Agenda Item #3K-3

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date: June 3, 2014 | **Consent [X]** | **Regular [ ]** | **Public Hearing [ ]**

Department: Water Utilities Department

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Work Authorization No. 23 with Globaltech, Inc. for the Southern Region Water Reclamation Facility (SRWRF) Digester Gas Improvements in the amount of $235,665.40.

Summary: On January 24, 2012, the Palm Beach County Board of County Commissioners (BCC) approved the contract for Water, Wastewater, and Reclaimed Water Improvements Design/Build Services (R2012-0159) with Globaltech, Inc. Work Authorization No. 23 will authorize the installation of a digester gas removal system and process control improvements to the waste gas flare at the SRWRF. This Work Authorization is necessary to reduce biogas engine maintenance by removing gas impurities and to optimize gas flow to maximize renewable energy generation. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance is 15% overall. The contract with Globaltech, Inc. provides for SBE participation of 75% overall. This Work Authorization includes 96.28% overall SBE participation. The cumulative SBE participation, including this Work Authorization is 90.72% overall. Globaltech, Inc. is a Palm Beach County company. This project is included in the FY14-15 Capital Improvement plan adopted by the Board of County Commissioners. (WUD Project No. 14-051) District 5 (JM)

Background and Justification: Work Authorization No. 23 provides for Design-Build services to furnish and install equipment to remove siloxanes from the digester gas at the SRWRF. Siloxanes are non-combustible gas impurities which reduce the engine lifespan and increase the need for engine oil changes. These improvements will maximize engine life while reducing engine maintenance. Increased control of the digester waste gas flare is necessary to improve the flow split when operating one generator and to meter the flow to the waste gas flare. On January 24, 2012, the Palm Beach County Board of County Commissioners (BCC) approved a contract with Globaltech, Inc. for Water, Wastewater, and Reclaimed Water Improvements Design/Build Services (R2012-0159). Globaltech, Inc. will provide builders risk insurance prior to commencement of construction.

Attachments:

1. Location Map
2. Two (2) Original Work Authorization No. 23

Recommended By: _____ 5/27/14
Department Director **Date**

Approved By: _____ 5/30/14
Assistant County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	$235,665.	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match County	0	0	0	0	0
NET FISCAL IMPACT	$235,665.	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0

Budget Account No.: **Fund** 4011 **Dept** 721 **Unit** W010 **Object** 6545

Is Item Included in Current Budget? Yes X No ___

Reporting Category **N/A**

B. Recommended Sources of Funds/Summary of Fiscal Impact:

One (1) time capital expenditure from user fees with balance brought forward.

C. Department Fiscal Review: Delma M West

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

[signature] 5/19/2014
OFMB

[signature] 5/29/14
Contract Development and Control
5-29-14

B. Legal Sufficiency:

[signature] for Jim Mize 5/30/14
Assistant County Attorney

C. Other Department Review:

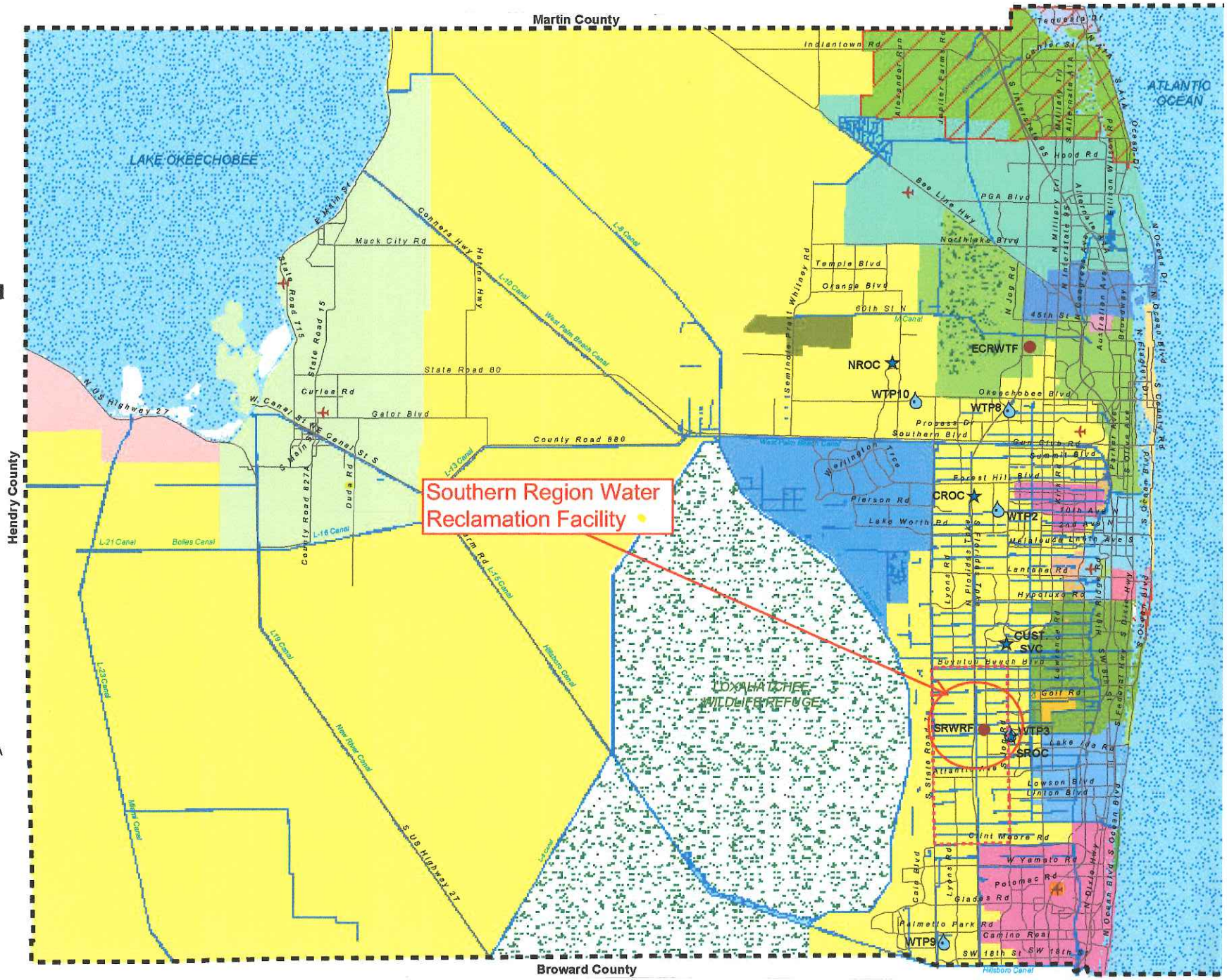
____
Department Director

This summary is not to be used as a basis for payment.

ATTACHMENT – I

Project Location Map

Palm Beach County Water Utilities Department Service Area (SA) and Major Facilities



Legend

- MANDATORY RECLAIMED SA
- Water Treatment Facility
- Administration
- Water Reclaimation Facility
- COUNTY LIMITS
- P.B.C.W.U.D. SA

NOT TO SCALE

WA–23 SRWRF Digester Gas Improvements WUD 14–051

WORK AUTHORIZATION NO. 23

Palm Beach County Water Utilities Department
Water, Wastewater & Reclaimed Water Improvements Design/Build Contract

Project No.: WUD 14-051
District: 5
Budget Line Item No.: 4011 - 721 – W010 - 6545
Project Title: SRWRF Digester Gas Improvements

THIS AUTHORIZATION # 23 to the Contract for Water, Wastewater & Reclaimed Water Improvements Design/Build Services dated January 24, 2012 (R2012-0159), by and between Palm Beach County and the Contractor identified herein, is for the Design/Build Services of this Work Authorization. The Contract provides for 75% SBE participation overall. This Work Authorization includes **96.28**% overall participation. The cumulative proposed SBE participation, including this authorization is **90.72**% overall. Additional authorizations will be utilized to meet or exceed the stated overall participation goal.

1. Contractor: Globaltech, Inc.

2. Address: 6001 Broken Sound Parkway NW, Suite 610, Boca Raton, FL 33487

3. Description of Services (Scope of Work) to be provided by the Contractor:

   See **ATTACHMENT - A**.

4. Services completed by the Contractor to date:

   See **ATTACHMENT - G**.

5. Contractor shall begin work promptly or deliver ordered materials within the following calendar days from the approval date of the Work Authorization:

   Substantial Completion **200** Calendar Days
   Final Construction Completion **230** Calendar Days
   Liquidated damages will apply as follows:
   $ 1,000 per day past substantial completion date.
   $ 500 per day past final completion date.
   (For Liquidated Damages Rates see **ATTACHMENT - B**)

6. The compensation to be paid to the Contractor for providing the requested services in accordance with the Guaranteed Maximum Price is $ **235,665.40**.

7. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated **January 24, 2012** remain in full force and effect.

WORK AUTHORIZATION NO. 23

Project No.: WUD 14-051

Project Title: SRWRF – Digester Gas Improvements

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms, conditions and obligations of the aforementioned Contract.

PALM BEACH COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA

Sharon R. Bock, Clerk & Comptroller,
Palm Beach County

ATTEST:

Signed:_____

Typed Name: _____
Deputy Clerk

Palm Beach County,
Board of County Commissioners

Signed:_____
Priscilla A. Taylor, Mayor

_____
Date

Approved as to Form and Legal Sufficiency

Signed: _____

Typed Name: _____
County Attorney

CONTRACTOR: Globaltech, Inc.

ATTEST:

_____
Witness

_____
(Signature)

David A. Schuman / Secretary
(Name and Title)

Bernard P. Gandy / President & CFO
(Name and Title)

(CORPORATE SEAL)

4-8-14
Date

LIST OF ATTACHMENTS

WORK AUTHORIZATION NO. 23

Palm Beach County Water Utilities Department
Water, Wastewater & Reclaimed Water Improvements Design/Build Contract

ATTACHMENT - A	Scope of Work & Compensation
ATTACHMENT - B	Rate for Liquidated Damages
ATTACHMENT - C	Public Construction Bond
ATTACHMENT - D	Form of Guarantee
ATTACHMENT - E	Work Authorization Schedule of Bid Items
ATTACHMENT - F	SBE Schedule 1 & Schedule 2
ATTACHMENT - G	Authorization Status Report - Summary & Status of Authorizations
ATTACHMENT - H	Authorization Status Report - Summary of SBE/Minority Business Tracking
ATTACHMENT - I	Location Map
ATTACHMENT - J	Design-Build Criteria Report
ATTACHMENT - K	Vendor Quotes

ATTACHMENT - A

WORK AUTHORIZATION NO. 23

Palm Beach County Water Utilities Department
Water, Wastewater & Reclaimed Water Improvements Design/Build Contract

SCOPE OF WORK & COMPENSATION

FOR

Southern Region Water Reclamation Facility – Digester Gas Improvements

INTRODUCTION

Palm Beach County (County) entered into an agreement entitled SRWRF – Digester Gas Improvements, Palm Beach County Water Utilities Department Project No. WUD 12-016 (CONTRACT) with Globaltech, Inc. (CONTRACTOR) to provide design/build services for various general activities on the Contract for Water, Wastewater & Reclaimed Water Improvements Design/Build Services, dated January 24, 2012 (R2012-0159). This Work Authorization will be performed under that CONTRACT.

This Work Authorization encompasses providing services related to:

Furnish and install digester gas siloxanne removal system and automation for digester gas flare for improved process control.

SCOPE OF SERVICES

Engineering Services:

1. Meet with plant staff to obtain existing drawings and review system and operational requirements
2. Prepare detailed construction schedule to include as a minimum; design services, procurement, site mobilization, detailed construction activities, scheduled shut downs and duration, equipment / material delivery times, testing, and startup and commissioning.
3. Prepare submittals (or confirmation of compliance with PBCWUD design standards), administer and track submittal process.
4. Prepare 60-percent design of digester gas improvements for PBCWUD review. Submittal shall include three (3) full size and three (3) half size drawings. Meet with PBCWUD to review comments.
5. Respond to 60-percent review comments in writing
6. Prepare 90-percent design of digester gas improvements for PBCWUD review. Submittal shall include three (3) full size and three (3) half sized drawings. Meet with PBCWUD to review comments.
7. Incorporate PBCWUD comments into FINAL, 100-percent design.
8. Submit O&M material for significant equipment.

Construction Services:

1. Establish construction staging area with plant staff prior to mobilization.
2. Mobilize materials, equipment and temporary facilities.
3. Obtain Building Permit.
4. Furnish and install Unison gas skid with media to remove siloxanne to less than 100 ppbv to include the following.
    a. Basis of design for pricing is Unison proposal PX-113-1383.1 dated 12/12/13 with 2 siloxanne removal vessels, see attached. List any modifications in Design-Build proposal.
    b. Concrete pad for gas skid contiguous with existing Unison gas compressor with expansion joint. Provide for accessibility to existing gas compressor skid for equipment operation and maintenance when placing new siloxanne removal skid.
    c. Gas sampling and testing:
        i. Sample and test digester gas to verify design parameters prior to fabrication.
        ii. Pre and post gas sampling and testing to verify siloxanne removal of installed system.
    d. Adjust speed of existing blowers for additional headloss through siloxanne removal system.
5. Furnish and install two new flow meters for digester gas flare. Install owner furnished motorized Auma valve operator on two existing valves for remote operation gas flare.
    a. Furnish and install instrumentation and electrical power conduits and wiring for motorized valves.
    b. Connect Instrumentation to PLC 5 in electrical building.
    c. Connect electrical power to existing 480 V distribution panel inside existing electrical building.
    d. Disconnects for motorized valves.
6. Restore site to existing condition.

Submittals:

1. Provide 3 full sized and 3 half sized plans at 60%, 90% and 100% design. Respond to County's 60% written design comments in writing.
2. Provide 8 sets of shop drawings.
3. Provide record drawings CAD and PDF formats and 3 full size sets.
4. Construction meetings will be held monthly.
5. Conform to the Water Utilities Minimum Design and Construction Standards, Engineering Design-Manual and security requirements.

Salvaged Materials

1. Scrap metal to be placed in the County's salvage dumpster.
2. Non-metal waste such as concrete, PVC, fiberglass etc to be hauled and legally disposed by Design/Builder.

ASSUMPTIONS

1. No permits will be required.
2. The project will be designed in accordance with the Palm Beach County Water Utilities Department Manual of Minimum Engineering Standards.
3. County will provide the following:
    a. Copies of all existing record drawings, submittals, equipment cut sheets, O&Ms, and programming/SCADA interface information as may be required to coordinate and complete this scope of services.
    b. Provide review comments within 10 working days.
    c. Access to project site to conduct site visits.
4. It is assumed that there are necessary power and control capabilities within the existing infrastructure to power and operate the new devices.
5. A 10-percent construction allowance is included in the project budget ($20,995.60).
6. Liquidated Damages may be assessed at a rate of $1000 per day up to Substantial Completion and $500 per day from Substantial Completion until Final Completion.

COMPENSATION

Compensation shall not exceed the Guaranteed Maximum Price of $235,665.40 in accordance with the unit prices established in the Contract for construction services dated January 24, 2012 as approved by the Board of County Commissioners.

SBE/M-WBE PARTICIPATION

As described the Contract (R2012-0159), SBE/M-WBE participation is included in **ATTACHMENT - F** under this Authorization. The attached Schedule 1 defines the SBE/M-WBE applied to this Authorization/Contract and Schedule 2 establishes the SBE/M-WBE contribution from each subcontractor (Letter of Intent to perform as an SBE/M-WBE).

ATTACHMENT - B

WORK AUTHORIZATION NO. 23

Palm Beach County Water Utilities Department
Water, Wastewater & Reclaimed Water Improvements Design/Build Contract

Rates for Liquidated Damages

Palm Beach County Water Utilities Department shall establish liquidated damages rates for each Work Authorization based on the dollar amount and time sensitivity of the project. The rates shall be as follows according to a criticality rating of 1 through 3 assigned to each Work Authorization by the Department as established below:

Moderately Important Project (Criticality 2): Liquidated Damages
$1,000 per day after Substantial Completion Date
$500 per day after Final Completion Date

ATTACHMENT - C

NIELSON, ROSENHAUS & ASSOCIATES

April 4, 2014

Globaltech, Inc.
6001 Broken Sound Parkway NW, Ste. 610
Boca Raton, FL 33487

RE: Palm Beach County Board County Commissioners, as Obligee
Project: SRWRF Digester Gas Improvements; WA-23 (14-051)
Bond No. K09024797

Dear Ladies and Gentlemen:

Please supply us with the following information for the above captioned final bond:

Executed Contract with Date: X

This letter is also giving Globaltech, Inc. as Principal and/ or Palm Beach County Board of County Commissioners., as Obligee, the authority to complete these bonds by dating the bonds with the contract date, execution and Power of Attorney dates. **The contract date MAY BE THE SAME date as the execution of the bond or PRIOR to the execution date of the bonds.**

We will forward this information onto your surety company upon our receipt. Please return as soon as possible.

Thank you for your cooperation.

Sincerely,

Brett Rosenhaus,
FL Resident Agent

SMART. UNCOMPROMISING. TIMELY. EFFECTIVE. NIELSON & COMPANY, INC. SURETY SOLUTIONS THAT MAKE A DIFFERENCE.

4000 South 57th Avenue
Suite 201
Lake Worth, FL 33463
P: 561.432.5550
F: 561.432.5442
www.nielsonbonds.com

FRONT PAGE OF
PUBLIC PAYMENT BOND
Florida Statute 255.05

Attached to and part of BOND NO. K09024797
In Compliance with Florida Statutes Chapter 255.05 (1) (a), Public Work. All other Bond page(s) are deemed subsequent to this page regardless of any number (s) that may be pre-printed thereon.

CONTRACTOR: Globaltech, Inc.
6001 Broken Sound Parkway NW, Ste. 610
Boca Raton, FL 33487
561-997-6433

SURETY: Westchester Fire Insurance Company
436 Walnut Street
Philadelphia, PA 19106
800-357-4473

AGENT: Nielson, Rosenhaus & Associates
4000 South 57th Avenue, Suite 201
Lake Worth, FL 33463
561-432-5550

OBLIGEE: Palm Beach County Board of County Commissioners
8100 Forest Hill Blvd
West Palm Beach, FL 33413
561-493-6000

PROJECT: SRWRF Digester Gas Improvements WA-23 (WUD 14-051)

THE PROVISIONS AND LIMITATIONS OF SECTION 255.05 FLORIDA STATUTES, INCLUDING BUT NOT LIMITED TO THE NOTICE AND TIME LIMITATIONS IN SECTIONS 255.05(2) AND 255.05(10), ARE INCORPORATED IN THIS BOND BY REFERENCE.

ATTACHMENT - C

PUBLIC CONSTRUCTION BOND

BOND NUMBER:	K09024797
BOND AMOUNT:	$235,665.40
CONTRACT AMOUNT:	$235,665.40
CONTRACTOR'S NAME:	Globaltech, Inc.
CONTRACTOR'S ADDRESS:	6001 Broken Sound Parkway NW Suite 610 Boca Raton, FL 33487
CONTRACTOR'S PHONE:	(561) 997-6433
SURETY COMPANY:	Westchester Fire Insurance Company
SURETY'S ADDRESS:	436 Walnut Street WA10F Philadelphia, PA 19106 (800) 357-4473
OWNER'S NAME:	Palm Beach County
OWNER'S ADDRESS:	8100 Forest Hill Boulevard West Palm Beach, FL 33413
OWNER'S PHONE:	(561) 493-6000
DESCRIPTION OF WORK:	Furnish and install digester gas siloxanne removal system and automation for digester gas flare for improved process control.
COUNTY'S PROJECT No:	WUD 14-051, WA-23
PROJECT LOCATION:	Southern Region Water Reclamation Facility (SRWRF) 12751 Hagen Ranch Road, Boynton Beach, FL 33437 PCN 00-42-43-27-05-064-0730
LEGAL DESCRIPTION:	Southern Region Water Reclamation Facility (SRWRF) Digester Gas Improvements WUD 14-051

PUBLIC CONSTRUCTION BOND

This Bond is issued in favor of the County conditioned on the full and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS: that Contractor and Surety, are held and firmly bound unto

Palm Beach County Board of County Commissioners
301 N. Olive Avenue
West Palm Beach, Florida 33401

as Obligee, herein called County, for the use and benefit of claimant as herein below defined, in the amount of

Dollars ($235,665.40)

(Two hundred thirty-five thousand six hundred sixty-five dollars and forty cents)

for the payment whereof Principal and Surety bind themselves, their heirs, personal representatives, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated _____, 20__, entered into a contract with the County for:

Project Name: SRWRF Digester Gas Improvements (WA-23)
Project No.: WUD 14-051
Project Description: Furnish and install digester gas siloxanne removal system and automation for digester gas flare for improved process control.
Project Location: Southern Region Water Reclamation Facility (SRWRF)
12751 Hagen Ranch Road, Boynton Beach, FL 33437
PCN 00-42-43-27-05-064-0730

in accordance with Design Criteria Drawings and Specifications prepared by:

Name of Design Firm: Globaltech, Inc.
Location of Firm: 6001 Broken Sound Parkway NW, Ste. 610, Boca Raton, FL 33487
Phone: (561) 997-6433
Fax: (561) 997-5811

which contract is by reference made a part hereof in its entirety, and is hereinafter referred to as the Contract.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _____, 20__, between Principal and County for the design and construction of SRWRF Digester Gas Improvements, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and

2. Promptly makes payments to all claimants, as defined in Section 255.05, Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and

3. Pays County all losses, damages (including liquidated damages), expenses, costs, and attorneys' fees, including appellate proceedings, that County sustains because of a default by Principal under the contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

5. Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond and Surety waives notice of such changes.

6. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of construction liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against the bond.

7. Principal and Surety expressly acknowledge that any and all provisions relating to consequential, delay and liquidated damages contained in the contract are expressly covered by and made a part of this Performance, Labor and Material Payment Bond. Principal and Surety acknowledge that any such provisions lie within their obligations and within the policy coverage's and limitations of this instrument.

8. Section 255.05, Florida Statutes, as amended, together with all notice and time provisions contained therein, is incorporated herein, by reference, in its entirety. Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes. This instrument regardless of its form, shall be construed and deemed a statutory bond issued in accordance with Section 255.05, Florida Statutes.

9. Any action brought under this instrument shall be brought in the state court of competent jurisdiction in Palm Beach County, Florida and not elsewhere.

Witness

Rebecca Koontz
Print name

Witness

Jackie Haynes
Print name

Globaltech, Inc.
Principal (Seal)

Print name

PRESIDENT
Title

Westchester Fire Insurance Company
Surety (Seal)

Print name

Brett Rosenhaus, Attorney in fact
Title

Power of Attorney

WESTCHESTER FIRE INSURANCE COMPANY

Know all men by these presents: That **WESTCHESTER FIRE INSURANCE COMPANY**, a corporation of the Commonwealth of Pennsylvania pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 11, 2006, to wit:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into the ordinary course of business (each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such persons written appointment as such attorney-in-fact .

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

Does hereby nominate, constitute and appoint Brett Rosenhaus, Charles D Nielson, Charles J Nielson, David R Hoover, Edward M Clark, Ian A Nipper, Joseph P Nielson, Katherine S Grimsley, Kevin R Wojtowicz, Laura D Mosholder, all of the City of MIAMI LAKES, Florida, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding Ten million dollars & zero cents ($10,000,000.00) and the execution of such writings in pursuance of these presents shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office,

IN WITNESS WHEREOF, the said Stephen M. Haney, Vice-President, has hereunto subscribed his name and affixed the Corporate seal of the said **WESTCHESTER FIRE INSURANCE COMPANY** this 3 day of December 2013.

WESTCHESTER FIRE INSURANCE COMPANY

Stephen M. Haney

Stephen M. Haney , Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA ss.

On this 3 day of December, AD. 2013 before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came Stephen M. Haney ,Vice-President of the **WESTCHESTER FIRE INSURANCE COMPANY** to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
KAREN E. BRANDT, Notary Public
City of Philadelphia, Phila. County
My Commission Expires September 28, 2014

Karen E. Brandt

Notary Public

I, the undersigned Assistant Secretary of the **WESTCHESTER FIRE INSURANCE COMPANY**, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a substantially true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this day of

William L. Kelly

William L. Kelly, Assistant Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER December 03, 2015.

ATTACHMENT - D

ATTACHMENT - D

FORM OF GUARANTEE

GUARANTEE FOR GLOBALTECH INC. (CONTRACTOR) AND WESTCHESTER FIRE INSURANCE COMPANY (SURETY)

We the undersigned hereby guarantee that the SRWRF Digester Gas Improvements **(WUD 14-051, WA-23)**, Palm Beach County, Florida, which we have constructed and bonded, has been done in accordance with the plans and specifications; that the work constructed will fulfill the requirements of the guaranties included in the Contract Documents. We agree to repair or replace any or all of our work, together with any work of others which may be damaged in so doing, that may prove to be defective in the workmanship or materials within a period of one year from the date of Substantial Completion of all of the above named work by the County of Palm Beach, State of Florida, without any expense whatsoever to said County of Palm Beach, ordinary wear and tear and unusual abuse or neglect excepted by the County. When correction work is started, it shall be carried through to completion.

In the event of our failure to acknowledge notice, and commence corrections of defective work within five (5) calendar days after being notified in writing by the Board of County Commissioners, Palm Beach County, Florida, we, collectively or separately, do hereby authorize Palm Beach County to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefore upon demand.

DATED: _____
(notice of completion filing date)

SEAL AND NOTARIAL ACKNOWLEDGMENT OF SURETY

Globaltech, Inc.

_____(Seal)
(Contractor)

By: _____ BERNARD P. GANDY
(Signature) (Printed Name)

Westchester Fire Insurance Company

_____(Seal)
(Surety)

By: _____ Brett Rosenhaus, Attorney in fact
(Signature) (Printed Name)

ATTACHMENT - E

WORK AUTHORIZATION COST SCHEDULE

Globaltech
A DESIGN - BUILD COMPANY

Takeoff Worksheet by Bid Item w/Tax & Markup

04/08/14

WUD 14-051 PBC Water Utilities Department
130410PBC SRWRF Digester Gas Impr.

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Tax (%	Markup*	Ext. Price
Job: 130410 PBC SRWRF Digester Gas Impr.								
Bid Item: 1	**General Conditions**							
1	Temporary Facilities	LOT	1.00	790.00				
L	Sanitary	Month	2.00	95.00	190.00	6.00	1.1500	231.61
L	Waste Hauling	LOT	1.00	600.00	600.00	6.00	1.1500	731.40
2	General Conditions	LOT	1.00	8,029.20				
L	Submittal Labor	HR	8.00	59.54	476.32		1.2992	618.83
L	O&M	HR	20.0	59.54	1,190.80		1.2992	1,547.09
L	Progress Meeting	HR	8.00	79.50	636.00		1.2992	826.29
L	Scheduling Labor	HR	4.00	59.54	238.16		1.2992	309.42
L	Construction PM	HR	40.0	59.54	2,381.60		1.2992	3,094.17
L	Startup Crew	CR-D	1.00	799.44	799.44		1.2992	1,038.63
L	Punch Out Crew	CR-D	1.00	799.44	799.44		1.2992	1,038.63
L	Office Admin	HR	8.00	33.66	269.28		1.2992	349.85
L	Safety	LOT	4.00	59.54	238.16		1.2992	309.42
L	Seed & Sod	LOT	1.00	1,000.00	1,000.00	6.00	1.1500	1,219.00
				Bid Item Totals:	**8,819.20**			**11,314.34**
Bid Item: 3	**Concrete**							
	Concrete Pad	LOT						
	Form & Materials	LOT	1.00	1,000.00	1,000.00	6.00	1.1500	1,219.00
	Cast In Place Concrete	LOT	6.00	175.00	1,050.00	6.00	1.1500	1,279.95
	Testing Services	LOT	2.00	350.00	700.00		1.1000	770.00
	3 Man Crew	CR-D	3.00	799.44	2,398.32		1.2992	3,115.90
	Construction PM	HR	8.00	59.54	476.32		1.2992	618.83

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Tax (%	Markup*	Ext. Price
				Bid Item Totals:	**5,624.64**			**7,003.68**
Bid Item:	**4 Misc Metals**							
	Pipe Support Systems	LOT	1.00	1,500.00	1,500.00	6.00	1.1500	1,828.50
	Misc Metals & Fasteners	LOT	1.00	500.00	500.00	6.00	1.1500	609.50
				Bid Item Totals:	**2,000.00**			**2,438.00**
Bid Item:	**11 Equipment**							
	Siloxane Removal System	LOT	1.00	79,575.00	79,575.00	6.00	1.1500	97,001.93
	Start-up and Commissioning	LOT	1.00	5,800.00	5,800.00		1.1000	6,380.00
	Gas Testing (2 gas sampling)	LOT	1.00	2,250.00	2,250.00		1.1000	2,475.00
	Construction PM	HR	10.0	59.54	595.40		1.2992	773.54
				Bid Item Totals:	**88,220.40**			**106,630.47**
Bid Item:	**13 I&C**							
	FCI-ST51 Gas Mass Flowmeter	Ea	2.00	3,315.00	6,630.00	6.00	1.1500	8,081.97
	3 Man Crew	CR-D	1.00	799.44	799.44		1.2992	1,038.63
	Construction PM	HR	4.00	59.54	238.16		1.2992	309.42
				Bid Item Totals:	**7,667.60**			**9,430.02**
Bid Item:	**15 Mechanical**							
	Utility Locates	DAY	1.00	1,800.00	1,800.00		1.1000	1,980.00
	SS Pipe, Tubing & Ftgs	LOT	1.00	2,000.00	2,000.00	6.00	1.1500	2,438.00
	Flange Kits & Misc Materials	LOT	1.00	900.00	900.00	6.00	1.1500	1,097.10
	SS Saddle	LOT	2.00	150.00	300.00	6.00	1.1500	365.70
	3 Man Crew	CR-D	7.00	799.44	5,596.08		1.2992	7,270.43
	Construction PM	HR	10.0	59.54	595.40		1.2992	773.54
				Bid Item Totals:	**11,191.48**			**13,924.77**
Bid Item:	**16 Electrical**							
	Electrical Sub	LOT	1.00	23,950.00	23,950.00		1.1000	26,345.00
2221	Trenching, Backfilling, and Compaction	LOT						

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Tax (%	Markup*	Ext. Price
	3 Man Crew	CR-D	6.00	799.44	4,796.64		1.2992	6,231.79
	Construction PM	HR	4.00	59.54	238.16		1.2992	309.42
				Bid Item Totals:	**28,984.80**			**32,886.21**
Bid Item:	**18 Rental Equipment**							
	Compactor	LOT	1.00	300.00	300.00	6.00	1.1500	365.70
	Backhoe w/ forks	LOT	1.00	1,200.00	1,200.00	6.00	1.1500	1,462.80
				Bid Item Totals:	**1,500.00**			**1,828.50**
Bid Item:	**25 Allowance**							
	Allowance	LOT	1.00	20,995.60	20,995.60		1.0000	20,995.60
				Bid Item Totals:	**20,995.60**			**20,995.60**
Bid Item:	**50 Engineering**							
	Engineering	LOT	1.00	8,166.67	8,166.67		3.0000	24,500.01
				Bid Item Totals:	**8,166.67**			**24,500.01**
Bid Item:	**60 Bonds & Certifications**							
	Bonds & Certifications	LOT	1.00	3,591.18	3,591.18		1.1500	4,129.86
	Builders Risk Insurance	LOT	1.00	507.77	507.77		1.1500	583.94
				Bid Item Totals:	**4,098.95**			**4,713.80**
				Grand Totals:	**187,269.34**			**235,665.40**

** Materials = 15%, Subcontractors = 10%, Labor at Burden = 29.92% (12% G&A x 16% Profit & Overhead)*

ATTACHMENT - F

SBE SCHEDULE 1 & 2

ATTACHMENT - F

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONTRACTORS

PROJECT NAME: SRWRF Digester Gas Improvements (WA-23) PROJECT No: 14-051

NAME OF PRIME BIDDER Globaltech, Inc. ADDRESS: 6001 Broken Sound Parkway NW, Suite 610
CONTACT PERSON: Bernard P. Gandy, President PHONE NO.: 561-997-6433 FAX NO.: 561-997-5811
BID OPENING DATE: N/A DEPARTMENT: N/A

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES

Name, Address and Telephone Number of Minority Contractor	(Check one or both Categories) Minority Business	Small Business	Dollar Amount Black	Hispanic	Women	Caucasian	Other (Please Specify)
Globaltech, Inc., (561) 997-6433 6001 Broken Sound Parkway NW, Suite 610, Boca Raton, FL 33487	☐	☑	$ -	$ -	$ -	$ 201,165.40	$ -
Powerline of South Florida, Inc 711 Commerce Way,Ste. 6 Jupiter, FL 33458	☐	☑	$ -	$ -	$ -	$ 23,950.00	$ -
Groundhound Detection Services 2930 NW Commerce Park Drive, Ste. 1 Boynton Beach, FL 33426	☐	☑	$ -	$ -	$ -	$ 1,800.00	$ -
	☐	☐	$ -	$ -	$ -	$ -	$ -
	☐	☐	$ -	$ -	$ -	$ -	$ -
PRIME CONTRACTOR TO COMPLETE:		TOTAL	$ -	$ -	$ -	$ 226,915.40	$ -

BID PRICE: $ 235,665.40 Total Value of SBE Participation: $ 226,915.40

NOTE:
1. The amount listed on this form for a Subcontractor must be supported by price or percentage included on Schedule 2 or a proposal from each Subcontractor listed in order to be counted toward goal attainment.
2. Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
3. M/WBE information is being collected for tracking purposes only.

ATTACHMENT - F

SCHEDULE 2

LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONTRACTOR

PROJECT NO. WUD 14-051 PROJECT NAME: SRWRF - Digester Gas Improvements WA-23

TO: Globaltech, Inc.
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise _____

Black ____ Hispanic ____ Women ____ Caucasian X Other (Please Specify) _____

Date of Palm Beach County Certification: November 24, 2012.

The undersigned is prepared to perform the following described work in connection with the above project **(Specify in detail, particular work items or parts thereof to be performed):**

Line Item/ Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Mechanical Construction	1	150,955.99	150,955.99
2	Engineering	1	24,500.01	24,500.01
3	Bonds & Insurance	1	4,713.80	4,713.80
4	Allowance	1	20,995.60	20,995.60

at the following price:
$201,165.40 (Two Hundred One Thousand One Hundred Sixty-Five Dollars and Forty Cents)
(Subcontractor's Quote)

And will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: $_____.

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

Globaltech, Inc.
(Print Name of SBE-M/WBE Subcontractor

By: _____
(Signature)

Bernard P. Gandy, President & CFO
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: April 7, 2014

ATTACHMENT - F

SCHEDULE 2

LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONTRACTOR

PROJECT NO. WUD 14-051 PROJECT NAME: ~~SRPF~~ SRWRF Digester Gas Improvements WA23

TO: Globaltech, Inc.
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise _____

Black ____ Hispanic ____ Women ____ Caucasian X Other (Please Specify) _____

Date of Palm Beach County Certification: August 6, 2011.

The undersigned is prepared to perform the following described work in connection with the above project **(Specify in detail, particular work items or parts thereof to be performed):**

Line Item/ Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Electrical Contracting	1	LS	$23,950.00

at the following price:
$23,950.00 (Twenty-Three Thousand Nine Hundred Fifty Dollars and No Cents)
(Subcontractor's Quote)

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: $_____.

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

Powerline of South Florida, Inc.
(Print Name of SBE-M/WBE Subcontractor

By: _____
(Signature)

Thomas Laessig, President
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: 4/2/14

ATTACHMENT - F

SCHEDULE 2

LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONTRACTOR

PROJECT NO. WUD 14-051 PROJECT NAME: SRPF Digester Gas Improvements WA23

TO: Globaltech, Inc.
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise _____

Black ____ Hispanic ____ Women ____ Caucasian X Other (Please Specify) _____

Date of Palm Beach County Certification: July 26,2011.

The undersigned is prepared to perform the following described work in connection with the above project **(Specify in detail, particular work items or parts thereof to be performed):**

Line Item/ Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Utility Location Services	1	Hourly	$1,800.00

at the following price:
$1,800.00 (One thousand eight hundred dollars and No Cents)
(Subcontractor's Quote)

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with *Palm Beach County.*

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: $_____.

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

Groundhound Detection Services, Inc.
(Print Name of SBE-M/WBE Subcontractor

By: _____
(Signature)

Sean Halsey / South-Florida Director
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: March 31, 2014

ATTACHMENT - G

AUTHORIZATION STATUS REPORT
April 7, 2014

SUMMARY AND STATUS OF AUTHORIZATIONS

Auth. No.	Description	Status	Project Total Amount	Date Approved	WUD No. Assigned	Globaltech Project No.
	CONSULTANT SERVICE AUTHORIZATIONS					
CSA-1	WTP 8 Filter Media Replacement and Re-Rating	Approved	$31,399.22	3/8/12	12-002	120291
CSA-2	Pump Station 5241 Improvements	Approved	$11,451.79	6/14/12	12-061	120302
CSA-3	WTP 2 Wellfield Backup Power Improvements	Approved	$49,975.00	7/9/12	12-005	120321
CSA-4	WTP 3 and SROC Security Upgrades	Approved	$24,786.20	8/22/12	10-028	120334
CSA-5	WTP 9 Permeate Flushing System Modifications	Cancelled	$0.00	-	-	120330
CSA-6	WTP 3 Membrane Cleaning System Modification	Approved	$32,528.22	9/28/12	12-004	120331
CSA-6.1	WTP 3 Membrane Cleaning System Modification - Supplement 1 / Project Cancelation	Approved	-$32,528.22	5/20/13	12-004	120331
CSA-7	SRPF Membrane Concentrate Bypass and PS 9S RPZ Installation	Cancelled	$0.00	-	12-021	120340
CSA-8	LRWTP PW-5 Pump Conversion	Pending				120347
CSA-9	SROC DIW Blending System	Cancelled	$0.00	-	-	120348
	Total CSAs		$117,612.21			
	WORK AUTHORIZATIONS					
WA-1	SW Boca Diversion PS Sound Attenuation	Approved	$16,814.95	7/5/12	12-067	120303
WA-2	WTP 8 Filters 4, 5 & 6 Media Replacement	Approved	$592,611.00	8/14/12	12-002	120309
WA-3	South Bay Repump Station Improvements	Approved	$290,022.00	9/11/12	12-030	120313
WA-3.1	South Bay Repump - BB Court Electrical	Approved	$22,486.92	12/12/12	12-030	120313
WA-3.2	South Bay Repump - Isolation Valve	Approved	$3,428.48	4/4/13	12-030	120313
WA-4	LRWTP MFP No. 3 VFD Replacement	Approved	$149,985.36	8/29/12	12-074	120332
WA-5	Online Water Quality Monitoring System	Approved	$399,844.00	9/11/12	10-072	120328
WA-5.1	Online Water Quality Monitoring System - Sup. 1	Approved	$73,165.54	6/5/13	10-072	120328
WA-6	Pump Station 5241 Improvements	Approved	$277,780.62	12/4/12	12-061	120336
WA-7	LRWTP PW-5 Pump Conversion	Pending			13-015	120338
WA-8	WTP 3 and SROC Security Upgrades	Approved	$63,603.58	11/14/12	13-011	120341
WA-9	LRWTP Well 1 Generator Pad	Pending			13-016	120345
WA-10	WTP 2 Wellfield Backup Power Improvements	Approved	$716,189.09	3/12/13	12-005	120343
WA-11	SRPF Membrane Concentrate Bypass	Approved	$406,149.75	6/18/13	13-036	120357
WA-12	WTP 3 Chemical Improvements	Pending			12-003	
WA-13	LRWTP Well Pump Repositioning	Approved	$30,496.69	2/21/13	11-112	120358
WA-14	WTP 3 Membrane Concentrate RPZ	Approved	$199,192.48	3/13/13	13-017	130362
WA-15	WTP 9 Membrane Concentrate RPZ's	Approved	$198,407.37	3/13/13	13-018	130364
WA-16	SW Boca Diversion Intake Modifications	Approved	$30,378.48	8/12/13	13-083	130370
WA-17	WTP 9 Permeate Flush System	Pending				130378
WA-18	WTP 8 - Filter Gallery Valve Replacement	Approved	$178,536.90	9/11/13	12-002	130385
WA-19	WRWWTF - Effluent Straiiner & Screen Bypass	Approved	$182,163.55	11/06/13	13-093	130389
WA-20	WTP 11 - Membrane Replacement for Train 3	Approved	$111,015.20	3/05/14	14-039	
WA-21	WTP 8 - Hypo. Bldg. Generator Connection	Approved	$53,591.07	3/13/14	14-023	
WA-22	WTP 8 - Generator Removal					
WA-23	SRWRF Digester Gas Improvements	Pending	$235,665.40		14-051	
	Total WAs		$4,231,528.43			
	Total CSAs + WAs		**$4,349,140.64**			

ATTACHMENT - H

AUTHORIZATION STATUS REPORT
WATER, WASTEWATER, AND RECLAIMED WATER IMPROVEMENTS DESIGN-BUILD SERVICES CONTRACT

SUMMARY of SBE/MWBE TRACKING

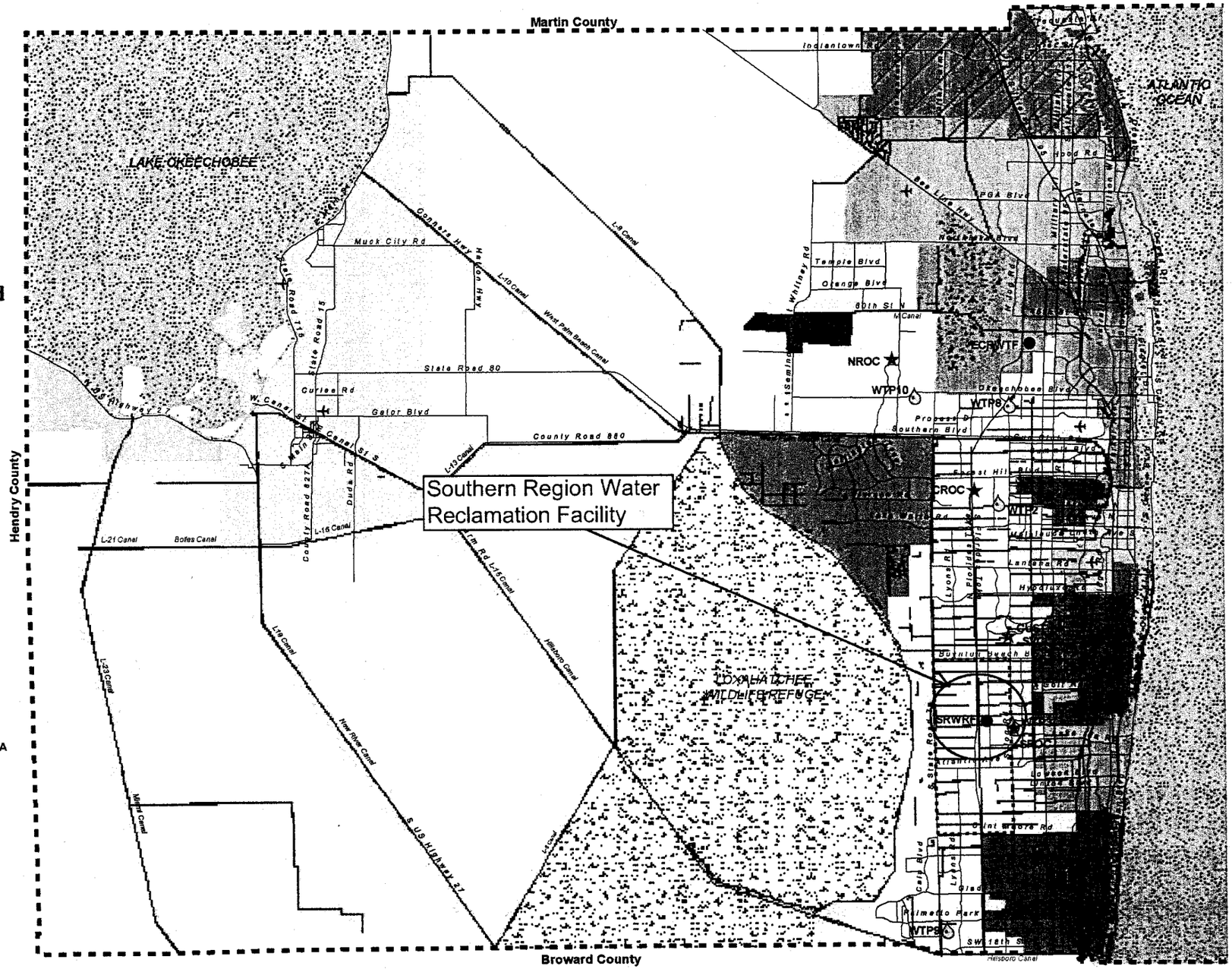
WUD 14-051: SRWRF Digester Gas Improvements

	Total
Current Proposal	
Value of Consultant Service Authorization	$0.00
Value of Work Authorization	$235,665.40
Value of CSA and WA	$235,665.40
Value of SBE Minority Letter of Intent	$226,915.40
Actual Percentages	96.28%
Signed / Approved Authorizations	
Total Value of Approved Consultant Service Authorization	$117,612.21
Total Value of Approved Work Authorization	$3,995,863.03
Total Value of CSAs and WAs	$4,113,475.24
Total Value of SBE Signed Subcontracts	$3,718,652.24
Actual Percentages	90.40%
Signed Authorizations Plus Current Proposal	
Total Value of Approved CSAs Plus Current CSA Proposal	$117,612.21
Total Value of Approved WAs Plus Current WA Proposal	$4,231,528.43
Total Value of Approved and Proposed CSAs and WAs	$4,349,140.64
Total Value of SBE Subcontracts and Letters of Intent	$3,945,567.64
Actual Percentages	90.72%
GOAL	75%

ATTACHMENT – I

Project Location Map

Palm Beach County Water Utilities Department Service Area (SA) and Major Facilities



Legend

- MANDATORY RECLAIMED SA
- Water Treatment Facility
- Administration
- Water Reclaimation Facility
- COUNTY LIMITS
- P.B.C.W.U.D. SA

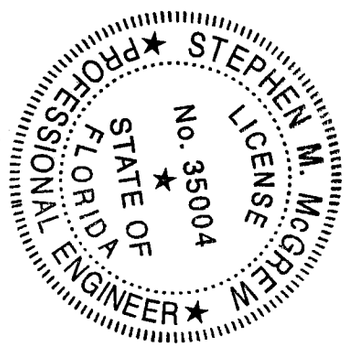
NOT TO SCALE

WA–23 SRWRF Digester Gas Improvements WUD 14–051

ATTACHMENT - J

Design-Build Criteria Report

Design Build Criteria
Digester Gas Improvements
Southern Region Water Reclamation Facility
Project No. WUD 14-051



4/10/14

Stephen McGrew, P.E.
State of Florida Professional Engineer No. 35004
Palm Beach County Water Utilities Department
8100 Forest Hill Blvd.
West Palm Beach, FL 33413

Design Build Criteria
Digester Gas Improvements
Southern Region Water Reclamation Facility
Project No. WUD 14-051

Part 1 General

1.1 Summary of Work

The proposed work to be performed as described below is located at the following facility: Southern Region Water Reclamation Facility (SRWRF), 12751 Hagen Ranch Road, Boynton Beach, FL 33437, PCN 00-42-43-27-05-064-0730.

The proposed work to be performed by the Design-builder generally includes furnishing all labor, equipment, materials, tools, supervision, and services required to design, construct, test, and startup the proposed work is described as follows:

Furnish and install digester gas siloxanne removal system and automation for digester gas flare for improved process control.

The following design criteria shall be used:

1. Furnish and install Unison gas skid with media to remove siloxanne to less than 100 ppbv to include the following.
    a. Basis of design for pricing is Unison proposal PX-113-1383.1 with 2 siloxanne removal vessels, see attached. List any modifications in Design-Build proposal.
    b. Concrete pad for gas skid contiguous with existing Unison gas compressor with expansion joint. Provide for accessibility to existing gas compressor skid for equipment operation and maintenance when placing new siloxanne removal skid.
    c. Gas sampling and testing:
        i. Sample and test digester gas to verify design parameters prior to fabrication.
        ii. Pre and post gas sampling and testing to verify siloxanne removal of installed system.
    d. Adjust speed of existing blowers for additional headloss through siloxanne removal system.
2. Furnish and install two new flow meters for digester gas flare. Install owner furnished motorized Auma valve operator on two existing valves for remote operation gas flare.
    a. Furnish and install instrumentation and electrical power conduits and wiring for motorized valves.

b. Connect Instrumentation to PLC 5 in electrical building.
c. Connect electrical power to existing 480 V distribution panel inside existing electrical building.
d. Disconnects for motorized valves.

3. Restore site to existing condition.

1.2 Permits and Fees

It shall be the Design-builder's responsibility to secure all permits required to complete the work under this contract, except permits obtained by the Owner. The Design-builder shall be responsible for all inspections and requirements to close-out the completed permits. The Owner shall pay all permit fees. The Design-Builder shall be responsible for all Business tax fees for work within the county or Municipalities.

1.3 Utility Services

The Design-builder shall obtain the necessary utility services by making application for the services and paying such fees and charges required by the utility companies, including construction water meters, if required.

1.4 Tests

The Design-builder shall pay for all required tests. Water required for pressure/leakage tests shall be furnished by the Owner.

1.5 Site elevations, Lines, and Grades

Where the dimensions and locations of existing piping and utilities are of critical importance in the installation or connection of proposed work, the Design-builder shall verify such dimensions and locations in the field prior to the fabrication of any materials or equipment, which is dependent on the correctness of such information. The Design-builder shall employ a land surveyor registered in the State of Florida. The Design-builder shall locate and protect survey control and reference points. The Design-builder shall be responsible to establish elevations, lines, and levels, utilizing recognized engineering survey practices. The Design-builder shall provide all labor, instruments and stakes, templates, and other materials necessary for marking and maintaining all lines and grades. The Design-builder shall submit a copy of as-built drawings signed/sealed by the land surveyor that the elevations and locations of the work in Florida State plane coordinates are in conformance with the contract documents.

1.6 Work Area

The Design-builder shall confine his activities to the site(s) designated by Owner for the work or staging areas for materials storage. All debris, materials, piping,

and miscellaneous waste products from the proposed work shall be removed from the project as soon as possible. They shall be disposed of in accordance with applicable federal, state, and local regulations. The Design-builder shall be responsible for determining these regulations and shall bear all costs or retain any profit associated with disposal of these items.

The Design-builder shall protect his work throughout its length by the erection of suitable barricades and handrails, where required. The Design-builder shall further indicate this work at night by the maintenance of suitable lights or flares, especially along or across thorough fares. Wherever it is necessary to cross a public walk, the Design-builder shall provide suitable safe walkways with hand railings. The Design-builder shall also comply with all laws or ordinances covering the protection of such work and the safety measures to be employed therein. The Design-builder shall carry out his work so as not to deny access to private property. All utility access manholes, valves, and fire hydrants shall be kept accessible at all times.
No trenches or holes near walkways, in roadways or road shoulders are to be left open during night hours without the permission of the Owner.

1.7 Underground Utilities

All water pipes, storm drains, force mains, gas or other piping, telephone or power cables or conduits, and all other obstructions, whether or not shown, shall be temporarily removed from or supported across pipeline excavations. Before disconnecting any pipes or cables, the Design-builder shall obtain permission from the Owner, or shall make suitable arrangements for their disconnection by the Owner. The Design-builder shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly as soon as the work has progressed past the point involved. Approximate locations of known water, sanitary, drainage, power and telephone installations along route of new pipelines or in vicinity of the work are shown on as-built drawings, but must be verified in the field by the Design-builder. The Design-builder shall uncover these pipes, ducts, cables, etc., carefully, by hand, to verify location and depth of cover. Any discrepancies or differences found shall be brought to the attention of the Owner in order that necessary changes may be made. Where fences, walls or other man made obstructions exist illegally in the public right-of-way, the Owner will have them removed upon adequate prior notice by the Design-builder.

All exaction activity shall notify "SUNSHINE STATE" at 1 (800)-432 4770 at least forty-eight (48) hours prior to excavating for FPL and AT&T. Evidence of such notice shall be furnished to the Owner prior to excavating. Provide independent locate service for all PBC WUD buried pipelines and electrical.

Design of all underground water, wastewater and reclaimed water shall comply with the Palm Beach County Water Utilities Minimum Engineering Standards (latest edition), Environmental Control Rule 1 (wastewater), Environmental

Control Rule II (water) and applicable provisions of the Florida Administrative Code. Design submittal requirements shall be in accordance with the Palm Beach County Water Utilities Design Manual.

1.8 Maintenance of Operations

The Design-builder's activities or any partial plant shutdowns shall minimize disruption to the treatment facilities and conveyance. The Design-builder shall schedule and perform the proposed work in a manner such that the Owner can keep the existing treatment and conveyance facilities in continuous dependable operation. Operation of all existing valves, gates and equipment shall be performed by Owner.

1.9 Plant Shutdowns

Owner shall approve all plant shutdowns. If, in the opinion of Owner, a shutdown is not required in order for the Design-builder to perform the proposed work, the Design-builder shall use alternative methods to accomplish the work. All shutdowns shall be coordinated with and scheduled at times suitable to Owner. Owner shall be provided a minimum of 7 days notice of Design-builder's need for any system or partial system shutdown. Additional notice may be required for certain shutdowns.

1.10 Project Coordination

Design-builder shall be solely responsible for coordination of all of the proposed work. He shall supervise, direct and cooperate fully with all sub-contractors, manufacturers, fabricators, suppliers, distributors, installers, testing agencies and all others whose services, materials or equipment are required to ensure completion of the proposed work within the contract time.

Design-builder shall cooperate with and coordinate his work with the work of any other contractor, utility service company or Owner's employees performing additional work related to the project at the site. Design-builder shall not be responsible for damage done by Design-builders not under his jurisdiction. Design-builder shall not be liable for any such loss or damage unless it is through the negligence of Design-builder. Design-builder shall also coordinate his work with the work of others to assure compliance with schedules.

Design-builder shall attend and participate in all project coordination or progress meetings and report on the progress of all work and compliance with schedules. The Design-builder shall provide and maintain a field office with telephone facilities where he or a responsible representative of his organization may be reached at any time while work is in progress.

Part 2 Acceptance Test Requirements

The Design-builder shall be responsible for coordinating and completing the overall system startup and testing. The Design-builder is responsible for providing all labor, equipment, and materials for conducting systems startup and testing.

2.1 Starting and Placing Equipment in Operation

Design-builder shall initially start-up and place all equipment installed into successful operation according to manufacturer's written instructions and as instructed by manufacturer's field representative. Design-builder shall provide all material, labor, tools, equipment, chemicals, lubricants, and expendables required to complete start-up. No system or subsystem shall be started up for continuous operation unless all components of that system or subsystem, including instrumentation, have been tested and proven to be operable as required for proposed work

General system startup activities include: cleaning; removing temporary protective coatings; flushing and replacing greases and lubricants, where required by manufacturer; lubrication, checking shaft, and coupling alignments and resetting where required; checking and setting motor, pump and other equipment rotation, safety interlocks, and belt tensions; checking and correcting if necessary leveling plates, grout, bearing plates, anchor bolts, fasteners, and alignment of piping which may put stress on pumping equipment; performing any adjustments; providing chemicals and lubricants and all other required operating fluids; providing fuel, electricity, water, filters, and other expendables required for start-up of equipment.

Owner shall provide sufficient personnel to assist Design-builder in the start-up, but the prime responsibility for proper mechanical operation shall belong to Design-builder. Manufacturer's representatives shall be present during initial start-up and operation. Owner shall assume responsibility for operation of the equipment upon completion of start-up and placing equipment in operation.

2.2 Minimum Start-Up Requirements

A. After system has been placed in operation the Design-builder shall clean strainers, drives, pockets, orifices, valve seats and headers in fluid system to assure freedom from foreign materials. He shall remove rust, scale and foreign materials from equipment and renew defaced surfaces. All visible leakage shall be repaired.

B. The Design-builder shall check each electrical control circuit to assure that operation complies with regulations and requirements of proposed work and to provide desired performance. The Design-builder shall vent

gasses trapped in any part of systems and verify that liquids are drained from all parts of gas or air systems.

C. The Design-builder shall inspect for cleanliness, and clean and remove all foreign materials, verify alignment, replace defective bearings and those, which run rough or noisy, and grease as necessary and in accord with manufacturer's recommendations.

D. The Design-builder shall adjust tension in V-belt drives, and adjust varipitch sheaves and drives for proper equipment speed, adjust drives for alignment of sheaves and V-belts, and clean and remove foreign materials before starting operation.

E. The Design-builder shall check each motor for comparison to amperage nameplate value and correct conditions which produce excessive current flow and exist due to equipment malfunction.

F. The Design-builder shall check glands and seals for cleanliness and adjustment before running pump; inspect shaft sleeves for scoring; inspect mechanical faces, chambers, and seal rings, and replace if defective; and verify that piping system is free of dirt and scale before circulating liquid through the pump.

G. The Design-builder shall inspect both hand and automatic control valves, clean bonnets and stems; tighten packing glands to assure no leakage, but permit valve stems to operate without galling; replace packing on any valve that continues to leak; remove and repair bonnets that leak; and coat packing gland threads and valve stems with a surface preparation of "Moly-Cote" or "Fel-Pro" after cleaning. The Design-builder shall verify that control valve seats are free from foreign material and are properly positioned for intended service.

2.3. Equipment Startup and Performance Testing

The Design-builder shall be responsible for performance testing during startup of all mechanical, electrical, instrumentation, and piping equipment and systems.

A. Provide a testing plan setting forth the sequence in which all testing work required for the proposed upgrades will be implemented.

B. A documentation the results of all equipment and system tests and submit to the Owner. Provide calibration tags for all equipment certifying the date of calibration.

2.3. Instruction of Operations and Maintenance Personnel

Training shall be provided prior to turning the operation of a system, unit process or piece of equipment. Training shall be scheduled for each plant staff work shift accordingly. No system, unit process or any piece of equipment shall be started

up for continuous operation without the approved operation and maintenance manuals being turned over to Owner.

Design-builder shall provide services of supplier's operation and maintenance training specialists to instruct Owner's personnel in recommended operation and maintenance procedures for products and equipment. Supplier may be required to provide a combination of classroom and field training. All training shall be conducted at the site, unless otherwise stated in the Specifications. Owner reserves the right to videotape training sessions.

Training of plant's personnel shall commence only after acceptable preliminary operation and maintenance data have been provided and starting and placing equipment in operation and equipment and system startup and performance testing, has been completed. Provide written documentation and checklists outlining important training items. Provide spreadsheets needed to document new processes for input by operators.

Part 3 Technical Requirements

3.1. Plant Site / Civil Requirements

The Design-builder shall be responsible for becoming completely familiar with the site conditions in connection with developing the final site plan including all site investigations, analysis of subsurface conditions, geotechnical conditions, and soil borings. Limited geotechnical investigation data for the site are provided in Appendix A.

3.2 Demolitions

Design-builder shall be responsible for all labor, materials, equipment and incidentals required for demolitions and pay for all disposal fees. Design-builder shall not start removals without the permission of the Owner. At least 48 hours prior to commencement of any demolition activities, the Design-builder shall advise the Owner, in writing, of the proposed schedule.

Design-builder shall carry out operations so as to avoid interference with Owner's operations and work in the existing facilities. Design-builder shall perform all demolition and removal work so as not to interfere with the use and safe passage to and from adjacent structures and shall prevent damage or injury to structures, occupants, and adjacent features, which might result from falling debris or other causes. Design-builder shall erect and maintain barriers, lights, sidewalk sheds, and other necessary protective devices. The Design-builder is responsible for repairing damage to the Owner's property or facilities.

Design-builder shall not bring explosives on site nor use explosives without written consent of authorities having jurisdiction. Design-builder shall use water sprinkling, temporary enclosures, and other suitable methods for dust control within the lowest practical level in compliance with governing regulations.
Surfaces of walls, floors, ceilings, or other areas, which are exposed by any of the removals, and which will remain as architecturally finished surfaces shall be repaired and re-finished by Design-builder with the same or matching materials as the existing adjacent surface. Adjacent structures, facilities, and improvements of dust, dirt, and debris caused by demolition operations shall be cleaned and returned to pre-construction conditions.

Where piping that is to be removed passes through existing walls, the piping shall be cut off and properly capped on each side of the wall. When underground piping is to be altered or removed, the remaining piping shall be properly capped. Abandoned underground piping may be left in place and grouted under major structures/roadways, unless it interferes with the work. Any changes to potable water piping work shall be made in conformance with all applicable codes and under the same requirements as other underground piping.

All materials and equipment removed from existing work shall become the property of Design-builder, except for those which Owner has identified and marked for their use. All materials and equipment marked by the Owner for its use shall be carefully removed by Design-builder so as not to be damaged, and shall be cleaned and stored in a protected location specified by the Owner. Design-builder shall dispose of all demolition materials, equipment, debris, and all other items not marked by the Owner, off the work site and in conformance with all existing applicable laws and regulations. Upon completion of the work, all materials, equipment, waste, and debris of every sort shall be removed and premises shall be left, clean, neat and orderly.

3.3 Excavation and Backfill

Design-builder shall furnish all labor, materials, equipment and incidentals required to perform all excavating, backfilling and disposing of earth materials required for the purpose of constructing structures, conduits, pipelines, grading, and other facilities required to complete the work in every respect.

Design-builder shall be solely responsible for designing, installing, operating and maintaining whatever system is required to satisfactorily accomplish all necessary sheeting, bracing, protection, underpinning and dewatering.

Design-builder shall be responsible for all field test data and shall submit to Owner copies of the following test reports from his testing laboratory.

Design-builder shall perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction. Design-builder shall obtain all necessary permits for work in roads, rights of way, etc. He shall also obtain permits as required by local, state and federal agencies for discharging water from excavations. The use of explosives will not be permitted.

Data on subsurface conditions will be made available by Owner for the convenience of Design-builder. The reports are not intended as a representation or warranty of continuity of such conditions between soil borings. Owner will not be responsible for interpretations or conclusions drawn by Design-builder. Additional test borings and other exploratory operations may be made by Design-builder at no cost to Owner.

Drawings from existing records showing certain surface and underground structures adjacent to the work will be made available by Owner. It is not guaranteed to be correct or complete and is shown for the convenience of the Design-builder. Design-builder shall explore ahead of the required excavation to determine the exact location of all structures. They shall be supported and protected from damage by the Design-builder. If they are broken or damaged, they shall be restored immediately by the Design-builder at its expense.

Design-builder shall locate existing underground utilities in the areas of work. If utilities are to remain in place, Design-builder shall provide adequate means of protection during earthwork operations. If uncharted or incorrectly charted piping or other utilities are encountered during excavation, Design-builder shall consult the Owner immediately for directions as to procedure. Design-builder shall cooperate with Owner and utility companies in keeping respective services and facilities in operation. Design-builder shall repair damaged utilities to the satisfaction of Owner.

Design-builder shall not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided.

3.4 Cast-In-Place Concrete

Design-builder shall be responsible for providing concrete consisting of portland cement, fine and coarse aggregate, water, and approved admixtures; then combined, mixed, transported, placed, finished and cured to accommodate the proposed work. All admixtures, curing compounds, etc. used in concrete or the curing and repair of concrete, which can contact potable water, shall be certified as conforming to the requirements of ANSI/NSF 61 for contact with potable water when in the finished concrete.

3.5 Miscellaneous Metals

All metals shall be non-ferrous except of steel reinforcing and as approved by the Owner. All bolt, nuts and washers shall be 316 stainless steel the nuts shall be coated to prevent galling. Anchor bolts shall be 316 stainless steel. Stanchions, pipe supports, equipment bases, braces and straps shall be 316 stainless steel or aluminum.

3.6 Painting

Design-builder shall provide all labor, materials, tools, equipment, and incidentals as required to furnish and apply paint systems for surface preparation and painting of all new and existing interior and exterior items and surfaces throughout the project areas. Mechanical and process items to be painted include new and existing walls, floors, piping, mechanical equipment, supports, and any pertinent accessory items or area damaged by the construction activity. Owner's approval shall be required for all components of the surface preparation, selection of colors, and paint system application before start of proposed work.

Color-coding of pipelines, valves, equipment and ducts shall comply with applicable standards of ANSI A13.1, ANSI Z535.1, and 40 CFR 1910.144. Finish coats of paint for pipelines and equipment shall be coded in basic colors. Colors shall be brilliant, distinctive shades matching safety and pipeline colors per ANSI Z535.1, Recommended Standards for Water Works; Recommended Standards for Wastewater Facilities, color specifications for safety colors and other primary colors.

Provide pipe labels with flow arrows at each change in direction, tees (all sides) and every 20 feet of straight run.

3.7 Valves and Piping Requirements

The Design-builder is responsible for the final sizing and selection of all equipment, piping, and materials. Design-builder shall provide all labor, materials, equipment, and incidentals to furnish and install valves, piping, and fittings complete and operational as required for the proposed work. The Design-builder conform to the Palm Beach County Water Utilities Manual of Minimum Design and Construction Standards. Valves, piping, and fittings, including linings and coatings, that will convey potable water or water that will be treated to become potable shall be certified by an accredited organization in accordance with ANSI/NSF 61 as being suitable for contact with potable water, and shall meet requirements of the regulatory authorities having jurisdiction at work site.

The following information shall be submitted to the Owner for review and approval: detailed drawings and data on valves, piping, joints, fittings, gaskets, harnessing, and all other pertinent information required for the manufacture and performance history of the product; certificates of compliance with all applicable referenced standards and any provisions for valves, piping, joints, fittings,

coatings, linings, sleeves, gaskets, harnessing, and all other appurtenances; complete field pressure testing, flushing, and disinfection plan

Materials shall be delivered to the site to ensure uninterrupted progress of the work. Valves, piping, fittings, specials and accessories shall be handled carefully with approved handling devices. Materials shall be stored on heavy wood blocking or platforms so they are not in contact with the ground. Delivered materials shall be inspected for cracked, gouged, chipped, dented or other damaged material and immediately removed from site. If in the process of manufacture, transportation, storage of handling, any valves, pipe, fittings or specials receive any damage such material shall be rejected and replaced at the Design-builder's expense.

Pipe interiors shall be kept completely free from dirt and foreign matter. All piping shall be installed in complete accordance with the manufacturer's instructions and recommendations. If any piping must be cut, the work shall be done in a satisfactory manner using a machine specifically designed for cutting the pipe, so as to avoid damage to the pipe and to leave a smooth end. The manufacturer's field representative shall certify the installations observed were satisfactorily completed and all installation crews were familiar with the proper methods and procedures for the pipeline installations.

3.8 Secondary Containment Piping

Secondary containment piping shall be furnished for all chemical piping outside of that chemical's containment area. Secondary containment piping shall be Schedule 80, PVC construction, with fittings, as required and rated for 50 psig. Inner and outer systems shall be factory assembled. Secondary containment piping shall be. System shall have centralizers that center and support carrier pipe within double containment pipe. No mechanical elastomeric seal system will be accepted. Installation of all containment piping shall be as recommended by the containment pipe manufacturer. Installers shall use testing equipment recommended by the manufacturer for double containment piping.

Part 4 Electrical Requirements

4.1 Basic Requirements

Design-builder shall design and provide all labor, materials, equipment and incidentals to complete the electrical work. All systems shall be properly grounded. Exterior systems shall have lightening protection.

4.2 Codes

Material and equipment shall be installed in accordance with the current standards and recommendations of the National Electrical Code, the National Electrical Safety Code, and with local codes, which apply. Where discrepancies arise between codes, the most restrictive regulation shall apply.

4.3 Area Classifications

A. Wet Locations

The following areas shall be considered wet locations:

1. All outdoor areas.
2. All indoor areas below grade unless otherwise specified.
3. Materials, equipment and incidentals in areas identified as wet locations shall meet NEC and NEMA requirements for wet locations. Enclosures shall meet NEMA 4 requirements as a minimum. Conduits shall be terminated at enclosures with watertight, threaded hubs.

B. Corrosive Locations

All chemical storage and pumping areas or rooms. Materials, equipment and incidentals in areas identified as corrosive shall meet NEC and NEMA requirements for corrosive locations. Conduit systems shall be PVC and enclosures shall meet NEMA 4X requirements. Conduits shall be terminated at enclosures with watertight hubs. Independent supports shall be PVC-coated galvanized steel, or fiberglass-reinforced epoxy struts.

4.4 Electrical Equipment

All new electrical equipment shall be capable of operating successfully at full-rated load, without failure, with an ambient outside air temperature of 0 degrees F to 122 degrees F and an elevation of 400 feet (MSL). All electrical devices and equipment shall have ratings based on 75 degrees C terminations. All electrical equipment enclosures at a minimum shall meet NEMA 12 requirements.

4.5 Schematic Diagrams

Schematic diagrams shall be prepared by the Design-builder to act as guidance in fulfilling the operational intent of the conceptual documents. It shall be the Design-builder's responsibility to meet all safety and electrical codes, and to provide all equipment, appurtenances and specialty items required to provide for complete and operable systems. Review of control schemes submitted by Design-builder shall not relieve Design-builder of their contractual responsibility to provide complete and successfully operating systems.

4.6 Raceway Systems

Design-builder shall furnish and install conduit and fittings to form complete, coordinated and grounded raceway systems. Design-builder shall provide for the proper installation of all conduits for each system.

A. Rigid aluminum conduit for exposed indoor conduit runs in non-corrosive areas and rigid aluminum at all other sites.
B. PVC Schedule 80 for individual conduit runs direct buried in earth and PVC coated rigid steel at all other sites (minimum 24-inch burial depth).
C. Schedule 40 PVC for conduit runs embedded in or under structural concrete slabs or in concrete ductbanks (all sites).

D. PVC schedule 80 conduit for exposed indoor and outdoor runs in corrosive areas and PVC coated rigid steel at all other sites.
E. Flexible conduit for connections to motors and equipment.
F. be provided.

4.7 Inspections, Testing and Adjustments

Accompany the normal installation tests with inspections to demonstrate to the satisfaction of the required judicial authorities the following:

A. Connections: All circuits are properly connected in accordance with the drawings and applicable approved shop drawings.
B. Operation: All circuits and devices are operable.
C. Identification: All conductors are properly identified at each terminal.

Test each electrical circuit after permanent cables are in place to demonstrate that the circuit and connected equipment perform satisfactorily and that they are free from improper grounds and short circuits. Individually test 600-volt cables for insulation resistance between phases and from each phase to ground. Test after cables are installed and before they are put in service with a Megger whose rating is suitable for the tested circuit. Tests shall meet with the applicable specifications of ICEA S 66 524 and NEMA WC7 1971. The insulation resistance for any given conductor shall not be less than 1 megohm for 600 volt and less service. Any cable not meeting this value or which fails when tested under full load conditions shall be replaced with a new cable for the full length.

Test shielded instrumentation cable shields with an ohmmeter for continuity along the full length of the cable and for shield continuity to ground. Connect shielded instrumentation cables to a calibrated 4-20 milliamp DC signal transmitter and receiver. Test at 4, 12, and 20 milliamp transmitter settings.

Test the completed ground systems for continuity and for resistance to ground using an electrical ground resistance tester. Ground system resistance must be less than 5 ohms. Add up to two additional rods, spaced at 20 feet minimum from other electrodes, until resistance is less than 5 ohms.

Operate all starters, circuit breakers and associated equipment to demonstrate suitability and compliance with Specifications and reference standards, except for short circuit interrupting rating or other inherent design features covered by shop tests. Test all motors for direction of rotation and reverse connections if necessary. Check control circuits to determine that operation and sequence are correct and adjust limit switches, pressure switches, float switches, timers and other devices to give proper operation.

Part 5 Instrumentation and Control Requirements

5.1 General

Design-builder shall provide all labor, materials, equipment and incidentals as shown, specified and required to furnish, install, calibrate, test, start-up and place in satisfactory operation a complete and operating system for proposed work, including programming of the PLC, SCADA, and all required wire terminations. Tag number, equipment number, and description shall match the Owners numbering convention standards.

5.2 Calibration, Start-Up and Testing

Field verify the calibration and performance of each instrument prior to start-up of the associated equipment, and document on a separate sheet for each.

5.3 System Check-Out and Start-Up Responsibilities

Design-builder shall retain the services of the system supplier to supervise and/or perform check out and start up of all system components. As part of these services, the system supplier shall coordinate and include check-out and start-up for those equipment items not manufactured or provided by him. The services of an authorized manufacturer's representative to check the equipment installation and place the equipment in operation may be required. The manufacturer's representative shall be thoroughly knowledgeable about the installation, operation and maintenance of the equipment.

Check and approve the installation of all instrumentation and control system components and all cable and wiring connections between the various system components prior to placing the various processes and equipment into operation. Conduct a complete system checkout and adjustment, including calibration of all instruments, tuning of control loops, checking operation functions, and testing of final control actions. When there are future operational functions included in this work, they should be included in the system checkout. All problems encountered shall be promptly corrected to prevent any delays in start up of the various unit processes.

System supplier shall provide all test equipment necessary to perform the testing during system checkout and start up. Design-builder and system supplier shall be responsible for initial operation of monitoring and control system and shall make any required changes, adjustment or replacements for operation, monitoring and control of the various processes and equipment necessary to perform the functions intended.

Design-builder shall furnish to the Owner certified calibration reports for field instruments and panel mounted devices specified in this Section as soon as calibration is completed. Design-builder shall furnish Owner an installation inspection report certifying that all equipment has been installed correctly and is operating properly. The report shall be signed by authorized representatives of both Design-builder and the system supplier.

5.4. Instrumentation and Control System Field Test

Following the plant monitoring and control system checkout and initial operation, system supplier, under the supervision of the Design-builder, shall perform a complete system test to verify that all equipment and programmed software is operating properly as a fully integrated system, and that the intended monitoring and control functions are fully implemented and operational. Any defects or problems found during the test shall be corrected by system supplier, and then retested to demonstrate proper operation. Following demonstration of all system functions, the plant monitoring and control system including field sensors/transducers and instruments, and telemetry system shall be running and fully operational for a continuous 72 hour period.

5.5 Control Panels and Enclosures

Control panels located inside control or electrical room areas shall be NEMA 12 rated unless differently noted on drawings. All others shall be stainless steel or non-metallic NEMA 4 except in corrosive areas, which shall be NEMA 4X. Provide panel ventilation or air conditioning if required by ambient conditions. Use pan type construction for doors. Door widths shall not exceed 36-inches. Exterior panel with displays shall face north. Exterior control panels shall be 316 stainless steel with powder coated white epoxy exterior finish.

5.6 Surge Protection

Surge protection shall be provided to protect all electronic instrumentation from surges propagating along the signal, telephone, and power supply lines. Locate the suppression device as close as possible to the load device. The protection systems shall be such that the protection level shall not interfere with normal operation, but shall be lower than the instrument surge withstand level, and be maintenance free and self-restoring. Instruments shall be housed in suitable metallic cases, properly grounded. Ground wires for all surge protectors shall be connected to a good earth ground and where practical each ground wire run individually and insulated from each other.

ATTACHMENT - K

Vendor Quotes

The attached proposal from Unison Solutions for the Siloxane Removal System is dated 12/12/13 with an expiration date of 1/12/14. On April 3, 2014, Globaltech contacted Unison Solutions to confirm that their cost proposal is still valid. They stated that the cost will remain firm until the Work Authorization is executed. This email (if needed) will be provided to PBC-WUD when received.

Bruce Rahmani

From: Adam Klaas <adam.klaas@unisonsolutions.com>
Sent: Tuesday, April 8, 2014 4:28 PM
To: Bruce Rahmani
Subject: PBC SRWRF Digester System - Siloxane Removal Proposal

Bruce,

Per this email proposal PX-113-1383.2 is still valid and Unison Solutions will honor the pricing on this proposal dated 12/12/2013.

Thanks,

Adam Klaas
Unison Solutions, Inc.
(563) 542-3081
-------- Original message --------
From: Bruce Rahmani
Date:12/12/2013 8:01 AM (GMT-07:00)
To: Adam Klaas
Subject: PBC SRWRF Digester System - Photo

Adam,

As discussed see attached photos

Bruce Rahmani
Project Manager
(561) 997-6433 O
(954) 882-1169 M
(561) 997-5811 F

Globaltech
A DESIGN - BUILD COMPANY

UNISON
SOLUTIONS

Leaders in Biogas Technology

SILOXANE REMOVAL SYSTEM - PROPOSAL

PROJECT INFORMATION

Date: 12/12/2013
Expires: 1/12/2014

Bruce Rahmani
Globaltech

Proposal Number: PX-113-1383.2
Project Name: Palm Beach FL WWTP

Unison Solutions, Inc. is pleased to provide you with this proposal for a Siloxane Removal System for the Palm Beach FL WWTP Project. This proposal includes all the engineering, technician labor, fabrication, CAD design services and materials to construct a Siloxane Removal System.

EQUIPMENT/SUB-SYSTEMS

SILOXANE REMOVAL SYSTEM
- Standalone
- Class I, Division 1 Electrical Area

Components
- (2x) Siloxane Removal Vessels
- Initial charge of Siloxane Removal Media
- Lead/Lag Piping and Valves
- Interconnection piping

DESIGN CONDITIONS

SITE INFORMATION

Minimum Ambient Temperature	50°F
Maximum Ambient Temperature	110°F
Site Elevation	50'AMSL

SYSTEM REQUIREMENTS

Minimum Gas Flow	0 scfm
Maximum Gas Flow	205 scfm

ASSUMED INLET GAS CONDITIONS

Inlet Gas Pressure	5 psig
Inlet Gas Temperature	80 to 85°F

Relative Humidity	<25%
Hydrogen Sulfide	? ppmv
Siloxane	1085 ppbv

DISCHARGE GAS CONDITIONS

Discharge Gas Pressure	4.5 psig
Maximum Siloxane	<100 ppbv

SYSTEM DETAILS

SILOXANE REMOVAL SYSTEM

- (2) Siloxane Removal Media Vessels
  - 42" diameter x 6' straight side
  - Materials of construction will be 304L stainless steel
  - Flanged and dished top and bottom heads
  - Vessels will be free-standing on four 304L stainless steel legs
  - A work platform is provided for media change out maintenance. Platform, hand rails and ladder will be stainless steel.
  - Elliptical manway on top of each vessel
  - Internal septas for even gas distribution through media
  - 150# ANSI B16.5 side inlet and outlet connections
  - Fasteners will be F593 304 stainless steel
  - Pressure relief valves included
  - Bottom manual condensate drain with stainless steel ball valves
  - Test/purge ports with valves on the inlet and exit of each vessel
- Siloxane Removal Media
  - Initial charge of Siloxane Removal Media is supplied
  - The media is specifically engineered for removal of siloxanes and similar contaminants from landfill and digester gas sources
  - Siloxane media to be loaded into Siloxane Removal Vessel by INSTALLATION CONTRACTOR
- Piping
  - Lead/Lag piping between the Siloxane Removal Vessels will be provided
  - All piping shall be minimum Type 304/304L stainless steel in IPS standard sizes
  - All piping 2 inches and smaller may be threaded or 150# ANSI B16.5 flanged, but threaded piping shall be a minimum of Schedule 40
  - All piping 2 inches and larger shall be welded with 150# ANSI B16.5 flanged connections
  - Fabricated in accordance with ASME B31.3 - Process Piping
  - Fasteners will be F593 304/316 stainless steel
- Valves
  - All valves 3 inches and larger shall be butterfly valves with cast iron bodies, stainless steel disk and stem, and Viton seats. Butterfly valves shall be lug style.
  - All valves 2-1/2 inches and smaller shall be ball valves.
  - Ball valves 1 inch and smaller shall have NPT threaded connections. Bodies and balls shall be 316 stainless steel. Packing or seats will be PTFE.
  - Ball valves 1-1/2 inches and larger shall have 150# flanged connections. Bodies and balls shall be 316 stainless steel. Packing or seats will be PTFE.

SUBMITTALS

- Three Copies of 3 Ring Binders and one electronic CD copy

FACTORY TESTING

- Complete system will be pressure tested at the Unison Solutions manufacturing facility in Dubuque IA. If customer would like to witness the testing Unison will inform the customer two (2) weeks prior to anticipated testing date so customer can make travel arrangements.

OPERATION & MAINTENANCE MANUALS

- An insert section for existing manuals will be provided as well as an updated electronic copy of the complete O&M Manual.

DELIVERY SCHEDULE

- Submittals delivered 1 week after order acknowledgement
- Equipment delivery 10 to 14 weeks after submittal approval
- Delivery is subject to confirmation at the time of order placement and/or submittal approval

PRICING SUMMARY

- Price includes all labor and expenses associated with the fabrication of the system.
- Prices do not reflect any taxes that may be applicable and are valid for 30 days.
- Price is EXW; Factory, Dubuque, IA 52002. Shipping costs not included, see estimate below
- Price does not include Start-up and Commissioning. Costs are shown below

Siloxane Removal System $81,400.00

Shipping Estimate to Palm Beach FL..... $3,575.00
Cost is an estimate and is subject to change without notice. It does not include any special packaging or permitting that may be required and is dependent on the final equipment dimensions and weights.

Start-up and Commissioning Services Estimate..... $5,800.00
Price includes One (1) consecutive, 8 hour day, for one Unison Technician onsite with travel and expenses included. Additional days may be necessary to complete start-up and commissioning, they will be billed to the Buyer/Owner/End User at the cost of $1,200 per day, per technician, plus travel & expenses.

PAYMENT SCHEDULE

- 30% upon order acceptance.
- 30% at midpoint of construction.
- 30% upon equipment delivery.
- 10% upon site acceptance not to exceed 180 days from shipment.

- Net 30 days on all payments.

PROVIDED BY OTHERS

- VPN connection for remote access to Unison supplied equipment for troubleshooting and remote assistance.

PRICE DOES NOT INCLUDE

- Shipping of equipment to jobsite
- Start-up or commissioning
- Wind or seismic calculations for all equipment
- Any maintenance work after start-up
- Siloxane removal media after initial fill
- Performance guarantee or service/maintenance contract
- Any gas testing or analyses
- Permitting for the installation of the equipment or air permits
- Freeze protection; including insulation and/or heat trace and heat trace power
- Pipe stands for field piping

ASSUMPTIONS

VESSELS & MEDIA

- H2S and VOC's present in the gas will foul Siloxane media, additional gas testing will be necessary to finalize all vessel and media requirements, budget pricing is dependent on gas data given at the time of the proposal.
- No assumption of media life has been given; additional gas testing will be required at the Buyer/Owner/End Users expense.

MECHANICAL

- Foundations and/or maintenance pads are designed by others to properly support the equipment.

ELECTRICAL & CONTROLS

- The Siloxane Removal System will be considered a Class I, Division 1 Electrical Area around all gas components.

INSTALLATION CONTRACTOR RESPONSIBILITIES

- Installation responsibilities are broken out below into two categories to outline the work; these responsibilities by no means fall on any single contractor or individual. It is the responsibility of the Buyer/Owner/End User to ensure all these conditions are adhered to, as necessary. It is responsibility of the Buyer/Owner/End User to install all equipment in compliance with local and national codes applicable to the installation site.

BUYER/OWNER/END USER RESPONSIBILITIES

- All field and installation work
- All rigging and setting of equipment at site
- Provide installation of Equipment per the Unison Solutions Installation Guide
- Proper storage of the equipment and media prior to installation
- Media is to be installed in respective vessels

MECHANICAL CONTRACTOR RESPONSIBILITIES

- Provide all field piping between the existing gas conditioning system and new siloxane removal system.
- Provide pipe supports as necessary. Piping shall be self-supporting, and not supported off of the Unison supplied equipment.
- Provide foundations and/or maintenance pads as necessary for equipment

WARRANTY

Unison Solutions, Inc. will warrant all workmanship and materials in conformance with the attached Warranty Statement. Warranty is valid for 18 months from the time the equipment is shipped from Unison's factory or 12 months from the date of startup, whichever occurs first.

Unison Solutions, Inc. will not release the PLC program for this system. This is considered proprietary and the intellectual property of Unison Solutions, Inc.

Thank you for giving Unison Solutions the opportunity to propose our services. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

Adam Klaas
Unison Solutions, Inc.
5451 Chavenelle Road
Dubuque, IA 52002
Phone: 563-585-0901
Fax: 563-585-0970
Cell: 563-542-3081

UNISON
SOLUTIONS

WARRANTY STATEMENT

Unison Solutions, Inc. (Unison) is committed to providing quality products and services to its customers. As a demonstration of this commitment, Unison offers the following warranty on its products.

Grant of Warranty: Unison provides this warranty for its equipment under the terms and conditions which are detailed herein. This warranty is granted to the person, corporation, organization, or legal entity (Owner), which owns the equipment on date of start-up. This warranty applies to the owner during the warranty period, and is not transferable.

Warranty Coverage: Equipment that is determined by Unison to have malfunctioned during the warranty period under normal use solely as a result of defects in manufacturing workmanship or materials shall be repaired or replaced at Unison's option. Unison's liability under this warranty to the Owner shall be limited to Unison's decision to repair or replace, at its factory or in the field, items deemed defective after inspection at the factory or in the field.

Warranty Exclusions: All equipment, parts and work not manufactured or performed by Unison carry their own manufacturer's warranty and are not covered by this warranty. Unison's warranty does not override, extend, displace or limit those warranties. Unison's only obligation regarding equipment, parts and work manufactured or performed by others shall be to assign to the Owner whatever warranty Unison receives from the original manufacturer. Unison does not warrant its products from malfunction or failure due to shipping or storage damage, deterioration due to exposure to the elements, vandalism, accidents, power disturbances, or acts of nature or God. This warranty does not cover damage due to misapplication, abuse, neglect, misuse, improper installation, or lack of proper service and/or maintenance, nor does it cover normal wear and tear. This warranty does not apply to modifications not specifically authorized in writing by Unison or to parts and labor for repairs not made by Unison or an authorized warranty service provider. This warranty does not cover incidental or consequential damages or expenses incurred by the Owner or any other party resulting from the order, and/or use of its equipment, whether arising from breach of warranty, non-conformity to order specifications, delay in delivery, or any loss sustained by the Owner. No agent or employee of Unison has any authority to make verbal representations or warranties of any goods manufactured and sold by Unison without the written authorization signed by an authorized officer of Unison. Unison warrants the equipment designed and fabricated to perform in accordance with the specifications as stated in the proposal for the equipment and while the equipment is properly operated within the site specific design limits for that equipment. Any alterations or repair of Unison's equipment by personnel other than those directly employed by, or authorized by Unison shall void the warranty unless otherwise stated under specific written guidelines issued by Unison to the Owner. This warranty does not cover corrosion or premature wear or failure of components resulting from the effects caused by siloxanes, hydrogen sulfide or volatile organic compounds in excess of the design limits. All media must be purchased through Unison Solutions or approved in writing by Unison Solutions during warranty period. Media purchased though alternate sources and not approved in writing by Unison shall void the warranty. The design limit is based on site specific gas data provided by the Owner prior to the proposal for the equipment. Owner shall be responsible for all maintenance service, including, but not limited to, lubricating and cleaning the equipment, replacing expendable parts, media, making minor adjustments and performing operating checks, all in accordance with the procedures outlined in Unison's maintenance literature. Unison does not warrant the future availability of expendable maintenance items.

Warranty Period: This Unison warranty is valid for 18 months from the time the equipment is shipped from Unison's factory or 12 months from the date of startup, whichever occurs first.

Repairs During Warranty Period: All warranty claim requests must be initiated with a Return Material Authorization (RMA) number for processing and tracking purposes. The RMA number shall be issued to the Owner upon claim approval and/or field inspection. When field service is deemed necessary in order to determine a warranty claim, the costs associated with travel, lodging, etc. shall be the responsibility of the Owner except under prior agreement for a field inspection. This warranty does not include reimbursement of any costs for shipping the equipment or parts to Unison or an authorized service establishment, or for labor and/or materials required for removal or reinstallation of equipment or parts in connection with a warranty repair. This warranty covers only those repairs that have been conducted by Unison or by a Unison authorized warranty service provider, or by someone specifically authorized by Unison to perform a particular repair or service activity. All component parts replaced under the terms of this warranty shall become the property of Unison.

UNISON ASSUMES NO OTHER WARRANTY FOR ITS EQUIPMENT, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NONINFRINGEMENT, OR LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

5451 Chavenelle Road, Dubuque, Iowa 52002 ▫ [O] 563.585.0967 [F] 563.585.0970 ▫ www.unisonsolutions.com

WA-23

SRPF Digester Gas Improvements

Electrical Contractor Quotes

Powerline, Inc. $22,950 / Low bid

Energy Efficient Electric - $66,500

Powerline of S.FL. INC.

State Certificate # EC-13003753

Date: 22 Dec. 13

To: Globaltech, Inc.
1075 Broken Sound Pkwy NW
Suite 103
Boca Raton, FL 33487

Ref. SCRWRF – Actuators & Gas Mass Flowmeters

We Purpose to provide a complete Electrical Installation per Provided Information

1. Furnish & install 2-30 amp. SS NF Disconnects 4-SS J-box with Panel Supports 6- Joslyn surge Arresters & 2- Edco arresters.
2. Furnish & install 2-1" conduits w/4#10 xhhw from Panel 8PH1 to Disc. @ Actuators.
3. Furnish & install 1-1" conduit from Pnl. 8PL1 to Flow Meters.
4. Furnish & install 1-1 1/2" conduit w/6 TSP from PLC 5 to Actuators & Flow Meters.
5. Furnish & install 1-11/2" conduit with 15-#14 from PLC 5 to Actuators.
6. Furnish & install 4/0 counter pos.
7. Furninsh & install 1- 6" grd. to existing gas pipe & to grd. grid

711 Commerce Way Suite # 6 Jupiter, FL. 33458
Ph. 561-575-4270 Fax 561-575-4269 Email: PowerlineOfSouth@bellsouth.net

Exceptions: 1. Instruments /Actuators /valves

This Proposal subject to renegotiation after (90 Day Period)

Purposed Amount: ***$ 23,950.00***

Thank you for the opportunity to provide this Proposal.

Sincerely

Thomas Laessig

President

Powerline of S.FL. INC.

State Certificate # EC-13003753

Energy Efficient Electric, Inc.
1600 Mercer Ave. Unit 6
West Palm Beach, FL. 33401
Phone (561) 655-7211 Fax (561) 655-9661
Mobile (561) 722-1381
E-Mail Address: rene@energyeff.com

State License #EC 0001096

December 20, 2013

Electrical Scope of Work
Southern Region Digester Gas

Quote # 30809

We are pleased to provide your firm with our scope and proposal for the necessary electrical work on the above referenced project. Our scope and proposal is based on the drawings prepared by a walkthrough with Globaltech, Hillers and Dave Dalton on December 17th.

Included:

1. Furnish and install (2) 30 amp 480 volt SS NF disconnects, (4) SS junction boxes, panel support rack, (6) Joslyn surge arresters and (2) Edco pipe style surge arresters.
2. Furnish and install (2) 1" conduits with 4 # 10 conductors from panel 8PH1 via disconnects to actuators.
3. Furnish and install (1) 1" conduit from panel 8PL1 to the 2 flow meters.
4. Furnish and install (1) 1 ¼" conduit with (6) TSP from PLC 5 via junction box to actuators and flow meters.
5. Furnish and install (1) 1 ¼" conduit with 15 # 14 from PLC 5 to the actuators.
6. Furnish and install (1) 4/0 ground conductor with underground conduits.
7. Furnish and install (1) 6" ground strap to the existing gas pipe and tie into the existing ground grid.

Excluded:

1. Permit fees.
2. Digging with machinery, backfill, and final restoration by Globaltech.
3. No concrete cap or concrete encased ductbank per Dave Dalton.
4. Flow meters and actuators by others.
5. Concrete and asphalt cutting and patching.

Lump Sum **$66,500**

We appreciate the opportunity to quote your organization on this project. If you have any questions, please call me at the office.

Thank You Very Kindly,

Rene Viau

Vice President

Lewis and Associates, Inc.

BOX 16518, TAMPA, FLORIDA 33687-6518
PHONE 813-986-8450 FAX 813-986-8444

INDUSTRIAL INSTRUMENTS AND CONTROL SYSTEMS

December 20, 2013

Bruce Rahmani
Globaltech, Inc.
6001 Broken Sound Parkway, Suite 610
Boca Raton, FL 33487
Ph: 561-997-6433; Cel: 954-882-1169; Fax: 561-997-5811
Email: bruce@globaltechdb.com

Reference: FCI Model ST51 Thermal Dispersion Gas Mass Flowmeters
Palm Beach County Water Utilities SRWRF Project
L&A Quote #13129090

Bruce:

As discussed, we are quoting you four (4) FCI Model ST51 flowmeters for the Palm Beach County Water Utilities SRWRF digester/bio-gas flow applications. For hot-tap removal, we are quoting FCI 1.5" ANSI (¾" center-threaded) 150# flanges for use of the Model ST51 flowmeters with customer supplied 1.5" full throat flanged isolation ball valves. Note that the price has changed due to the change in terms. FCI requires completion of the attached Application Data Sheet (ADS) at time of order. Do not hesitate to contact our office as questions arise, and we are pleased to quote as follows:

Item #1 - Qty (4); FCI Model ST51-8P33FN0A, Mass Flow Transmitter, for hydrocarbon gas in 4.0" to 8.0" Sch 20 pipes, process temperature to 200° F and process pressure to 50 psig, flow rates to 200 SCFM, side mount with flow vertical down, and NIST gas flow stand calibration with extended temperature compensation to 250° F. Insertion Sensor is 316 SS thermal dispersion type with Hastelloy C tips, 1" - 18" adjustable insertion length, 3/4" MNPT compression process connection with Teflon ferrule, rated 200°F and 150 psig. Accuracy is 1.0% reading (± 0.5% full scale), with 0.5% reading repeatability. Remote mount electronics includes two-line x 16 character digital LCD display, two 4-20 madc outputs with both set for zero-based gas flow range, with RS232 serial comms port. NEMA4X Aluminum Hazardous location Class 1, Div. 1, Groups B, C, D; Class 1, Div. 2, Groups A-D and EExd IIC enclosures [IP67] with 10' (3m) PVC jacketed interconnecting cable. Requires 100-240 VAC power. FM, CSA and ATEX Approvals.

Unit Price - $3,215.00 each; - Total - $12,860.00.

Item #2 - Qty (4); FCI Process Flange for Model ST51 Gas Mass Flowmeter, 1.5" 150# 316SS ANSI flange with 0.75 FNPT female center threaded connection for Model ST51.

Unit Price - $ 360.00 each; - Total - $1,440.00.

Prices are valid for sixty (60) days.
Prices are F.O.B., San Marcos, CA **92078.**
Shipping Costs are included.
Delivery is 4-5 weeks ARO.
Terms are 30 day net, upon approved credit.

Should this proposal result in an order, please address your purchase order to:

Fluid Components International, c/o Lewis & Associates, Inc.

Cordially,
Wayne R. Gray