



FRIEDMAN,  
FRIEDMAN & LONG, P.A.  
ATTORNEYS & COUNSELORS

July 8, 2014

E-FILING

Carlotta S. Stauffer, Commission Clerk  
Office of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

RE: Docket No. 140060-WS; Application of Sanlando Utilities Corporation for an increase in its Water and Wastewater Rates in Seminole County, Florida  
Our File No. 30057.214

Dear Ms. Stauffer:

Sanlando Utilities Corporation's recently filed Application and MFRs included the following three pro-forma projects:

1. Wekiva Hunt Club WWTP EQ Tank and Headworks, CP# 2014049.
2. Wekiva Hunt Club WWTP Electrical Improvements split into two pieces with separate capital project numbers assigned.
  - a. Engineering design, CP#2014043.
  - b. Construction, to be determined in about five weeks after the bids are opened and the project is fully approved.
3. Sanlando Collection System Improvements, Phase 1, CP# 2014053.

Enclosed are the summaries of each pro-forma project, and current documentation on each.

Should you have any questions regarding this filing, please do not hesitate to give me a call.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Martin S. Friedman', written in a cursive style.

MARTIN S. FRIEDMAN  
For the Firm

MSF/  
Enclosures

cc: John Hoy (via email-w/o enclosures)  
John Stover (via email-w/o enclosures)  
Patrick Flynn (via email-w/o enclosures)  
Darrien Pitts (via email-w/o enclosures)  
Frank Seidman (via email-w/o enclosures)  
Deborah Swain (via email-w/o enclosures)  
Andrew Maurey (via email-w/o enclosures)

**1. WEKIVA HUNT CLUB WWTP EQUALIZATION TANK AND HEADWORKS, CP# 2014049**

1. The project's description, justification and additional information is found in the attached "Wekiva EQ and Headworks Pro Forma".
2. No assets are to be retired as part of this project.
3. The tabulation of the bids received from five qualified utility contractors is attached as "Wekiva EQ & Headworks Bid Tabulation". The selected contractor was Florida Environmental Construction, Inc., the low bidder in the amount of \$2,065,000.
4. The executed contract for the design of the project by CPH Engineers is attached as "Wekiva EQ Tank CPH Design Proposal" in the amount of \$84,500. The project design commenced in July 2013.
5. The executed contract for the provision of construction services by CPH Engineers is attached as "Wekiva EQ Tank CPH CEI Proposal" in the amount of \$35,000. Construction services commenced in April 2014.
6. The executed contract for the project is attached as "Wekiva EQ Tank FEC Contract", which was signed in April 2014. The project's cost was subsequently reduced by \$24,000 as described in the attached "FEC Wekiva EQ Tank Change Order #1" dated May 8, 2014.
7. The contractor's first draw is attached as "FEC Wekiva EQ Tank Draw 01".
8. The projected completion date of this project is March 1, 2015.



ADD-CHANGE FORM

New Project or Budget Change? New Project Assigned Project #: 2014049

Requested by: Bryan K. Gongre Date: 3/19/2014
Project Manager / Area Manager

Project Name: Wekiva EQ Tank & Headworks
Company: 255 Sanlando Utilities Corp
Business Unit: 255101 Sanlando Utilities Corp S
Project Owner: Bryan K. Gongre
Project Manager: Bryan K. Gongre
Start Date: 4/1/2014 Q2 2014
Estimated End Date: 3/1/2015 Q1 2015
BU Type: Sewer
Budget Owner / RVP: Rick Durham 02
Region: Southeast 07
State: FL

Project Type: Maintenance

Will project replace/retire any assets: No

Previously Requested:

Table with 2 columns: Request Type, Amount. Rows: This Request: \$2,195,225; Still to be Requested: ; Total Project Budget: \$2,195,225

Object Account(s) to which project will be closed: 1410 Plant Sewers Trtmt Pit
select from dropdown list
select from dropdown list
select from dropdown list
select from dropdown list
Go to Reference List

Description: The project consists of engineering, design, permitting and CEI services followed by the construction of a new mechanical bar screen, a new equalization tank, new surge pumps, associated electrical components and site work at the Wekiva Hunt Club WWTP.



## JUSTIFICATION / ALTERNATIVES

### Justification and Benefits:

The Wekiva WWTF has a permitted capacity of 2.9 MGD with a current annual average daily flow of approximately 2.1 MGD. The treatment facility provides service to approximately 10,250 connections yielding an annual average flow of 204 gallons per day per connection. The current plant design does not include an equalization basin or any means to ameliorate peak flow of over 3,500 gpm. Such peak flows have a negative impact on the facility's operating characteristics such as hydraulic overloading that can cause clarifier blankets to rise over their weirs and blind the gravity sand filters. This negatively impacts the ability to produce plant effluent that meets public access reuse water quality standards. When the treated effluent fails this standard, it must be diverted to the on site percolation ponds that have a limited disposal capacity of 0.400 AADF.

In order to consistently produce reuse quality effluent, a suitably sized EQ tank is required to address the diurnal flow conditions. The new headworks is designed with a peak flow capacity of 5,000 GPM. Using a peaking factor of 2.4, this yields an average daily flow rate of 3.0 MGD. Since the service area is essentially built out, the design flow rate will not be exceeded. The elevation of the new headworks is designed to maintain the existing plant hydraulic profile without impacting the pumping capacity of the influent lift stations.

The screening equipment is designed with an overflow bypass to allow excess flows to be sent directly to the EQ tank and then pumped back to the treatment trains once influent flows decrease. Three new 1,000 gpm VFD-controlled EQ pumps will provide a fairly constant feed of wastewater to the treatment trains by using a signal generated by influent flow meters located at each of the three treatment trains.

A new Vulcan stairscreen will be installed to prevent rags and debris from entering the EQ tank and the downstream treatment trains. Screenings will be discharged to a dewatering screw conveyor and then to a dumpster for disposal in a landfill.

The EQ tank will also be equipped with a high level sensor that will increase the output of the surge pumps should the levels in the tank rise to the set point.

Two 12.2 HP propeller mixers will keep the tank contents turned over preventing any septic conditions from occurring.

### Alternatives Considered:

1. The Utility could choose not to construct the proposed project, and instead, limit the project to the rebuilding of the existing influent splitter box that is in danger of complete structural failure and must be replaced. However, this does not address the peak flows and associated hydraulic conditions that routinely impare the overall performance of the facility.
2. A facility of this size and flow profile requires the use of an EQ tank and suitable headworks equipment in order to reliably meet its existing permit limits and to deliver proper service to its customers. Various options were presented to the bidding contractors such as alternative tank materials and equipment manufacturers in order to gain the most value at the lowest cost. This is a pro forma project to be included in the upcoming Sanlando rate case that is to be filed on or before July 1, 2014.



**CAPITAL PROJECT REVIEW CHECKLIST**

		Yes	No
Does project meet the definition of a Capital Project? (> \$50k)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does project meet the definition of a Capital Project? (Complete > 30 days)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has project been thoroughly investigated?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has project been added to Cap Plan Budget Template for Regional Consideration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
What is the proposed Initial Project Budget?	<u>\$2,195,225</u>		
What quarter does the project need to start?	<u>2Q 2014</u>		
Will any CIAC be collected? How much?	<u>                    </u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any engineering evaluations been performed?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, is the engineering a separate project?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have all alternatives been investigated? If so, what are they? Comment below		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the proposed project tied to a rate case? When?	<u>2Q 2014</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have three bids been received? If not, why? List and provide amounts below		<input checked="" type="checkbox"/>	<input type="checkbox"/>
What are the repercussions if project is not approved? Comment below			
Are there any permits required to start the project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the Cap Ex add/change form complete?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has Cap Ex add/change form been submitted to project owner/manager to discuss with the CPRT?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other issue(s)? (use comments section below)		<input type="checkbox"/>	<input type="checkbox"/>

Bid	Company	Amount	Selected
1	See attached bid tab		
2			
3			

**Estimated Revenue Impact per Customer:**

Number of Customers Impacted: 10,258

**\$2.68** per customer per month

15% estimate covers return, depreciation and taxes

**Comments:**



**WEKIVA HUNT CLUB WRF HEADWORKS IMPROVEMENTS  
BID TABULATION**

			FEC	Wharton Smith	McMahan	ECO 2000	Garney
ITEM	UNIT	QUANT.	TOTAL PRICE	TOTAL PRICE	TOTAL PRICE	TOTAL PRICE	TOTAL PRICE
Mobilization	LS	1	\$ 40,000.00	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 140,000.00
Building Permit Allowance	LS	1	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00
Site Layout and Final Surveying	LS	1	\$ 8,000.00	\$ 3,000.00	\$ 20,000.00	\$ 15,000.00	\$ 50,000.00
Site Work	LS	1	\$ 31,000.00	\$ 60,000.00	\$ 100,000.00	\$ 59,900.00	\$ 100,000.00
Demolition	LS	1	\$ 2,500.00	\$ 10,000.00	\$ 20,000.00	\$ 73,200.00	\$ 90,000.00
Site Paving	LS	1	\$ 24,000.00	\$ 25,000.00	\$ 30,000.00	\$ 10,900.00	\$ 80,000.00
Headworks	LS	1	\$ 550,000.00	\$ 550,000.00	\$ 594,000.00	\$ 651,400.00	\$ 550,000.00
Site Piping, valves, and fittings	LS	1	\$ 291,000.00	\$ 335,000.00	\$ 250,000.00	\$ 389,400.00	\$ 350,000.00
Surge Pumps	LS	1	\$ 58,000.00	\$ 50,000.00	\$ 80,000.00	\$ 58,200.00	\$ 55,000.00
Surge Tank	LS	1	\$ 400,000.00	\$ 405,000.00	\$ 503,000.00	\$ 505,800.00	\$ 484,000.00
Mixers	LS	1	\$ 65,000.00	\$ 65,000.00	\$ 90,000.00	\$ 71,200.00	\$ 80,000.00
Walkways and Misc App.	LS	1	\$ 163,500.00	\$ 65,000.00	\$ 60,000.00	\$ 11,400.00	\$ 60,000.00
Concrete	LS	1	\$ 45,000.00	\$ 60,000.00	\$ 50,000.00	\$ 40,100.00	\$ 230,000.00
Hoists	LS	1	\$ 2,500.00	\$ 10,000.00	\$ 10,000.00	\$ 9,100.00	\$ 24,000.00
Landscaping	LS	1	\$ 7,500.00	\$ 3,000.00	\$ 30,000.00	\$ 50,400.00	\$ 60,000.00
Instrumentation	LS	1	\$ 168,000.00	\$ 175,000.00	\$ 200,000.00	\$ 218,300.00	\$ 170,000.00
Electrical	LS	1	\$ 210,000.00	\$ 215,000.00	\$ 240,000.00	\$ 205,800.00	\$ 210,000.00
<b>SUB TOTAL LUMP SUM PRICE (BASE BID)</b>			<b>\$ 2,075,000.00</b>	<b>\$ 2,140,000.00</b>	<b>\$ 2,386,000.00</b>	<b>\$ 2,459,100.00</b>	<b>\$ 2,742,000.00</b>
Engineering/Design	LS	1	\$ 84,500.00				
Permitting	LS	1	\$ 725.00				
CEI Services	LS	1	35,000.00				
<b>TOTAL COST</b>			<b>\$ 2,195,225.00</b>				



CHANGE ORDER

AIA DOCUMENT G701

Distribution to:  
 OWNER: Sanlando Utilities Corp.  
 ENGINEER: CPH Engineers  
 CONTRACTOR: Florida Environmental Construction, Inc.  
 FIELD:  
 OTHER:

PROJECT: WEKIVA WRF HEADWORKS IMPROVEMENTS	CHANGE ORDER NUMBER: 1
TO (Contractor): FLORIDA ENVIRONMENTAL CONSTRUCTION, INC. PO BOX 305 HOWEY IN THE HILLS, FL 34737	INITIATION DATE: 5/5/2014
	ARCHITECT'S PROJECT NO:
	CONTRACT FOR: Wekiva WRF Headworks
	CONTRACT DATE: 4/16/2014

You are directed to make the following changes in this Contract:

DEDUCTIONS:

- |  |                |
|--|----------------|
| 1) NO COATING ON FLOOR OF FUSION TANK                                  | <\$ 14,000.00> |
| 2) ALUMINUM GRATING & STAIRTREADS IN LIEU OF FRP FOR WALKWAYS & STAIRS | <\$ 10,000.00> |

Not valid until signed by both the Owner and Architect.

Signature of the Contractor indicates his agreement herewith, including any adjustment in the Contract Sum or Contract Time.

The Original (Contract Sum) (Guaranteed Maximum Cost) Was.....	\$2,065,000.00
Net Change by previously authorized Change Orders.....	\$0.00
The (Contract Sum) (Guaranteed Maximum Cost) prior to this Change Order was.....	\$2,065,000.00
The (Contract Sum)(Guaranteed Maximum Cost) will be (decreased) by this Change Order.....	-\$24,000.00
The new (Contract Sum) (Guaranteed Maximum Cost) including this Change Order will be.....	\$2,041,000.00
The Contract Time will be (unchanged by)Days	
The Date of Substantial Completion as of the date of this Change Order therefore is	

CPH ENGINEERS, INC.  
 ENGINEER  
 1117 EAST ROBINSON ST  
 Address  
 ORLANDO, FL 32801

FLORIDA ENVIRONMENTAL CONST., INC.  
 CONTRACTOR  
 PO BOX 305  
 Address  
 HOWEY IN THE HILLS, FL 3737

SANLANDO UTILITIES CORP  
 OWNER  
 200 WEATHERSFIELD AVE  
 Address  
 ALTAMONTE SPRINGS, FL 32714

By \_\_\_\_\_

BY *[Signature]*

BY *[Signature]*

DATE: \_\_\_\_\_

DATE: 5-5-14

DATE: 5/8/2014



1117 East Robinson St.  
Orlando, FL 32801  
Phone: 407.425.0452  
Fax: 407.648.1036

March 7, 2014

Mr. Bryan Gongre  
Regional Manager  
Sanlando Utilities Corporation  
200 Weathersfield Ave  
Altamonte Springs, FL 32714

RE: Wekiva Headworks Construction Services Proposal

Mr. Gongre:

Thank you for the opportunity to present this proposal to perform the construction services associated with the Wekiva Headworks improvements at the Wekiva Hunt Club WRF. Services associated with this proposal include the following:

1. Project Coordination - This includes the project kickoff and coordination with FEC. This includes general coordination of construction activities with the Contractor and the Utility's staff overseeing the construction.
2. Shop Drawing Review - CPH will assist the Utility with shop drawing reviews to ensure the equipment is provided in accordance with the design.
3. Clarifications/Conflict resolutions - CPH will provide any support necessary to resolve any site related clarifications on site regarding the site hydraulics and specified equipment.
4. Site Inspections - CPH will provide periodic site inspections to verify the equipment is being installed in accordance with the contract requirements. These inspections will be coordinated with the Contractors monthly pay requests for certification of work completed.
5. System Testing and Startup - CPH will coordinate the full system startup and testing. This includes oversight of operator training and review of any O&M manuals or startup information.

No design or permitting services are including in the contract.

#### **Payment**

The engineering fee for the services, described herein is estimated to be \$35,000.00, including out of pocket expenses.

If this Contract is terminated during prosecution of the services prior to completion of the services, payments to be made on account of that and all prior work under this Contract shall be due and payable, and shall constitute total payment for services rendered. In addition, upon termination, engineer shall be paid for any Supplementary Services authorized and rendered.

If you are in agreement with the terms and fees proposed, please sign on the space provided below and return one (1) copy to us and initial as indicated on Exhibit A.



If you have any questions please call me.

Sincerely,  
CPH INC.

A handwritten signature in black ink, appearing to read 'Stephen N. Romano', written over a horizontal line.

Stephen N. Romano, P.E.  
*Vice President/Associate*

**ACCEPTED BY:**  
**SANLANDO UTILITIES CORP.**

A handwritten signature in black ink, appearing to read 'Brent B.', written over a horizontal line.

Date: 4/10/14

Supplier # 3002528  
 PO# 156297 / Recpt # 166887

**APPLICATION AND CERTIFICATE FOR PAYMENT**

A1A DOCUMENT G702

PAGE:

TO (OWNER):  
 SANLANDO UTILITIES CORP.  
 200 WEATHERSFIELD AVE  
 ALTAMONTE SPRINGS, FL 32714  
 FROM (CONTRACTOR):  
 FL ENVIRONMENTAL CONST., INC.  
 P.O. BOX 305  
 HOWEY IN THE HILLS, FL 34737  
**CONTRACTOR'S APPLICATION FOR PAYMENT**

PROJECT NAME:  
 WEKIVA WRF HEADWORKS IMPROVEMENT  
 VIA (ENGINEER): CPH ENGINEERS, INC.  
 CPH ENGINEERS, INC  
 1117 EAST ROBINSON ST  
 ORLANDO, FL 32801

APPLICATION NO: 1  
 PERIOD TO: 5/5/2014  
 PROJECT NO: U07134  
 JOB #: 155  
 CONTRACT DATE: 4/16/2014

Distribution to:  
 \_\_\_ OWNER  
 \_\_\_ ARCHITECT  
 \_\_\_ CONTRACTOR  
 \_\_\_ ENGINEER

Application is made for payment, as shown below, in connection with the Contract.  
 Continuation Sheet, A1A Document G703, is attached.

CHANGE ORDER SUMMARY				
Change Orders approved in previous months by Owner		TOTAL	ADDITIONS \$ -	DEDUCTIONS \$ -
Approved this Month				
Number	Date Approved			
1				\$ (24,000.00)
<b>TOTALS</b>			\$ -	\$ (24,000.00)
Net Change by Change Orders.			\$ (24,000.00)	

1. ORIGINAL CONTRACT SUM.....	\$ 2,065,000.00
2. Net change by Change Orders.....	\$ (24,000.00)
3. CONTRACT SUM TO DATE (Line 1 + 2).....	\$ 2,041,000.00
4. TOTAL COMPLETED & STORED TO DATE.....	\$ 100,000.00
(COLUMN G ON G703)	
5. RETAINAGE:	
A. 10% OF COMPLETED WORK.....	\$ 100,000.00
(COLUMN D + E ON G703)	
B. ___% OF STORED MATERIAL.....	
(COLUMN F ON G703)	
TOTAL RETAINAGE (LINE 5A + 5B OR TOTAL IN COLUMN I OF G703).....	\$ 10,000.00
6. TOTAL EARNED LESS RETAINAGE.....	\$ 90,000.00
(LINE 4 LESS LINE 5 TOTAL)	
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (LINE 6 FROM PRIOR CERTIFICATE).....	\$ -
8. CURRENT PAYMENT DUE.....	\$ 90,000.00
9. BALANCE TO FINISH, PLUS RETAINAGE.....	\$ 1,951,000.00
(LINE 3 LESS LINE 6)	
OWNER: SANLANDO UTILITIES CORP.	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.  
 CONTRACTOR: Florida Environmental Construction, Inc

By: Karen Lightsey 5/5/2014  
 Karen Lightsey, Vice President Date

BY: [Signature] DATE: 5/8/2014

**ARCHITECT'S CERTIFICATE FOR PAYMENT**

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

ENGINEER: CPH ENGINEERS, INC.

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

SECTION 00520  
AGREEMENT FORM

PART 1 GENERAL

1.01 THIS AGREEMENT, made this 16 day of April, 2014, by and between 1) Sanlando Utilities Corporation, hereinafter called the Owner, and 2) Florida Environmental Construction, Inc., hereinafter called the Contractor.

- 1) Name of Owner
- 2) Name of Contractor

1.02 The Owner and Contractor agree as follows:

A. Contract Documents

The Contract Documents include the Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid, Notice to Proceed, the Bonds, the General Conditions, the Supplementary Conditions, the Specifications listed in the Index to the Project Manual, any technical specifications as incorporated by the Project Manual; the Drawings as listed in the Project Manual, all Written Amendments, Change Orders, Work Change Directives, Field Orders, and Engineer's written interpretations and clarifications issued on or after the Effective Date of this Agreement. These form the Contract and all are as fully a part of the Contract as if attached to this Agreement or repeated herein.

B. Scope of Work

The Contractor shall perform all work required by the Contract Documents for the construction of the 3) Wekiva Headworks Improvements.

- 3) Name of Project identified in Invitation for Bids

C. Contract Time

The Contractor shall begin work within 10 days after the issuance of a written Notice to Proceed and shall substantially complete the work within 4) 270 calendar days from the date of the Notice to Proceed. The work shall be finally complete, ready for Final Payment in accordance with the General Conditions, within 30 calendar days from the actual date of substantial completion.

- 4) As specified in paragraph 1.02/C/5 of the Bid Form

D. Liquidated Damages

OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in Paragraph C above, plus any extensions thereof allowed in accordance with the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$500.00 each calendar day that expires after the time specified in Paragraph C for substantial completion until the work is substantially complete. It is agreed that if this Work is not Finally completed in accordance with the Contract Documents, the CONTRACTOR shall pay the OWNER as liquidated damages for delay, and not as penalty, one-fourth (¼) of the rate set forth above.

E. Contract Price

Unit Price Contract

The Owner will pay the Contractor in current funds for the performance of the work, subject to additions and deductions by Change Order and subject to the Measurement and Payment Provisions, and subject to actual constructed quantities; the Total Contract Price of two million sixty five thousand Dollars (\$2,065,000.00). Payments will be made to the Contractor on the basis of the Schedule of Unit Prices included as a part of his Bid, which shall be as fully a part of the Contract as if attached or repeated herein.

F. Payments

The Owner will make payments as provided in the General Conditions and Supplementary Conditions.

G. Retainage

The value of each application for payment shall be equal to the total value of the Work performed to date, less an amount retained, and less payments previously made and amounts withheld in accordance with the General Conditions and Supplementary Conditions. Retainage for this project is 10%, to be held by Owner as collateral security to ensure completion of Work. The Owner is not obligated to reduce retainage at any time during the Contract, but may choose to do so at its discretion once the Work is at least 75% complete.

H. Engineer

The Project has been designed by CPH, Inc., referred to in the documents as the Engineer, whose authority during the progress of construction is defined in the General Conditions and Supplementary Conditions.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

CONTRACTOR:

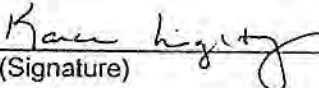
Florida Environmental Construction, Inc.  
Name of Firm

  
By (Signature)

(SEAL)

ROBERT LIGHTSEY - PRESIDENT  
Printed Name and Title

ATTEST:

  
By (Signature)

KAREN LIGHTSEY - VICE PRESIDENT  
Printed Name and Title

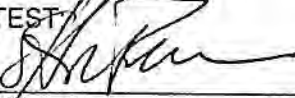
OWNER:

Sanlando Utilities Corporation  
Name of Owner

  
By (Signature)

(SEAL)

Bryan K. Gonave, Regional Manager  
Printed Name and Title

ATTEST:  
  
By (Signature)

Stephen Rouens, VP CAH, Inc.  
Printed Name and Title

END OF SECTION

Wekiva WRF Headworks Improvements  
Equipment Delivery Schedule

Item	Submittal Time (weeks)	Delivery Time after Submittal Approval (Weeks)
Building Permit	N/A	4 -6
Fusion Tank	4 - 6	10 - 12
Electric	2 - 4	10 - 12
Controls	4 - 6	6 - 8
Pumps	2 -4	10 - 12
Headworks	8 - 10	20 -24
Mixers	4 - 6	12 -14
Pipe, Valves & Fittings	1 -3	4 - 6





1117 East Robinson Street  
Orlando, Florida 32801

Phone: 407.425.0452  
Fax: 407.648.1036

[www.cphengineers.com](http://www.cphengineers.com)

February 18, 2013

Mr. Bryan Gongre  
Regional Manager  
Sanlando Utilities Corp.  
200 Weathersfield Ave.  
Altamonte Springs, FL 32714

RE:           Wekiva Surge Tank Proposal

Bryan:

We are pleased to submit this proposal to provide professional engineering services associated with the design and permitting of a new surge tank at the Wekiva Hunt Club Water Reclamation Facility. Since the Des Pinar wastewater flows have been diverted to the Wekiva facility, there have been problems handling the peak loads at the facility. These improvements include a surge tank, and a new surge pumping station and a flow splitter structure to split the flows between the three plants. This structure will be designed to receive all of the facility flows. The average flows will be designed to flow through the structure directly to the three wastewater plants. Excess flows will be diverted over a weir to the new surge tank. During periods of low flow the surge pumps will pump flow into the splitter box for flow to be sent to the wastewater plants.

#### Scope of Services

This project involves the design of several facets of the facility and a few considerations should be made to determine the final configuration of the facility.

#### Splitter Box Design

The proposed splitter box will be designed to function in two ways. It will collect all of the flows from the collection system and either divert the flows directly into the surge tank or it will allow average flows to be split between the three plants and overflow the excess to the surge tank. The design will allow for the facility to operate either way. The splitter will be designed to be fabricated out of stainless steel or poured coated concrete. A fixed bar screen will be designed to screen all incoming flows of larger particles, with a bypass designed to prevent the structure from overflowing if the bar screen gets blocked up. The fee to design this item includes the civil design and structural analysis and is \$15,000.

The addition of a mechanical bar screen is recommended as it will remove a higher percentage of trash from the waste stream. This will greatly reduce the buildup of rags throughout the treatment facility. Rag buildup typically occurs around diffuser pipes and any submersible equipment in the aeration basins and digesters. In the new surge tank, rags can build up in the new diffuser drop pipes and submersible pumps. While the addition of a mechanical bar screen



will increase the capital cost by approximately \$100,000, depending on the type and design, having a mechanical screen reduces maintenance costs and extends equipment life. The design of a mechanical bar screen into the facility will cost an additional \$10,000.

#### Surge Tank Design

The surge tank will be designed with an operating volume of at least 600,000 gallons and an overall capacity of approximately 800,000. This will provide the maximum beneficial use of the tankage to provide equalized flow. Based on the known hydraulics of the site, the tank will be partially buried. This will be necessary to prevent any adverse impacts on the existing lift stations. The fee to design this item includes the civil design and geotechnical analysis and is \$12,000

#### Surge Pumping Design

The surge pump station will be designed as submersible pumps located inside the surge tank. These pumps will be on vfd drives to allow for a better range of flow control. The discharge of the pump station will be directly to the splitter box, so the pumps will not provide flow directly to each plant. This minimizes the number of pumps required. The vfd controls allow for the variable flows to be sent to the splitter box in order to minimize the flow which would otherwise recycle back into the surge tank creating a more efficient system. The design of this item includes electrical instrumentation and control design as well as civil design and is \$25,000.

#### Surge Tank Mixing

The surge tank can be mixed by pumping air into the surge tank to provide a turbulent mixing pattern within the tank preventing any solids from settling out. We will design a bridge to span the surge tank and air drop pipes with coarse bubble diffusers will be installed on both sides of the walkway. This will mix most of the tank, but there will be a dead zone beneath the walkway. There is no available spare air at the facility so new blowers and controls will need to be installed to provide the air for mixing.

If the mechanical bar screen is designed into the facility, mechanical mixers could be designed instead of a diffused air mixing system. This would eliminate the blowers as well as the diffusers offsetting some of the cost of the cost of the mechanical bar screen.

This fee for designing a mixing system in the surge tank is \$7,500

#### Site Work

The site work task in this project pulls all the pieces together. The site piping will tie the new surge tank into each of the existing treatment plants and includes the demolition of the existing piping and splitter structure. This task also includes the site grading, access roads, and stormwater design. The design fee for this task is \$10,000.

#### Permitting

This project will require permitting through the FDEP and Seminole County site plan review. Permitting fees are not included in the total fee and shall be paid separately. The cost for this task is \$5,000.



This design will be completed without a survey. The survey from the previous reclaimed expansion will be used as a base for the design plans. If a new survey is required by Seminole County for site plan review, this cost will be additional to this contract.

The preliminary construction costs have been estimated to be approximately \$1,500,000 for this project, and approximately \$1,600,000 with the addition of a mechanical bar screen. The design can be completed within six months of authorization to proceed and construction will take approximately an additional year making the total project time 18 months.

There are no construction services included in this contract. The total design fee for this contract is \$74,500. If a mechanical bar screen is desired to be a part of the project, the design fee would increase to \$84,500.

#### **Supplementary Services**

If authorized in writing by the Owner prior to the rendering of such services, the engineer will furnish or obtain under subcontracts, supplementary services which will be paid for by the Owner.

Additional services due to significant changes in the scope of the project or its design including, but not limited to, changes in size, complexity, character of construction or due to time delays in initiating or completion of the work as described herein.

Preparing to serve as an expert witness for the Owner in any protest, litigation, or other proceeding involving the project.

Additional engineering services required by revisions to regulations (after the date of this contract) as applicable to the Florida Department of Environmental Protection, the St. Johns River Water Management District, or other regulatory agency requirements.

#### **Payment**

Compensation paid Engineer for services described herein and rendered by principals and employees assigned to the project are computed by multiplying Standard Classification Billing Rates for all classifications of employees directly engaged on the project, times the number of hours worked on the project.

The lump sum engineering fees for the services, described herein are estimated to be \$74,500.00.

Out-of-pocket expenses and subconsultant costs will be specifically identified in periodic invoicing, and include such items as transportation and subsistence of principals and employees when traveling in connection with the project, toll telephone calls, photocopies, blueprints and plots, etc. Invoices will be submitted periodically, indicating the hours expended during that billing cycle.

Expenses for items not specifically valued herein are to be reimbursed to the engineer at the actual cost thereof. Said expenses shall include transportation and subsistence of principals and employees, when traveling in connection with the Project, toll telephone calls, and similar project related items.



Charges for the services rendered by principals and employees as witnesses in any litigation, hearing or proceeding in accordance with this Contract will be computed at a rate of \$600 per day or any portion thereof.

If this Contract is terminated during prosecution of the services prior to completion of the services, payments to be made on account of that and all prior work under this Contract shall be due and payable, and shall constitute total payment for services rendered. In addition, upon termination, engineer shall be paid for any Supplementary Services authorized and rendered.

If you are in agreement with the terms and fees proposed, please sign on the space provided below and return one (1) copy to us.

If you have any questions please call me.

Sincerely,  
CPH Engineers, Inc.

Stephen N. Romano, P.E.  
Vice President/Associate

ACCEPTED BY:  
SANLANDO UTILITIES CORP.

\_\_\_\_\_

(Base Fee \$74,500)

Date: \_\_\_\_\_

OR

Raymond D. ... Proj. Mgr.  
(Base Fee + Mech Bar Screen Design \$84,500)

Date: 7/8/13

## **2. WEKIVA HUNT CLUB WWTP ELECTRICAL IMPROVEMENTS**

### a) Wekiva Hunt Club WWTP Engineering Design of Electrical Improvements, CP# 2014043:

1. The project's description, justification and additional information is found in the attached "Wekiva WWTP Eng Electrical Improvements".
2. No existing assets will be retired as part of this engineering design effort or while performing construction services.
3. The executed contract for the design of the project by Bailey Engineering Consultants, executed in February 2014, is attached as "Wekiva WWTF Elect Design Proposal" in the amount of \$28,000.
4. The executed contract for the provision of construction services by Bailey Engineering Consultants is attached as "Wekiva WWTP Bailey CEI Proposal" in the amount of \$14,000. Construction services will commence later in 2014 once the construction contract has been awarded and executed.
5. The projected completion date of this effort is December 31, 2014 coinciding with the completion of construction of the proposed facilities.

### b) Wekiva Hunt Club WWTP Electrical Improvements (CP# to be assigned in August 2014)

1. The project's description and justification are referenced in the attached "Wekiva WWTP Eng Electrical Improvements".
2. Electrical equipment assets that were placed into service in 1973 will be retired at the completion of construction.
3. The project design was completed and the bidding process is under way with bid opening scheduled for August 1, 2014 by qualified electrical contractors. Subsequently, a qualified bidder will be selected, and once a contract is executed, the construction activities will commence.
4. The projected completion date of the construction activities is December 31, 2014.



ADD-CHANGE FORM

New Project or Budget Change? New Project Assigned Project #: 2014043

Requested by: Bryan K. Gongre Date: 2/17/2014  
*Project Manager / Area Manager*

Project Name: Eng - Wekiva WWTF Elect.

Company: 255 Sanlando Utilities Corp

Business Unit: 255101 Sanlando Utilities Corp S

Project Owner: Bryan K. Gongre

Project Manager: Bryan K. Gongre

Start Date: 4/1/2014 Q2 2014

Estimated End Date: 12/31/2014 Q4 2014

BU Type: Sewer

Budget Owner / RVP: Rick Durham 02

Region: Southeast 07

State: FL

Project Type: Maintenance

Will project replace/retire any assets: Yes

Previously Requested:

This Request:	\$42,000
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Still to be Requested:

Total Project Budget:	\$42,000
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Object Account(s) to which project will be closed: 1380 Pumping Equipment Pump Pit  
select from dropdown list  
select from dropdown list  
select from dropdown list  
select from dropdown list  
[Go to Reference List](#)

Description:

The Wekiva Wastewater Treatment Plant is a 2.900 MGD extended aeration facility that treats all wastewater flows generated by more than 10,250 customers. The plant is comprised of three 1.0 MGD circular treatment trains, filtration, disinfection, ground storage, high service pumping, instrumentation, emergency generators, sludge dewatering facilities and chemical feed equipment. The plant's Operations Building and Motor Control Center (MCC) were originally constructed in 1973 when the first of three three treatment trains was placed in service.

The existing MCC provides for the operation of three centrifugal blowers, three clarifier drives, exhaust fans and ancillary equipment. This project is to provide engineering design, bidding and CEI services to replace the electrical controls and components within the MCC panel that have outlived their service life. The new design will include the means to connect, monitor and control the PLC controllers located at the Wekiva Hunt Club WWTP, Reclaimed Water Plant (RWTP), and Water Treatment Plant (WTP) through the use of a VTScada HMI SCADA package.



## JUSTIFICATION / ALTERNATIVES

### Justification and Benefits:

The Wekiva Hunt Club WWTP Motor Control Center and associated components have been in continuous service since 1973. Replacement parts and materials are unavailable due to the age of the components. In addition, the internal wiring is in poor shape after many years of use. The panel components are tied to a bus bar that can only be accessed from a rear wall located directly behind the control panels that must be dismantled in order to make repairs or perform maintenance tasks. The rear wall behind the electrical bus is common with the process blower room south wall where temperatures are typically elevated well above 100 degrees F taxing the MCC components and wiring.

The new design will:

1. Allow for the installation of the new MCC in a cooler location.
2. Conform with current electrical code.
3. Provide safe access for service and maintenance tasks.
4. Improve reliability.
5. Provide real time monitoring of plant performance.
6. Support plant upgrades or changes triggered by FDEP or EPA-mandated regulatory requirements.

By routing all of the information generated by various PLCs to a central location in the Plant Operations building, the equipment will be centrally located and able to monitor plant operations continuously. This will improve the facility's performance by the use of data compiled and stored by the VTScada HMI package. The VTScada will communicate with RTUs in the field such as at many of the 55 lift stations and with the Des Pinar and Knollwood WTP's, which are key Sanlando water production and storage facilities.

### Alternatives Considered:

The addition of the VTScada HMI components could be postponed and then included under a separate future project. However, by coupling this current MCC replacement project and the approved Wekiva EQ tank and Headworks project (that will include replacing the facility's existing PLC at the Reuse Water Plant Control Building, the inclusion of VTScada under this project would be integral to the monitoring of plant performance and controlling influent flow.

**CAPITAL PROJECT REVIEW CHECKLIST**

		Yes	No
Does project meet the definition of a Capital Project? (> \$50k)		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does project meet the definition of a Capital Project? (Complete > 30 days)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has project been thoroughly investigated?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has project been added to Cap Plan Budget Template for Regional Consideration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
What is the proposed Initial Project Budget?	<u>\$42,000</u>		
What quarter does the project need to start?	<u>2Q 2014</u>		
Will any CIAC be collected? How much?	<u>                    </u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any engineering evaluations been performed?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, is the engineering a separate project?		<input type="checkbox"/>	<input type="checkbox"/>
Have all alternatives been investigated? If so, what are they? Comment below		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the proposed project tied to a rate case? When?	<u>3Q 2014</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have three bids been received? If not, why? List and provide amounts below		<input type="checkbox"/>	<input checked="" type="checkbox"/>
What are the repercussions if project is not approved? Comment below			
Are there any permits required to start the project?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the Cap Ex add/change form complete?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Has Cap Ex add/change form been submitted to project owner/manager to discuss with the CPRT?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other issue(s)? (use comments section below)		<input type="checkbox"/>	<input type="checkbox"/>

Bid	Company	Amount	Selected
1	Bailey Engineering Consultants	\$42,000	Yes
2			
3			

**Estimated Revenue Impact per Customer:**

Number of Customers Impacted: 10,558

\$0.05

per customer per month

15% estimate covers return, depreciation and taxes
**Comments:**

This project is below \$75,000 thus not required to have three bids. The selected engineering consultant has been used frequently in the past for various electrical improvement projects including the design of the Wekiva Hunt Club WTP electrical improvements project, all with very good results and at a reasonable price.







February 21, 2014

Bryan K. Gongre  
Regional Manager  
Sanlando Utilities Corporation  
200 Weathersfield Avenue  
Altamonte Springs, FL 32714

Re: Wekiva Wastewater Treatment Facility (WWTF) Electrical Upgrades  
Sanlando Utilities Corporation, Inc., Florida

Dear Mr. Gongre:

We are pleased to submit our proposal for engineering design services for the above project. The following provides an overview of the engineering services Bailey Engineering Consultants, Inc. (BEC) intends to furnish to Sanlando Utilities Corporation (SUC) and a lump sum fee amount to provide these services. Our fee shall include completed drawings for the work, covering all phases of our design in an AutoCAD 2011 format, project specifications and opinion of probable cost for the work performed under this agreement. An overview of the work to be performed for the electrical and instrumentation design is as outlined below:

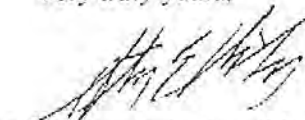
1. Electrical and I&C engineering services associated with the electrical upgrades for the existing WWTF. Work to include:
  - a. MCC replacement.
  - b. Reclaim Water PLC tie-in to new VT SCADA server.
  - c. WTP PLC tie in to VT SCADA server.
2. BEC shall visit site and observe existing conditions.
3. BEC shall assist during the permitting process and answer questions resulting from building department review.
4. BEC shall provide interpretation of construction contract documents and provide written responses to questions from bidders requiring clarification during the bidding period. Prepare and issue addenda to the construction contract documents when required.

- 5. BEC shall provide bidding services including pre bid meeting and preparation of front end documents typical of previous projects developed for SUC.
- 6. Deliverables:
  - a. 60% Drawings and specifications – One (1) hard copy and one (1) set of PDF files.
  - b. 90% Drawings, specifications and opinion of costs – One (1) hard copy and one (1) set of PDF files.
  - c. 100% Drawings, specifications and opinion of costs – One (1) hard copy and one (1) set of PDF files.
  - d. All reproduction shall be completed by others.

SUPPLEMENTAL SERVICES - Any work requested by the Owner that is not included in one of the items listed in any other phase will be classified as supplemental services. Items listed above will be performed on a lump sum basis. Travel to and from the site and other direct costs are included in the overhead rate and will not be billed as a separate line item. Our fee for this work shall be as follows:

When Plans are 60% Complete	\$ 14,400.00
When Plans are 90% Complete	\$ 7,200.00
When Plans are 100% Complete	\$ 2,400.00
Bidding Services	\$ <u>4,000.00</u>
Total:	\$ 28,000.00

Very truly yours,



Stephen E. Bailey, P.E.

ACCEPTED Bryan K. Gongre, Des. Mgr. DATE 3/6/2014



February 21, 2014

Bryan K. Gongre  
Regional Manager  
Sanlando Utilities Corporation, Inc., Florida  
200 Weathersfield Avenue  
Altamonte Springs, FL 32714

Re: Wekiva Wastewater Treatment Facility (WWTF) Electrical Upgrades  
Sanlando Utilities Corporation

Dear Mr. Gongre:

We are pleased to submit our proposal for general services during construction for the above project. Our services shall be for the electrical engineering services work shown on the contract documents prepared by others and shall consist of the following:

Task 1 - Shop Drawing Review

Review and approve (or take other appropriate action in respect of) Shop Drawings and samples, the results of tests and inspections and other data which each Contractor is required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents (but such review and approval or other action shall not exceed to means, methods, sequences, techniques or procedures of construction or to safety precautions and programs incident thereto); and receive and review (for general content as required by the Specifications) maintenance and operating schedules and instruction, guarantees, bonds and certificates of inspection which are to be assembled by Contractor(s) in accordance with the Contract Documents.

Task 2 - Issue Clarifications

Issue all instructions of OWNER to Contractor(s); issue necessary interpretations and clarifications of the Contract Documents; have authority, as OWNER's representative to require special inspection or testing of the work; act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder, and make decisions on all claims of OWNER and Contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. The ENGINEER shall render all interpretations or decisions in good faith and in accordance with the requirements of the Contract Documents.

5300 W. ATLANTIC AVE., SUITE 408 • DELRAY BEACH, FL • 33484  
PHONE: 561-819-0488 • FAX: 561-819-5557

Task 3 – Site Visits

Make visits to the site at periods appropriate to the various stages of construction to observe, as an experienced and qualified professional, the progress and quality of the executed work of Contractor(s) and to determine in general if such work is proceeding in accordance with the Contract Documents. Prepare trip reports to document observations made during these inspections. ENGINEER shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s). ENGINEER's efforts will be directed toward providing a greater degree of confidence for OWNER that the completed work of Contractor(s) will conform to the Contract Drawings, but ENGINEER shall not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Drawings. During such visits and on the basis of on-site observations, ENGINEER shall keep OWNER informed of the progress of the work, shall endeavor to guard OWNER against defects and deficiencies in such work and may disapprove or reject work failing to conform to the Contract Documents.

The above work will be performed on a lump sum basis of \$14,000.00. A spreadsheet is attached showing our hourly breakdown of each task. Our fee will be billed at monthly intervals. Travel to and from the site and other direct costs are included in the overhead rate and will not be billed as a separate line item.

Very truly yours,



Stephen E. Bailey, P.E.

ACCEPTED By: [Signature], Reg. Mgr. DATE 3/6/2014

**Wekiwa Wastewater Treatment Facility  
Sanlando Utilities Corporation  
General Services**

**TASK 1 - SHOP DRAWING REVIEW**

Task	Man-Hours	Billing	
		Rate/Hour	Cost
Principal	16	\$ 160.00	\$ 2,560.00
Engineer	12	\$ 130.00	\$ 1,560.00
Subtotal			\$ 4,120.00

**TASK 2 - ISSUE CLARIFICATIONS**

Task	Man-Hours	Billing	
		Rate/Hour	Cost
Principal	16	\$ 160.00	\$ 2,560.00
Engineer	4	\$ 130.00	\$ 520.00
Field Supervisor	8	\$ 95.00	\$ 760.00
Subtotal			\$ 3,840.00

**TASK 3 -SITE VISITS AND MEETINGS**

Task	Man-Hours	Billing	
		Rate/Hour	Cost
Principal in Company	24	\$ 160.00	\$ 3,840.00
Field Supervisor	24	\$ 92.00	\$ 2,208.00
Subtotal			\$ 6,048.00

Task 1 - Shop Drawing Review	\$ 4,120.00
Task 2 - Issue Clarifications	\$ 3,840.00
Task 3 - Site Visits	\$ 6,048.00
Total	\$ 14,008.00
<b>Say</b>	<b>\$14,000.00</b>

**3. WEKIVA HUNT CLUB WWTP COLLECTION SYSTEM IMPROVEMENTS,  
PHASE 1, CP# 2014053**

1. The project's description, justification and bid tabulation are found in the attached "Sanlando Coll System Def Ph 1".
2. A schedule identifying the deficiencies found in the Sanlando collection system following a video inspection of select areas is attached as "Sanlando I&I Def Corrections GSM & MHs".
3. Some existing assets will be retired as part of this project, primarily those segments of pipe materials that are removed and replaced. The majority of the project scope involves making improvements to existing facilities in situ.
4. The executed contract for the CIPP components of the project, executed in May 2014 with Insituform Technologies LLC, is attached as "Sanlando Insituform CIPP Work Ph 1" in the amount of \$530,561. This work will be under way in July 2014 in coordination with the completion of some pipe improvements executed by Traverse Group under separate contract.
5. The estimated cost of various manhole improvements and gravity sewer main replacements, submitted by Traverse Group, Inc., is attached as "Sanlando Coll Syst Ph 1 Traverse Estimate" in the amount of \$417,275, with a Change Order increasing this amount by \$40,975. This work will commence no later than July 2014.
6. The projected completion date of this project is October 31, 2014.



ADD-CHANGE FORM

New Project or Budget Change? New Project Assigned Project #: 2014053

Requested by: Bryan K. Gongre Date: 4/1/2014
Project Manager / Area Manager

Project Name: Correct I&I Def. Sanlando PH 1

Company: 255 Sanlando Utilities Corp

Business Unit: 255101 Sanlando Utilities Corp S

Project Owner: Bryan K. Gongre

Project Manager: Bryan K. Gongre

Start Date: 4/14/2014 Q2 2014

Estimated End Date: 9/30/2014 Q3 2014

BU Type: Sewer
Budget Owner / RVP: Rick Durham 02
Region: Southeast 07
State: FL

Project Type: Cost Reduction

Will project replace/retire any assets: Yes

Previously Requested:

This Request: \$915,696

Still to be Requested:

Total Project Budget: \$915,696

Object Account(s) to which project will be closed: 1350 Sewer Gravity Main/Manholes
select from dropdown list
select from dropdown list
select from dropdown list
select from dropdown list
Go to Reference List

Description:

During the third quarter of 2013, under CP# 2013093, Sanlando Utilities Corporation contracted with American In Line to clean and video inspect approximately 49,900 LF of 8" gravity sewer main within the Sanlando collection system. The videos and reports were reviewed resulting in the identification of 14,580 LF of 8" VCP pipe with multiple cracks, fractures at joints, joint separation, infiltration, infiltration staining, root intrusion, bellies holding greater than 3" of water up to and including complete pipe collapse. Approximately 12 manhole structures showed evidence of infiltration at inverts and seams as well as signs of infiltration staining. This project will address these issues by installing full segment CIPP liners within 14,360 LF of 8" VCP, installation of 220 LF of short liners, reinstatement and grouting of 109 each 6" laterals, rehabilitation of 12 manholes using cementitious materials, open excavation and replacement of approximately 205 LF of 8" VCP at six (6 each) locations between manhole segments to include Right-of-Way permitting, MOT, dewatering, bypass operations and restoration of curb, pavement and driveways.





## JUSTIFICATION / ALTERNATIVES

### Justification and Benefits:

The Sanlando Utilities Corp. service area provides sanitary sewer service to approximately 10,250 connections through a network of approximately 490,000 LF of gravity collection mains. A vast majority of the gravity collection system was constructed in the 1970's and consists of a combination of vitrified clay pipe (VCP) and PVC. Until just last year the WW flows were treated at the Des Pinar and Wekiva WWTFs. As a result of nitrogen discharge limitations in the operating permit, the Des Pinar WWTF average daily flows of approximately 0.250MGD were diverted to the Wekiva facility in 2013. The Wekiva WWTF is rated at 2.9MGD and prior to the diversion of the Des Pinar flow typically experienced an average daily flow of 1.8MGD. Therefore, with the addition of the Des Pinar flow the utility expected the Wekiva flows to rise to between 2.0 to 2.1MGD.

However, as a result of wet weather conditions in 2013, the Wekiva facility treated flows in excess of 2.900MGD over an extended period of time. This condition led to the investigation of the collection system's lift stations and associated run times to determine where possible inflow/infiltration may exist. Several lift stations were determined to have excessive run times leading to the video inspection of the gravity collection system within those areas that the lift stations support. After reviewing the data of the video survey, the VCP pipe segments and several associated manholes show obvious signs of groundwater infiltration. In order to reduce the infiltration of groundwater into the collection system these deficiencies must be repaired through the application of a combination of technologies including Cured-In-Place-Pipe (CIPP) lining and open cut excavation and replacement. Doing so will reduce operating expense in the form of electric and chemical cost, wear and tear on equipment, improve the operational aspects of the Wekiva WWTF and extend the service life of the collection system by restoring the integrity of the gravity main and manholes. The benefit in the reduction of operating expense is not calculable at this time as the quantity of infiltration is not readily measurable and is based upon seasonal groundwater tables that vary according to weather patterns.

### Alternatives Considered:

This is a pro forma project to the Sanlando rate case to be filed in June 2014. Recovery of this investment is timely not only from a rate making perspective but also due to the condition of the aging infrastructure and the need to address the many failures throughout the collection system thereby reducing O&M and extending the life of the assets. The longer these conditions exist the worse they will become eventually leading to collapse and complete failure. There are two components to this project. CIPP lining/root removal/manhole rehabilitation and excavate/repair activity. The lining and excavation were bid out separately. Four vendors bid the lining/rehab portion and three vendors bid the excavation/replacement work. This was necessary as most lining/rehab companies do not perform excavation services and those that do would skew the lining costs provided by the vendors that do not perform excavation services. The manhole segments were evaluated by degree of severity using a scale of high to low priority. A high priority was given those segments with visual signs of infiltration, multiple fractures, voids, etc. A lesser ranking of low was given to segments with multiple hair line cracks and no obvious signs of infiltration staining. To take advantage of economies of scale all segments that either ranked high, medium or low were included under this project (14,580 LF out of 49,900LF). The project cost could be reduced by removing 3,119LF of low priority work or approximately \$85,000.00. Also, although not yet evaluated is the possibility of a cost reduction by lining an entire segment as opposed to the cost to install a short liner. Short liner costs are significantly higher as compared to LF cost to line an entire segment. This will be fleshed out prior to going to contract with the selected vendor.





**Sanlando I & I Deficiency Corrections Phase 1**

**CIPP Lining/Manhole Rehab & Root Removal**

<b>Bidder</b>	<b>Bid</b>
Insituform	498,421.00
Layne Inliner	806,590.00
Vac Vision	528,700.00
American In Line	828,709.00

**Excavation/Replacement**

<b>Bidder</b>	<b>Bid</b>
Boykin	444,456.00
CFT	478,259.00
Traverse	417,275.00

**Total**                      **915,696.00**

**SECTION 00520**  
**AGREEMENT FORM**

**PART 1 GENERAL**

1.01 THIS AGREEMENT, made this 2nd day of May, 2014, by and between Sanlando Utilities Corporation, hereinafter called the Owner, and Insituform Technologies, LLC, and hereinafter called the Contractor.

1.02 The Owner and Contractor agree as follows:

A. Contract Documents

The Contract Documents include the Agreement, Contractor's Bid, Notice to Proceed, the General Conditions, the Supplementary Conditions, the Specifications, the Drawings, all Written Amendments, Change Orders, Work Change Directives, Field Orders, and OWNER's written interpretations and clarifications issued on or after the Effective Date of this Agreement. These form the Contract and all are as fully a part of the Contract as if attached to this Agreement or repeated herein.

B. Scope of Work

The CONTRACTOR shall perform all work required by the Contract Documents for the construction of the CIPP lining, manhole rehabilitation and root removal & treatment under the Project: Sanlando I&I Deficiency Corrections Phase 1.

C. Contract Time

The CONTRACTOR shall begin work within 10 days after the issuance of a written Notice to Proceed and shall substantially complete the work within \* calendar days from the date of the Notice to Proceed. The work shall be finally complete, ready for Final Payment within 30 calendar days from the actual date of substantial completion.

\* As mutually agreed by Contractor and Subcontractor  
Completion date September 30, 2014

**00520-1**

C:\Documents and Settings\pkgenjre\Desktop\Sanlando I&I Def Correct Agreement 042514 Rev 050214.docx

NAME OF PROJECT: Sanlando I & I Deficiency Corrections Phase 1

D. Liquidated Damages

OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in Paragraph C above, plus any extensions thereof allowed as approved by the OWNER. They also recognize the delays, expense and difficulties involved in proving in a legal arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$500.00 for each calendar day that expires after the time specified in Paragraph C for substantial completion until the work is substantially complete. It is agreed that if this Work is not Finally completed in accordance with the Project Scope, the CONTRACTOR shall pay the OWNER as liquidated damages for delay, and not as penalty, one-fourth (1/4) of the rate set forth above.

E. Contract Price

Unit Price Contract

The Owner will pay the CONTRACTOR in current funds for the performance of the work, subject to additions and deductions by Change Order and subject to the Measurement and Payment Provisions, and subject to actual constructed quantities; the Total Contract Price of Five hundred thirty thousand five hundred sixty one and 59/100's Dollars ( \$530,560.59 ). Payments will be made to the CONTRACTOR on the basis of the Schedule of Unit Prices included as a part of CONTRACTOR'S Bid, which shall be as fully a part of the Contract as if attached or repeated herein.

\* See attached Schedule "A" Pricing & Bid Quantities

F. Payments

The OWNER will make payments on a monthly basis for work performed as verified by OWNER.

G. Retainage

The value of each application for payment shall be equal to the total value of the Work performed to date, less an amount retained, and less payments previously made and amounts withheld. Retainage for this project is 10%, to be held by OWNER as collateral security to ensure completion of Work. The OWNER is not obligated to reduce retainage at any time during the Contract, but may choose to do so at its discretion once the Work is at least 75% complete.

00520-2

C:\Documents and Settings\hngngro\Desktop\Sanlando I&I Def Correct Agreement 042514 Rev 050214.docx

NAME OF PROJECT: Sanlando I & I Deficiency Corrections Phase 1

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

CONTRACTOR:

Insituform Technologies, LLC

Name of Firm



By (Signature)

(SEAL)

Diane Partridge, Contracting and Attesting Officer

Printed Name and Title

ATTEST:



By (Signature)

Joann Smith, Contracting and Attesting Officer

Printed Name and Title

OWNER:

Sanlando Utilities Corp.

Name of Owner



By (Signature)

(SEAL)

Bryan K. Gongre, Regional Mgr.

Printed Name and Title

ATTEST:



By (Signature)

Peggy Hanks, Admin. Asst.

Printed Name and Title

END OF SECTION

00520-3

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NAME OF PROJECT: Sanlando I & I Deficiency Corrections Phase 1

SANLANDO I&I DEFICIENCY CORRECTIONS PHASE 1

INSITUFORM TAKEOFF - BID PROPSOAL 5/1/14

Bid Item per Docs	Description	Unit of	Per Bid	Bid Price	Total	
		Measure	Quantity			
1	8" CIPP High Priority Lines	LF	16,502	\$ 25.80	\$ 425,741.28	
2	8" Lateral Reinstatement High Priority I	LF	127	\$ 305.00	\$ 38,735.00	
3	8" CIPP Medium Priority Lines	LF				
4	8" Lateral Reinstatement Medium Prior	LF				
5	8" CIPP Low Priority Lines	LF				
6	8" Lateral Reinstatement Low Priority I	LF				
7	8" CIPP Short Liners	LF	134	\$ 320.00	\$ 42,880.00	
8	Manhole rehabilitation	EA	11	\$ 1,590.00	\$ 17,490.00	
9	8" Root removal and Application	LF	2,721	\$ 2.10	\$ 5,714.31	
					<b>\$ 530,560.59</b>	Revised Total C



TRAVERSE GROUP, INC.

PO BOX 121754  
CLERMONT, FL 34712

# Estimate

Date	Estimate #
2/28/2014	2014 UI 8

Name / Address
SANLANDO UTILITIES 200 WEATHERSFIELD AVENUE ALTAMONTE SPRINGS, FL 32714

Project
SANLANDO SANITARY REPA

Description	Qty	Units	Rate	Total
<b>SANLANDO SANITARY REPAIR</b>				
406-411 \$58,650.00				
303-306 \$79,975.13				
108 \$42,000.00				
114-118 \$56,950.00				
106-100 \$86,400.00				
525-550 \$93,300.00				
<b>406-411</b>				
Mobilization	1	LS	7,500.00	7,500.00
MOT	1	LS	5,500.00	5,500.00
Dewater	1	LS	4,500.00	4,500.00
Excavate and Removal	1	LS	4,500.00	4,500.00
Sanitary Bypass	1	LS	3,500.00	3,500.00
Pipe Repair	26	LF	700.00	18,200.00
Sidewalk Removal and Replace	30	LF	95.00	2,850.00
Curb Removal and Replace	30	LF	85.00	2,550.00
Video	1	LS	2,000.00	2,000.00
Road Base Repair	1	LS	3,500.00	3,500.00
Asphalt Patch	1	LS	2,000.00	2,000.00
Final Dress and Sod	1	LS	750.00	750.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
<b>SUBTOTAL \$58,650.00</b>				
<b>303-306</b>				
Mobilization	1	LS	6,500.00	6,500.00
MOT	1	LS	5,500.00	5,500.00
Dewater	1	LS	6,000.00	6,000.00
Excavate and Removal	1	LS	6,500.00	6,500.00
Sanitary Bypass	1	LS	3,500.13	3,500.13
Pipe Repair	75	LF	250.00	18,750.00
Lateral	1	EA	950.00	950.00
Sidewalk Removal and Replace	80	LF	75.00	6,000.00
Curb Removal and Replace	75	LF	65.00	4,875.00
Driveway Repair	2	EA	1,800.00	3,600.00
Estimate Accepted By: _____		<b>Total</b>		

TRAVERSE GROUP, INC.

PO BOX 121754  
CLERMONT, FL 34712

# Estimate

Date	Estimate #
2/28/2014	2014-018

Name / Address
SANLANDO UTILITIES 200 WEATHERSFIELD AVENUE ALTAMONTE SPRINGS, FL 32714

Project
SANLANDO SANITARY REPA

Description	Qty	Units	Rate	Total
Video	1	LS	2,000.00	2,000.00
Road Base Repair	1	LS	7,500.00	7,500.00
Asphalt Patch	1	LS	5,500.00	5,500.00
Final Dress and Sod	1	LS	1,500.00	1,500.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
SUBTOTAL \$79,975.13				
108				
Mobilization	1	LS	4,500.00	4,500.00
MOT	1	LS	4,500.00	4,500.00
Dewater	1	LS	4,500.00	4,500.00
Excavate and Removal	1	LS	4,500.00	4,500.00
Sanitary Bypass	1	LS	2,500.00	2,500.00
Lateral	1	EA	3,000.00	3,000.00
Sidewalk Removal and Replace	30	LF	95.00	2,850.00
Curb Removal and Replace	30	LF	85.00	2,550.00
Driveway Repair	1	LS	2,500.00	2,500.00
Video	1	LS	2,000.00	2,000.00
Road Base Repair	1	LS	2,000.00	2,000.00
Asphalt Patch	1	LS	2,000.00	2,000.00
Final Dress and Sod	1	LS	1,500.00	1,500.00
Landscape	1	LS	1,800.00	1,800.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
SUBTOTAL \$42,000.00				
114-118				
Mobilization	1	LS	6,500.00	6,500.00
MOT	1	LS	4,500.00	4,500.00
Dewater	1	LS	4,500.00	4,500.00
Excavate and Removal	1	LS	4,500.00	4,500.00
Sanitary Bypass	1	LS	3,500.00	3,500.00
Pipe Repair	30	LF	500.00	16,500.00
Lateral	1	EA	1,500.00	1,500.00
Driveway Repair	1	LS	2,500.00	2,500.00
Estimate Accepted By _____				<b>Total</b>

TRAVERSE GROUP, INC.

PO BOX 121754  
CLERMONT, FL 34712

# Estimate

Date	Estimate #
2/28/2014	2014 UI 8

<b>Name / Address</b>
SANLANDO UTILITIES 200 WEATHERSFIELD AVENUE ALTAMONTE SPRINGS, FL 32714

<b>Project</b>
SANLANDO SANITARY REPA...

Description	Qty	Units	Rate	Total
Curb Repair and Replace	40	LF	85.00	3,400.00
Video	1	LS	2,000.00	2,000.00
Road Base Repair	1	LS	3,500.00	3,500.00
Asphalt Patch	1	LS	2,000.00	2,000.00
Final Dress and Sod	1	LS	750.00	750.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
SUBTOTAL \$56,950.00				
100-106				
Mobilization	1	LS	7,500.00	7,500.00
MOT	1	LS	6,000.00	6,000.00
Dewater	1	LS	7,500.00	7,500.00
Excavate and Removal	1	LS	7,500.00	7,500.00
Sanitary Bypass	1	LS	5,500.00	5,500.00
Pipe Repair	60	LF	365.00	21,900.00
Lateral	4	EA	1,500.00	6,000.00
Driveway Repair	2	EA	1,800.00	3,600.00
Curb Removal and Replace	70	LF	55.00	3,850.00
Video	1	LS	2,000.00	2,000.00
Road Base Repair	1	LS	7,500.00	7,500.00
Asphalt Patch	1	LS	5,500.00	5,500.00
Final Dress and Sod	1	LS	750.00	750.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
SUBTOTAL \$86,400.00				
525-550				
Mobilization	1	LS	9,500.00	9,500.00
MOT	1	LS	7,500.00	7,500.00
Dewater	1	LS	8,500.00	8,500.00
Excavate and Removal	1	LS	15,000.00	15,000.00
Sanitary Bypass	1	LS	7,500.00	7,500.00
Pipe Repair	25	LF	850.00	21,250.00
Lateral	2	EA	1,500.00	3,000.00
Video	1	LS	2,000.00	2,000.00
Estimate Accepted By: _____	<b>Total</b>			

TRAVERSE GROUP, INC.

PO BOX 121754  
CLERMONT, FL 34712

# Estimate

Date	Estimate #
2/28/2014	2014 UI 8

Name / Address
SANLANDO UTILITIES 200 WEATHERSFIELD AVENUE ALTAMONTE SPRINGS, FL 32714

Project
SANLANDO SANITARY REPA...

Description	Qty	Units	Rate	Total
Road Base Repair	1	LS	9,500.00	9,500.00
Asphalt Patch	1	LS	7,500.00	7,500.00
Final Dress and Sod	1	LS	750.00	750.00
Pre Con Video	1	LS	800.00	800.00
Permitting	1	LS	500.00	500.00
SUBTOTAL \$93,300.00				
Estimate Accepted By <i>Bryan K. Gongre 6/9/14</i>			<b>Total</b>	\$417,275.13
<i>Bryan K. Gongre, Reg. mgr.</i>				

TRAVERSE GROUP, INC.  
CLERMONT, FL 34712

# Estimate

Date	Estimate #
6.12.2014	2014UI8CO1

Name / Address
SANLANDO UTILITIES 200 WEATHERSFIELD AVENUE ALTAMONTE SPRINGS, FL 32714

Project
CHANGE ORDER 1

Description	Qty	Units	Rate	Total
MANHOLE 306 SANLANDO SANITARY REPAIR				
MOT	1	LS	3,500.00	3,500.00
Dewatering	1	LS	7,500.00	7,500.00
Excavate & Removal	1	LS	4,500.00	4,500.00
Sanitary Bypass	1	LS	1,250.00	1,250.00
Pipe Repair	20	LF	250.00	5,000.00
Sidewalk Removal & Replacement	40	LF	75.00	3,000.00
Driveway Apron	1	LS	1,800.00	1,800.00
Curb Replacement	35	LF	75.00	2,625.00
Road Base Repair	24	LF	75.00	1,800.00
Asphalt Patch	1	LS	5,000.00	5,000.00
Final Dress & Sod	1	LS	1,500.00	1,500.00
Testing	1	LS	2,000.00	2,000.00
Masonary Repairs	1	LS	1,500.00	1,500.00
<b>Accepted by: <i>Bryant</i> 6/12/14</b>			<b>Total</b>	<b>\$40,975.00</b>

*Bryant K. George, Proj. Mgr.*