## Agenda Item #3K-6

## PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS AGENDA ITEM SUMMARY

Meeting Date:

June 18, 2013

Consent [X]
Public Hearing []

Regular []

Department:

**Water Utilities Department** 

## I. EXECUTIVE BRIEF

**Motion and Title: Staff recommends motion to approve:** Work Authorization No. 11 with Globaltech, Inc. (R2012-0159) for Southern Region Pumping Facility Membrane Concentrate Bypass in the amount of \$406,149.75.

**Summary:** Work Authorization No. 11 will install bypass piping and backflow prevention system at the Southern Region Pumping Facility (SRPF) to allow membrane concentrate from Water Treatment Plant 9 (WTP 9) to be diverted to the South County Water Reclamation Facility (SCWRF). The bypass will increase available flow to the Southern Region Water Reclamation Facility (SRWRF) to support reclaimed water demands. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance (R2002-0064) is 15% overall. The contract with Globaltech, Inc. provides for SBE participation of 75% overall. This Authorization includes 100% overall participation. The cumulative SBE participation, including this Work Authorization, is 89.27% overall. Globaltech is a local company. (WUD Project No. 13-036) <u>District 5</u> (JM)

**Background and Justification:** Work Authorization No. 11 will install bypass piping, valves and backflow prevention system at the SRPF to allow membrane concentrate from WTP 9 to be diverted to the SCWRF. The Florida Department of Environmental Protection (FDEP) requires backflow prevention devices between the membrane concentrate lines and the force mains. The bypass includes a motorized valve system, flow meter and an backflow preventer and will increase available flow to the SRWRF to support reclaimed water demands.

## Attachments:

1. Location Map

2. Two (2) Original Work Authorizations No. 11

Recommended By:

Department Director

Date

Approved By:

Assistant County Administrator

hath

## II. FISCAL IMPACT ANALYSIS

## A. Five Year Summary of Fiscal Impact:

Fiscal Years	2013	2014	2015	2016	2017					
Capital Expenditures External Revenues Program Income (Count In-Kind Match County	\$406,149.75 (y) $\frac{0}{0}$	<u>0</u> <u>0</u> <u>0</u> <u>0</u>	<u>0</u> <u>0</u> <u>0</u> <u>0</u>	<u>0</u> <u>0</u> <u>0</u>	<u>O</u> <u>O</u> <u>O</u>					
NET FISCAL IMPACT	NET FISCAL IMPACT         \$406,149.75         0         0         0         0									
# ADDITIONAL FTE POSITIONS (Cumulative) 0 0 0 0										
Budget Account No.:	Fund 4011 Dep	t <u>721</u>	Unit <u>W01</u>	0 Object_€	3545					
Is Item Included in Curre	_	**************************************	_ No ategory <u>N/A</u>							
B. Recommended	Sources of Funds	s/Summary	/ of Fiscal In	npact:						
One (1) time cap	tal expenditure fro	m user fee	s with balanc	es brought f	orward.					
C. Department Fiscal Review:										
	III. <u>REV</u>	IEW COM	<u>MENTS</u>		•					
A. OFMB Fiscal an	d/or Contract Dev	velopment	and Control	ħ	<b>s</b> :					

B. Legal Sufficiency:

Assistant County Attorney

C. Other Department Review:

Department Director

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

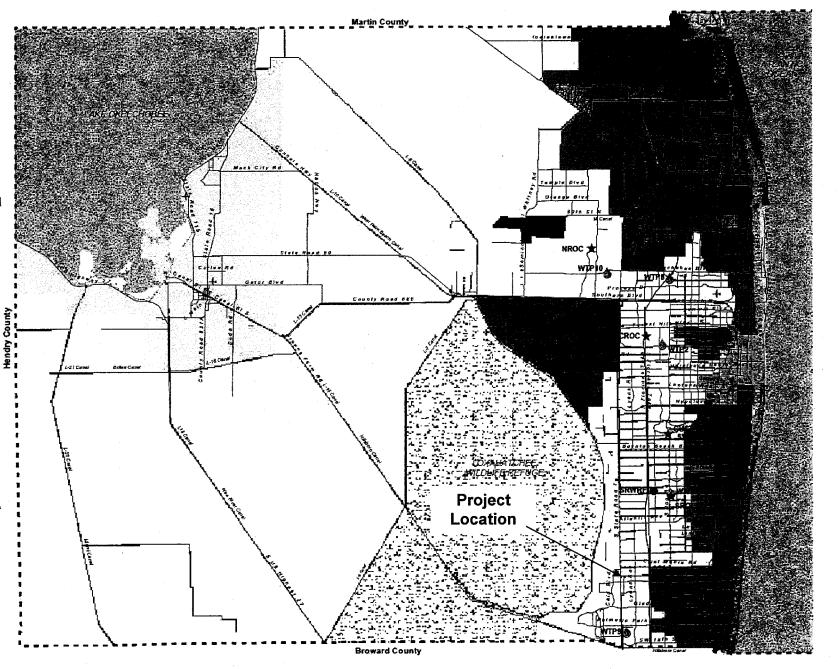
**Major Facilities** 



\*\*\*\* MANDATORY RECLAIMED SA

- & Water Treatment Facility
- \* Administration
- Water Reclaimation Facility
- = = · COUNTY LIMITS P.B.C.W.U.D. SA





WA-11: SRPF Membrane Concentrate Bypass (WUD 13-036)

## **WORK AUTHORIZATION NO. 11**

Project No.: WUD 13-036

Budget Line Item No.: 4011-721-W010-6545

Project Title: Southern Region Pumping Facility (SRPF) Membrane Concentrate

Bypass

District No.: 5

THIS AUTHORIZATION No. 11, to the Contract for Water, Wastewater and Reclaimed Water Improvements Design-Build Services dated January 24, 2012 with an effective date of January 24, 2012 (Design/Build Contract R2012-0159), by and between Palm Beach County and the Design-Build Entity identified herein, is for the Construction Services described in Item 3 of this Authorization. The Contract provides for 75% SBE participation overall. This Work Authorization includes 100.00% overall participation. The cumulative SBE participation, including this authorization is 89.27% overall.

- 1. Design-Build Entity: Globaltech, Inc.
- 2. Address: 6001 Broken Sound Pkwy NW, Suite 610, Boca Raton, FL 33487
- Description of Services to be provided by the Design-Build Entity:

Design, permit and construct bypass piping and backflow prevention system at the Southern Region Pumping Facility to allow membrane concentrate from PBC WTP 9 to be diverted to the South County Water Reclamation Facility. The bypass will be motorized for remote control and will increase available flow to the Southern Region Water Reclamation Facility (SRWRF) to support reclaimed water demands. The system will be approved by Florida Department of Environmental Protection in accordance with the Design Criteria.

See EXHIBIT - A and ATTACHMENT - F

4. Services completed by the Design-Build Entity to date:

See ATTACHMENT - E.

- 5. Design-Build Entity shall begin work promptly on the requested services.
- 6. The compensation to be paid to the Design-Build Entity for providing the requested services shall be:
  - A. Computation of time charges plus expenses, not to exceed \$ N/A
  - B. Guaranteed Maximum Price of \$406,149.75

- 7. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Design-Build Entity, the Design-Build Entity shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.
- 8. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated 01/24/12 with an effective date of 01/24/12 remain in full force and effect.

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida, has made and executed this Contract on behalf of the said County and caused the seal of the said County to be affixed hereto, and the Design-Build Entity has hereunto set his hand and seal the day and year written. The Design-Build Entity represents that it is authorized to execute this contract on behalf of itself and its Surety.

ALLEST.	
SHARON R. BOCK CLERK AND COMPTROLLER	PALM BEACH COUNTY, FLORIDA, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA BOARD OF COUNTY COMMISSIONERS
· · · · · · · · · · · · · · · · · · ·	By: Steven L. Abrams, Mayor
APPROVED AS TO FORM AND LEGAL SUFFICIENCY	APPROVED AS TO TERMS AND CONDITIONS
Assistant County Attorney	Bevin A. Beaudet, Director Water Utilities Department
Oemste (Witness signature)	By:  Title: Vice Rresident  Florida  (Insert state of corporation)
	$\frac{3/22/13}{\text{(Date of execution)}}$
(Witness signature)	
Rebecca Koontz (Witness name printed)	6001 Broken Sound Pkwy NW, Suite 610 <u>Boca Raton, FL 33487</u> (Design-Build Entity's City, State, Zip Code)
(Corporate Seal)	

## **EXHIBIT - A**

### **WORK AUTHORIZATION NO. 11**

## PALM BEACH COUNTY WATER UTILITIES DEPARTMENT DESIGN-BUILD SERVICES

## SCOPE OF WORK FOR SRPF Membrane Concentrate Bypass

#### INTRODUCTION

Palm Beach County (COUNTY) entered into an agreement entitled Water, Wastewater & Reclaimed Water Improvements Design/Build Contract - Palm Beach County Utilities Department Project No. WUD 11-134 (CONTRACT) with **Globaltech, Inc.** (DESIGN-BUILD ENTITY) to provide design-build services for various general activities on (Design/Build Contract R2012-0159). This Work Authorization will be performed under that CONTRACT. The County has provided Design Criteria which is an Attachment to this Work Authorization.

#### **SCOPE OF SERVICES**

The Florida Department of Environmental Protection (FDEP) has issued a Permit Revision (PA Number: FL0041424-061-DW1/MR) for the Southern Region Water Reclamation Facility that requires the PBCWUD to install additional backflow prevention devices between the membrane concentrate lines and the force mains, to which they discharge to, at Water Treatment Plant 9 (WTP 9) and for the new planned interconnect at the Southern Region Pumping Facility (SRPF), which was formally known as Pump Station 9 North or 9N. The Permit Revision requires either an air gap or installation of reduced-pressure-zone (RPZ) backflow protection valves. The PBCWUD has elected to utilize the RPZ option.

This project involves design, permitting and construction of the FDEP-approved bypass piping and valves at the Southern Region Pumping Facility (formerly known as Pump Station 9 North) to allow membrane concentrate from PBC WTP 9 to be diverted to the South County Water Reclamation Facility. All work shall comply with all County and Building Department standards, shall conform to the Palm Beach County Manual of Minimum Engineering Standards and Palm Beach County Water Utilities Department design standards, and shall meet the Design-Build criteria established in Attachment - F Design Build Criteria Report.

Globaltech has previously designed, and conducted field investigations for an interconnect at the SRPF that included a motorized valve system, a flowmeter and an RPZ. The original design was based on past FDEP requirements for membrane concentrate/wastewater force main interconnects; however, the new Permit Revision will now require that a second RPZ bank will need to be installed at the SRPF site in series with the one previously designed. The second RPZ bank will lower the pressure in the membrane concentrate line by 12-18 psi and this impact will need to be evaluated. The previously prepared design at the SRPF will also need to be modified.

### **Description of Services**

The following work will be accomplished for each site:

Task 1 - Administrative, Procurement, and Design Services

- 1. Modify existing design to accommodate changed project conditions which include additional FDEP requirements and provision of flow meter and check valve.
- 2. Provide review drawings at 90% and 100% complete stages.
- 3. Incorporate the review comments and prepare the Final Design. Submit the Final Design to the PBCWUD. The submittal shall include five (5) copies of full-size drawings and equipment cut-sheets and two (2) copies of half-size drawings.
- 4. Evaluate expected pressure loss through two banks of RPZ's in series. Determine whether the residual membrane concentrate pressure will be sufficient to discharge to the force main.
- 5. Select location for second RPZ bank and modify the existing design to include the second set of RPZ's.
- 6. The initial design was based on the membrane concentrate being fed into the discharge side of Repump Station 9N. The revised configuration has the membrane concentrate being fed into the suction side of Repump Station 9N.
- 7. Initially, the PBCWUD was going to provide a 24" venturi flowmeter and swing check valve for the interconnect at this site. After review, it was determined that neither item was appropriate for this project. Therefore, the revised design will need to include design and selection of these items. The original pipe size was also based upon the sizes of this flowmeter and check valve. The pipe size will now be re-evaluated based upon a properly-sized flowmeter and check valve.
- 8. Prepare an updated construction cost estimate for the anticipated work for the 90% submittals.
- Submit the Final Design to the FDEP along with a letter stating that the work is being performed in conformance with their Permit Revision with a request for noted exceptions.
- 10. Prepare detailed construction schedule to include as a minimum; engineering and permitting services, site mobilization, detailed construction activities, schedule shut downs and durations, equipment / material delivery times, testing, startup and commissioning.
- 11. Prepare submittals (or confirmation of compliance with PBCWUD design standards) administer and track submittal process.
- 12. Schedule meetings, inspections, and testing with PBCWUD staff.
- 13. Obtain PBC building and electrical permits. PBCWUD will pay for permit fees.
- 14. Provide Engineer's site visits during construction to confirm construction is being performed in conformance with Design Drawings and Specifications. Site visits to be performed by design professional.

## Task 2 - Construction Services

The following construction services are specific to this project and supplement the requirements of Article 19 of the Contract:

- 1. Schedule meetings, inspections, and testing with County and WTP staff.
- 2. Obtain building permit, as required. All permit fees to be paid by County.
- 3. Prepare submittals (or confirmation of compliance with PBCWUD design standards), administer and track submittal process.
- 4. Establish staging areas with PBC Pump Station Operation and Maintenance staff, mobilize to facilities.
- 5. Layout and install piping and valves to include:
  - a. Install 18-inch Mag Meter.
  - b. Provide and install approximately 220 feet of buried 18-inch diameter C905 pipe and fittings.
  - c. Provide and install above ground modulating motorized butterfly valve, tilting disc check valve and meter station interconnected to existing Deep Injection Well wellhead.
  - d. Provide and install 20-inch wet tap sleeve and valve on existing buried pump station influent line.
  - e. Provide two (2) and install three (3) 10-inch RPZ backflow preventer manifolds in parallel; entire assembly to be inline downstream of Mag meter.
- 6. Provide and install all electrical components. Electrical and I&C components shall include the following:
  - a. Power to the motorized butterfly valve and Mag Meter/transmitter.
  - b. Conduit and conductors to check valve limit switch.
  - Conduit and signal conductors to motorized butterfly valve and Mag meter.
     Valve function shall be modulating with position feedback.
  - d. Terminations in existing power and control panels for new devices. No new devices are anticipated for existing control panels. Programming modifications will be performed by Globaltech.
- 7. Cleanup work area and demobilize from site.
- 8. Prepare record drawings for owner.

#### **ASSUMPTIONS**

- 1. County to pay for all permits.
- 2. The project will be designed in accordance with the Palm Beach County Water Utilities Department Manual of Minimum Engineering Standards and in accordance with Design Criteria Report (Attachment F)
- 3. County will provide the following:
  - a. Copies of record drawings requested by Globaltech, Inc.
  - b. Provide review comments within 10 working days.
  - c. Access to project site to conduct survey, locates, site visits, and construction activities.
- 4. It is assumed that there are necessary power and control capabilities within the existing structure to power and operate the new valve.
- 5. Globaltech will provide two 10-inch RPZ backflow preventers. The third will be supplied from County inventory.
- 6. A 10-percent construction allowance is included in the project budget.
- 7. Liquidated Damages may be assessed at a rate of \$500 per day up to Substantial Completion and \$1,000 per day from Substantial Completion until Final Completion.

## **COMPENSATION**

Compensation for Work Authorization No. 11 will be for a Guaranteed Maximum Price (inclusive of allowances) of \$406,149.75. Attachment - A provides a breakdown of engineering and construction costs.

#### PROJECT SCHEDULE

The milestone completion schedule is provided in Attachment - B. A detailed construction activity schedule will be provided under Task 2.1 of this WA.

## SBE-M/WBE PARTICIPATION

As prescribed under Provision A.3 of the CONTRACT, SBE-M/WBE participation is included in Attachment - C under this Authorization. Schedule 1 to Attachment - C defines the M/WBE participation.

ATTACHMENT - A	Compensation Summary
ATTACHMENT - B	Project Schedule
ATTACHMENT - C	SBE-M/WBE Schedules 1 & 2
ATTACHMENT - D	Project Location Map
ATTACHMENT - E	Authorization Status Report
ATTACHMENT - F	Design-Build Criteria Report
ATTACHMENT - G	Vendor Quotes
ATTACHMENT – H	Public Construction Bond
•	
ATTACHMENT - I	Form of Guarantee and Power of Attorney

# ATTACHMENT - A Compensation Summary

WA-11: SRPF Membrane Concentrate Bypass

## Compensation Summary

	<u> </u>											
	·	E6	E6	E5	E4	T1	Office	Office		Т	*Sub-	
		\$64.90	\$58.90	\$57.69	\$42,30	\$14.00	\$23.32	\$20.00	1	0	onsultant	Sub-
Task	Task Description				7	V	420.02	<b>420.00</b>	Total Labor		Services	Consultant
1	Design Review					<u></u>		<u> </u>		_		
	Project Management/Coordination	4					2	1		丄		
	Meet with Staff to Review Project/Collect Info	2	1						<u> </u>			
	Hydraulic Review SRPF	4							L	丄		
	Mechnical Design Review SRPF		20			20				_		
	Electrical / I&C Design Review SRPF		1			1		1		\$	7,000.00	HEE
	Update Cost Estimate	1			4			1				
	Meet with Staff and Review		4							_		
	Subtotal Task 1	11	45	0	4	21	2	3	\$ 3,934.24	\$	7,000.00	
2	90% Design								<u> </u>	╁		
	Project Management/Coordination	2	4				2	1	-	1		
	Mechanical Design of SRPF		12			12				1		
	Electrical / I&C Design of SRPF	,	. 1			1				\$	4,000.00	HEE
	Update Construction Estimate		i		8					Ť	,	1166
	Meet with Staff and Review	2	4						<u> </u>	╁		
	QA/QC Review	2								$\vdash$		
	Subtotal Task 2	6		0	8	13	2	1	\$ 2,213.34	\$	4,000.00	
3	100% Design									_		
	Project Management/Coordination	1					2	1	·	<u> </u>		
	Mechanical Design of SRPF		8			8				_		
	Electrical / I&C Design of SRPF		1			1				\$	2,500.00	HEE
	Update Construction Estimate	1	<u> </u>		. 6					<u> </u>		
	Subtotal Task 3	2	11	0	6	9	2	1	\$ 1,224.14	\$	2,500.00	
4	SDC									┢		
	Site Visits	8	12		8					1		
	Submittals		8									
	As-Built Survey		2					2		\$	1,700.00	Avirom
	Programming		2					2		\$	7,000.00	HEE
	Electrical		1					1		\$	7,000.00	HEE
	O&M Manual		8					4		$\vdash$		
	Record Drawings		16			16		2		1		
	Subtotal Task 4	8	49	0	8	16	0	11	\$ 4,187.70	\$	15,700.00	
	Labor Hours	27	126	0	26	59	6	16		_		
	Labor Costs	\$1,752.30	\$7,421,40	\$0.00	\$1,099,80	\$826.00	\$139.92	\$320.00		-		
	Labor Multiplier	3.00	3.00	3.00	3.00	3.00	3,00	3.00				
	Labor Total	\$5,256.90	\$22,264.20	\$0.00	\$3,299.40	\$2,478.00	\$419.76	\$960.00		-		
	Subconsultant Total									\$	29,200.00	
	Subconsultant Multiplier										1.1	
	Subcontract Total									\$	32,120.00	
	PROJECT TOTAL									├-	\$66,798.26	
	PROJECT TOTAL Subconsultants:										\$66,798.26	

Subconsultants:

HEE - Hillers Electrical Engineering, Inc.

Avirom - Avirom & Associates



## WUD 13-036 PBC Water Utilities Department 120357 PBC SRPF Memb Byps & RPZ WA-11

ssembly#	Description	Unit	Quantity	Cost	Ext. Cost	Markup*	Ext. Price
Job: 120357 PE	BC SRPF Memb Byps & RPZ WA-11						
Bid Item:	1 General Requirements						
1	Temporary Facilities	LOT	1.00	2,235.0000			
L	Job Site Trailer	Month	3.00	300.0000	900.00	1.1500	1,097.10
Ľ	Trailer Pick up/Delivery	Ea	2.00	150.0000	300.00	1.1500	345.00
L	Sanitary	Month	3.00	95.0000	285.00	1.1500	347.42
L	Job Site Office Supplies	LOT	3.00	50.0000	150.00	1.1500	182.85
L	Waste Hauling	LOT	1.00	600.0000	600.00	1.1500	731.40
2	General Conditions	LOT	1.00	26,172.7500			
, <b>L</b>	Submittal Labor	HR	20.00	63.1400	1,262.80	1.2992	1,640.63
L	Progress Meeting	HR	20.00	64.7100	1,294.20	1.2992	1,681.42
L	Scheduling Labor	HR	40.00	63.1400	2,525.60	1.2992	3,281.26
L	Construction PM	HR	80.00	63.1400	5,051.20	1.2992	6,562.52
L	Construction Superintendent	HR	100.00	65.5000	6,550.00	1.2992	8,509.76
L	Startup Crew	CR-D	2.00	1,014.3000	2,028.60	1.2992	2,635.56
L.	Punch Out Crew	CR-D	2.00	1,014.3000	2,028.60	1.2992	2,635.56
· L	Purchasing & Subcontracts	HR	20.00	63.1350	1,262.70	1.2992	1,640.50
L	Testing Services	LOT	1.00	400.0000	400.00	1.1000	440.00
L	Safety	HR	25.00	75.0000	1,875.00	1.2992	2,436.00
L	O&M	HR	30.00	63.1350	1,894.05	1.2992	2,460.75
B. 114				Bid Item Totals:	28,407.75		36,627.73
Bid Item:	2 Civil		•				
2001	Mobilization	LOT	1.00	3,057.7200			
L	Construction PM	HR	8.00	63.1400	505.12	1.2992	656.25

Assembly#		Description	Unit	Quantity	Cost	Ext. Cost	Markup*	Ext. Price
	L	Construction Superintendent	HR	8.00	65.5000	524.00	1.2992	680.78
	L	3 Man Crew	CR-D	2.00	1,014.3000	2,028.60	1.2992	2,635.56
		Underground Layout	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.78
		Utility Locates	HR	4.00	225.0000	900.00	1.1500	1,035.00
2221		Excavate, Install, Backfill/Compact 18" to abv grd	LOT	1.00	25,402.5000			
	L	3 Man Crew	CR-D	5.00	1,014.3000	5,071.50	1.2992	6,588.89
	L	Piping General	LOT	1.00	18,406.0000	18,406.00	1.1500	22,648.58
	L	Stone/Fill	LOAD	3.00	475.0000	1,425.00	1.1500	1,737.08
	L	Temp Erosion Control	LOT	1.00	500.0000	500.00	1.1500	609.50
2221		Тар	LOT	1.00	22,467.9000			
	L.	3 Man Crew	CR-D	3.00	1,014.3000	3,042.90	1.2992	3,953.34
	L.	30x18 Tap Rangeline	EA	1.00	16,950.0000	16,950.00	1.1000	18,645.00
	L	Stone/Fill	LOAD	1.00	475.0000	475.00	1.1500	579.03
	L	Wellpoint System	LOT	1.00	1,000.0000	1,000.00	1.1500	1,219.00
	L	Trench Box/Shoring	LOT	1.00	1,000.0000	1,000.00	1.1500	1,219.00
2221		Cut and Plug 24" DIP	LOT	1.00	1,514.3000			•
	L	3 Man Crew	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.78
	L	Saw	LOT	1.00	250.0000	250.00	1.1500	304.75
	L	Grout 24" Pipe (2)	LOT	1.00	250.0000	250.00	1.1500	304.75
2002		Damah	LOT	4.00	, 057 7000			÷
2002	1	Demob	LOT	1.00	3,057.7200	F0F 40	4 0000	
	L	Construction PM	HR	8.00	63.1400	505.12	1.2992	656.25
	L	Construction Superintendent	HR	8.00	65.5000	524.00	1.2992	680.78
	L	3 Man Crew	CR-D	2.00	1,014.3000	2,028.60	1.0000	2,028.60
					Bid Item Totals:	57,414.44		68,817.70

## Continued...

sembly#	Description	Unit	Quantity	Cost	Ext. Cost	Markup*	Ext. Price
Bid Item:	3 Concrete						
3300	RPZ Slab	LOT	1.00	6,557.2000			
L	Prep, Form & Tie Steel	CR-D	2.00	1,014.3000	2,028.60	1.2992	2,635.56
· L	Form & Materials	LOT	1.00	1,000.0000	1,000.00	1.1500	1,219.00
L	Place & Finish	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.78
L	Cast In Place Concrete	CY	10.00	150.0000	1,500.00	1.1500	1,828.50
L	Strip & Rub	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.78
3300	Pipe Supports and valve box collar	LOT	1.00	5,871.5000			
L	Excavate, Form & Tie Steel	CR-D	3.00	1,014.3000	3,042.90	1.2992	3,953.34
L	Form & Materials	LOT	1.00	500.0000	500.00	1.1500	609.50
L	Place & Finish	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.7
. L	Cast In Place Concrete	LOT	2.00	150.0000	300.00	1.1500	365.7
L	Strip & Rub	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.7
Bid Item:	5 Metals			Bid Item Totals:	12,428.70		15,882.7
Bia item:	5 Metals						
5050	Pipe Supports	LOT	1.00	2,014.3000			
L	Pipe Supports	LOT	1.00	1,000.0000	1,000.00	1.1500	1,219.00
. <b>L</b>	3 Man Crew	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.7
				Bid Item Totals:	2,014.30		2,536.7
Bid Item:	9 Finishes						
9000	Finished	LOT	1.00	5,540.8000	• .		
9000	Finishes Coatings	LOT	1.00	1,000.0000	1,000.00	1.1500	1,219.00
L	Coat Pipe	CR_D	5.00	908.1600	4,540.80	1.2992	5,899.4
	•	_					-,

## Continued...

sembly#	Description	Unit	Quantity	Cost	Ext. Cost	Markup*	Ext. Price
Bid Item:	13 I&C						
	DP Transmitter	LOT	1.00	1,500.0000	1,500.00	1.1500	1,828.50
	Magmeter	LOT	1.00	8,990.0000	8,990.00	1.1500	10,958.8
	I&C Acc	LOT	1.00	1,200.0000	1,200.00	1.1500	1,462.8
	PLC Card Installation	LOT	1.00	500.0000	500.00	1.1000	550.0
				Bid Item Totals:	12,190.00		14,800.1
Bid Item:	15 Mechanical						
15050	Above Ground Mechanical	LOT	1.00	94,621.4000			
L	Install Meter Head/RPZ	CR-D	6.00	1,014.3000	6,085.80	1.2992	7,906.6
L	Piping General	LOT	1.00	84,707.0000	84,707.00	1.1500	103,257.8
L	Pressure Test	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.7
L	Pressure Test Materials & Equipment	LOT	1.00	1,800.0000	1,800.00	1.1500	2,194.2
L	Tie-In	CR-D	1.00	1,014.3000	1,014.30	1.2992	1,317.7
				Bid Item Totals:	94,621.40		115,994.2
Bid Item:	16 Electrical						
	Electrical Sub	LOT	1.00	24,700.0000	24,700.00	1.1000	27,170.0
				Bid Item Totals:	24,700.00		27,170.0
Bid Item:	18 Tools & Equipment						
18001	Tools & Consumables	LOT	1.00	840.0000			
L	Misc Tools	LOT	1.00	750.0000	750.00	1.1500	914.2
L	Saw Blade	LOT	1.00	90.0000	90.00	1.1500	109.7
18002	Rental Equipment	LOT	1.00	14,334.3400			
L	Excavator - 210	Week	2.00	2,165.9200	4,331.84	1.1500	5,280.5
L	Fuel	GAL	400.00	4.5000	1,800.00	1.1500	2,070.0
· Ĺ	Loader	Week	2.00	1,775.0000	3,550.00	1.1500	4,327.4
L	Fuel	GAL	240.00	4.5000	1,080.00	1.1500	1,242.0
					,		.,

#### Continued...

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Markup*	Ext. Price
L	Fuel	GAL	25.00	4.0000	100.00	1.1500	115.00
L	10,000lb Traversing Fork Lift	Week	2.00	1,140.0000	2,280.00	1.1500	2,779.32
Γ.	Fuel	GAL	75.00	4.5000	337.50	1.1500	388.13
				Bid Item Totals:	15,174.34		18,268.62
Bid Item:	25 Allowance						
	Allowance	LOT	1.00	25,000.0000	25,000.00	1.0000	25,000.00
				Bid Item Totals:	25,000.00		25,000.00
Bid Item:	50 Engineering						
	Engineering	LOT	1.00	66,798.2600	66,798.26	1.0000	66,798.26
				Bid Item Totals:	66,798.26		66,798.26
Bid Item:	60 Bonds						
	Bonds & Certifications	LOT	1.00	6,204.4900	6,204.49	1.1500	7,135.16
				Bid Item Totals:	6,204.49		7,135.16
				Grand Totals:	350,494.48		406,149.75

Note: All materials include an additional 6.0% markup for FL State sales tax.

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

## **PROJECT SCHEDULE**

WA-11: SRPF Membrane Concentrate Bypass (WUD 13-036)

## **SCHEDULE**

The completion dates for this work will be as follows (starting from DESIGN-BUILD ENTITY'S receipt of Notice to Proceed).

Design-Build Services	Substantial Completion <sup>(1)</sup>	Final Completion <sup>(1)</sup>
Design Services	45 days	60 days
Permitting		120 days
Procurement		150 days
Construction	210 days	240 days

<sup>(1)</sup> Total Time From Notice to Proceed

#### SCHEDULE #1

#### LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONTRACTORS

PROJECT NAME:	WA-11: SRPF Membrane Concentrate Bypass		PROJECT NUMBER	R: <u>13-036</u>
NAME OF PRIME BIDDER: CONTACT PERSON:	Globaltech, Inc. Paul Gandy, P.E.	ADDRESS:	6001 Broken Soun FL 33487	nd Parkway NW, Suite 610, Boca Raton,
BID OPENING DATE:		PHONE NO. DEPARTMENT:	561-997-6433	FAX NO. <u>561-997-5811</u>

#### PLEASE IDENTIFY ALL APPLICABLE CATEGORIES

Name, Address, Telephone Number of SBE-W/MBE	(Check one or b	ooth Categories)			Dollar Amount		
Contractor	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
Globaltech, Inc.		/	\$0.00	\$0.00	\$0.00	\$335,299.75	\$0.00
(See above for Address and Number)			70.00	\$0.00	\$0.00	\$555,255.75	Ş0.00
Energy Efficient Electric, Inc.			\$0.00	\$0.00	\$0.00	\$24,700.00	\$0.00
23257 St. Rd. 7, Boca Raton, FL 33428		, ,	<del>50.00</del>	\$0.00	\$0.00	\$24,700.00	\$0.00
Rangeline Tapping Services, Inc.							
11353 52nd Road North West		<b> </b>	\$0.00	\$0.00	\$0.00	\$16,950.00	\$0.00
Palm Beach, FL 33411							
Hillers Electrical Engineering, Inc.		1	\$0.00	\$27,500.00	\$0.00	\$0.00	¢0.00
23257 St. Rd. 7, Boca Raton, FL 33428			\$0.00	\$27,500.00	\$0.00	\$0.00	\$0.00
Avirom & Associates, Inc.					e .		
50 SW 2nd Ave., Ste. 102, Boca Raton, FL		✓	\$0.00	\$0.00	\$0.00	\$1,700.00	\$0.00
33432 (561)							
PRIME CONTRACTOR TO COMPLETE:		TOTAL:	\$0.00	\$27,500.00	\$0.00	\$378,649.75	\$0.00
DID DDICE: \$406 140 75	Takal Malua af (	DE Dortisination	···	140.75	, -,	7 - 1 - 7 - 1 - 1 - 1	70.00

BID PRICE: \$406,149.75 Total Value of SBE Participation: \$406,149.75

NOTE:

- 1. The amount listed on this form for a Subcontractor must be supported by price or precentage included on Schedule 2 or a proposal from each Subcontactor 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 a SBE and M/WBE, please indicate the dollar amount under the appropriate category.
- 3. M/WBE information is being collected for tracking puposes only.

## SCHEDULE #2

PROJECT	ΓNO.	WUD 13-036	PROJECT NAME:	WA-11 RPZ's		lembrane Conce	ntrate
TO: G	ilobalted	h, Inc.					,
			(Name of Prime Bi	dder)			
The under	rsigned	is certified by P	alm Beach County as	a(n) – (ch	eck one o	r more, as applic	able):
		Small Busine	ess Enterprise XX Mir	nority Bus	iness Ente	erprise	
Bla	ack	_ Hispanic	Women Cauc	asian <u>XX</u>	Other (Ple	ease Specify)	
Date of Pa	alm Bea	ch County Cert	ification: <u>November 24</u>	, 2012			
The unders	signed is n detail, ı	prepared to perfo	orm the following describe	ed work in be perfo	connection rmed):	with the above pro	oject
Line Item/ Lot No.		item [	Description		Qty / Units	Unit Price	Total Price
1			nical Design		L.S.	1 ·	\$34,678.26
3			al Construction		L.S.	1	\$238,993.76
4	<u></u>		ent / General Conditions tion Allowance		L.S. L.S.	1	\$36,627.73 \$25,000.00
at the follov	wing price	e <u>\$335,299.75 (t</u> ł	nree hundred thirty five th	ousand tw	o hundred r	ninety nine dollars	and seventy
-		(Subcont	ractor's quote)				
And will en Beach Cou		a formal agreem	ent for work with you co	nditioned	upon your	execution of a co	ntract with Palm
			ontract any portion of this st be stated: \$			n-certified SBE su 	bcontractor, the
			derstands that the provons to other bidders	rision of t	his form to	prime bidder do	oes not prevent
				Global	tech, Inc		
				(Print Na	me of SBE	-M/WBE Subcontr	actor)
				Ву:	V french (S	gnature)	
				(Print na	me/title of p	/ Vice President person executing of BE Subcontractor)	<u>.</u>
				Date:	March 22	2, 2013	

## SCHEDULE #2

PROJE	ECT NO.	WUD 13-036	_ PROJECT NAM	4r. –	VA-11: SRPF M ypass	lembrane Conce	entrate
TO:	Globalte	ch, Inc.					
		······································	(Name of Prim	e Bidder	)		***************************************
The un	dersigned	is certified by Pa	lm Beach County	as a(n)	– (check one o	r more, as applic	cable):
		Small Busine	ss Enterprise <u>XX</u>	Minority	Business Ente	erprise	
	Black _	Hispanic	Women Ca	ucasian	XX Other (Plea	se Specify)	
Date of	Palm Bea	ich County Certif	ication: <u>Septemb</u>	er 4 <sup>th</sup> , 20	<u>12.</u>		
The und (Specify	lersigned is v in detail,	prepared to perfor particular work it	m the following des ems or parts there	scribed wo	ork in connection performed):	with the above pro	oject
Line Item/ Lot No.		Item De	escription		Qty / Units	Unit Price	Total Price
1	Ele		tor – provide power ew motorized valve		L.S.	1	\$24,700.00
	-						
			WALLET TO THE STATE OF THE STAT				
at the fol _\$24,70	lowing price 0.00 (Twer	ty four thousand s	even hundred dolla	rs and no	cents)		
		(	Subcontractor's qu	ote)			
And will Beach C	enter into a ounty.	a formal agreemer	nt for work with you	u conditio	ned upon your e	execution of a cor	ntract with Palm
If unders amount o	signed inter of any such	nds to sub-subcont subcontract must	ract any portion of oe stated: \$	this subd	contract to a nor	n-certified SBE su	bcontractor, the
The und	ersigned s actor from p	ubcontractor unde providing quotation	rstands that the last to other bidders	provision	of this form to	prime bidder do	es not prevent
						t Electric, Inc. M/WBE Subcontra	
				Ву:	<u>u</u>	gnature)	
				Wi	11iam T. Sc		
				(Prin	nt name/title of pe	erson executing or E Subcontractor)	1
				Date	March 4	2013	

## SCHEDULE #2

PROJECT NO.	WUD 13-036 PR	OJECT NAME:	WA-11: SRPF M Bypass	embrane Conce	entrate	
TO: Globalt	ech, Inc.					
	(N	ame of Prime Bid	lder)			
The undersigne	d is certified by Palm B	each County as a	ı(n) – (check one or	more, as applic	cable):	
	Small Business Er	terprise XX Min	ority Business Ente	erprise		
Black _	Hispanic Won	nen Caucas	ian <u>XX</u> Other (Plea	se Specify)	••••	
Date of Palm Be	each County Certification	n: <u>December 21,</u>	2011.			
The undersigned (Specify in detail	is prepared to perform the , particular work items o	following describe or parts thereof to	d work in connection be performed):	with the above pr	oject	
Line Item <i>l</i> Lot No.	Item Descrip	otion	Qty / Units	Unit Price	Total Price	
1	Wet Tap of 30"x		L.S.	1	\$16,950.00	
					***	
					-	
at the following pr	ice.					
	een thousand nine hundr (Subcontractor's	ed fifty dollars and r	no cents)			
And will enter into	a formal agreement for	• •	ditioned upon your e	execution of a co	ntract with Palm	
Beach County.	<b>3</b>		america apon your c	Account of a con	THE COLUMN TO A STATE OF THE ST	
If undersigned into amount of any suc	ends to sub-subcontract a th subcontract must be sta	any portion of this ated: \$	subcontract to a non	-certified SBE su	bcontractor, the	
The undersigned subcontractor from	subcontractor understan providing quotations to c	ds that the provis	sion of this form to	prime bidder do	es not prevent	
	en production of the second		Rangeline Tapp (Print Name of SBE-I			
			ву:			
			(Print name/title of pe behalf of SBE-M/WB	gnature) COKOCU erson executing of E Subcontractor	J. Vice f	President
			Date: 3-/8			

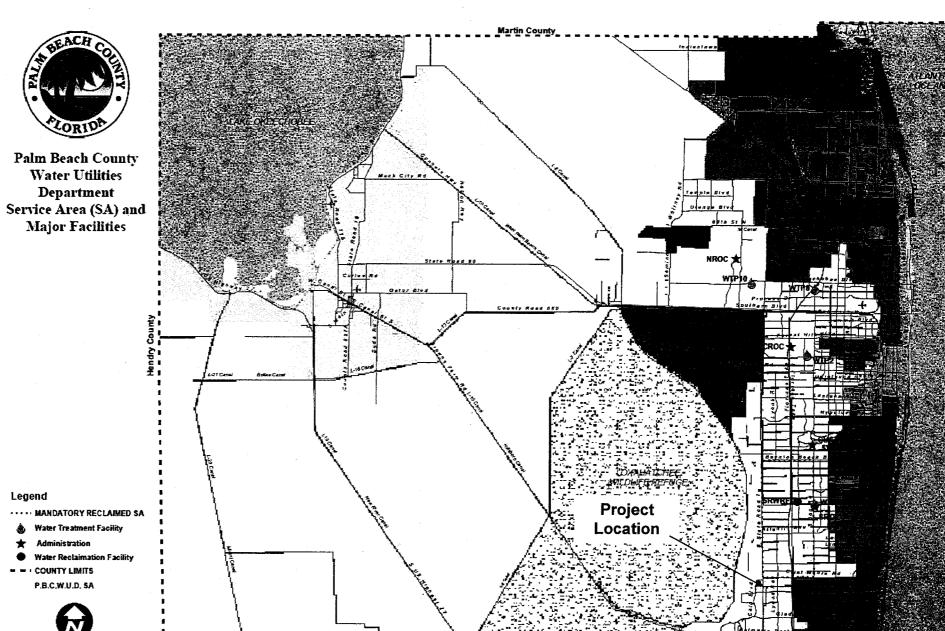
## SCHEDULE #2

PROJI	ECT NO.	WUD 13-036	PROJE	CT NAME:	WA- Bypa		embrane Conce	entrate
TO:	Globalte	ch, Inc.						
			(Name	of Prime Bid	lder)			
The ur	ndersigned	is certified by Pa	alm Beach	County as a	(n) — (d	check one or	more, as applic	cable):
		Small Busine	ss Enterpi	ise <u>XX</u> Min	ority B	usiness Ente	rprise	
	Black	_ Hispanic XX \	Women	Caucasia	n	_ Other (Ple	ase Specify)	
Date o	f Palm Bea	ach County Certif	ication: <u>O</u>	ctober 17 <sup>th</sup> , 2	2012.			
The und	dersigned is y in detail,	prepared to perfor particular work it	rm the follo ems or par	wing describe	d work be per	in connection ( formed):	with the above pr	oject
Line Item/ Lot No.		Item De	escription			Qty / Units	Unit Price	Total Price
1	Desig	n Review – Electri	cal/I&C De	sign Rev. SRF	PF	L.S.	1	\$7,000.00
2 3	90	% Design – Electri 0% Design – Electr	ical/I&C De	sign of SRPF		L.S. L.S.	1	\$4,000.00
4		Electrical Services			<del></del> -	L.S.	1	\$2,500.00 \$7,000.00
5			ramming			L.S.	1	\$7,000.00
	l enter into	e <u>\$27,500.00 (Tw</u> (Subcontra a formal agreeme	actor's quot	e)				ntract with Palm
lf under	signed inte	nds to sub-subcon n subcontract must	ntract any p be stated:	ortion of this \$	subcon	tract to a non	-certified SBE su	bcontractor, the
The un subcont	dersigned ractor from	subcontractor und providing quotation	erstands ti ns to other	nat the provis bidders	sion of	this form to	prime bidder do	pes not prevent
					(Print N	(Si earne/title of peof SBE-M/WB	M/WBE Subcontrol gnature) gnature) erson executing of E Subcontractor)	sident
					Date: _	3/19	//3	

## SCHEDULE #2

PROJECT NO.	WUD 13-036	PROJECT NAME:	WA-11: SRPF M Bypass	embrane Conce	entrate 	
TO: Globalt	ech, Inc.					
		(Name of Prime Bid	der)		······································	
The undersigne	d is certified by Pa	lm Beach County as a	(n) – (check one or	more, as applic	cable):	
	Small Busine	ss Enterprise <u>XX</u> Min	ority Business Ente	rprise		
Black _	Hispanic	Women Caucas	ian <u>XX</u> Other (Pleas	se Specify)	- Stele - skeeks - steeks	
Date of Palm Be	each County Certif	ication: <u>July 29, 2010.</u>				
The undersigned (Specify in detail	s prepared to perfor , particular work it	m the following describe	d work in connection to be performed):	with the above pr	oject	
Line Item/ Lot No.	item De	escription	Qty/ Units	Unit Price	Total Price	
1	<del>'''''''''''''''''''''''''''''''''''''</del>	Survey	L.S.	1	\$1,700.00	
				***************************************		
			#	***************************************		
at the following pri	ce: <u>\$1,700.00 (One</u> (Subcontra	thousand seven hundre ctor's quote)	d dollars and no cent	s)		
And will enter into Beach County.	a formal agreeme	nt for work with you con	ditioned upon your e	xecution of a co	ntract with Palm	
If undersigned into	ends to sub-subcon th subcontract must	tract any portion of this- be stated: \$	subcontract to a non	-certified SBE st	ubcontractor, the	
The undersigned subcontractor from	subcontractor under providing quotation	erstands that the provis s to other bidders	sion of this form to	prime bidder do	oes not prevent	
			Avirom & Assoc (Print Name of SBE-I		actor)	
			By M. Sign	gnature)	<i>0</i> ~	
			Michael D. Av (Print name/title of pe behalf of SBE-M/WB	erson executing o	n	
			Date: March 1	. 2013		

## ATTACHMENT -- D Project Location Map



WA-11: SRPF Membrane Concentrate Bypass (WUD 13-036)

## ATTACHMENT - E Authorization Status Report

## AUTHORIZATION STATUS REPORT March 22, 2013

## SUMMARY AND STATUS OF REQUESTS FOR 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	Pending		-	13-003	120330
CSA-6	WTP 3 Membrane Cleaning System Modification	Approved	\$32,528.22	9/28/12	12-004	120331
CSA-7	SRPF Membrane Concentrate Bypass and PS 9S RPZ Installation	Pending	,		12-021	120340
CSA-8	LRWTP PW-5 Pump Conversion	Pending				120347
CSA-9	SROC DIW Blending System	Pending				120348
	Total CSAs		\$150,140.43			
	Total COAS		\$130,140.43			
	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	Pending			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-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	Pending	\$406,149.75		13-036	120357
WA-12	WTP 3 Acid Piping	Pending			13-019	120317
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
	Total WAs		\$3,363,583.81			
	Total CSAs + WAs		\$3,513,724.24	<del>}</del>	·	

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

## SUMMARY AND STATUS OF SBE / MINORITY BUSINESS TRACKING SYSTEM

WA-11: SRPF Membrane Concentrate Bypass

	Total
Current Proposal	
Value of Consultant Service Authorization	\$0.00
Value of Work Authorization	\$406,149.75
Value of CSA and WA	\$406,149.75
Value of SBE Minority Letter of Intent	\$406,149.75
Actual Percentages	100.00%
Signed / Approved Authorizations	
Total Value of Approved Consultant Service Authorization	\$150,140.43
Total Value of Approved Work Authorization	\$2,957,434.06
Total Value of CSAs and WAs	\$3,107,574.49
Total Value of SBE Signed Subcontracts	\$2,730,885.49
Actual Percentages	87.87%
Signed Authorizations Plus Current Proposal	
Total Value of Approved CSAs Plus Current CSA Proposal	\$150,140.43
Total Value of Approved WAs Plus Current WA Proposal	\$3,363,583.81
Total Value of Approved and Proposed CSAs and WAs	\$3,513,724.24
Total Value of SBE Subcontracts and Letters of Intent	\$3,137,035.24
Actual Percentages	89.27%
GOAL	75%

# ATTACHMENT - F Design-Build Criteria Report

# Design Build Criteria Membrane Concentrate Bypass Southern Region Pumping Facility Project No. WUD 13-036

## 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 Pumping Facility (AKA 9 North), 19110 South SR 7 (Yamato), Boca Raton, FL 33428, PCN 00-42-43-27-05-074-0161.

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 membrane concentrate bypass piping and appurtenances to connect the existing membrane concentrate pipeline to the influent side of the regional wastewater pumping station. The membrane concentrate bypass shall be in accordance with the sketch prepared by Hassan Hadjimiry, Director of Regulatory compliance and permit by FDEP dated August 31, 2012 with revision dated September 6, 2012, attached hereto. Plans shall be prepared upon the master base CAD files from Mathews Consulting. The record drawing will include CAD files to insert the pipeline into the existing master drawing CAD file as a single 3-D layer. The general pipeline route has been determined under project WUD 11-108.

The following design criteria shall be used:

- 1. Average membrane concentrate flow is 2,525 gpm (5 membrane trains at 505 gpm per train).
- 2. Peak membrane concentrate flow is 5,872 gpm (7 membrane trains at 505 gpm per train + 2,337 gpm permeate flush).
- 3. Provide minimum 2 stainless steel RPZ's in parallel.
- 4. Underground piping shall be either PVC 905 DR 25 (greater than 12" diameter) with bell clamp restraint or restrained joint DIP with Protecto 401 interior lining. Fittings shall be mechanical joint DIP with Protecto 401 interior lining. Mechanical joint restraint shall conform to the Palm Beach County Water Utilities Manual of Minimum Engineering Standards.
- 5. Above ground pipe and fittings shall be flanged DIP with Protecto 401 interior lining or 316 SS.

- 6. Provide new flow meter for membrane concentrate bypass.
- Provide motorized valve for remote operation of bypass with position feedback. Valve must be capable of being modulated for partial flow bypass.
- 8. ARV's shall be 316 SS.
- 9. Provide associated instrumentation and electrical.
- 10. 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 excavation 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, 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 - G Vendor Quotes

Energy Efficient Electric, Inc. 1600 Mercer Ave. Unit 6 West Palm Beach, FL. 33401 Phone (561) 655-7211 Fax (561) 655-9661 Mobile (561) 722-1383 E-Mail Address: bill@energyeff.com

#### **Electrical Scope of Work**

# Palm Beach County 9 North Pump Station Motorized Valve & Flow Meter & Check Valve Limit Switch

February 6, 2013 Revision 04

Quote No. 30170

We are pleased to provide your firm with our scope and proposal for the necessary electrical work on the above referenced project.

- 1. Provide Three (3) new A-B PLC cards. Analog input, digital input & output cards.
- 2. Furnish and install 3-30A 480V fuses in existing spare fused switch in switchboard for new feeder to a new motorized valve.
- 3. Install 4 # 10 THHN conductors from the existing switchboard to the motorized valve disconnect.
- 4. Provide 3-pole Nema 4X disconnect at a new motorized valve.
- 5. Provide Two (2) junction boxes for power and control wiring below existing control panel on the West end of the deep well pad as shown on Hillers electrical (HEE) drawings E-1 thru E-3.
- 6. Provide a 3/4" conduit with a 2/conductor twisted shielded pair to a new flow meter.
- 7. Provide a ¾" conduit with 8 # 14 THWN conductors digital input and output controls to a new 3-phase motorized valve for control.
- 8. Provide a  $1 \frac{3}{4}$ " conduit with 1 TW Shielded pair to new motorized valve as shown on HEE drawings.
- 9. Provide N4X surge suppression at the flow meter.
- 10. Provide a 3/4" conduit from the control junction box to the check valve limit switch. Check valve to be supplied with limit switch.
- 11. Excavation and backfill is included to a rough grade. Final restoration is to be by others.
- 12. Patching and painting is not included.
- 13. Provide additional conduit, fittings and wiring to new pressure transmitter. Transmitter furnished and installed by others.

Lump Sum

\$24,700.00

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,

Bill Scott

Bill Scott Vice President

Residential ---- Lighting Systems ---- Commercial ---- Industrial

C:\USERS\MOORE\APPDATA\LOCAL\MICROSOFT\WINDOWS\TEMPORARY INTERNET FILES\CONTENT.OUTLOOK\EOV4SSA4VBC 9 NORTH ELEC REVOLDOC



January 31, 2013

Globaltech adam@globaltechdb.com

Attn: Adam Moore Phone: 561-997-6433 Fax #: 561997-5811

Re: 30" x 18" Wet Tap – Boca Raton, FL

Rangeline Tapping Services, Inc. will provide Epoxy Coated Line Stop fittings with Stainless Steel

Hardware, unless otherwise specified and perform the following:

Quantity	Size	Pipe Type	Single Line Stop XXX Main (80 PSI or less)	Double Line Stop XXX Main (80 PSI or less)	Line Stop Equipment Overnight charges			
				(0010101103)	Per day			

#### Prices are based on:

- Normal daytime hours (7:00AM- 7:00 PM) Monday through Friday. Technician(s) will have a \$100.00 per hour overtime charge.
- Please allow 5 7 days notice for scheduling to insure availability.
- Rangeline will allow (1) days or less to complete the quoted work.
- Rangeline will allow (1) Mobilizations/De-Mobilizations to the job-site. Additional trip will be \$350.00 per trip.
- Rangeline will allow the Line Stop to be left in place for () day(s) or less. Each additional day will be charged as noted above including weekends.
- If the type of pipe changes from what we have quoted above, prices and scheduling may vary. Contractor or Municipality is responsible for verifying the type of pipe and it's O.D.
- Stand-by charges will be billed at \$100.00 per hour / per technician.
- Stand-by charges for equipment at \$750.00/per day When technician & equipment arrive on-site.

Rangeline can also perform the following Wet Taps:

Quantity	Size	Pipe Type	Complete w/ Materials, Install, Test & Tap	Install, Test & Tap (excluding materials)	*Test & Tap
1	30" x 18"	DIP	\$16,950.00	\$2,000.00	\$975.00

Prices are based on normal daytime hours (7:00AM-7:00 PM) Monday through Friday.

- Price includes "Sales Tax" on supplied material.
- \*When customer installs material and it does not pass pressure test, \$100.00/ hr will be charged for re-work.

Rangeline Tapping Services, Inc.
P.O. Box 210155 • Royal Palm Beach, FL 33421
Phone: (800) 346-5971 • Fax: (561) 683-0912



# Post Office Box 16039 - Tampa, FL 33687-6039 (813) 740-1144 - FAX (813) 627-9387

February 6, 2012

Globaltech, Inc. Attn: Adam

Project:

**PBC SRPF Membrane Concentrate** 

Bid Date: Addendum: ARRA - No

QTY	SIZE Above Ground	DESCRIPTION	UNIT \$	EXT \$
1	20"	MEGAFLANGE W/ 316SST HARDWARE	\$1,615.95	\$1,615.95
1	20"	FLG BFV W/EMO	\$9,096.77	\$9,096.77
1	20"	FLG DI TEE (401)	\$1,266.22	\$1,266.22
1	20"	FLG BFV W/HW AND WORM GEAR	\$2,831.18	\$2,831.18
1	18" x 20"	FLG RED 90° ELL (401)	\$1,002.22	\$1,002.22
1	18" x 19'-6"	FLG DI SPOOL (401)	\$2,634.65	\$2,634.65
1	18" x 4'-0"	FLG DI SPOOL (401)	\$984.64	\$984.64
1	18" x 4'-6"	FLG DI SPOOL (401)	\$1,038.33	\$1,038.33
1	18" x 1'-6"	FLG DI SPOOL (401)	\$716.16	\$716.16
1	18"	Dresser Coupling w/4 lugs for 7/8" rods (SB-411)	\$1,099.72	\$1,099.72
1	18" x 2"	JCM 406 Tapping Sleeve for DIP	\$180.76	\$180.76
1	2"	Air Release Valve (GA 920) (Not sure which spec to use since this is concentrate)	\$423.25	\$423.25
1	2"	316SS Ball Valve, 2pcs w/ Lever	\$103.74	\$103.74
20	2"	Sch40 316SS welded pipe	\$10.61	\$212.25
2	18" x 10"	FLG TEE (401)	\$903.56	\$1,807.11
2	18" x 10"	FLG CON RED (401)	\$549.78	\$1,099.56
2	10"	RPZ	\$8,555.56	\$17,111.11
2	10" x 3'-0"	FLG DI SPOOL (401)	\$366.70	\$733.40
2	10" x 1'-6"	FLG DI SPOOL (401)	\$288.86	\$577.73
1	18"	FLG DI 90°ELL (401)	\$744.89	\$744.89
1	18" x 10'-0"	FLG X PE DI SPOOL (401)	\$1,360.56	\$1,360.56
10	18"	FAS, 316SS B&N Kit w/ Toruseal Gasket	\$240.54	\$2,405.41
6	20"	FAS, 316SS B&N Kit w/ Toruseal Gasket	\$299.88	\$1,799.29
10	10"	FAS, 316SS B&N Kit w/ Toruseal Gasket	\$74.52	\$745.18
1	18"	FLG Swing Check Valve w/dashpot and limit switch (Tilted Disc Check Valve)	\$15,321.51	\$15,321.51
1	18"	MAG METER	Ву	Others
_	Underground			
1	18"	C153 MJ 90° BEND (401)	\$536.00	\$536.00
2	18"	C153 MJ 45° BEND (401)	\$441.33	\$882.67
2	18"	C153 MJ 111/4° BEND (401)	\$511.11	\$1,022.22
260	18"	DR18 C905 PVC Pipe (Blue)	\$29.27	\$7,609.33
14	18"	Mega-Lugs for PVC w/ Accys	\$221.90	\$3,106.56
8	18"	Bell Restraints for PVC Pipe w/ 304SS Rods/Nuts	\$366.67	\$2,933.33
1	18"	Mega-Lugs for DIP w/ Accys	\$195.09	\$195.09
1	24"	Mega-Lugs for DIP w/ Accys (IS THIS NEEDED?)	\$322.76	\$322.76

#### McDade Waterworks, Inc.

QTY	SIZE Above Ground	DESCRIPTION	<u>UNIT \$</u>	EXT \$
	Тар			
1	30" x 18"	Tapping Sleeve (JCM 412 Epoxy w/ SS Hardware)	\$5,650.00	\$5,650,00
1	16"	Tapping Valve (W/O GEARS)	\$4,688.76	\$4,688.76
1	16"	Mega-Lug for PVC w/ Accys	\$182.59	\$182.59
1		Valve Box w/ Lid	\$121.43	\$121.43
1	6'-0"	Extension Stem, Galvanized	\$75.66	\$75.66
1		3" Bronze Valve Tag	\$15.80	\$15.80
1	DAY	Valve Start-up (1-8hr day)	\$1,500.00	\$1,500.00
		TOTAL THIS BID ITEM - TAX NOT INCLUDED		\$95,753.81

#### Notes:

- 1 All Ductile Iron MJ Fitting Quoted C153 (Compact)
- 2 All Fitting and Valves Quoted Less Accessories
- 3 All Buried Ductile Iron Pipe and MJ Fitting Quoted Bituminous Coated
- 4 All Flange Pipe and Fitting Quoted Prime Coated
- 5 All Ductile Iron Pipe and Fitting Quoted Protecto 401 Lined
- 6 All Ductile Iron Fitting (MJ & Flange) Quoted Are Globally Sourced
- 7 Due to the volatile raw market All C-900 PVC, C-905 PVC, HDPE, SDR 35, Sch 80 PVC, Sch 40 PVC, Stainless Steel, Copper & Brass Pipe, Fittings, Valves, etc will/may need to be re-quoted at the time of purchase. Pricing Subject to Availability.

  \*\*\* PVC prices are good till March 6th, 2013.
- 8 Due to the volitility of the raw <u>PVC</u> material market this quotation is valid until <u>March 6th, 2013</u>, at which time the order must be placed or this quotation is automatically voided. Prices are firm if order is released by <u>March 6th, 2012</u> for shipment completed by <u>March 30, 2012</u>. Pricing and order acceptance is contingent upon the selected PVC manufacturer receiving collectively sufficient orders to meet minimum run requirements. All backorders will be shipped, "Price In Effect" at time of shipment, If for any reason pipe is delivered after the terms of this quotation.
- 9 All valve boxes quoted less extension stem unless noted otherwise.
- 10 Stainless Steel Flange Accessories Set Prices are Firm for 15 Days from Bid Date, & Must Ship Within 15 Working Days from Bid Date.
- 11 Lead Time on the following valves are:

Butterfly Valve: 8 weeks Valve w/ EMO: 14-16 weeks Check Valve: 16-18 weeks

#### \*\* DISCLAIMER:

Prices quoted on Ductile Iron Pipe and Fittings will be firm for a period of 60 days from quotation date. Any shipments after 60 days from the quotation date can be subject to a 4% increase. Any shipments made after four months from quotation date will be re-quoted using that days current price sheets. McDade Waterworks, Inc. reserves the right to increase prices and/or change escalation terms at any time based on the potential of continued cost volatility.

The above quotation is **our** interpretation of the plans and specifications and should be reviewed by **your** firm for accuracy. Prices do not include valve boxes, ext stems, wrenches, start-up services, etc. unless specifically noted in our quotation. Prices are based on full freight allowed truckload shipments to the project. Additional materials ordered will be furnished on a case by case basis.

The quotation does **not** include electronic O&M manuals, but can be furnished for a fee based on the requirements of the specifications. The fee will be quoted at the contractor's request.

Terms Net 30 Days FOB: S/P - FFA to Jobsite

Please call should you have any questions or need any additional pricing.

Sincerely, Wesley Bunn

Page 2 of 2



# FEI-POMPANO BEACH WW #125 1950 NW 18TH STREET

From:

Deliver To: gary.morgan2@ferguson.com

Gary Morgan

Comments:

17:01:40 FEB 06 2013

FEI-POMPANO BEACH, FL WW #125

Price Quotation

Phone: 954-973-8100

Page# 1

Fax: 954-917-3134

Bid No.....: B218002

Bid Date....: 01/31/13

Quoted By.: GM

Cust 954-973-8100

Terms......: NET 10TH PROX

Customer: \*\*BID PLANT CONTRACTOR\*\*

FOR BIDDING PURPOSES ONLY POMPANO BEACH, FL 33069

Ship To: \*\*BID PLANT CONTRACTOR\*\* FOR BIDDING PURPOSES ONLY

POMPANO BEACH, FL 33069

Cust PO#...: PBC

Job Name: SRPF MEMBRANE CONC.

Item	Description		Quantity	Net Price	UM	Total	
•	PER GLOBALTECH LIST						
	ALL MATERIAL P401 LINED						
	FLG KITS 316SS W/TORUSEAL						
	****FITTING & SPOOL PRICE		•				
	INCREASE EFFECTIVE 3/15/13						
	ALL FITTINGS MUST BE						
	APPROVED & ORDERED PRIOR.						
	APPROX 25-30% INCREASE		,				•
	AFTER 3/15/13. PLEASE PLAN						
	ACCORDINGLY!!****						
	=======================================						
	<del></del>						
	ABOVE GROUND						
E2120	20 MEGAFLANGE FLG ADPT	•	1	877.000	EA	877.00	
SP-H20FBFVEMO	20 FLG BFV W/EMO		1	8905.000	EA	8905.00	
	MOD EMO						
SP-VLVSTARTUP	START UP & TRAINING FOR VLV		1	700.000	EA	700.00	
FTP420	20 DI 125# FLG P-401 TEE		1	1721.000	EA	1721.00	
M45000220OL	20 FLG BFV OL W/ H/WHL		1	2659.000	EA	2659.00	
	W/WORM GEAR						
	TRAV. NUT \$300 LESS					•	
F9SP22018	20X18 DI 125# FLG SP2000 90 ELL		1	1415.000	EA	1415.00	



# FEI-POMPANO BEACH, FL WW #125

# Price Quotation

Phone: 954-973-8100

Fax: 954-917-3134

Page# 2

17:01:40 FEB 06 2013 Reference No: B218002

FCROSS18 SP-FFELP1819'6 SP-FFELP18P SP-FFELP18R SP-FFELP18J SP-18S38C SP-18GUSSET R202N211072 V48AK	18 DI 125# C110 FLG CRS  18" X 19'6 FLG X FLG P401 DIP  18" X 4'0 FLG X FLG P401 DIP  18" X 4'6" FLG X FLG P401 DIP  18" X 1'6" FLG X FLG P401 DIP  18 DRESSER COUP F/DIP  18" SS GUSSET FLANGE  18X2 IP DBL SS STRAP-NYLON  2 SEWAGE AIR RELEASE VLV	2 1 1 1 1 1 4 1	1787.000 4313.000 1500.000 1650.000 969.000 659.000 277.000	EA EA EA EA EA	3574.00 4313.00 1500.00 1650.00 969.00
SP-FFELP18P SP-FFELP18R SP-FFELP18J SP-18S38C SP-18GUSSET R202N211072	18" X 4'0 FLG X FLG P401 DIP 18" X 4'6" FLG X FLG P401 DIP 18" X 1'6" FLG X FLG P401 DIP 18 DRESSER COUP F/DIP 18" SS GUSSET FLANGE 18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV	1 1 1 1 4	1500.000 1650.000 969.000 659.000	EA EA EA	1500.00 1650.00
SP-FFELP18R SP-FFELP18J SP-18S38C SP-18GUSSET R202N211072	18" X 4'6" FLG X FLG P401 DIP 18" X 1'6" FLG X FLG P401 DIP 18 DRESSER COUP F/DIP 18" SS GUSSET FLANGE 18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV	1 1 1 4	1650.000 969.000 659.000	EA EA	1650.00
SP-FFELP18J SP-18S38C SP-18GUSSET R202N211072	18" X 1'6" FLG X FLG P401 DIP 18 DRESSER COUP F/DIP 18" SS GUSSET FLANGE 18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV	1 1 4	969.000 659.000	EA	
SP-18S38C SP-18GUSSET R202N211072	18 DRESSER COUP F/DIP 18" SS GUSSET FLANGE 18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV	1 4	659.000		969.00
SP-18GUSSET R202N211072	18" SS GUSSET FLANGE 18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV	4		EA	
R202N211072	18X2 IP DBL SS STRAP-NYLON 2 SEWAGE AIR RELEASE VLV		277.000		659.00
	2 SEWAGE AIR RELEASE VLV	1		EA	1108.00
V48AK			215.000	EA	215.00
	0.00 1000000000000000000000000000000000	1	591.000	EA	591.00
FNW200AK	2 SS 1000# THRD 2PC FP BV LL	1	130.000	EA	130.00
GSP46LK	. 2 SS S40 316L A312 WELD PIPE	20	10.000	FT	200.00
FT1810	18X10 DI 125# C110 FLG TEE	2	1185.000	EA	2370.00
FCRP41810	18X10 DI 125# FLG P-401 CONC RED	2	711.000	EΑ	1422.00
SP-A4000SSOSY10	10" AMES 4000 RPZ BACKFLOW	2	6187.000	EA	12374.00
SP-FFELP10M	10 X 3 FT FLG X FLG P-401 DI PIPE	2	499.000	EA	998.00
SP-FFELP10J	10 X 1-1/2 FT FLGXFLG EPOX PIPE	2	373.000	EA	746.00
F9P410	10 DI 125# FLG P-401 90 BEND	2	420.000	EA	840.00
F9P418	18 DI 125# FLG P-401 90 BEND	1	1012.000	EA	1012.00
SP-FPELP1810	18" X 10'0 FLG X PE P401 DIP	1	2218.000	EA	2218.00
SP-SSFAP18	18" SS FLG ACC PKG	10	280.000	EA	2800.00
SSFAP20	20 SS FLG ACC PKG	6	329.000	EA	1974.00
SSFAP10	10 SS FLG ACC PKG	10	93.000	EA	930.00
SP-18TDCVTODP	18 TILTED DISC CHK VLV W/TOP ODP	1	14900.000	EA	14900.00
	W/DASHPOT & LIMIT SWITCH				
SP-18MM	18" MAG METER	1	8990.000	EΑ	8990.00
	WATERMASTER AB FEF121.450				
	SUBTOTAL				82760.00
,					
•	UNDERGROUND				
MJ9P4LA18	18 MJ C153 P-401 90 BEND L/A	1	729.000	EA	729.00
MJ4P4LA18	18 MJ C153 P-401 45 BEND L/A	2	599.000	EA	1198.00
MJ1P4LA18	18 MJ C153 P-401 11-1/4 BEND L/A	2	695.000	EA	1390.00
DR18GP18	18 C905 DR18 CL235 PVC GJ GREE PIPE	260	37.000	FT	9620.00
SPVC4018AP	18 PVC STARGRIP SER 4000 W/A	14	179.000	EA	2506.00
SPWPC18	18 SIGMA BELL REST F/ C900 *PVLOK	8	322.000	EA	2576.00
SSGDP18AP	18 DI REST SER 3000 W/A	. 1	154.000	EA	154.00
SPVC4024AP	24 PVC STARGRIP SER 4000 W/A	1	233.000	EA	233.00
	SUBTOTAL				18406.00

TAP



17:01:40 FEB 06 2013

Reference No: B218002

# FEI-POMPANO BEACH, FL WW #125

Price Quotation

Phone: 954-973-8100

Fax: 954-917-3134

Page# 3

ltem	Description	Quantity	Net Price	UM	Total
SP-J412320018ESS	30X18 EPOXY SS TAPN SLV	1	1762.000	EA	1762.00
AFC2518TMLAOL	18 MJ RW DI OL TAPN VLV L/A	1	9200.000	EA	9200.00
	ADD \$1200 F/BEVEL GEAR				
SPVC4018AP	18 PVC STARGRIP SER 4000 W/A	1	179.000	EA	179.00
Γ4905W	2PC SCRW VLV BX W/ WTR LID	1	90.000	EΑ	90.00
841112	6 FT GATE VLV STEM EXT W/ C/PLT	1	52.000	EA	52.00
VTM	3 BRS VLV ID TAG	1	16.000	EA	16.00

Net Total:

\$112465.00

Tax:

\$6747.90

Freight:

\$0.00

Total:

\$119212.90

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This quote is offered contingent upon the buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at http://wolseleyna.com/terms\_conditionsSale.html.

#### ATTACHMENT - H

# **PUBLIC CONSTRUCTION BOND**

**BOND NUMBER:** 

K08687444

**BOND AMOUNT:** 

\$406,149.75

CONTRACT AMOUNT: <u>\$406,149.75</u>

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 WATER UTILITIES DEPT.

**OWNER'S ADDRESS:** 

8100 Forest Hill Boulevard (P. O. Box 16097)

West Palm Beach, FL 33416

**OWNER'S PHONE:** 

(561) 493-6000

**DESCRIPTION OF WORK:** 

Southern Region Pumping Facility Membrane Concentrate Bypass

<u>System</u>

PROJECT LOCATION:

PBCWUD Southern Region Pumping Facility (AKA 9 North), 19110

South State Road 7 (Yamato), Boca Raton, FL 33428

PCN 00-42-43-27-05-074-0161

LEGAL DESCRIPTION:

SRPF Membrane Concentrate Bypass - Contract Number WUD 13-036

# **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 (\$406,149.75)

(Four hundred and six thousand, one hundred and forty nine dollars and seventy five 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 \_\_\_\_\_\_, entered into a contract with the County for

Project Name: SRPF Membrane Concentrate Bypass

Project No.: WUD 13-036

Project Description: Design, permit and construct bypass piping and backflow prevention system at

the Southern Region Pumping Facility to allow membrane concentrate from PBC

WTP 9 to be diverted to the South County Water Reclamation Facility.

**Project Location:** 

PBCWUD Southern Region Pumping Facility (AKA 9 North), 19110 South State

Road 7 (Yamato), Boca Raton, FL 33428

PCN 00-42-43-27-05-074-0161

in accordance with Design Criteria Drawings and Specifications prepared by

Name of Design Firm: Globaltech, Inc. Location of Firm: 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.		the contract			, betwee	en Pr	incipal a	and Co	untv for	the d	esian
and	construction	of the SRPF	Membrane	Concentrate	Bypass,	the c	ontract	beina r	made a	part o	f this
oon	d by referenc	e, at the time	s and in the	manner pres	cribed in	the c	ontract:	and			

PROJECT NO. WUD 13-036

BOND - 2

- 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 Principal Clobaltech, Inc.

<u>「PRESiの起て</u> Title

Surety (Seal)
Westchester Fire Insurance Company

Title Joanne M. Mursell, Attorney-In-Fact

#### ATTACHMENT - I

#### **FORM OF GUARANTEE**

GUARANTEE FOR (Contractor and Surety Name) Globaltech, Inc. and Westchester Fire Insurance Company.

We the undersigned hereby guarantee that SRPF Membrane Concentrate Bypass (WUD 13-036). 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
Countersigned Resident Agent in Florida:	Globaltech, Inc. (Seal) (Contractor)
Joanne M. Murseil (Agent)  By Ame M Mayyell	By: Signature)
(Signature)	Westchester Fire Insurance Company (Seal) (Surety)
	By: <u>Jane M. Musell</u> Joanne M. Mursell, (Signature)  Attorney-In-Fact

**END OF SECTION** 

PROJECT NO.: WUD 13-036

**GUARANTEE - 1** 

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

on for and on behalf of the Comm

- OF TOPES Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Con
- Each duly appointed attories, the fact of the Company is hereby authorized to execute any Written Commun such action is authorized by the graph of powers provided for in such persons written appointment as such at (2)
- (3)
- (5) n, and the seal of the Company, may be affixed by facsimile on s

FURTHER RESOLVED, that the fore Company, and such Resolution shall n

Does hereby nominate, constitute and appoint Gerald J Arch, James F Murphy, Joanne M Mursell, Michael A Holmes, all of the City of FT, LAUDERDALE, 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 dellars & 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 23 day of January 2033.

WESTCHESTER FIRE INSURANCE COMPANY

Stephen M. Hancy , Vice President

COMMONWEALTH OF PENNSYLVANIA COUNTY OF PHILADELPHIA

On this 23 day of January, 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 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 

TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day



HOTARIAL SEAL KAREN E. BRANDT, NON

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.

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



THIS POWER OF A TORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER January 23, 2015