reduce nitrogen concentrations in the reclaimed water from 29.4 mg/L to 7.5 mg/L. The load reduction benefit to the lagoon, after factoring in soil attenuation, was estimated in 2016 to be 17,790 pounds of nitrogen per year. The CostShare Funding Agreement was executed on April 6, 2018. The City of Palm Bay has moved forward with the project completing the design, securing local approvals, and they anticipate receipt of state permits by October. Some design changes were made to extend the operating lifespan of the proposed improvements. Per the attached letter request, the updated project cost estimate is \$3,634,900. According to the attached letter request from the City, this cost increase is due mostly to changes in the market but partially to the design improvements.

The 2019 Update to the Save Our Indian River Lagoon Project Plan increased the load reduction estimate for this project from 17,790 to 20,240 pounds of nitrogen per year and estimated the phosphorus load reduction benefit as 102 pounds. At a revised cost of \$3,634,900 and a revised benefit of 20,240 pounds, the project is still very cost effective. At a revised cost of \$180 per pound of nitrogen reduction, the project is still the most costeffective reclaimed water project in the plan and more cost effective than septic upgrades, septic to sewer projects, muck removal or living shoreline projects. If fully funded, the project can go to bid this fall. If not, the project will be delayed indefinitely while the City pursues other grants or loans and ranks it against their other critical needs.

On July 19, 2019, the Citizen Oversight Committee heard a presentation by the City and had the opportunity to ask questions about the design and cost changes. After their discussion, they voted unanimously to recommend approval of the funding request to the County Commission.

The City has also requested an extension to the contract expiration date. It is estimated to take 5 months from 25

the bid start before to the contract is awarded. The project will then take roughly 420 days to construct. The contract expiration date would change from February 5, 2020 to April 30, 2021.

Clerk to the Board Instructions:

Please sign and return two originals of each to NRMD

Deborah Thomas

From: Breeden, Terri <Terri.Breeden@brevardfl.gov>
Sent: Wednesday, December 4, 2019 3:36 PM
To: Deborah Thomas
Subject: Save Our Lagoon Palm Bay North Region WRF Amendment
Attachments: Palm Bay North Region WRF Amendment 1 Executed.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Deborah – Attached is the Palm Bay North Region WRF Amendment for your records.

Thanks,
Terri

Terri Breeden
Brevard County Natural Resources Management
2725 Judge Fran Jamieson Way, Bldg. A-219
Viera, FL 32940
321-633-2016 x58407

"Under Florida Law, email addresses are Public Records. If you do not want your e-mail address released in response to public record requests, do not send electronic mail to this entity. Instead, contact this office by phone or in writing."

**BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS**

INITIAL CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor: City of Palm Bay	
2. Fund/Account #: 1260/271110	3. Department Name: Natural Resources Management
4. Contract Description: North Area Wastewater Treatment Facility Upgrade SOIRL 18-17 Amendment 1	
5. Contract Monitor: Brandon Smith	7. Contract Type:
6. Dept/Office Director: Virginia Barker	CONSTRUCTION

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

<u>COUNTY OFFICE</u>	<u>APPROVAL</u>		<u>SIGNATURE</u>	<u>DATE</u>
	<u>YES</u>	<u>NO</u>		
User Agency	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Risk Management	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
County Attorney	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

SECTION III - REVIEW AND APPROVAL TO EXECUTE

<u>COUNTY OFFICE</u>	<u>APPROVAL</u>		<u>SIGNATURE</u>	<u>DATE</u>
	<u>YES</u>	<u>NO</u>		
User Agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Brandon Smith <small>Digitally signed by Brandon Smith Date: 2019.08.01 14:28:33 -0400</small>	08/01/2019
Risk Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Matt Lairsey <small>Digitally signed by Matt Lairsey Date: 2019.08.05 10:40:58 -0400</small>	08/05/2019
County Attorney	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Valliere, Christine <small>Digitally signed by Valliere, Christine Date: 2019.08.07 08:44:02 -0400</small>	08/07/2019

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

<u>CM DATABASE REQUIRED FIELDS</u>	<u>Complete</u> ✓
Department Information	<input type="checkbox"/>
Department	<input type="checkbox"/>
Program	<input type="checkbox"/>
Contact Name	<input type="checkbox"/>
Cost Center, Fund, and G/L Account	<input type="checkbox"/>
Vendor Information (SAP Vendor #)	<input type="checkbox"/>
Contract Status	<input type="checkbox"/>
Contract Title	<input type="checkbox"/>
Contract Type	<input type="checkbox"/>
Contract Amount	<input type="checkbox"/>
Storage Location (SAP)	<input type="checkbox"/>
Contract Approval Date	<input type="checkbox"/>
Contract Effective Date	<input type="checkbox"/>
Contract Expiration Date	<input type="checkbox"/>
Contract Absolute End Date (No Additional Renewals/Extensions)	<input type="checkbox"/>
Material Group	<input type="checkbox"/>
Contract Documents Uploaded in CM database (Initial Contract Form with County Attorney/ Risk Management Approval; Signed/Executed Contract)	<input type="checkbox"/>
"Right To Audit" Clause Included in Contract	<input type="checkbox"/>
Monitored items: Uploaded to database (Insurance, Bonds, etc.)	<input type="checkbox"/>



Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Tammy.Rowe@brevardclerk.us

September 18, 2019

MEMORANDUM

TO: Virginia Barker, Natural Resources Management Director

RE: Item F.1., Amendment 1 for the City of Palm Bay North Regional Water Reclamation Facility Nutrient Removal Project

The Board of County Commissioners, in regular session on September 17, 2019, authorized the Chair to execute Amendment 1 to the Cost-Share Funding Agreement with the City of Palm Bay; and authorized any associated budget change requests. Enclosed are two executed Amendment to the Interlocal Agreements.

Upon execution by all parties, please return a fully-executed Amendment to the Interlocal Agreement to this office for inclusion in the official minutes.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Rowe

Tammy Rowe, Deputy Clerk

/kp

Encls. (2)

✓ new goal

AMENDMENT 1 TO THE SAVE OUR INDIAN RIVER LAGOON PROJECT COST-SHARE FUNDING INTERLOCAL AGREEMENT BETWEEN BREVARD COUNTY, FLORIDA AND THE CITY OF PALM BAY, FLORIDA

AGREEMENT NUMBER: SOIRL 18-17 Amendment I

THIS AMENDMENT entered into by and between the Board of County Commissioners of Brevard County, Florida (hereinafter "COUNTY") and The City of Palm Bay (hereinafter "CITY").

WHEREAS, the parties have previously entered into that certain Save Our Indian River Lagoon Project Cost-Share Funding Interlocal Agreement No. SOIRL 18-17 ("ILA") on April 6, 2018; and

WHEREAS, the COUNTY has revised cost-share funding for wastewater treatment facility upgrade projects in the 2019 Save Our Indian River Lagoon Project Plan Update, approved by the Board of County Commissioners on April 9, 2019, increasing the cost-share eligibility of Wastewater Treatment Facility Upgrades for Reclaimed Water from \$231 to \$300 per pound of nitrogen removed as listed in Table 7-1: Cost Share offered for Project Requests Submitted for the 2019 Plan Update; and

WHEREAS, the CITY's North Area Waste Water Treatment Facility Upgrade project costs have increased from \$1,400,000 to \$3,634,900 due to increases in construction costs and materials from the initial 2015 project estimate; and

WHEREAS, improvements to the project design has increased nitrogen removal benefits from 17,790 pounds to 20,240 pounds, thus increasing the Save Our Indian River Lagoon unadjusted Eligible Tax Funding Cost Share from \$4,109,490 to \$6,072,000 in accordance with the rates in Table 7-1: Cost Share offered for Project Requests Submitted for the 2019 Plan Update; and

WHEREAS, the CITY does not have a dedicated funding source to offset the construction cost increase and would either delay or indefinitely suspend the project until such funds could be allocated;

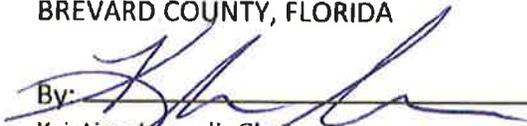
NOW, THEREFORE, in consideration of the promises and mutual covenants herein contained, the parties hereby agree as follows:

1. Section 3. Terms and Extensions is amended to read as follows:
 - a. The term of this Agreement is from the date upon which the last party has dated and executed the same ("Effective Date") until ~~February 5, 2020~~ April 30, 2021 ("Completion Date"). CITY shall not commence the Project until any required submittals are received and approved. Time is of the essence for every aspect of this Agreement, including any time extensions.

- b. Any request for an extension of time beyond the Completion Date must be made in writing no less than 45 days prior to the contracted Completion Date. Timely requests to extend for longer than six months may only be approved by the Board of County Commissioners. Requests to extend for less than six months may be approved by the County Manager or his/her designee.
 - c. Notwithstanding specific mention that certain provisions survive termination or expiration of this Agreement, all provisions of this Agreement that by their nature extend beyond the Completion Date, for example, delivery of a final progress report, will remain in full force and effect after the Completion Date as necessary to affect performance.
2. Attachment E – Eligible Tax Funding Cost Share Form is amended to read as follows:
- a. Permitting Task Cost ~~\$20,500~~ \$29,100; Eligible Lagoon Tax Cost Share, Adjusted ~~\$20,500~~ \$29,100
 - b. Permitting Task Cost ~~\$179,500~~ \$217,800; Eligible Lagoon Tax Cost Share, Adjusted ~~\$179,500~~ \$217,800
 - c. Construction Task Cost ~~\$1,200,000~~ \$3,388,000; Eligible Lagoon Tax Cost Share, Adjusted ~~\$1,200,000~~ \$3,388,000;
 - d. Total Task Cost ~~\$1,400,000~~ \$3,634,900; Eligible Lagoon Tax Cost Share, Adjusted ~~\$1,400,000~~ \$3,634,900;
 - e. Pounds of Nitrogen Reduction ~~17,790~~ 20,240
 - f. Eligible Lagoon Tax Cost Share ~~\$1,400,000~~ \$3,634,900
3. All terms and conditions of the Agreement, incorporated herein by this reference, not inconsistent with the provisions of this First Amendment, shall remain in full force and effect.

IN WITNESS WHEREOF, the COUNTY and CITY have caused this Amendment 1 to be executed by its duly authorized representatives as of the date on which the last of the parties hereto executes this document.

BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDA

By: 
Kristine Ishardi, Chair

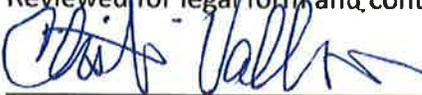
Date: September 17, 2019
As Approved by the Board on {Date of Board Meeting}

ATTEST


Scott Ellis, Clerk

Date: September 17, 2019

Reviewed for legal form and content


Christine Valliere, Assistant County Attorney

THE CITY OF PALM BAY, FLORIDA

By: 
Lisa Morrell, City Manager

Date: 10-22-19

ATTEST

By: 
Name: TERESE M. JONES

Title: CITY CLERK

Date: 10-22-19



www.palmbayflorida.org

July 3, 2019

Virginia Barker
Brevard County Natural Resources Management Director
2725 Judge Fran Jamieson Way
Melbourne, FL 32940

Re: Request for Additional Funding for Agreement Number: SOIRL 18 17
City of Palm Bay North Regional Water Reclamation Facility Nutrient Removal Project

Dear Ms. Barker:

Please accept this letter as our formal request for additional funding from the Save Our Indian River Lagoon Program for the Nutrient Removal project at the North Regional Water Reclamation Facility. The Utilities Department's Engineer of Record, Wade Trim Inc., has provided a detailed justification outlining the circumstances related to this request. If accepted and approved, the total project funding will increase from \$1,400,000 to \$3,634,900.

The drastic increase in the funding request can be attributed to the rapidly rising cost of construction since the project was first considered and scoped for funding in 2015. Many materials of construction have sharply spiked in price due to the demand in the market and due to the tariffs and trade restrictions implemented by the US Government in the past year.

Permitting for the project is nearly complete. The Florida Department of Environmental Protection has commented on our design and intends to incorporate the construction permit into the renewal of our Wastewater Treatment Plant Operating Permit (FLA103357). We anticipate our Operating Permit to be renewed by October 2019. If we acquire the additional funding from the Save Our Indian River Lagoon program, we can place the project for bid as soon as the permit is issued.

If we are unable to acquire the additional funding through the Save Our Indian River Lagoon program, we will evaluate the implementation of the project for Fiscal Year 2021 (October 2020 to September 2021) due to current budgetary constraints and critical needs. The project would be incorporated into our Capital Improvement Program and ranked based criteria such as imminent failure, critical need, compliance, and cost.

If we can justify the need for the project in Fiscal Year 2021 and still address the major rehabilitation needs at each wastewater treatment plant, then we will pursue Clean Water State Revolving Fund financing. We would submit the Request for Inclusion as early as possible and then work to submit the State-required Facility Plan and Readiness to Proceed documents by the end of this year so that we can be considered for funding at the State's April 2020 or August 2020 hearing. If we were to receive the full commitment from the State Revolving Fund and can carry the debt service, we would place the project for bid and have a notice to proceed ready for a contractor as early as October 2020.

Thank you for your consideration in this matter. We look forward to proceeding with the construction of the project and implementing the changes necessary to greatly reduce the excessive quantities of Nitrogen and Phosphorus in our reclaimed water. Should you have any questions or comments, please do not hesitate to contact me at 321-952-3410.

Sincerely,

s/ Christopher A. Little, P E
Utilities Director

cc: Brandon Smith, Environmental Specialist, Brevard County
Lisa Morrell, City Manager, City of Palm Bay
Suzanne Sherman, Deputy City Manager, City of Palm Bay
Bob Hinkel, Assistant Utilities Director, City of Palm Bay



Wade Trim, Inc.

3790 Dixie Highway NE, Suite D • Palm Bay, FL 32905
321.728.3389 • www.wadetrim.com

July 1, 2019

Christopher A. Little, P E
Utilities Director
City of Palm Bay Utilities Department
250 Osmosis Drive SE
Palm Bay, FL 32909

Re: Request for Additional Funding
North Regional Water Reclamation Facility Nutrient Removal Project
Save Our Indian River Lagoon Project Cost Sharing Agreement SOIRL 18 17

Dear Mr. Little:

Wade Trim completed the design for the subject project and submitted the Construction Documents (Plans and Technical Specifications) to the City of Palm Bay Utilities Department on March 7, 2019. By the completion of the final design, the construction costs for the project increased substantially, thereby delaying the overall project schedule.

The conceptual construction costs for this project were originally estimated to equal \$1.2M in early 2015; this estimated construction cost was used by the City as a basis for the funding request with Brevard County's Save Our Indian River Lagoon (SOIRL) program. The Engineer's Notice to Proceed for the project was received by Wade Trim on May 4, 2018. In July 2018, Wade Trim completed the Project Basis of Design Report which included an estimated construction cost of \$2.3M. Based on the completion of final design in March 2019, the engineer's estimated construction cost was \$3.4M which included a 10% contingency.

The increase in the estimated construction cost is associated with several contributing factors. First, the treatment process structure for the proposed improvements was modified from utilizing an existing steel ring tank to replacing the existing steel ring tank with two (2) new concrete basins. This decision was given by the City's former senior staff at the project kickoff meeting held in May 2018. Steel ring tanks were commonly used for construction of wastewater facilities back in the 1970s by developers because they were quick to assemble and had a relatively low capital cost. Unfortunately, these tanks are known to have a short to mid-range service life and generally have a high maintenance cost. While concrete basins are more expensive to construct, concrete basins have a longer service life and relatively low maintenance costs in comparison. Concrete construction costs have increased at double digit annual rates since 2017.

Finally, the costs of all goods used in construction have seen the largest increases in the past seven (7) years. These costs have been further impacted by the ongoing U.S.-imposed steel and aluminum tariffs on imports from Canada, Mexico, and the European Union. The threat of tariffs on material prices and demand will likely increase more as new trade restrictions are set in place.

These factors have an impact on the costs of all construction materials such as steel, concrete, copper, brass, lumber, and diesel fuel.

This increased project cost has resulted in delaying the construction phase as the City does not have the available funding to proceed with construction. This information has been shared with the Director of Brevard County's Natural Resources Management Department with an informal inquiry as to whether the City can request additional grant funding for the project to the SOIRL Committee later this year (4th quarter 2019). Because of the lack of funding, the City must delay bidding of the project until Fall 2020 at which time additional grant funding may be available for constructing the project.

Summary of Original Project Costs

The City received an original grant in the amount of \$1,400,000 which was eligible for the Lagoon Tax Cost Share. The Project Cost-Share amounts are shown in **Table 1** below.

Table 1. Palm Bay Utilities Department Project Cost-Share (2018)

Task Number	Task Description	Task Cost	Grant 1 (319)	Grant 2 (Florida Department of Environmental Protection)	Grant 3 (St. Johns Water Management District)	Eligible Lagoon Tax Cost Share, Adjusted	Local Match
1	Permitting	\$20,500	\$0	\$0	\$0	\$20,500	\$0
2	Engineering	\$179,500	\$0	\$0	\$0	\$179,500	\$0
3	Construction	\$1,200,000	\$0	\$0	\$0	\$1,200,000	\$0
	Totals	\$1,400,000	\$0	\$0	\$0	\$1,400,000	\$0

Additional Engineering and Construction Costs

As a result of the design changes in the project, the Utilities Department has incurred increased costs in design which have resulted in two change orders given to Wade Trim to date. Table 2 below summarizes both the design change orders given to date and the anticipated change in construction costs.

Table 2. Additional Design and Construction Costs

Task Number	Task Description	Original Task Cost	Palm Bay Utility Department Task Amendment Costs	Estimated Construction Costs Increase	Total Revised Task Cost
1	Permitting	\$20,500	\$8,600		\$29,100
2	Engineering	\$179,500	\$38,300		\$217,800
3	Estimated Construction Costs	\$1,200,000		\$2,188,000	\$3,388,000¹
	TOTAL COST SUMMARY	\$1,400,000	\$44,900	\$2,188,000	\$3,634,900

¹Engineer's estimated construction cost based on March 2019 Final Design submittal to Palm Bay.

In summary, the total project is estimated to cost approximately \$3.6M which includes a 10 percent contingency. Based on the revised project construction and engineering costs, the City Utilities Department estimates an additional \$2.2M in project funding will be required to complete the project.

Should you require any additional information, please feel free to contact me.

Respectfully,

s/ Daniel G. Burden, Ph.D., P E
Senior Project Manager

DGB:dgb
PBU2127.01L

cc: Tom Brzezinski, P E
Oscar Duarte, P E